To the Graduate Council:

I am submitting herewith a dissertation written by Bruce J. Sherwin entitled "Development of a Rating Scale for the Measurement of the Concept of Modal Organizational Orientation and the Prediction of Work Satisfaction on the Basis of Personal/Organizational Congruence." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Psychology and Guidance.

Siegfried C. Dietz, Major Professor

We have read this dissertation
and recommend its acceptance:

Robert L. Williams

Donald K. Darda

K. Owen McCulloch

Accepted for the Council:

L. Evans Beck
Vice Chancellor
Graduate Studies and Research

4

DEVELOPMENT OF A RATING SCALE FOR MEASUREMENT OF THE CONCEPT OF MODAL ORGANIZATIONAL ORIENTATION AND THE PREDICTION OF WORK SATISFACTION ON THE BASIS OF PERSONAL/ORGANIZATIONAL CONGRUENCE

A Dissertation

Presented for the

Doctor of Education

Degree

The University of Tennessee, Knoxville

Bruce J. Sherwin

June 1981

3051926

DEDICATION

To MAGGI ..... This research effort would not have been possible without her endless patience and encouragement!

and

To DUTCHESS ..... A recently lost friend of our family.

ABSTRACT

The goal of this research was to simplify the process of career decision making through the articulation of a comprehensive two level decision making model.

The research strategy was centered on the extension of Holland's occupational selection model to the level of organizational choice using conceptually compatible criteria. A general environmental descriptor, "organizational climate", was selected as the organizational variable to classify and differentiate among various types of organizations.

The methodology of the study included the development of a rating scale to measure the climates of four generic organizational types. Underlying the rating scale development was the assumption that generic organizational types were well understood as stereotypes within the general culture. The Modal Organizational Orientation (MOO) Rating Scale Type III was designed to tap the stereotype images of Bank, University, Business School and Community College.

An extraorganizational rating group comprised of 90 community college psychology students enrolled at Housatonic Community College, was selected to rate the climates of the four organizational types. In order to control the accuracy of the student generated ratings, 30 employees representing each of the four organizational types were

also used as raters of their own organizational climates. Secretaries were asked to rate Banks and Business Schools and Social Science Instructors were asked to rate Universities and Community Colleges.

Once the ratings of the two groups were cross verified, a second phase of the research was designed as a field study for the purpose of evaluating the practical utility of the rating scale and resulting organizational ratings. Since Holland had shown that personal/occupational congruence generally increased achievement and satisfaction, it was hypothesized that the expanded personal/occupational/organizational congruence would lead to measurably higher levels of satisfaction. Therefore, the concept of personal/organizational congruence was conceived as a predictor of work satisfaction differences. Thirty eight secretaries and 26 social science instructors representing the four generic organizational types were selected as field study subjects on the basis of personal/occupational congruence. The latter was controlled as an important extraneous variable in the field study phase.

The results of this study demonstrated that a rating instrument could be used to measure generic organizational climates using an extraorganizational rating group. Single sample Chi Square (X^2) was used to validate both student and employee generated rating frequencies at $P \leq .01$ (two tailed test). Moreover, the student and employee ratings for Bank, University and Community College were shown to have operational correspondence.

In phase II of the study, 2 x 2 tables were designed to establish personal/organizational congruence as the independent variable. Difference in work satisfaction was the dependent variable. The Chi Square (X^2) test for two independent samples was employed to evaluate the 2 x 2 table frequencies at $P \leq .05$ (one tailed test).

Secretaries whose personal/organizational congruence was determined from employee rated climates were found to have higher levels of work satisfaction than secretaries without congruence or secretaries whose congruence was determined from student generated climate ratings. No significance was found with Social Science Instructors using either climate classification approach.

The Phi (ϕ) Coefficient was used to determine the magnitude of relationships between personal/organizational congruence and work satisfaction differences for secretaries using employee rated climates. A Phi (ϕ) value of .32 indicated a low to moderate positive correlation between the variables. Phi (ϕ) was converted to the index of prediction, PRE = .10, which indicated that 10% of the error in predicting work satisfaction differences could be accounted for by using congruence as the predictor variable.

TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
	Importance of the Study	4
	Research Assumptions	6
	Use of Holland's Theory in the Measurement of Climate	9
	Limitations	12
	Description of Terms	14
	Statement of the Problem	15
	Hypotheses	16
	Methodology of the Study	17
	Sampling and Data Collection	18
	Analysis of Data	19
	Organization of the Study	23
II.	REVIEW OF RELATED LITERATURE	25
	Holland's Theory of Careers	25
	The Extension of Holland's Environmental Model to the Level of "Organization".	35
	Organizational Stereotype	40
	Organizational Climate	42
	Socialization Process within Organizations	47
III.	METHODS AND PROCEDURES	52
	Selection of Subjects	52
	Instrumentation	60
	MOO Rating Scale Type I	60
	MOO Rating Scale Type III	63
	Vocational Preference Inventory	66
	Work Satisfaction Scale	68
	Collection of Data	68
	Research Design	72
	Statistical Procedures	81
IV.	PRESENTATION AND ANALYSIS OF THE DATA	83
	Approach to Climate Measurement	83
	Climate Measurement - Use of Outside (Student) Group - $H:_1$	85
	Climate Measurement - Use of Inside (Employee) Groups	89
	Student and Employee Groups Compared - $H:_2$	93
	Field Study of Work Satisfaction - $H:_1$, $H:_2$, $H:_4$	98
	Statistical Support for Hypotheses	108
V.	SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS	116
	Summary	116
	Findings	118

CHAPTER PAGE

Conclusions 119
Implications 123
Recommendations 128

LIST OF REFERENCES 129

APPENDICES 134
Appendix A. MOO Rating Scale Type I . . 135
Appendix B. MOO Rating Scale Type III . . 142
Appendix C. Work Satisfaction Scale . . . 143
Appendix D. Vocational Preference Inventory 144

VITA 146

LIST OF TABLES

TABLE		PAGE
1.	Proportion of Potential Participants Completing Full Study Instruments	55
2.	Employee Rating Samples - Phase I	56
3.	Field Study Subject Samples - Phase II	58
4.	City Locations of Organizational Samples	69
5.	Proportion of Potential Participants Completing Field Study Instruments	71
6.	Holland's Occupational Sub Types	76
7.	Secretary Stereotype and Employee Rated Climates - BMOO, MOO	78
8.	Social Science Instructor Stereotype and Employee Rated Climates - BMOO, MOO	79
9.	Stereotype Rating Frequencies - Bank	86
10.	Stereotype Rating Frequencies - Business School	87
11.	Stereotype Rating Frequencies - University	87
12.	Stereotype Rating Frequencies - Community College	88
13.	Stereotype Ratings of Organizational Types	89
14.	Employee Rating Frequencies - Bank	90
15.	Employee Rating Frequencies - Business School	91
16.	Employee Rating Frequencies - University	91
17.	Employee Rating Frequencies - Community College	92
18.	Employee Ratings of Organizational Types	93

TABLE PAGE

19. Comparison of Stereotype and Employee Ratings of Organizational Types . . . 93

20. Correspondence of Stereotype and Employee Ratings 94

21. 2 X 2 Contingency Tables for Values Indicating Congruence and Satisfaction Differences; Stereotype and Employee Rated Climates for Secretary 104

22. 2 X 2 Contingency Tables for Values Indicating Congruency and Satisfaction Differences; Stereotype and Employee Rated Climates for Social Science Instructor . . . 105

LIST OF FIGURES

FIGURE PAGE

1. Holland's Six Orientations 26

2. A Hexagonal Model for Defining the Psychological Resemblances among Types and Environments and their Interactions 29

3. Levels of Consistency among Typological Dimensions 29

4. A Comparison of Holland's Satisfaction Model and Field Study Model 103

CHAPTER I

INTRODUCTION

The Dictionary of Occupational Titles, published by the United States Department of Labor lists in excess of 30,000 distinct occupational categories. If this abundance of work specializations is considered within a liberalized legal and social climate that has catalyzed an increase in worker mobility, a startling picture of both work complexity and movement emerges.

