

AN ABSTRACT OF THE THESIS OF

Angelica Rita Pilato for the degree of Doctor of Philosophy

in Vocational Education presented on July 28, 1978

Title: The Judgment Policy Used by Community College Administrators in

Judging the Success Potential of Male and Female Administrative

Applicants

Abstract Approved: 

Signature redacted for privacy. 

 Larry J. Kenheke

Purpose of the Study

The main focus of this study was to determine how community college administrators used certain personality traits (cues) in judging the success potential of female and male administrative applicants.

The following hypotheses were tested:

1. There will be no significant difference in the weights attached to the following cues when females and males are being rated on their success potential.
 - (a) Outgoing
 - (b) Intelligence
 - (c) Suspicious
2. There will be a significantly greater weight attached to the following cues when males are being rated on their success potential.

- (a) Assertiveness
- (b) Venturesome
- (c) Self-Sufficient

3. There will be a significantly greater weight attached to the following cues when females are being rated on their success potential.

- (a) Person-Oriented
- (b) Accommodative

Procedures

The judges were 20 female and 20 male administrators randomly selected from Oregon's community colleges. They assessed the personality profiles of 30 female and 30 male hypothetical administrative applicants. The profiles depicted eight personality dimensions having values ranging from 1 to 10. The subjects were asked to judge the success potential of these applicants on a scale of 1 to 20. A multiple-cue learning model was used to assess the importance of the various cues in judging the success potential of the applicants. The Pearson "r" was used to measure the relationship between the cue value and the response value. The significance of the mean utilization coefficients was assessed by using t-tests. The cue weighting patterns within male and female profiles was determined by using Tukey's HSD. To examine the stability of the female and male judges in making their judgments multiple linear regression was used, thus yielding the cognitive control indices (R_s^2) for each judge. The significance of the mean (R_s^2) for the male and female judges was

compared by using a t-test. Tukey's HSD compared the mean utilization coefficients for the male and female judges to determine if they used cues differently.

Findings

The following four objectives were answered:

1. To compare the cue weights used by the judges in predicting the success potential of the female and male applicants.

Results: There were no significant differences in the weights attached to the following cues: outgoing, intelligent, venturesome and self-sufficient. Significant differences were found for cues: assertive (0.25, $p < .05$), person-oriented, suspicious and accommodative (all .001, $p < .001$). The hypotheses could not be supported for the assertive, person-oriented and suspicious cues because they were weighted contrary to what had been predicted.

2. To describe the cue weighting patterns within the female and male applicants.

Results: For the female profiles the judges used the intelligent, accommodative, self-sufficient, venturesome and outgoing cues significantly more than the other cues. For the male profiles the self-sufficient, intelligent, venturesome and person-oriented cues were used significantly more than the other cues.

3. To examine the stability of the female and male judges in making their judgments.

Results: A significant difference was found in comparing the means of the male and female cognitive control indices (R_s^2). The female judges

were more consistent in making their judgments than the males.

4. To assess the cue weights used by the female and male judges in making their judgments.

Results: Both female and male judges used the intelligent, self-sufficient, venturesome and outgoing cues significantly more than the other cues when rating the applicants.

Conclusions

1. Males and females who are intelligent, self-sufficient, venturesome and outgoing are perceived as having a greater success potential.

2. It was perceived that accommodative females and person-oriented males would have a greater possibility for success.

© 1978

ANGELICA RITA PILATO

ALL RIGHTS RESERVED

The Judgment Policy Used by Community College
Administrators in Judging the Success Potential
of Male and Female Administrative Applicants

by

Angelica Rita Pilato

A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Doctor of Philosophy

Completed July 28, 1978

Commencement June 1979

ACKNOWLEDGEMENTS

This study would not have been possible without the encouragement, love and assistance of many individuals.

I wish to express my thanks to my doctoral committee: Dr. Larry Kenneke, Dr. John Gillis, Dr. Anne Keast, Dr. Forrest Gathercoal and Prof. Don Amort. I am deeply indebted to Dr. Rod Fielder who provided tremendous encouragement and assistance in the initial stages of this study. For his statistical consultation, I would like to thank Dave Niess.

Greatly appreciated was the continuous moral support extended by my family and close friends. Gratitude is expressed for the memory of my mother, Angelica Tremiti Pilato, who planted the seeds of knowledge very early in my life.

Most importantly, sincere thanks go to Larry Denny, whose constant love and encouragement brought me through the final stages of this endeavor.

TABLE OF CONTENTS

I.	Introduction	1
	Statement of the Problem	3
	Purpose of the Study	5
	Objectives	5
	Definition of Terms	5
II.	Review of Related Literature	7
	Introduction	7
	Outgoing-Socialibility	9
	Intelligence	10
	Trusting Versus Suspicious	12
	Assertive Versus Yielding	14
	Venturesome Versus Shy	16
	Self-Sufficient Versus Dependent	17
	Person-Oriented Versus Task-Oriented	18
	Accommodative Versus Exploitative	20
	Personality Traits of Leaders	21
	Summary	23
	Hypotheses	25
III.	Design of Study	27
	The Lens Model	27
	The Lens Model Equation	30
	Selection of the Population	35
	Data Collecting Instrument	36
	Collection of Data	37
	Analysis Procedures	38
	Cue Utilization Index	39
	Cue Weighting Within Female and Male Profiles	40
	Cognitive Control Index	40
	Cue Weighting by Female and Male judges	41
IV.	Analysis of Data	42
	Cue Utilization	42
	Positive or Negative Cue Utilization	45
	Additional Questions	46
	Cue Weighting Within Female and Male Profiles	47
	Stability of the Judges	49
	Cue Weighting by Female and Male Judges	49
	Summary	51
V.	Summary, Conclusions and Recommendations	53
	Summary	53
	Purpose	53
	Method	54
	Findings	55
	Conclusions	56
	Recommendations for Further Study	58

Bibliography	60
Appendix A, Personality Profile	65
Appendix B, Success Potential for Administrative Applicants . .	66
Appendix C, Instructions	68
Appendix D, "r" Values for Female Judges on Female Profiles . .	69
Appendix E, "r" Values for Female Judges on Male Profiles . . .	70
Appendix F, "r" Values for Male Judges on Female Profiles . . .	71
Appendix G, "r" Values for Male Judges on Male Profiles	72

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1	Mean Cue Utilization Coefficients of Female and Male Profiles	43
2	A Summary of the Judges' (+) or (-) Cue Utilization	46
3	Tukey's HSD Multi-Mean Comparison for Coefficients of Female Profiles	47
4	Tukey's HSD Multi-Mean Comparison for Coefficients of Male Profiles	48
5	Stability of the Judges (R_s^2) Mean Comparison Using T-Test	49
6	Tukey's HSD Multi-Mean Comparison for Coefficients of Female Judges	50
7	Tukey's HSD Multi-Mean Comparison for Coefficients of Male Judges	51

The Judgment Policy Used by Community College
Administrators in Judging the Success Potential
of Male and Female Administrative Applicants

I. INTRODUCTION

An American feminist asked Sir Winston Churchill what he thought the role of women in the future would be. His reply, "The same, I trust, as it has been since Adam and Eve."

Both traditionally and cross-culturally, feminine and masculine roles have been considered complementary domains. Different traits have been designated desirable for each domain (Bem, Martyna and Watson, 1976). Women have generally been expected to be gentle, sensitive to others' feelings and emotional; men are assumed to be self-confident, independent and ambitious (Rosenkrantz et al. 1968). These roles have also been thought to be mutually exclusive, which has made role flexibility difficult for males as well as females (Donelson and Gullahorn, 1977).

Because role flexibility has been difficult, women who have ventured into non-traditional roles, such as managers or administrators, have been perceived as having different leadership styles. The personality traits that describe these styles have been consistent with the traits associated with the stereotypic image of femininity. Women leaders were perceived as person-oriented, accommodative, intuitive and passive (Chapman and Luthans, 1975).

These traits are contrary to the traits consistently mentioned in the leadership literature as being necessary to achieve success. Schein

(1973) found that successful middle-managers were perceived as possessing characteristics such as aggressiveness, leadership ability, certainty, vigor, self-reliance, desiring responsibility, seriousness, objectivity, knowledge, and straightforwardness. The majority of these traits can be categorized on Bem's Sex Role Inventory as socially desirable "masculine" items (1974).

Recent findings have determined that a great majority of these psychological sex differences can be attributed to the effects of socialization rather than inherent biological tendencies. Socialization takes place through imitation of same-sex models, positive or negative reinforcement of sex appropriate behavior, and self-conceptualization of acceptable feminine and masculine behavior (Maccoby and Jacklin, 1974). Women are encouraged toward a communal sense of being at-one-with other individuals; men are encouraged toward an agentic sense of having a separateness from others (Donelson and Gullahorn, 1977; Bakan, 1966).

These socialization patterns that have inhibited the total development of an individual have brought into question the necessity for maintaining the traditional sex role stereotypes. By holding on to this concept of mutually exclusive roles, women and men are prevented from reaching their potential and expanding their human experiences (Bem, 1974).

Scholars in a number of disciplines have begun to concern themselves with the concept of psychological androgyny which would allow individuals to integrate both the masculine and feminine traits depending on the situational appropriateness (Bem et al., 1976). According

to Bem (1974), a well integrated personality will be androgynous, including both "male" and "female" characteristics. An individual could be assertive and yielding, both instrumental and expressive--depending on the situational appropriateness of these various behaviors.

In view of this present trend towards androgyny and the lingering sex-role stereotypes, how do people perceive females and males who aspire to leadership positions?

Statement of the Problem

As females and males continue to struggle with their roles and begin to move towards a more androgynous development, it follows that the society will begin to move away from its traditional view of masculine and feminine roles. It would seem that this trend would cause some individuals to experience more difficulty when making decisions concerning females and males in non-traditional roles. In order to help individuals alleviate habitual methods of decision making, they will have to begin relying on more analytical resources (Slovic and Lichtenstein, 1971).

More and more decision making is being given attention by numerous academic, business and government disciplines. They are devoting their efforts to developing practical methods for helping people cope with the uncertain environment (Slovic, Fischhoff and Lichtenstein, 1977).

Because we are continually being asked to make judgments and decisions that not only control our personal lives, but in many cases control the lives of a large segment of society, it is necessary that we learn to cope with the ambiguities of decision making. Skolnikoff

and Brooks (1975) contend that judgments are unavoidably affected by biases, policy preferences, ignorance and other vagaries. Therefore, "one logically reasoned answer is not possible." According to Skolnikoff and Brooks, this is the nature of human judgment and "nothing is wrong with this."

Hammond and Adelman (1976) disagree with Skolnikoff and Brooks and argue that policy judgments can be brought under scientific study as can all natural phenomena. Hammond and Adelman (1976) state that "a scientific approach to the role of judgment would emphasize that judgment is a human cognitive activity and can, therefore, be subject to scientific analysis." They contend that, as a result, the process of decision making that is now poorly understood can be "examined, understood, assisted and thereby improved."

To support this contention, Hammond (1955, 1966) and others have developed a multiple-cue, probabilistic learning model (MCPL) that is an adaptation and application of the lens model developed by Egon Brunswik. This paradigm enables researchers to systematically study a wide variety of problems of human judgment and social interaction, such as clinical judgment, individual learning, disordered thought, interpersonal conflict and group processes (Rappoport and Summers, 1973). These investigations have helped to improve our understanding of the relationships among variables in the tasks requiring human judgment (Hammond, 1975; Hammond and Stewart et al., 1975). By using this multiple-cue probabilistic learning model (MCPL) in what is referred to as a single-system case, the cognitive system of the individual making the judgments can be examined. It can determine how the

individual uses the various sources of information available and what policy is used in making judgments about a criterion.

Purpose of the Study

The main focus of this study was to determine how community college administrators used certain personality traits in judging the success potential of female and male administrative applicants.

Objectives

1. To compare the cue weights used by the judges in predicting the success potential of the female and male administrative applicants.
2. To describe the cue weighting patterns within the female and male applicants (profiles).
3. To examine the stability of the female and male judges in making their judgments.
4. To assess the cue weights used by the female and male judges in making their judgments.

Definition of Terms

In order to clarify the terms that are used in this study the following definitions of terms are presented:

Administrators: those persons in "non-teaching" positions at community colleges such as presidents, vice presidents, deans, associate deans, department heads, program coordinators, or directors who serve as judges.

Cue: a variable or an information source that partially defines the object being judged. In this study the cues are eight personality traits and the object is male and female administrative applicants. $(X_1, X_2, X_3, \dots, X_8)$.

Cue Dimension: a quantifiable indicator of the cue. The cue dimensions have a value ranging from 1 to 10.

Cue Utilization or Cue Dependency: an index which reflects the extent to which the judge relies on a particular cue in formulating a judgment.

Criterion: a standard by which a judgment of something can be formed. The criterion will judge the success potential of female and male administrative applicants.

Judge/Subject: the individual being asked to assess the cue values and make a judgment concerning a criterion value, thereby determining the cue dependencies used in making a judgment.

II. REVIEW OF RELATED LITERATURE

Standing on the ground of common sense and the constitution of the human mind, I deny that anyone knows, or can know, the nature of the two sexes, so long as they have only been seen in their present relation to one another.... What is now called the nature of woman is an eminently artificial thing - the result of forced repression in some directions, unnatural stimulation in others.

John Stuart Mill
The Subjection of Women 1869

The discussion in this chapter is divided into three parts: (1) The research conducted concerning the psychological sex differences of the eight personality traits used in this study. (2) The personality traits associated with leadership. (3) The hypotheses derived as a result of the questions raised in this chapter.

Introduction

Why is it that when a man is aggressive he is considered ambitious and enterprising; when a woman is aggressive she is considered abrasive and pushy? Why is it that when a woman is sensitive, she is called considerate and warm; when a man is sensitive he is called weak and effeminate? Why is it that an independent woman is seen as hard-nosed and selfish and when a man is independent he is seen as self-actualized?

The "why" stems from several sources, one being that society still tends to view the roles of women and men differently. Understanding women and men has been impeded by assumptions of unidimensionality, bipolarity and biopsychological equivalence. Unidimensionality claims

males and females differ in one basic way. Although there may be many manifestations of the dimension they all "go together." Bipolarity asserts that masculinity and femininity are direct opposites. Biopsychological equivalence claims that sex differences in traits and behavior are "natural" inevitable consequences of physical sex differences (Donelson and Gullahorn, 1977). The psychological differences are not as easily distinguished as the physical differences. Thus, a great deal of folklore and myth constitutes the popular views about sex differences.

In our society certain traits have been prescribed for females and are related to facilitating social concerns and interpersonal warmth. For males, the traits are basically related to personal competence and achievement (Broverman et al., 1972; Rosenkrantz et al., 1968). Women are expected to be gentle, sensitive to others' feelings, passive, tactful and emotional. Men are expected to be aggressive, independent, unemotional, self-confident, ambitious and competitive (Rosenkrantz et al., 1968). Members of each sex are expected to display "appropriate" traits and not to exhibit traits definable for the other sex (Donelson and Gullahorn, 1977). Because the roles demand mutual exclusiveness, society looks at similar personality traits in women and men differently.

A voluminous number of studies have been undertaken in an attempt to prove or disprove the existence of psychological sex differences. They have looked at various personality traits and endeavored to ascertain whether they were in fact present more in females than in males or vice versa.

The following is a look at some of the research that has explored differences in female and male personality traits.

Outgoing-Socialibility

Females are generally believed to be more socially oriented than males (O'Leary, 1977). Garai and Scheinfeld (1968) state,

"in psychological development, from earliest infancy on, males exhibit a greater interest in objects and their manipulation, whereas females show a greater interest in people and a greater capacity for the establishment of interpersonal relations."

Many studies of sociability begin with babies and report that female infants spent more time looking at social stimuli (faces) than geometrical forms (Lewis, Kagan and Kalafat, 1966). Sherman (1971) writes, "at 6 months, girls notice faces more than boys ... and are more interested in people by the age of two." This is consistent with the findings of Bardwick (1971). On the other hand, Berstein and Jacklin (1973) found no sex differences in infants attention to social versus nonsocial stimuli. Maccoby and Jacklin (1974) in reviewing 33 studies on visual perception during the first year found no sex differences in most cases. "Many people believe that little girls are friendlier and more concerned with having playmates than boys. This is not true." (Tavris and Offir, 1977). A number of studies show boys interact socially with playmates of their same sex more than girls. Boys seem to run in packs while girls prefer to play in pairs (Maccoby and Jacklin, 1974).

The assumption that females are friendlier continued when describing adult women. This concern for liking others and being liked has

been termed by psychologists as the "need for affiliation." They have measured this by analyzing themes in people's fantasies and the answers to questions like "what makes you happy?" Some studies find some sex difference but others find none. "In their actions, both men and women love to be loved." (Tavris and Offir, 1977).

At best, the results are nebulous because the same behavior gets different labels in different studies and from different writers. Lionel Tiger (1969) proposed "that men, not women, are the affiliative sex because they form closer relationships with members of their own sex." He claims that "women's friendships are more superficial." Tiger calls the male need for other men "male bonding" and he relates it to the biological instinct of prehistoric man and the hunt. The need for cooperation in the hunt during prehistoric times has extended into today's world of business, sports and politics. Tavris and Offir (1977) claim Tiger's thesis is highly speculative because research with Americans does not show that either sex has a greater need for social contact with members of the same sex; and in some societies women, not men, do the "bonding."

Research on socialability and outgoingness have not found any significant bases to indicate a sex difference in this area.

Intelligence

When one views the history of great persons, women have not been considered intellectually equal with men. Madame Curie, Margaret Mead and Susan B. Anthony are rare exceptions. It is assumed that women have lacked the genius necessary for outstanding achievement (Tavris

and Offir, 1977). It has been suggested by Sherman (1971) and Shields (1975) that the reason society has failed to recognize women's genius is more a reflection of cultural values rather than inherent ability.

In the early part of the twentieth century, because women were virtually absent from the list of eminent persons and were largely ignored, sex differences in intellectual functioning were explained on the basis of what is called "the variability hypothesis." The variability hypothesis refers to the fact that on a number of psychological dimensions, the scores of males are distributed more widely around the mean than those of females (O'Leary, 1977). Although mean IQ scores of females and males are the same, the scores of males have a greater number of extreme high and low scores. Therefore, it seems reasonable to assume that there will be more evidence of male genius and more male mental defectives in any large sample of women and men. The variability hypothesis has not been disproven and Heim (1970) and Hutt (1972) suggest that it may be a reasonable explanation for sex differences.

However, O'Leary (1977) states that,

"on most psychometric measures, the variation of the scores around the mean within each sex is much greater than the variation in the dispersion of scores between the sexes."

Even when significant differences in mean scores of females and males are obtained, their distributions overlap considerably. She suggests that "a definitive test of the variability hypothesis would be to test the difference in variance between the two sexes on some psychological measure." Because no such tests have been reported, the value of the variability hypothesis as an explanation for sex differences cannot be accurately assessed (Maccoby and Jacklin, 1974; Shields, 1975).

Research has consistently shown over the past five decades that there are no significant differences in general intelligence in the average IQ scores of females and males (Tavris and Offir, 1977; Maccoby and Jacklin, 1974; Hyde and Rosenberg, 1976). There have been relatively consistent sex differences obtained in comparative studies of verbal, mathematical and visual spatial abilities. Females excel in tests of verbal ability; males outperform females on measures of visual-spatial and mathematical ability (O'Leary, 1977; Maccoby and Jacklin, 1974).

In interpreting the results of IQ test scores for females and males, Hyde and Rosenberg (1976) suggest "they should be viewed with caution." The nature of the construction of IQ tests has been standardized in such a way as to minimize sex differences. Therefore, Hyde and Rosenberg state that, "saying that there are no sex differences in overall tested intelligence essentially means that the test constructors succeeded in their goal of eliminating sex differences."

Trusting Versus Suspicious

The importance of trust in interpersonal relationships has been given considerable attention in the literature of social science, philosophy and psychology. According to Lorraine and Jack Gibb's (1967) studies, "growth of the individual in ways relevant to human relations relies heavily on developing with others a climate of interpersonal trust." Allport's (1970) theory of personality development through social encounter "places trust at the foundation of a satisfying interpersonal relationship." In Erich Fromm's (1962) The Art of Loving, he

places trust at the center of developing warm human relationships.

In another research dealing with trust and suspicion, Deutsch (1958) noted the importance of trust to an understanding of social life and personality development. In defining a trusting behavior in interpersonal situations, Deutsch noted that "trust involves more than predictability--expectation is also involved." These statements are exceedingly insightful and demonstrate that the importance of personal trust in our interpersonal relationships can hardly be questioned (Giffin and Patton, 1971).

In the area of organizational management, Wofford, Gerloff and Cummins (1977) say that "a key to effective interpersonal communication is trust." In order for employees to convey accurate and open information to their manager, "the element of trust in that individual must be present." Subordinates must have the assurance that the manager will not use the information sent to their detriment. "They must believe that promises will be kept and that expressions of their feelings will be accepted without defensiveness" on the part of the manager. Wofford (1977) states "that employees want to believe that the supervisor is on their side and can be depended upon." He continues to emphasize the fact that "the responsibility for establishing a climate of trust and confidence rests initially with the manager."

Whether or not females or males exhibit more trusting behavior has not been the major focus of the research done in this area. Because trust has been emphasized in developing one's personality and in establishing successful interpersonal relationships, it would seem that developing a trusting behavior would be a positive attribute to

encourage in both females and males. Also, it could be deduced that if subordinates expected a trusting behavior in their managers, they would no doubt expect it from females as well as males.

Assertive Versus Yielding

Extensive research has been done in the area of aggressiveness. Results consistently have indicated that males exhibit more aggressiveness than females (Tavris and Offir, 1977; O'Leary, 1977). Maccoby and Jacklin (1974) indicate in their exhaustive review of studies concerning aggressiveness, "that in every society in which men and women differ in aggressiveness, men are more aggressive." Terman and Tyler (1954) in their review of the research of the 1930's and 1940's documented the generalization that males appear to be the more aggressive sex not only in restricted conditions, but in a wide variety of settings and using a wide variety of behavioral indices. Maccoby and Jacklin (1974) in reviewing more recent studies of the 1960's and 1970's substantiate these findings.

Some writers argue that females are just as aggressive as males but they express it differently. The hypothesis takes two forms:

1. The two sexes are reinforced for different forms of aggression. Girls are allowed to show their aggression in subtle ways, but not physically. Boys are allowed to be more physically aggressive.
2. Since aggression is less acceptable for girls and they are more actively discouraged from displaying aggression, they

tend to display it in disguised forms.

(Maccoby and Jacklin, 1974)

This has led to studies that ascertained boys were more physically aggressive and girls were more verbally aggressive. Feshbach (1970) found this to be true while Whiting (1963) found boys to counterattack if aggressed against in either verbal or physical form. For the present, the hypothesized existence of sex difference in verbal versus physical aggression has not been adequately supported.

Maccoby and Jacklin (1974) contend that "the sex difference in aggression has a biological foundation" and argue that "there is a sex-linked differential readiness to respond in aggressive ways to the relevant experiences." More work on human subjects needs to be done in this area.

"Aggressiveness" becomes an all encompassing term that covers everything from physical acts of violence, competing in athletic events, to expressing one's opinions openly. In American society, aggressiveness is seen as an exclusively male appropriate behavior (O'Leary, 1977; Bem, 1975). Aggressiveness is regarded by many people as a good thing and it is assumed the physical aggression in the school yard is a precursor for psychological aggression in the business world. Some psychologists are worried that Maccoby and Jacklin's findings "may reinforce the stereotype that women are ill-equipped to compete with men in the world of work" (Tarvis and Offir, 1977).

Research in assertive behavior, which is the ability to make one's interests and desires known to others, is only beginning to be studied. Argyle, Lalljee and Cook (1968) show some evidence that women are less

assertive than men; for example, in two-person conversations men tend to do more talking.