Among the factors that have stimulated worker mobility and compounded an already complex process of work choice have been the judicial elimination of many job barriers to women and minorities, a changing attitude concerning the appropriate work role of women, adverse economic pressures that have fostered the growth of the two income family and the recent emergence of an almost universal access to higher education. Moreover, these legal, social and economic developments have synergized with a period of accellerated technological growth to create a dilemma relatively new in the American life-style. This dilemma, which can occur at a number of choice points in a worker's career, may be interpreted as a kind of cultural "syndrome" when improperly resolved. This condition, which will be referred to as "work choice complexity" is the central concern of this paper.

Choice may certainly be viewed as a concomitent of freedom and therefore a social and philosophical good! On a more pragmatic level, however, the freedoms associated with improved access to advanced education and occupational and organizational mobility coupled with the intricacies of a highly specialized labor structure, relegate career decision making to an uncomfortable level of ambiguity for many people. The confusion brought about from too many options affects workers at every career stage, including senior citizens who may be seeking productive avocations, mid-life job changers, liberated housewives, and the perpetual cohorts of new high school and college graduates seeking entrance into the work force.

Despite the complexities inherent in career decision-making today, American workers are job changing at an unprecedented rate. Bolles (1975) estimated that the average worker will make between three and five career changes over a lifetime, each of which will involve movement into a completely new field. He adds that the typical worker under thirty-five seeks new employment once every year and a half while workers over thirty-five test the job market every three years.

Although the greater mobility of the American worker is, in large measure, a function of the earlier cited changes in the social and legal climate of the society, much of the impetus may also be attributed to related attitudinal changes of the workers themselves. Jennings (1970) captures the

essence of changing worker attitudes in his description of the mobicentric man:

> The mobicentric man values motion and action not because they lead to change, but because they are change, and change is his ultimate value ... Freedom to him is a form of movement ... His faith, often deep is not in institutions but in himself and perhaps his wife, in their capacity to grow and become more useful as long as they don't get hung up. For him success is represented less by position, title, salary, or performance than by moving and movement. (Jennings, 1970, p.35)

The mobicentric man described by Jennings might be construed as an irrational product of conditioning spawned by a recklessly fast paced American life-style. A more salubrious view of man, however, which portrays him as a planful rather than reactive creature, suggests that movement and change are often used as tools of career self-management. The modern career/job changer has largely taken control of his own destiny. He tends to prioritize his fundamental life values when making career decisions. He is not content to allow organizational employers to asume control of his career planning as had been done in the fifties when William Whyte wrote The Organization Man. An interesting characterization of this new worker/decision maker is evident in Hall's (1976) conception of the "protean" career. The latter engenders a new career ethic, which represents man's search for satisfaction in his life's work. His search may run counter to the pattern of traditional

career and organizational advancement ladders. The protean careerist rejects the "advancement" ethic, which has long been associated with organizational success. Intrinsic motivation and psychological success are the hallmarks of this career perspective, which anticipates goals of self-actualization for the individual in lieu of traditional conceptions of achievement.

A synthesis of the characterizations of the mobicentric man and the protean careerist point irresistably to the emergence of a new work ethic! This new ethic, which is distinctly worker-oriented, is being superimposed on a complex and fluid occupational superstructure. This mixture of social, economic and psychological events has placed an immense burden on the individual worker who is aware of his new freedoms but is uncertain how to cope with them! The dilemma of work choice complexity and the resultant need of workers and potential workers for more effective career management tools, provides the philosophical basis for this research effort. This research is intended to make a modest contribution to the array of useful techniques at the disposal of professional career planners.

Importance of the Study

A review of the literature of career planning and development reveals that a number of theorists have applied their efforts to the problems associated with making an initial choice of occupation (Blau et al., 1956; Bordin, Nachman and

Segal, 1963; Ginsberg et. al., 1951; Holland, 1957; Super, 1957). Although the question of initial occupational selection is of utmost importance, particularly for high school and college students, another category of career decisions has been largely ignored in the vocational literature. Once a vocational area has been selected, the next decision focuses on the context or organization in which the occupation will be "practiced." Organizational selection, then, ranks closely behind vocational choice in its importance to careers. The burden of organizational selection falls both on the established worker who wishes to move within his chosen occupational area and on the new worker just entering the work force.