A number of psychologists feel that aggressiveness should be distinguished from assertiveness. While it is quite possible that these traits have different origins, aggressiveness might be biologically linked and assertiveness may not. Nonetheless these studies consistently find males to exhibit more aggressive behavior.

Venturesome Versus Shy

Shy and timid versus bold and venturesome are generally discussed in terms of passivity versus activity. Although Freud emphasized passivity in women and activity in men, he was clear that activity--passivity in particular, and masculinity--femininity in general are not simple either-or matters (Donelson and Gullahorn, 1977).

Deutsch (1944) expanded on the personality theorists' view that femininity and passivity are synonymous. She claimed that passivity was essential in order for women to develop a mature female sexuality. Women had to accept the passive sexual role because of their "inferior" anatomy.

Passivity, like dependency, is seen as expected behavior for women. Costrich et al. (1975) found that "passive-dependent women were perceived as significantly better adjusted than aggressive-assertive women and that the reverse was true of men."

Maccoby and Jacklin's (1974) reivew of findings in the area of timidity show that:

1. Usually no sex differences in timidity were found in

observational studies.

2. Females were more timid and anxious than males in teacher ratings and self reports.

Maccoby and Jacklin (1974) content it is possible that because females readily admit their fears and anxieties this may "impose restrictions on their adventurousness in exploring new situations.

Contrary to the past assumptions of psychoanalytic theorists, passivity in females is not biologically based, but is a result of cultural conditioning (O'Leary, 1977). So it is perceived as socially desirable for women to be "shy" and "yielding" (Bem, 1974).

Self-Sufficient Versus Dependent

Although parents do not encourage children of either sex to be dependent, they tend to be more tolerant of dependent behavior on the part of their daughters than on the part of their sons (Hoffman, 1972, reported in O'Leary, 1977). In a study done by Baumrind (1971), he reports that "parents give equal encouragement to boys and girls for 'independent individuality.'" Maccoby and Jacklin (1974) report that in most studies they reviewed, parents granted more independent behavior to girls than to boys. Tavris and Offir (1977) think that this tendency for parents to be more restrictive with boys may be because parents possibly assume that "boys are more rambunctious and, therefore, they need to keep a closer tab on them."

Dependency in females is expected so much that women who deviate from this expectation are considered emotionally disturbed (Chesler, 1972). Even therapists define mature, healthy women as less active and

independent than men (O'Leary, 1977).

The most frequently cited finding in support of the contention that females are more dependent than males is contained in the results of a longitudinal study by Kogan and Moss (1962) as reported in O'Leary (1977). This study was done over a 25-year period with girls and boys. It demonstrated that female scores on dependency were more stable and girls who were more dependent in childhood grow up to be more dependent women. Parallel correlations were not obtained for boys, who tend to become more independent as they grow older.

Donelson and Gallahorn (1977) report on a study by Block et al. (1973) that was done with 30- to 40-year-old women. It showed that "socialization for women, regardless of their level of traditional femininity, is associated with control of impulse, expression and the renunciation of achievement and autonomy." It would seem then that socialization tends to reinforce dependency in females and that the expression tends to be relinquished ... because these qualities have been defined as masculine" (Donelson and Gallahorn, 1977).

Person-Oriented Versus Task-Oriented

With the overall abundance of studies favoring "altruism and compliance" for females and "egoism and assertiveness" in males, it has been argued that there is "a universal pattern of interdependence within the family." This pattern encourages males towards task specialization and females towards a social-emotional orientation (Donelson and Gullahorn, 1977). This assumed, universal, social pattern is founded on the biological functions of women and men. Women bearing

and caring for the children, and men using their physical strength for task-oriented activities of hunter and provider.

It is hypothesized that both sexes are motivated to achieve, but that the kinds of achievement are different; boys being interested in achieving on tasks that deal with inanimate objects or impersonal ideas and girls being interested in tasks that involve people (Maccoby and Jacklin, 1974). Garai and Scheinfeld (1968) state "from early childhood on, males appear to have greater achievement needs directed toward successful task accomplishment; while females exhibit greater affiliative or social needs directed toward successful relations with the people in their environment."

Emmerich (1971) in his studies on task-orientation versus person-orientation found that older, more mature children, tend to be both task- and person-oriented. Maccoby and Jacklin's review of findings shows that the tendency of the males to be more task oriented is "age-specific and transitory." They do not see any evidence that would lead to the conclusion that boys are more intrinsically interested in tasks than girls.

The conclusions of Maccoby and Jacklin (1974) have been confined to findings from studies done with children. In dealing with adults Lockheed and Hall (1976) report several studies that seem to confirm the assumption that women "initiate a higher proportion of their acts in social-emotional categories, while men initiate a higher proportion of their acts in task-oriented categories." They noted this pattern in the studies of Strodbeck and Mann (1956), Heiss (1962), Kenkel (1957), Borgatla and Stimson (1963), Piliavin and Martin (1974).

Parsons (1955) derives his assumptions of males being more task-oriented and females being more person-oriented from the family structure. He argues that "all groups contain both instrumental (task) and expressive (socio-emotional) leadership elements which are mutually exclusive and which compliment one another." His proposal suggests different behaviors of males and females in groups and different types of leadership that can be expected from males versus females (Bartol and Wortman, 1975).

Parsons' ideas have not been extensively tested. However, this perception of females being more person-oriented and males being more task-oriented was evident in a study by Rousell (1974). His findings were not significant but the tendency was that "school teachers rated female department heads higher on consideration and lower on production emphasis than their male counterparts." Although findings vary, it seems that women are seen as person-oriented and men tend to be seen as task-oriented.

Accommodative Versus Exploitative

Caplow (1956) theorized that the sexes had significant differences in strategy used in competitive situations. He states that "females typically adopt accommodative style of play, apparently oriented more towards the social situation itself rather than winning and marked by the arrangement of outcomes along mutually satisfactory rather than highly competitive lines." Males on the other hand, manifest an exploitative strategy characterized by behaving competitive and deceptive in their goal to strictly win the prize.

Vinacke has done numerous studies that confirm this assumption. Bond and Vinacke (1961) confirmed in their experimental study of mixed-sex trials that males tended toward exploitative behavior while the more successful females tended toward more accommodative behavior in terms of accomplishing tasks. Vinacke and Gullickson (1964) found that "females seemed to bargain less actively than males - at least when alliances are necessary to win. Also they seem to orient their efforts more towards the mutual satisfaction of the members of the group than towards the goal of winning in itself." This was evident for females at all three age groups tested, 7-8 years, 14-16 and college age. As their age increased the males seemed to use more exploitative behavior to defeat their opponents. The fact that adult males exhibited this behavior more than younger males might lead one to believe that this way of coping with competitive situations is not only learned, but socially expected and encouraged for males.

Personality Traits of Leaders

How do these personality differences and similarities affect the role of a leader or an administrator?

Many studies have been done to determine what personality traits are essential to become a successful leader, supervisor, manager or administrator. Stogdill (1958) offered two conclusions on leadership traits based on a comprehensive survey of 124 books and articles.

1. Individuals who occupy positions of leadership exceed the average number of their group in the following respects:

- (a) intelligence,

- (b) scholarship,
 - (c) dependability in exercising responsibilities,
 - (d) activity and social participation, and
 - (e) socio-economic status.
2. The qualities, characteristics, and skills required in leaders are determined, to a large extent, by the demands of the situation in which they are to function as leaders.

In addition, Stodgill attempted to classify the traits associated with the general headings mentioned above.

- (a) Capacity (intelligence, alertness, verbal facility, originality and judgment)
- (b) Achievement (scholarship, knowledge, athletic accomplishments)
- (c) Responsibility (dependability, initiative, persistence, aggressiveness, self-confidence and desire to excel)
- (d) Participation (activity, social ability, cooperation, adaptability, humor)
- (e) Status (socioeconomic position and popularity)

Jennings (1960) in "An Anatomy of Leadership, Princes, Heroes and Supermen," summarizes the findings of Partridge, Bird and Gibb. Partridge found intelligence correlated with leadership. Bird mentioned high intelligence, initiative, a sense of humor and extroversion as possible indicators of general traits in leaders. Gibb noted leaders frequently characterized as energetic, self-confident, intelligent, verbally affluent, persistent and having insight in human nature.

Ghiselli (1956) reported that superior supervisors were rated as energetic, loyal, kind, playful, clear thinking, enterprising,

progressive, poised, steady, appreciative and responsible. Schein (1973) found that successful middle managers are perceived to possess the characteristics of aggressiveness, leadership ability, certainty, vigor, desiring responsibility, seriousness, objectivity, knowledge and straightforwardness.

Although the traits for leadership are reported as numerous and varied, a general pattern can be seen. Leaders are rated, perceived and described with those traits, attitudes and temperaments more commonly associated with the "masculine" personality (Schein, 1973).

This finding is confirmed when the general pattern of leadership traits that were cited are compared with Bem's Sex-Role Inventory (BSRI) (1974) of socially desirable masculine, feminine and neutral items. More desirable leadership traits appear to be found under the masculine classification. For example, masculine items on Bem's SRI include:

"Acts as a leader, aggressive, analytical, assertive, athletic, independent, self-reliant, self-sufficient and others"

as compared with feminine items:

"loyal and compassionate"

and neutral items:

"reliable, truthful"

Summary

In light of the findings presented above concerning leadership traits and those presented in the discussion of psychological sex differences, several questions are generated. If a majority of the traits perceived necessary to be a successful leader are attributed

to be masculine, how will females be rated on the success ladder who exhibit those traits "traditionally" typed as feminine: accommodative, person-oriented and passive? How will females be judged who exhibit those traits "traditionally" typed as masculine: aggressive, independent, adventuresome? Will persons selecting females and males for leadership positions want both to exhibit the same traits necessary to accomplish the job? Will males exhibiting "typically feminine" traits be seen as having less possibility for success? How could perceptions be determined regarding the traits necessary for a successful leader?

How could these answers be ascertained without biasing the individuals being asked to make a decision of male and female administrative success? One might suggest that one way to learn what people think are the traits needed to be a successful administrator would be to simply ask them directly. However, there are several reasons why this method would prove difficult:

1. People may not be able accurately to articulate their preferences (Lichtenstein and Slovic, 1971).
2. They may not have any definite preferences, or they may be inconsistent in their preferences.
3. They may not want to directly state their preferences because they differ from what society may presently be advocating as socially acceptable.

So, to avoid the conflict of asking direct questions, the individuals can be asked to make judgments, rather than state preferences. Persons may be given several selected sources of information and then they can be asked to make their judgments about a criterion. This

procedure was adapted from a multiple-cue probability learning (MCPL) paradigm widely used in human judgment research. By allowing assessment of the relationship between the values of several items of information (cues) and the subjects judgment of criterion values, the model yields quantitative indices of the importance of the cues.

Hypotheses

These questions along with the findings cited have raised the following hypotheses for this study:

- H₁ There will be no significant difference in the weights attached to the following cues when females and males are being rated on their success potential.
- (a) Outgoing
 - (b) Intelligence
 - (c) Suspicious
- H₂ There will be a significantly greater weight attached to the following cues when males are being rated on their success potential.
- (a) Assertiveness
 - (b) Venturesome
 - (c) Self-Sufficient
- H₃ There will be a significantly greater weight attached to the following cues when females are being rated on their success potential.
- (a) Person-Oriented
 - (b) Accommodative

In order to evaluate these hypotheses the MCPL will be used to determine the subjects' differential cue dependencies. This paradigm is an adaptation of Brunswik's lens model and will be described in detail in Chapter 3.

III. DESIGN OF STUDY

The great decisions of human life have, as a rule, far more to do with the instincts and other mysterious, unconscious factors than with conscious will and well-meaning reasonableness.

Carl Gustav Jung
Modern Man in Search of a Soul, 1933

This study measured the cue utilization pattern of Oregon community college administrators in judging the success potential of female and male administrative applicants. The following sections are included in this chapter: presentation of the LENS Model, selection of the population, discussion of the instrument, collection of data, and analysis procedures.

The LENS Model

The basis for the design of this study lies in the framework and application of Brunswik's lens model. This section serves as an introduction to Brunswik's approach for conceptualizing the judgment process.

Before proceeding with the origins, aims and scope of Brunswik's model, it seems appropriate to discuss some of the basic assumptions underlying the concepts of human judgment.

Rappoport and Summers (1973) state:

1. Along with the major writers on cognitive development, we see thinking as an adaptive process, a "tool" gradually shaped out of experience along with the physical and social environment.

2. Judgment is a unique, important functional aspect of thinking that allows persons to cope with, or adapt to, uncertainty. It provides the psychological means of going beyond perceptual and cognitive "givens," while maintaining organization and continuity in behavior.
3. Because of its central role of mediating between intentions or purposes of the person and uncertainties in one's environment, judgment can only be understood by scrutinizing person-environment interactions.
4. Because judgment is here conceived of as centering upon relationships between proximal "givens" and distal "unknowns," the person-environment interaction can best be understood as an interaction between cognitive and environmental systems.

The lens model was initially conceived by Egon Brunswik (1952, 1956). His position of "probabilistic functionalism" brought him to examine the organism's successes and failures in adapting in an uncertain world. Brunswik's main concern was with the adaptive interrelationship between the organism and its environment. Thus, in addition to studying the degree to which a judge used cues, he analyzed the manner in which the judge learned the characteristics of the environment (Slovic and Lichtenstein, 1971).

In describing his approach to dealing with the interrelationship of the environment and the organismic system, Brunswik states:

The general pattern of the mediational strategy of the organism is predicted upon the limited ecological validity or trustworthiness of cues....This forces a probabilistic strategy upon the organism. To improve its bet, it must accumulate and combine cues....Hence the lens-like model... which may be taken to represent the basic unit of psychological functioning. (1955)

The lens model thus provides a methodological approach in which these interactive systems--the ecology and the organism's cognitive representation of it--may be adequately studied. Figure 1 illustrates

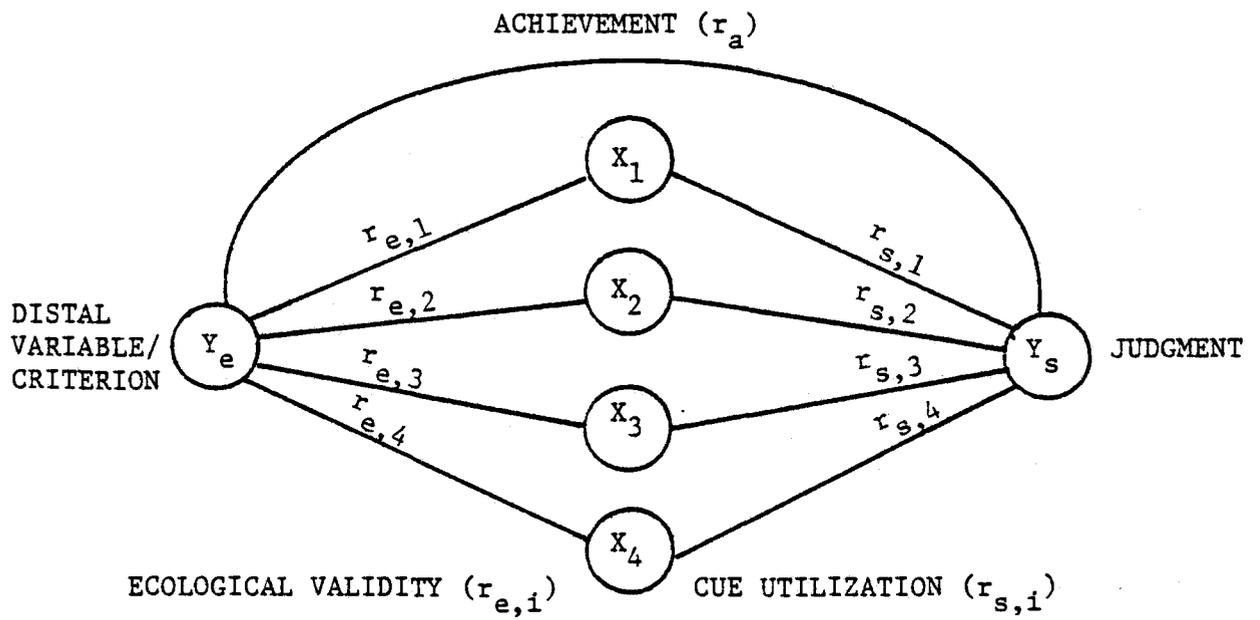


Figure 1. Brunswik's lens model.

Brunswik's lens model which has been used to convey a pictorial model of the probabilistic interrelationship between organismic and environmental components of the judgment situation (Brunswik, 1952, 1956; Slovic and Lichtenstein, 1971).

Brunswik's ideas have been extended from his own primary research on perceptual processes to areas that he could not have possibly anticipated (Rappoport and Summers, 1973). One example of how the lens model is used operationally involves the refinements and applications described by Hammond and his colleagues (1955, 1966). In the tasks used by Hammond, the subject makes a series of judgments on the basis of observable data about an unknown event that is not directly observable. However, these data have only an uncertain relationship with the actual distal (unknown) state. On completion of the series of judgments, it is possible to obtain statistical measures of the relationships between judgments, distal states, and cues (Beal, Gillis and Stewart, 1978).

The Lens Model Equation: Components of Judgmental Accuracy

The lens model equation has been applied to a wide variety of issues including clinical inference, multiple-cue probability learning, interpersonal learning, and cognitive conflict studies (Blevens, 1975). Tucker's (1964) refinement of the lens model equation identified the complex relationships that exist between the component indices of achievement (r_a), consistency (R_a), task certainty (R_e) and knowledge (G).

In its simplest form the lens model equation is:

$$r_a = G R_e R_s$$

Hammond and Summers (1972) state that "the equation demonstrates that achievement (r_a) is a function of consistency (R_s), task certainty (R_e) and knowledge (G)." In explaining this relationship, it is readily apparent that achievement (r_a) is limited by task certainty (R_e). That is, if the predictability in the environment is low, then the person's ability to perform well will be necessarily limited. Further accepting the limits set by R_e , achievement is then a function of a person's knowledge (G) and consistency (R_s). For a person to perform optimally, both one's awareness of the task requirements (G) and one's consistency (R_s) must be 1.00. If either is less than unity, the subject's achievement (r_a) will be prevented from reaching its upper limit (Tucker, 1964).

In addition to serving as a theoretical model of how individuals make judgments in probabilistic situations, the lens model also serves as an experimental paradigm which provides a variety of indices for measuring the complex interaction between the organism and the environment. They include: (1) achievement, (2) cue utilization, (3) the judgment policy of the individual, (4) cognitive control, (5) individual cue validities, (6) cue weights in the environment (i.e. ecological validities), (7) task control, and (8) knowledge. A brief explanation of the lens model indices will be discussed. Emphasis will be placed on the indices used in this study: cue utilization and cognitive control. The explanations presented are synthesized from Beal, Gillis and Stewart (1978).

1. Achievement (r_a) is a measure of the overall performance of the individual's judgmental accuracy within the environment.

Mathematically represented:

$$\text{Achievement} = r_{y_e y_s} = r_a$$

2. Cue utilization or cue dependency refers to the extent to which an individual relies on a particular cue. This index is obtained by examining the degree to which the cues vary systematically with the subject's response over a series of trials. By correlating the cue values with the subject's responses over a series of trials, the extent to which the subject is relying on the various cues can be determined.

Mathematically represented:

$$\text{Cue Utilization} = r_{x_i y_s}$$

As this index approaches +1.0 or -1.0 for a given cue the subject is increasingly dependent on that cue. The sign of the cue utilization index (+ or -) in the linear case indicates the direction of the relationship between the cue value (x_i) and criterion value (y_s). A positive (+) correlation means x and y tend to increase or decrease together. If the correlation is negative (-), it implies that as x_i becomes larger, y_s tends to become smaller or vice versa.

3. The judgment policy of the individual refers to how the individual is weighting the cues in combination in order to make judgments. If some weighting scheme can be found so that the subject's responses over the series of trials can be accurately predicted, then the weighting strategy the subject is using to make judgments can be mathematically modeled. Multiple regression is used to determine the judgment

policy of the individual by combining the cue values.

The regression equation which is used to predict the subject's response will reflect the relative importance the subject is placing on each cue. Since the weighting scheme is optimized so that no other weighting scheme could predict the subject's actual response with less error, the regression equation is the best possible linear representation of the subject's judgment policy. However, this equation does not indicate the extent of accuracy in its predictions. This is determined by the ecological validities of the cues, which may or may not be mirrored by the subject's policy.

4. Cognitive control refers to the stability or consistency of a subject's judgmental strategy. Control can be seen as the correlation between the predicted responses based on a regression model (mentioned above) and the actual responses made by the judge. This index is obtained in two steps. First, by inserting each of the cue values over all the trials into the raw score regression equation to solve for the set of estimated response values. Second, these predicted judgments are then correlated with the actual responses over all of the trials.

Mathematically represented:

$$\text{Cognitive Control} = r_{y_s \hat{y}_s} = R_s$$

5. Individual cue validity is the usefulness of a given cue in predicting the actual criterion over a series of trials. The usefulness of a given cue in the task is reflected by the ability of the cue to partially predict the criterion over a series of trials.

Mathematically represented:

$$\text{Ecological Validity} = r_{x_i y_e}$$

6. Weighting systems in the environment determine how the cues should be weighted and combined for maximum prediction of the criterion score. By using a regression equation, the proper combination rule can be identified and a weighting scheme can be found that yields the closest possible approximation of the actual criterion scores based on the cue values. This regression strategy can determine what weighting system the judge must use for maximum achievement.

7. Task control may be viewed as the index of the potential predictability of the criterion on the basis of all the available cues. It is the correlation between the estimated scores and the actual criterion scores.

Mathematically represented:

$$\text{Task Control} = r_{y_e \hat{y}_e} = R_e$$

8. Knowledge is used as a measure of the individual's awareness of the requirements of the task. It indicates the similarity between the pattern of actual cue weights in the environment and the weighting scheme which best models the judgments of the individual. It is obtained by correlating the judge's estimated response scores with the estimated criterion scores over all the trials.

Mathematically represented:

$$\text{Knowledge} = r_{\hat{y}_e \hat{y}_s} = G$$

Thus far the focus of the discussion has been the analysis of a situation in which two systems, the probabilistic environment and the cognitive system, of a judge are available for study. This is referred to by Hammond (1975) as a two-system case. Variations of the model have also been applied to the study of situations where only one system, the cognitive policy of the individual, is available for study. Examples of utilizing the single-system case may be found in a variety of areas, such as police and city counselors (Hammond and Adelman, 1976), radiologists (Hoffman, Slovic and Rorer, 1968) and client preferences in psychotherapy (Gillis and Stricherz, 1976).

The single-system case involves making public the subtle inferential activities of the judge when the environmental system is largely unknown. It focuses on the cognitive policy of the individual, that is, identifying the cues, function forms and the weighting scheme being utilized by the judge. The indices determined in the single-system case were cue utilization, the individual's judgment policy and cognitive control.

This study utilized this single-system case to determine the cue utilization of subjects in judging the success potential of female and male administrative applicants. Also, considered was the index of cognitive control.

Selection of the Population

The sample of this study consisted of two groups of judges: 20 male and 20 female administrators randomly selected from six Oregon community colleges. The six institutions were randomly selected from

the 13 Oregon community colleges. The list of administrators was obtained from the Oregon Department of Education's "Community College Directory 1977-1978." Judges were selected from persons who held the following administrative positions: president, dean, associate and assistant dean, administrative assistant, coordinator, and director. It was necessary to include administrative assistants, coordinators and directors in order to obtain the necessary random number of female subjects.

Data Collecting Instrument

The data collection instrument was a set of personality profiles presented in the format of the 16 Personality Factor Questionnaire (16 PF) (Cattell, Eber and Tatsuoka, 1970). The 16 PF represents 16 bipolar personality traits ranging on a scale from 1 to 10 with 10 being a high score. The profiles used here graphically depicted eight bipolar personality traits of 60 hypothetical administrative applicants, 30 males and 30 females.