Considering the importance of organizational selection, why has this area been largely ignored? Hall (1976) asserts that the issue "falls in the cracks between the interests of schools and the interests of employing organizations." Counseling and vocational psychology, as school based disciplines, have concentrated on occupational choice. Industrial/organizational psychology has focused on worker characteristics such as satisfaction, achievement and motivation.

Because the issue of organizational selection has not been investigated as thoroughly as that of occupational choice, a serious theoretical gap exists in the "science" available to professional career planners in their work with students and other clients. The seriousness of this research gap is readily appreciated when considered within the earlier

cited context of worker mobility, technological change and growth in occupations. All of these factors stimulate the development of multiple choice points within a single career. The effectiveness of the science of career decision making may well depend upon the successful bridging of this theory gap. This research is an acknowledgement of the importance of adding to the body of existing knowledge concerning the dynamics of organizational choice.

Research Assumptions

This research was founded on a number of assumptions concerning the structure, and social dynamics of organizations.

The significance of organizational selection in the overall career decisional process can readily be appreciated when considered in the light of two factors: 1) most occupations have sufficient flexibility to be practiced within a variety of settings or work environments, and 2) the latter, usually defined in organizational terms, generated quite distinct and variable environmental qualities. These factors formed the basic assumptions which supported the rationale for this research and which strongly suggested that a significant career variable existed beyond the initial choice of occupation.

An understanding of the importance of the variable of organizational choice was facilitated by a consideration of the dynamics of <u>occupational</u> choice. The essence of

occupational choice is normally viewed as the interface or matching of individual attributes with the specific skill and behavioral expectancies of various work specializations. For example, accountants quite often are prudent data-oriented individuals who have the ability to concentrate on detail for extended periods of time. This combination of skills and characteristics, compares favorably with the demands and task expectancies encountered in many accounting "jobs." Therefore, we can predict with some degree of assurance that this type of person/occupation matching represents a valid and elementary kind of career decision. Career planning specialists have commonly concerned themselves with this category of decision making. However, a casual observation of the employment structure in America indicates that the occupation of accounting can be practiced in widely divergent settings such as schools, government bureaus, small independent CPA firms, "big eight" public accounting firms, manufacturing, etc. Each of these work settings is quite likely to generate a different work environment or "climate." The latter is an all embracing term generally used to describe the general environmental qualities of an organization.

Since most employees of organizations, notwithstanding their occupational speciality, are exposed to a company philosophy, subjected to company "rules" and sensitized to both the predominent management style of the

organization and to the work values of other employees, the impact of the work environment on the individuality of the worker may be easily appreciated. Certain accountants will find a large accounting firm's climate quite compatible with their personality styles and others would be much more satisfied with a small business or educational environment. The search for a compatible work setting represents an important secondary class of career decision making for many individuals, including experienced occupational practioners seeking more compatible climates and others who will soon enter the work force and wish to select both occupational and organizational environments which are supportive of their particular work values.

Based on the assumption that different work settings exist for the same occupation and these settings generate specific environmental characteristics (climates), one of the objectives of this research was the development of an approach to the measurement of the general characteristics of work settings or organizational climates. The term organization is operationally defined as a unified work environment with a characteristic climate that has been produced and sustained by a number of factors including organizational goals, management style and most importantly, the personality influences of the workers, themselves. Climate has been specifically defined as an "umbrella concept encompassing an array of situational demands and opportunities present in the work assignment"

(Hall, 1976). This umbrella quality suggests the importance of the climate concept as a general organizational descriptor. The approach to measurement of climate was based upon two assumed characteristics; the general nature of climate and the notion that climate qualities were reflected in the personality styles of organizational employees.