The eight traits selected were:

1. Six bipolar traits from the 16 PF. These traits were representative of those most frequently mentioned in the literature concerning characteristics of successful leaders (Stodgill, 1958, 1974; Gibb, 1947; Adair, 1973).

2. Two bipolar traits taken from the literature dealing with psychological sex-differences of females and males as leaders (Parsons, 1955; Bond and Vinacke, 1961; Vinacke and Gullickson, 1964; Garai and Scheinfeld, 1968; Bartol and Wortman, 1975).

3. Five of the above traits corresponded to traits on BEM's Sex-Role Inventory (BSRI) as socially desirable for femininity and masculinity (1974).

Each personality trait (cue) was represented on a 10-point scale. The scores for each of the cues were indicated by a check mark at one of the 10 points along the scale. Since all of the profiles were bogus, the value for each cue was determined by using a table of random numbers. These cue values were plotted graphically on the personality profile (Appendix A).

A rating form was made for judges to record their judgments concerning the success potential (criterion) of the 60 hypothetical administrative applicants. The criterion values ranged from 1 (very low) to 20 (very high) possibility for administrative success (Appendix B).

Collection of Data

An administrator from each of the community colleges selected was contacted by telephone and arrangements were made for the researcher to visit the college to present the rating instrument. The telephone call covered the following details:

1. The purpose of the study would be to assess the personality profiles of 60 administrative applicants. On the basis of this information, administrators were to judge the success potential of the applicants as future mid-level administrators.

2. A date, day, time and room for the researcher to administer the instrument at the college was requested.

3. It was stated that approximately 45 minutes would be needed to complete the ratings.

4. Participants would remain anonymous.

5. Participation of individuals would be voluntary.

6. The participating colleges would receive a copy of the study when it was complete.

After an appropriate date, time and place had been established for each of the community colleges, the 40 judges were then contacted by phone. The purpose of the telephone call was to explain the aforementioned details. When an individual had agreed to participate, the judge was given an option to choose from several pre-established times to meet with the researcher.

The researcher met with groups ranging in size from two to eight judges. Judges were given a packet that included an instruction sheet, 60 personality profiles and a rating form. The rating forms had been precoded to indicate whether the judge was female or male. The directions as stated on the instruction sheet were read aloud by the researcher (Appendix C).

The 60 personality profiles were shuffled each time before being used by a subject to insure against sequence effects.

Analysis Procedures

Described in this section are the statistical tools used to answer the following questions.

1. Are the cues used differently to predict the administrative success of females and males? (Cue utilization index)

2. Are the cues differentially weighted within female profiles and male profiles?
3. Are the judges stable in making their judgments? (Cognitive Control Index)
4. Are the cues differentially weighted by the male and female judges?

Cue Utilization Index

The Pearson product-moment correlation coefficient, the symbol of which is "r", was used to measure the relationship between variables x_i (cue value) and y_s (criterion/response value) to obtain the cue utilization coefficient. Mathematically represented:

$$\text{Cue Utilization} = r_{x_i y_s}$$

A cue utilization index was obtained for each cue (8) in the task from each judge (40) resulting in 320 "r" values. This index reflected the degree to which each of the cues varied systematically with the subject's response over a series of 60 trials.

Since the Pearson r's are not equal units of measurements, they should not be added or averaged. To find the average correlation coefficient, Fisher's r to z transformation was used to convert the cue utilization coefficients into standardized scores (Dowie and Heath, 1974); Steel and Torrie, 1960). All succeeding statistical operations regarding correlations were performed on these normalized data.

Using the z scores, the mean \bar{X} utilization coefficients were computed for each of the eight cues for the following:

Female and male subjects on

1. Female profiles
2. Male profiles

To determine if any significant differences existed between the mean cue utilization scores on the females and male profiles t-tests were applied.

Cue Weighting Within Female and Male Profiles

The Tukey's HSD test was used to compare the cue means within the female and male profiles to determine if the cues were differentially weighted. The Tukey's HSD test was designed for making all pairwise comparisons among means (Kirk, 1968). A comparison involving two means was declared significant if it exceeded the HSD.

Cognitive Control Index (R_s^2)

The cognitive control index was determined for each judge by using multiple linear regression analysis. This technique analyzed the relationship between the criterion values (responses/y) and the eight cue values (x). This was done for each judge over 60 trials.

Through multiple regression techniques, a prediction equation was determined for each judge that indicated the manner in which the cue values were weighted to obtain the "best possible" prediction of the criterion.

The cognitive control index (R_s^2) was based on the regression equation obtained for each judge and indicated how well their cue weighting strategy worked. The index was determined by correlating the predicted

criterion (response) scores (\hat{y}) with the actual criterion scores (y).

Mathematically represented:

$$\text{Cognitive Control} = r_{y_s \hat{y}_s} = R_s$$

The symbol (R_s) indicated how closely the two sets of scores are related. The closer the relationship or similarity, the better the predictability. The symbol R_s indicates that the correlation involves multiple variables as opposed to the Pearson r which only involves two variables. Unlike r , R_s cannot be negative; it ranges from 0 to 1 (Beal, Gillis and Stewart, 1978). When this index was squared (R_s^2) it indicated the percentage of variance in the subject's responses that could be accounted for by the regression equation. For example, if R_s was .75, R_s^2 would be .56. Therefore, it could be said that 56 percent of the variance in the judge's responses could be accounted for by the regression equation.

Cue Weighting by Female and Male Judges

The Tukey's HSD test was used to determine if the female and male judges used the cues differently and the relative cue weights.

IV. ANALYSIS OF DATA

Data are presented regarding the judgment policies used by Oregon community college administrators in judging the success potential of female and male administrative applicants. The findings and discussion are divided into four sections: (1) a comparison of cue weights used by the judges in predicting the success potential of the female and male administrative applicants, (2) a description of the cue weighting patterns used within the female and male profiles, (3) an examination of the stability of the female and male judges in making their judgments, and (4) an assessment of the cue weights used by the female and male judges.

Cue Utilization

The major question of this study that deals with the hypotheses concerns the cue weights used by the judges in predicting the success potential of the female and male administrative applicants. In order to answer this question, thus testing the hypotheses, the following procedures were used: (1) The Pearson "r" was used to measure the relationship between the cue value and the criterion/response value over a series of 60 trials. This yielded the utilization coefficients for each of the eight cues in the task from each judge (N = 40). (2) The "r" scores were converted to two scores by using Fisher's r to z transformation. All further analyses were done using these z scores. (3) Significance of the mean utilization coefficients was tested by using t-tests. Table 1 presents the mean utilization coefficients on the female and male profiles and the results of the t-tests.

Table 1. Mean Cue Utilization Coefficients of Female and Male Profiles
 Female and Male - Judges

Cues	Female Profiles	Male Profiles	T-Value	Significance
1. Outgoing	.212	.180	-.103	.309
2. Intelligent	.333	.309	-.80	.429
3. Suspicious	.025	-.126	-5.21	.001***
4. Assertive	.069	-.012	-2.37	.023*
5. Venturesome	.239	.265	.85	.400
6. Self-Sufficient	.258	.314	1.57	.123
7. Person-Oriented	-.124	.219	11.53	.001***
8. Accommodative	.295	-.110	-10.75	.001***

***significant at $p < .001$

*significant at $p < .05$

The results summarized in Table 1 are discussed in relationship to the hypotheses. Before proceeding to discuss these results it is necessary to clarify how the term weight is being used in the hypotheses. Weight refers to correlation coefficients. The coefficients will be positive because the bipolar cues mentioned in the hypotheses are those that appear on the right side of the 10 point continuum. A positive (+) correlation means the cue value increases or decreases together with the criterion value (success potential). The hypotheses are presented as follows:

Hypothesis 1. There will be no significant difference in the weights attached to the following cues when females are being rated on their success potential.

- (a) Outgoing
- (b) Intelligent
- (c) Suspicious

Outgoing - No significant difference - hypothesis retained.

Intelligent - No significant difference - hypothesis retained.

Suspicious - Significant difference at $p < .001$ - hypothesis rejected.

The hypothesis could not be supported because the suspicious cue was weighted positively for females ($r = +.02$) and negatively for males ($r = -.12$), rather than positively for both.

Hypothesis 2. There will be a significantly greater weight attached to the following cues when males are being rated on their success potential.

- (a) Assertive
- (b) Venturesome
- (c) Self-sufficient

Assertive - Significant difference at $p < .05$ - hypothesis rejected.

The hypothesis could not be supported because the assertive cue was weighted positively for females ($r = +.06$) and negatively for males ($r = -.01$).

Venturesome - No significant difference - hypothesis rejected.

The hypothesis could not be supported because a significantly greater weight was not attached to the venturesome cue when rating males. Although the cue was weighted more heavily for males ($r = +.26$) than for females ($r = +.23$) it is not a significantly greater weight.

Self-sufficient - No significant difference - hypothesis rejected.

The hypothesis could not be supported because a significantly greater weight was not attached to the self-sufficient cue when rating

males. Although the cue was weighted more heavily for males ($r = +.31$) than for females ($r = +.25$) it was not a significantly greater weight.

Hypothesis 3. There will be a significantly greater weight attached to the following cues when females are being rated on their success potential.

(a) Person-oriented

(b) Accommodative

Person-oriented - Significant difference at $p < .001$ - hypothesis rejected.

The hypothesis could not be supported because the person-oriented cue was weighted more heavily for males ($r = +.21$) than for females ($r = -.12$).

Accommodative - Significant difference at $p < .001$ - hypothesis retained.

In summary, when rating male and female administrative applicants (profiles) there were no significant differences in the weights attached to the following cues: outgoing, intelligent, venturesome and self-sufficient. Significant differences were found for cues: assertive ($.025, p < .05$), person-oriented, suspicious, and accommodative (all $.001, p < .001$). Although significant differences were found for the cues assertive, person-oriented and suspicious, the hypothesis could not be supported because these cues were weighted in a manner contrary to what had been predicted.

Positive or Negative Cue Utilization

Table 2 presents a summary of the judges (+) or (-) cue utilization. It can be observed that when rating male and female profiles the cues were used in the same direction by the judges. A positive

Table 2. A Summary of the Judges' (+) or (-) Cue Utilization

Cues		Profiles			
		Female Judges		Male Judges	
+	-	Female	Male	Female	Male
1. Outgoing	Reserved	+	+	+	+
2. Intelligent	Less Intelligent	+	+	+	+
3. Assertive	Yielding				
4. Person-Oriented	Task-Oriented	-	+	-	+
5. Venturesome	Shy	+	+	+	+
6. Suspicious	Trusting		-		-
7. Accommodative	Exploitative	+	-	+	-
8. Self-Sufficient	Group-Dependent	+	+	+	+

Note: A cue was considered (+) or (-) if 70% or more of the judges used the cue in that manner. See Appendices D, E, F and G for "r" values for judges on male and female profiles.

correlation indicated that the cue value and the criterion value (success rating) tended to increase (or decrease) together. A negative correlation indicated that as the cue value became larger, the criterion value tended to become smaller, or vice versa.

Additional Questions

As a result of the findings that were presented concerning the hypotheses three additional questions were generated. They were:

1. Are the cues differentially weighted within the female and male profiles?
2. Are the judges consistent in their use of cues in making their judgments?

Table 3. Tukey's HSD Multi-Mean Comparison for Coefficients of FEMALE PROFILES

Cue	Results of Tukey's HSD	
Person-Oriented	X_4 -.124	Sub Set 1
Suspicious	X_6 .025	
Assertive	X_3 .069	Sub Set 2
Outgoing	X_1 .212	
Venturesome	X_5 .239	Sub Set 3
Self-Sufficient	X_8 .258	
Accommodative	X_7 .295	
Intelligent	X_2 .333	

3. Are the male and female judges differentially weighting the cues when rating the applicants?

The discussion of these three questions follows.

Cue Weighting Within Female and Male Profiles

The Tukey's HSD test was used to compare the cue means within the female profiles and male profiles to determine if the cues were differentially weighted. The results are presented in Table 3 for female profiles and in Table 4 for male profiles.

For female profiles, cue X_4 was significantly different from all of the other cues and cues X_6 and X_3 were significantly different from cues X_1 , X_5 , X_8 , X_7 and X_2 . Therefore, intelligent, accommodative,

Table 4. Tukey's HSD Multi-Mean Comparison for Coefficients of
MALE PROFILES

Cues	Results of Tukey's HSD	
Suspicious	X_6 -.126	Sub Set 1
Accommodative	X_7 -.110	
Assertive	X_3 -.012	
Outgoing	X_1 .180	Sub Set 2
Person-Oriented	X_4 .219	
Venturesome	X_5 .265	
Intelligent	X_2 .309	Sub Set 3
Self-Sufficient	X_8 .314	

self-sufficient, venturesome and outgoing cues were depended on most heavily by the judges when rating the success potential of the female profiles.

For males, cues X_6 , X_7 and X_3 were significantly different from all other cues. Cue X_1 was significantly different from X_8 . Therefore, self-sufficient, intelligent, venturesome and person-oriented cues were depended on most heavily by the judges when rating the male profiles.

In summary, the judges used the intelligent, accommodative, self-sufficient, venturesome and outgoing cues significantly more than the other cues when rating females. The self-sufficient, intelligent, venturesome and person-oriented cues were used significantly more than the other cues by the judges when rating males.

Table 5. Stability of the Judges (R_s^2) Mean Comparison Using T-Test.

$\bar{X} R_s^2$		t-Value	df	2-Tail Probability
Female	Male			
.520	.426	2.33	38	.025*

*significant at $p < .05$

Stability of the Judges

The cognitive control index (R_s^2) was obtained for each of the judges by using a multiple linear regression. A t-test was used to compare the means of R_s^2 for the female and male judges. The results are shown in Table 5.

A significant difference was found between the female and male judges ($p < .05$). The females maintained a greater consistency in making their overall judgments. Appendices D, E, F, and G show a more detailed review of the "r" values for the judges on male and female profiles and their (R_s^2) indices.

Cue Weighting by Female and Male Judges

The Tukey's HSD test was used to determine if female and male judges differentially weighted the cues when rating the applicants. The results are presented in Table 6 for female judges and Table 7 for male judges.

For female judges, cue X_6 was significantly different from cues X_1 , X_5 , X_8 and X_2 . Cues X_3 , X_4 and X_7 were significantly different from cues X_1 , X_5 and X_2 . Cue X_1 was significantly different from X_2 . Therefore, the female judges placed more importance on intelligent,

Table 6. Tukey's HSD Multi-Mean Comparison for Coefficients of FEMALE JUDGES

Cues	Results of Tukey's HSD	
Suspicious	X_6 -.052	Sub Set 1
Assertive	X_3 .027	
Person-Oriented	X_4 .039	
Accommodative	X_7 .070	
Outgoing	X_1 .176	Sub Set 3
Venturesome	X_5 .258	
Self-Sufficient	X_8 .286	Sub Set 4
Intelligent	X_2 .349	

self-sufficient and venturesome cues when rating both the profiles than the other cues.

For male judges, cue X_6 was significantly different from X_7 , X_1 , X_5 , X_8 and X_2 . Cues X_3 and X_4 were significantly different from cues X_1 , X_5 , X_8 and X_2 . Cue X_7 was significantly different from cues X_8 and X_2 . Therefore, the male judges placed more importance on intelligent, self-sufficient, venturesome and outgoing cues when rating the profiles.

In summary, both male and female judges depended most on the intelligent, self-sufficient and venturesome cues when rating the profiles. The only additional cue depended on by the judges was the outgoing cue.

Table 7. Tukey's HSD Multi-Mean Comparison for Coefficients of MALE JUDGES

Cues	Results of Tukey's HSD
Suspicious	X_6 -.049
Assertive	X_3 .030
Person-Oriented	X_4 .055
Accommodative	X_7 .115
Outgoing	X_1 .217
Venturesome	X_5 .246
Self-Sufficient	X_8 .286
Intelligent	X_2 .293

Summary

The mean cue utilization coefficients of the female and male profiles were tested for significant differences by using t-tests. No significant differences were found for the following cues: outgoing, intelligent, assertive, venturesome, and self-sufficient. Significant differences were found for the following cues: person-oriented, assertive, suspicious and accommodative. Although significant differences were found, the cues were used in a manner contrary to what was predicted.

The Tukey's HSD test compared the mean cue utilization coefficients within the female and male profiles to determine if the cues were differentially weighted. The results showed that when rating the success potential of female applicants, the judges used the following cues significantly more than the other cues: intelligent, accommodative, self-sufficient, venturesome and outgoing. When rating males the following cues were used significantly more than the other cues: self-sufficient, intelligent, venturesome and person-oriented.

The stability of the judges on the cognitive control index (R_s^2) was obtained by using multiple linear regression. Application of a t-test indicated a significant difference between the male and female judges. The females demonstrated a greater consistency in making their overall judgments than males.

A Tukey's HSD was used to determine if female and male judges differentially weighted the cues in making their judgments. The results showed that when rating the applicants both male and female judges used the intelligent, self-sufficient and venturesome cues significantly more than the other cues. In addition to these cues, the male judges used the outgoing cue significantly more than the other cues.

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The summary, conclusions, and recommendations for further study are presented as follows.

Summary

Purpose

The purpose of this study was to determine how community college administrators used certain personality traits (cues) in judging the success potential of female and male administrative applicants. The review of literature indicated that certain personality traits were socially desirable for either males or females, while other traits were perceived as neutral.

Of the eight personality traits used in this study, three could be classified as "masculine," assertive, venturesome and self-sufficient; two as "feminine," person-oriented and accommodative; and the remaining three, outgoing, intelligent and suspicious, as "neutral." Research also indicated that there were certain traits associated with leadership, but that the majority of these traits were associated with the masculine personality.

At the present time in our society there is a movement to allow males and females the opportunity to develop a more androgynous personality. Even though this concept is gaining momentum, sex-role stereotypes still exist. These inevitabilities have raised the question of how females and males would be perceived who are aspiring to leadership roles.

Method

The judges consisted of 20 female and 20 male administrators randomly selected from Oregon's community colleges. Judges were asked to assess the personality profiles of 60 hypothetical administrative applicants. There were an equal number of female and male profiles. The profiles depicted eight personality dimensions having values ranging from 1 to 10. Using these profiles as a basis of information the subjects were asked to judge the success potential of these applicants on a scale of 1 to 20, with 20 indicating the highest potential. A multiple-cue learning model was used to assess the importance of the various cue values in judging the success potential of male and female administrative applicants. The Pearson "r" was used to measure the relationship between the cue value and the criterion/response value over a series of 60 trials. This process yielded a utilization coefficient for each cue (8) in the task from each judge (40). The "r" scores were converted to z scores by using Fisher's r to z transformation. All further analyses were done using these z scores. Significance of the mean utilization coefficients was assessed by using t-tests. Tukey's HSD multi-mean comparison was used to determine the significance of the mean utilization coefficients within the female profiles and within the male profiles. To examine the stability of the female and male judges multiple linear regression was used. The square of the multiple correlation between cue value and a judge's responses (R_s^2) was obtained for each judge. The significance of the mean (R_s^2) for the male and female judges was compared by using a t-test. Tukey's

HSD compared the mean utilization coefficients for the male and female judges to determine if they used cues differently.

Findings

The results are presented in light of how they answer the following four objectives stated in this study:

1. To compare the cue weights used by the judges in predicting the success potential of the female and male administrative applicants. Results: When rating male and female administrative applicants (profiles) there were no significant differences in the weights attached to the following cues: outgoing, intelligent, venturesome and self-sufficient. Significant differences were found for cues: assertive ($.025 p < .05$), person-oriented, suspicious and accommodative (all $.001, p < .001$). Although significant differences were found for the cues: assertive, person-oriented and suspicious, the hypothesis could not be supported because these cues were weighted in a manner contrary to what had been predicted.

2. To describe the cue weighting patterns within the female and male applicants' profiles.

Results: In describing the cue weighting patterns used within the female profiles the judges used the intelligent, accommodative, self-sufficient, venturesome and outgoing cues significantly more than the other cues. For the male profiles the self-sufficient, intelligent, venturesome and person-oriented cues were used significantly more than the other cues by the judges.

3. To examine the stability of the female and male judges in making their judgments.

Results: In examining the stability of the female and male judges there was a significant difference found in comparing the means of the cognitive control indices (R_s^2). The female judges were more consistent in making their judgments than the males.

4. To assess the cue weights used by the female and male judges in making their judgments.

Results: The female and male judges used the intelligent, self-sufficient and venturesome cues significantly more than the other cues when rating the applicants. In addition to these cues the male judges used the outgoing cue significantly more than the other cues.

Conclusions

The findings presented in this study suggest the following conclusions:

1. Males and females who are seen as intelligent, self-sufficient, venturesome and outgoing are perceived by selected judges as having a greater potential for administrative success. This agrees with the suggestions of Stodgill (1958) and Jennings (1960) who have associated these traits with successful leaders.

2. It was perceived that assertive females would be more successful than assertive males. In fact, assertiveness for males seemed to be a liability. However, this conclusion is tenuous because the results suggest a certain ambivalence concerning exactly how assertiveness would affect the success potential of both males and females. This becomes

evident when examining the r values for the assertive cue for each of the judges. There seemed to be an equal use of the cue in both a positive and negative direction for males and females. When rating male and female applicants, 45 percent of the female judges used it negatively and 55 percent used it positively. The male judges showed the same pattern when rating female profiles, with 45 percent negative and 55 percent positive. For the male profiles, 50 percent used assertiveness positively and 50 percent used it negatively. This is an apparent contradiction of Jennings (1960) and Stodgill (1958) who suggest that aggressiveness and persistence are necessary traits for leadership. It is also contrary to the suggestions of Schein (1973) who states that this leadership trait is perceived as an acceptable trait for the masculine personality.

3. Person-oriented males are perceived as having a greater success potential than person-oriented females. This is contrary to Parsons' (1955) arguments that women tend to be more expressive (socio-emotional) in their leadership patterns, while men tend to be more instrumental (task-oriented). This is an apparent contradiction of Rousell's (1974) study which tended to indicate that "school teachers rated female department heads higher on consideration and lower on production emphasis than their male counterparts."

4. Women who tended to be suspicious are perceived as having a greater possibility for success, while the opposite was true for men. If the males were trusting their success potential increased. This seems to question the numerous studies which reported trust as the basis for successful interpersonal relationships (Giffin, 1971; Allport, 1960; Wofford et al., 1977). Also, it is contrary to the idea that the

manager (whether male or female) is initially responsible for establishing trust in the organization (Wofford, 1977).

5. Accommodative females are perceived as having a greater possibility for success, while males were seen as more successful if they exhibited exploitative behavior. This agrees with Caplow (1956), Bond and Vinacke (1961) and Vinacke and Gullickson (1964) whose findings show females adopt an accommodative style of behavior when competing within a group, while males demonstrate an exploitative behavior in order to win. This seems to indicate that it is still perceived as acceptable for males to be exploitative in order to win, while for females it continues to be more advantageous if they are accommodative in dealing with others.

Recommendations for Further Study

The following recommendations for further research are based on the findings in this study.

1. A replication study could be conducted using managers from business and industry which would allow the findings to be compared with this administrative group. The findings would concern the perceptions of business managers in judging managerial success potential. The results would enable one to determine whether or not the results from this study could be extended to a wider leadership group.

2. This study should be replicated using another sample of community college administrators, possibly from another state, to enable the results of this study to be substantiated.

3. If bipolar cues are used again, the hypotheses could be stated in a way that would indicate the positive or negative direction of the cue utilization coefficients. This would allow a more extensive discussion of results and how they relate to traditional sex-role stereotypes.

4. If the same profiles are used to replicate further studies the assertive cue should be defined as a positive method of affirming one's claim. In this study it was defined as synonymous with aggressive, meaning stubborn, competitive and dominant. Assertive versus aggressive has come to have two meanings, with assertive having a positive connotation while aggressive has a negative connotation. Using assertive as the same as aggressive may have caused the judges to be ambivalent about how this cue would affect the success potential of males and females.