In Chapter II, an insight into the genesis of organizational climate will be sought from an understanding of the process of organizational "socialization."

Use of Holland's Theory in the Measurement of Climate

One of the primary considerations in the search for a method of measuring organizational climates was the selection of discrete differentiating criteria. Optimely, an organizational selection follows an occupational choice which has been determined by a process of matching occupational factors with personal attributes. If organizational selection criteria are similar or related to factors used in making an occupational decision, the advantage to the counseling client would be significant. The decision maker could quite simply use a restricted number of homogeneous factors to make two levels of career choice. The ideal career decision-making model, then, was assumed to embrace a set of criteria, which could be used to make differentiations among people, occupations and organizations.

Interest in an occupational selection model, which could be modified or extended to include organizational factors led the researcher to a consideration of John Holland's typology of personal and environmental orientations. Holland (1966), proposed a six dimensional typology which described both people and occupational environments using the same informational protocols. On the assumption that most occupations were identified on the basis of a few broad characteristics, Holland categorized large numbers of occupations within his six dimensional typology. Holland's research led him to the conclusion that characteristics of most occupations were well understood within the culture on the basis of these stereotypical attributes. Since Holland's widely supported model offered a framework useful in relating personality types to occupational environments in the career decision making process, it was selected as the theoretical framework for the present research. The thrust of this study was toward an extension of Holland's environmental model to the level of organization.

The intended elaboration of the Holland model necessarily began with the development of a climate classification "tool" in the form of a "rating" instrument which was used to classify four experimental organizational types: Bank, University, Business (proprietary) School and Community College. The development of the rating instrument was based upon an assumption of the existence

of organizational stereotypes, which were pervasive and widely understood within the culture in the same manner that occupational stereotypes were shown to be culturally understood by Holland. The four experimental organizational types were rated (classified) within Holland's typological dimensions by two groups representing differing perspectives; employees of the test organizations and an "outside" group. The employee raters were expected to classify their work environments on the basis of a "felt" perception. The outside rating group, more representative of the community at large was expected to respond on the basis of popularly held notions or stereotypes. Once the rating of the four organizations was completed, a second phase of the study was directed toward an evaluation of the usefulness of the ratings and the rating instrument. This phase was looked upon as the experimental aspect of the study and involved a determination of the work satisfaction of two targeted occupational groups typically employed in the experimental organizations. Since Holland's theory predicted work satisfaction on the basis of person/occupational congruence, the broader person/occupation/organizational congruence would be expected to manifest measurably higher levels of satisfaction: this assumption provided the basis for the hypothesis of the experimental phase of the study which proposed that a higher degree of work satisfaction would exist among employees whose personal orientations manifested congruence

with their organizational climates than would be true for employees lacking this congruence.

Limitations of the Study

Limitations in the scope of this research may be ascertained from the restricted number of organizational types selected for study. Moreover, three of the four experimental organizations were educational institutions. Although this particularized sample did limit the extent of the empirical findings generated by the study, it did not ameliorate the hypothetical conclusions which were derived.

It was expected that a larger number and variety of organizational types would be classified once the assumptions and theoretical formulations in this study were validated. The key to expansion of the organizational classification lies in the utility of the experimental instrument, the MOO Rating Scale. The writer accepted the premise that the usefulness of the MOO Rating Scale could be effectively evaluated by using four organizations in the study.

Limitations might also be suggested from the restricted number of experimental "occupations" employed in the study. The hierarchical status of secretaries and social science instructors is sufficiently divergent, however, to allow for two distinct perspectives of organizational environment. Further, the inherent danger of deriving sub-unit (departmental) perspectives of environment rather than the more global organizational climate, was controlled somewhat by the ubiquitous

nature of the secretarial occupation, and the central position of the faculty within educational institutions.