5. Instead of using bipolar cues, unipolar cues could be used which might give a clearer indication of cue utilization.

BIBLIOGRAPHY

- Adair, J. 1973. Action Centered Leadership. New York: McGraw-Hill.
- Allport, C. W. 1960. Personality and Social Encounter. Boston: Beacon Press.
- Argyle, M., M. Lalljee, and M. Cook. 1968. The Effects of Visibility on Interaction in a Dyad. Human Relations 21:3-17.
- Bakan, D. 1966. The Duality of Human Existence: An Essay on Psychology and Religion. Chicago: Rand McNally.
- Bardwick, J. M. 1971. The Psychology of Women: A Study of Bio-cultural Conflicts. New York: Harper and Row.
- Bartol, K. and M. Wortman. 1975. Male and Female Leader Behavior and Satisfaction in a Hospital. Personnel Psychology 28(4): 533-547.
- Baumrind, D. 1971. Current Patterns of Parental Authority. Developmental Psychology Monograph 1971-4(1, Pt. 2).
- Beal, D., J. Gillis, and T. Stewart. 1978. The Lens Model: Computational Procedures and Applications. Perceptual and Motor Skills 46:3-28.
- Bem, S. 1975. Sex Role Adaptability: One Consequence of Psychological Androgyny. Journal of Personality and Social Psychology 31(4): 634-643.
- Bem, S. 1974. The Measurement of Psychological Androgyny. Journal of Consulting and Clinical Psychology 42(2):155-162.
- Bem, S., W. Martyna, and C. Watson. 1976. Sex Typing and Androgyny: Further Explorations of Expressive Domain. Journal of Personality and Social Psychology 34(5):1016-1023.
- Berstein, R. C. and C. Jacklin. 1973. The 3 1/2 Month-old Infant: Stability of Behavior, Sex Differences and Longitudinal Findings. Unpublished Masters Thesis, Stanford University, Palo Alto, Calif.
- Blevens, J. K. 1975. Sources of Cognitive Impairment in Paranoid and Non-Paranoid Schizophrenia. Unpublished dissertation, Texas Tech. University.
- Bond, J. R. and W. E. Vinacke. 1961. Coalitions in Mixed-Sex Triads. Sociometry 24:61.

- Broverman, I. K., S. R. Vogel, D. M. Broverman, F. E. Clarkson, and D. S. Rosenkrantz. 1972. Sex-Role Stereotypes: A Current Appraisal. Journal of Social Issues 28(2):59-78.
- Brunswik, E. 1956. Perception and the Representative Design of Experiments. Berkeley: University of California Press.
- Brunswik, E. 1952. The Conceptual Framework of Psychology. Chicago: Chicago University Press.
- Caplow, T. A. 1956. A Theory of Coalitions in the Triad. American Sociology Review 21:489-493.
- Cattell, R. B., H. W. Eber, and M. Tatsuoka. 1970. Handbook for the Sixteen Personality Factor Questionnaire. Champaign, Ill.: Institute for Personality and Ability Testing.
- Chapman, B. S. and F. Luthans. 1975. The Female Leadership Dilemma. Public Personnel Management, May-June:173-179.
- Chesler, P. 1972. Woman and Madness. Garden City, N.Y.: Doubleday.
- Costrich, N., J. Feinstein, L. Kidder, J. Marecek, and L. Pascale. 1975. When Stereotypes Hurt: Three Studies of Penalties for Sex-Role Reversals. Journal of Experimental Social Psychology 11:520-530.
- Deutsch, H. 1944. The Psychology of Women. New York: Grune and Stratton. (Vol. 1).
- Deutsch, M. 1958. Trust and Suspicion. Journal of Conflict Resolution 2:265-279.
- Donelson, E. and J. E. Gullahorn. 1977. Women, A Psychological Perspective. New York: John Wiley & Sons.
- Dowie, N. M. and R. M. Heath. 1974. Basic Statistical Methods (4th ed). New York: Harper & Row.
- Emmerich, W. 1971. Structure and Development of Personal-Social Behaviors in Preschool Settings. Educational Testing Service, Head Start Longitudinal Study.
- Feshbach, S. 1970. Aggression. In P. H. Mussen (ed.) Carmichael's Manual of Child Psychology. New York: Wiley.
- Fromm, E. 1962. The Art of Loving. London: Allen & Urwin Pub.
- Garai, J. E. and Scheinfeld, A. 1968. Sex Differences in Mental and Behavioral Traits. Genetic Psychology Monograph 169-299.

- Ghiselli, E. and R. Barthol. 1956. Role Perceptions of Successful and Unsuccessful Supervisors. Journal of Applied Psychology 40(4): 241-244.
- Gibb, C. 1947. The Principles and Traits of Leadership. Journal of Abnormal Psychology 42(3):267.
- Gibb, J. R. and L. M. Gibb. 1967. Humanistic Elements in Group Growth. In S. Bugental, ed., Challenges in Humanistic Psychology. New York: McGraw-Hill. pp. 161-170.
- Giffin, K. and B. Patton. 1971. Fundamentals of Interpersonal Communication (2nd ed.). New York: Harper & Row.
- Gillis, J., M. Stricherz, O. Caskey, and D. Beal. In press. An Experimental Study of Judgement of Quality Counseling.
- Hammond, K. R. 1966. The Psychology of Egon Brunswik. New York: Holt, Rinehart & Winston.
- Hammond, K. R. 1955. Probabilistic Functioning and the Clinical Method. Psychological Review 62:255-262.
- Hammond, K. 1975. Social Judgment Theory: Its Use in the Study of Psychoactive Drugs. In K. R. Hammond and C. R. B. Joyce, Psychoactive Drugs and Social Judgment. New York: Wiley.
- Hammond, K. R. and L. Adelman. 1976. Science Values and Human Judgment. Science 194(Oct.):389-396.
- Hammond, K. R., T. Stewart, B. Brehmer, and D. Steinmann. 1975. Social Judgment Theory. In M. F. Kaplan and S. Schwartz (eds.), Human Judgment and Decision Processes. New York: Academic Press.
- Hammond, K. R. and D. Summers. Cognitive Control. 1972. Psychological Review 79:58-67.
- Heim, A. H. 1970. Intelligence and Personality. New York: Penguin Books.
- Hoffman, P. J., P. Slovic, and L. G. Rorer. 1968. An Analysis of Variance Model for the Assessment of Configural Cue Utilization in Clinical Judgment. Psychological Bulletin 69:338-349.
- Hutt, C. 1972. Males and Females. Middlesex, England: Penguin Books.
- Hyde, J. S. and B. G. Rosenberg. 1976. Half the Human Experience. Lexington, Mass.: Heath.

- Jennings, E. 1960. An Anatomy of Leadership Princes, Heroes and Supermen. New York: Harper & Brothers Pub.
- Kirk, R. E. 1968. Experimental Design: Procedures for the Behavioral Sciences. Belmont, Calif.: Brooks/Cole Pub. Co.
- Lewis, M., J. Kagan, and J. Kalafat. 1966. Patterns of Fixation in the Young Infant. Child Development 37:331-341.
- Lichtenstein, S. and P. Slovic. 1971. Reversals of Preference Between Bids and Choices in Gambling Decisions. Journal of Experimental Psychology 89:46-55.
- Lockheed, M. and K. Hall. 1976. Conceptualizing Sex as a Status Characteristic: Applications to Leadership Training Strategies. Journal of Social Issues 32(3):111-120.
- Maccoby, E. E. and C. N. Jacklin. 1974. The Psychology of Sex Differences. Palo Alto, Calif.: Stanford University Press.
- O'Leary, V. E. 1977. Toward Understanding Women. Monterey, Calif.: Brooks/Cole Pub. Co.
- Parsons, T. 1955. The American Family: Its Relations to Personality and to the Social Structure. In T. Parsons and R. F. Bales (eds.), Family, Socialization and Interaction Process. New York: Free Press.
- Rappoport, L. and D. A. Summers. Human Judgment and Social Interaction. New York: Holt, Rinehart & Winston.
- Rosenkrantz, P., S. Vogel. H. Bee, I. Broverman, and D. M. Broverman. 1968. Sex-Role Stereotypes and Self Concepts in College Students. Journal of Consulting and Clinical Psychology 32:287-295.
- Rousell, C. 1974. Relationship of Sex of Department Heads to Department Climate. Administrative Science Quarterly 19:211-220.
- Schein, V. 1973. The Relationship Between Sex Role Stereotypes and Requisite Management Characteristics. Journal of Applied Psychology 57:95.
- Sherman, J. A. 1971. On the Psychology of Women. Springfield: Charles C. Thomas, Pub.
- Shields, S. 1975. Functionalism, Darwinism and the Psychology of Women. American Psychologist 30:739-754.
- Skolnikoff, E. B. and H. Brooks. 1975. Science Advice in the White House? Continuation of a Debate. Science 187:35-41.

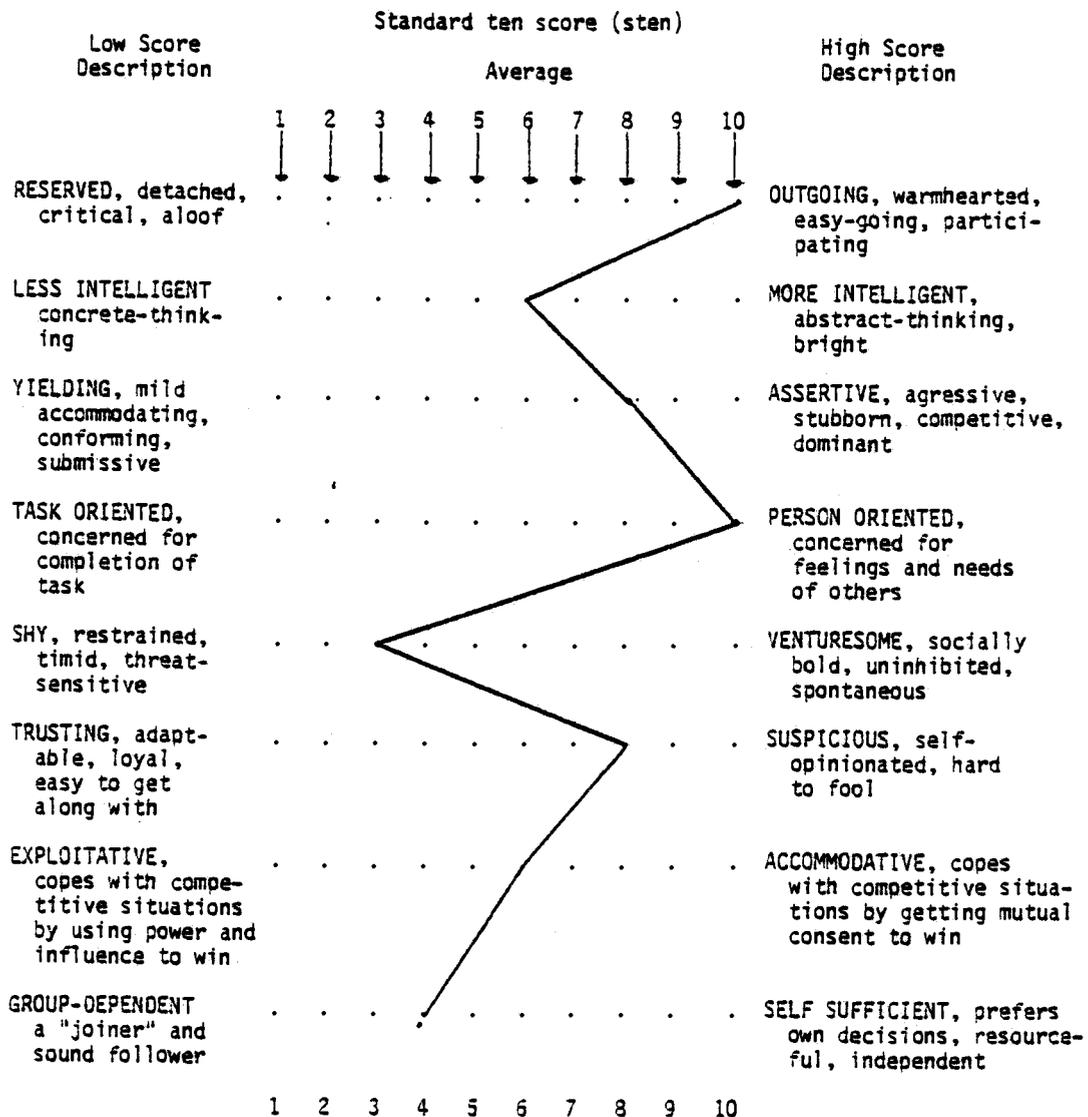
- Slovic, P., B. Fischhoff, and S. Lichtenstein. 1977. Behavioral Decision Theory. Annual Review of Psychology 28:1-39.
- Slovic, P. and S. Lichtenstein. 1971. Comparison of Bayesian and Regression Approaches to the Study of Information Processing in Judgment. Organizational Behavior and Human Performance 6:649-744.
- Steel, R. and J. Torrie. 1960. Principles and Procedures of Statistics. New York: McGraw Hill. pp. 189-191.
- Stodgill, R. M. 1974. Handbook of Leadership: A Survey of Theory and Research. New York: The Free Press.
- Stodgill, R. M. 1958. Personal Factors Associated with Leadership. Journal of General Psychology 25:35-71.
- Tavris, C. and C. Offir. 1977. The Longest War: Sex Differences in Perspective. New York: Harcourt, Bruce, Jovanovich, Inc.
- Terman, L. M. and L. E. Tyler. 1954. Psychological Sex Differences. In L. Carmichael (ed.), Manual of Child Psychology, 2nd ed. New York: Wiley.
- Tiger, L. 1969. Men in Groups. New York: Random House.
- Tucker, L. R. 1964. A Suggested Alternative Formulation in the Developments by Hursch, Hammond and Hursch, and by Hammond, Hursch and Todd. Psychological Review 71:528-530.
- Tyler, L. E. 1965. The Psychology of Human Differences. New York: Appleton-Century-Crofts.
- Vinacke, E. and G. Gullickson. 1964. Age and Sex Differences in the Formation of Coalitions. Child Development 35:1217-1231.
- Whiting, B. 1963. Six Cultures: Studies of Child Rearing. New York: John Wiley & Son.
- Wofford, J., E. Gerloff, and R. Cummins. 1977. Organizational Communications: The Keystone and Managerial Effectiveness. New York: McGraw-Hill.

APPENDICES

Appendix A

PERSONALITY PROFILE

NAME RITA CAMPBELL



Appendix B Continued

RATING SCALE
(Continued)

FIRST NAME	(1) VERY LOW SUCCESS POTENTIAL										(20) VERY HIGH SUCCESS POTENTIAL									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 31)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 32)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 33)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 34)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 35)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 36)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 37)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 38)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 39)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 40)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 41)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 42)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 43)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 44)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 45)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 46)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 47)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 48)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 49)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 50)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 51)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 52)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 53)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 54)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 55)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 56)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 57)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 58)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 59)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
_____ 60)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

APPENDIX C

INSTRUCTIONS

You have been given a packet that contains the names of 60 individuals and their profiles on several important personality dimensions. You also have a rating form numbered from 1 to 60.

The names and profiles are to be regarded as those of individuals who have all applied for mid-level administrative positions at community colleges; for example: associate dean, director or coordinator.

The scores for the 8 personality traits range from 1 to 10. Using these profiles as a basis of information you are being asked to judge how successful you think these applicants will be as future administrators.

Read over the personality traits and the descriptions given for each. Assess each person's profile and then on the rating form, write only the person's first name in the left hand margin. Rate the success potential of each person by circling the number from 1 to 20, with 20 being the highest potential.

There are no right or wrong answers. Take as long as you need to complete the rating sheet. It should take 45 minutes or less.

It will not be necessary to put your name on the rating sheet, unless you wish to do so. All information collected will remain anonymous.

Thank you for participating in this study.

APPENDIX D "r" Values for Female Judges on Female Profiles

Female Judges	Outgoing/ Reserved	More Intelligent/ Less Intelligent	Assertive/ Yielding	Person Oriented/ Task Oriented	Venturesome/ Shy	Suspicious/ Trusting	Accomodative/ Exploitative	Self-Sufficient/ Group Dependent	R^2 Index
1	.066	.146	.144	.015	.133	-.187	.297	.436	.387
2	-.076	.081	.276	-.338	.595	.097	.208	.608	.538
3	-.005	.325	-.169	-.512	.424	.299	.161	.128	.516
4	.260	.122	.020	-.258	.318	-.216	.228	.422	.460
5	.478	.289	-.291	.147	.025	-.032	.048	.276	.559
6	-.019	.302	.383	-.302	.291	.042	.036	.329	.468
7	.443	.601	-.232	-.217	.113	-.207	.439	-.236	.587
8	.460	.093	.258	.107	.377	.190	-.009	.262	.688
9	.044	.483	.092	-.528	.281	.152	.296	.484	.558
10	.167	.700	-.092	-.121	.265	-.139	.298	-.045	.662
11	.178	-.075	.245	-.116	.556	-.197	.258	.263	.422
12	.529	.578	-.051	.126	-.064	.090	.123	-.251	.537
13	.269	.440	-.168	-.219	-.001	.537	.440	-.152	.302
14	.208	.116	-.029	-.107	.117	-.237	.537	.119	.481
15	.258	.567	.352	-.249	.288	.111	.364	.246	.679
16	.108	.144	-.055	-.144	.198	-.324	.164	.187	.178
17	.038	.393	.388	-.085	.273	-.025	.370	.624	.723
18	-.021	.285	.359	.031	.480	.262	.198	.743	.744
19	-.128	.339	.294	.005	.039	.085	-.001	.582	.414
20	.318	.648	-.335	-.089	.025	.048	.235	-.225	.501
Summary:									
	5-	1-	9-	14-	2-	9-	2-	4-	
	15+	19+	11+	6+	18+	11+	18+	16+	

APPENDIX E "r" Values for Female Judges on Male Profiles

Female Judges	Outgoing/ Reserved	More Intelligent/ Less Intelligent	Assertive/ Yielding	Person Oriented/ Task Oriented	Venturesome/ Shy	Suspicious/ Trusting	Accomodative/ Exploitative	Self-Sufficient/ Group Dependent	R ² Index
1	.064	.360	.047	.418	.357	-.196	-.158	.248	.387
2	.076	.115	.175	.116	.485	-.240	-.178	.415	.538
3	.112	.438	-.060	.246	.477	-.008	-.399	.411	.516
4	.273	.264	-.098	.045	.367	-.300	.111	.214	.460
5	.488	.141	-.155	.408	.062	.044	-.449	.516	.559
6	-.069	.476	.092	.256	.278	-.159	.046	.236	.468
7	.167	.459	.019	.296	.400	-.353	-.118	.030	.587
8	.479	.085	.015	.397	.577	-.098	-.324	.608	.688
9	-.214	.567	.100	-.053	.150	.065	-.220	.270	.558
10	.087	.585	-.459	.429	.230	-.271	-.139	.243	.662
11	.249	.150	.018	.170	.496	-.319	-.104	.227	.422
12	.075	.496	-.213	.162	.252	-.318	-.250	-.166	.537
13	.151	.008	.028	-.069	.296	.067	.054	.042	.302
14	.141	-.162	.079	.164	.098	-.342	.339	.275	.481
15	.172	-.018	-.209	.235	-.137	.195	.156	.321	.679
16	.271	.272	.112	.463	.487	-.272	-.306	.400	.178
17	.223	.382	-.019	.371	.248	.091	-.241	.682	.723
18	.139	.471	.252	.065	.172	.241	-.106	.322	.744
19	.105	.484	-.070	.263	.064	-.163	.027	.255	.414
20	.154	.575	-.001	-.009	-.047	-.245	-.119	.020	.501
Summary:									
	2-	2-	9-	3-	2-	14-	14-	1-	
	18+	18+	11+	17+	18+	6+	6+	19+	

APPENDIX F "r" Values for Male Judges on Female Profiles

Male Judges	Outgoing/ Reserved	More Intelligent/ Less Intelligent	Assertive/ Yielding	Person Oriented/ Task Oriented	Venturesome/ Shy	Suspicious/ Trusting	Accomodative/ Exploitative	Self-Sufficient/ Group Dependent	R ² Index
1	.222	.290	-.205	-.196	.131	.162	.264	-.008	.175
2	.483	.379	-.146	-.068	-.015	-.001	.176	.093	.345
3	.118	.327	-.025	-.217	.218	.064	.545	-.048	.358
4	.362	.166	-.053	-.002	.265	.175	.329	.297	.502
5	.300	.355	-.052	.088	.353	-.006	.373	.101	.352
6	.258	.393	.302	.188	.010	-.158	.154	.103	.286
7	.107	.542	-.142	-.223	.315	.001	.601	.204	.528
8	.237	.103	.305	-.205	.485	-.163	.412	.398	.547
9	.384	.158	.090	-.189	.419	-.075	.253	.016	.354
10	-.105	.039	.281	-.096	.325	-.036	.324	.666	.531
11	.195	.271	.126	-.197	.091	-.240	.083	.179	.279
12	.435	.473	-.127	-.104	.395	.042	.366	-.007	.488
13	-.046	.546	.067	-.270	-.030	.139	.394	.382	.505
14	-.002	.093	.264	-.261	.321	-.016	.581	.541	.599
15	.226	.128	.269	-.271	.316	.027	.200	.552	.555
16	.334	.298	.082	-.001	.299	.046	.295	.022	.428
17	.147	.025	.255	-.063	.298	.135	.090	.440	.453
18	.343	.332	-.086	.123	.193	.050	.272	.025	.433
19	.245	.137	.084	.049	.240	.069	.166	.483	.395
20	.290	.611	-.003	-.014	.062	.211	.256	.041	.419
Summary:									
	3-		9-	16-	2-	8-		3-	
	17+	20+	11+	4+	18+	12+	20+	17+	

APPENDIX G "r" Values for Male Judges on Male Profiles

Male Judges	Outgoing/ Reserved	More Intelligent/ Less Intelligent	Assertive/ Yielding	Person Oriented/ Task Oriented	Venturesome/ Shy	Suspicious/ Trusting	Accomodative/ Exploitative	Self-Sufficient/ Group Dependent	R ² Index
1	.289	.203	-.046	.158	.066	-.071	-.220	.260	.175
2	.318	.192	-.102	.136	.148	-.383	-.066	.125	.345
3	.167	.234	.062	.113	.379	-.151	.114	.249	.358
4	.151	.476	-.112	.443	.269	.107	-.181	.479	.502
5	.061	.390	.149	.201	.158	-.164	-.246	.083	.352
6	.229	.112	-.110	.101	.035	-.116	.175	-.009	.286
7	-.180	.577	-.096	.077	-.162	-.121	.193	-.077	.528
8	.319	.291	.019	.260	.457	-.082	-.096	.261	.547
9	.457	.183	-.281	.086	.074	-.051	.045	.256	.354
10	.256	-.068	.383	.134	.240	-.039	-.059	.597	.531
11	.033	.160	-.052	.100	.244	-.406	-.075	.291	.279
12	.126	.581	-.259	.227	.119	.060	-.314	.339	.488
13	.048	.522	.018	.239	.230	.029	-.154	.419	.505
14	.335	.184	.187	.366	.466	-.196	-.264	.555	.599
15	.036	.345	.250	.261	.316	-.207	-.182	.594	.555
16	.428	.126	-.205	.445	.455	-.212	-.650	.453	.428
17	.284	.048	.053	.229	.481	-.136	-.044	.555	.453
18	.296	-.081	.281	.231	.414	-.154	.232	.006	.433
19	.131	.367	-.320	.259	.342	-.178	-.095	.328	.395
20	.030	.439	.053	.001	-.027	.139	.097	.291	.419
Summary	1-	2-	10-		2-	16-	14-	2-	
	19+	18+	10+	20+	18+	4+	6+	18+	