The organizational types selected for this research, e.g.Bank, University, Community College and Business School were neither the simplest nor the most complex organizational varieties in the American economic structure. Although climate has been shown to exist in large and complex organizations such as the United States Forestry Service (Hall, Schneider and Nygren, 1970), it is more easily measurable in smaller, simpler (homogeneous) social structures. Holland referred to the delimiting effects of size and complexity in his writings on environments. Therefore, the use of climate, as an environmental descriptor and the development of a pertinent measurement device required the acceptance of the inherent limitations of size and complexity of experimental organizations. The size, number and importance of sub-units must always be considered as modifiers of climate ratings. This qualification, of course is always appropriate wherever generalized notions are used to describe complex phenomena.

In summary, although limited in number, experimental organizations and occupations were carefully selected to provide maximum safeguards against extraneous variables. This study was designed to have heuristic value. Its significance is more appropriately weighted in the overall

approach to the development of an organizational selection paradigm and the novel synthesis of concepts such as Holland's typology, organizational stereotype, and organizational climate.

Description of Terms

The following terms and their operational definitions were employed in the study:

Classifications.....organizational types that have been defined in terms of the Holland typology

Climate.....a general environmental quality of an organization

Modal-Organization Orientation.....operational term for climate that has been defined in terms of a single Holland dimension

(Bi-Modal Organizational Orientation).....climate defined within <u>two</u> Holland dimensions

Modal-Personal-Orientation.....operational term for an individual personality type defined within a single Holland dimension

(Bi-Modal Personal Orientation).....individual personality type defined within <u>two</u> Holland dimensions

MOO Rating Scale Type I.....a research instrument based upon <u>singular</u> comparisons of adjectives which are descriptive of six Holland dimensions

MOO Rating Scale Type III.....a research instrument based upon <u>group</u> comparisons of adjectives which are descriptive of six Holland dimensions

Occupational Sub Types..occupations which have been defined within two Holland dimensions

Organization.....a unified work environment with a characteristic climate

Organizational Climate..same as climate

Organizational Type.....a generic grouping of organizations within the same field, i.e. banks, utilities, elementary schools etc.

Personality Style.....same as personal orientation

Ratings.....classifications of organizational types derived from MOO Rating Scale Type III

Socialization.....behavioral and attitudinal change induced by members of a social group

Statement of the Problem

The absence of a comprehensive career decision making model which encompasses individual personality differences, occupational characteristics and organizational factors, works to the detriment of career deciders. Progress toward the solution of this problem has been sought in this research. A comprehensive model is conceived in this study as one which employs identical criteria to delineate individual, occupational and organizational types.

Constructed upon a number of assumptions concerning the multi-dimensional qualities of common occupations and drawing heavily from the research of John Holland and studies of organizational climate, this research represents a heuristic effort to develop a simple, two-level decisional model.

An important aspect of this research was the development of an instrument which could be used to measure generic organizational types within dimensions identical to those of individuals and occupations.

Hypotheses for the study were generated to evaluate the effects of rating scale measurements, comparative value of rating groups and the field efficiency of an operational construct, "personal/organizational congruence."

Hypotheses

The assumptions and theoretical propositions of the study allowed the generation of the following research hypotheses:

$H:_1$ Stereotype perceptions of the climates of four organizational types will manifest in rating scale score differentials generated by a student sample.

$H:_2$ Organizational climates rated by a student sample will correspond to ratings generated by samples of employees drawn from the same organizational types.

$H:_3$ Student ratings of climates which have been verified by employee ratings will be better predictors of work satisfaction on the basis of personal/organizational congruence than unverified ratings of either group considered alone.

$H:_4$ The accuracy of stereotype ratings will be demonstrated by their equal or superior utility in predicting work satisfaction in instances where stereotype and employee ratings do not correspond.

$H:_5$ Employees with higher levels of professed work satisfaction will manifest greater incidence of personal/organizational congruence than employees with lower levels of satisfaction.

Methodology of the Study

Three basic and four subordinate assumptions formed the basis for the development of the methodology in this study. The basic assumptions were 1) the existence of multiple settings for many occupations, 2) the appropriateness of "organization" as a parameter of differential work settings and 3) the distinctive environmental characteristics (climates) of organizations which serve to differentiate among them.

Four subordinate assumptions formed the basis for the selection of the concept of organizational climate as a useful variable in the differentiation of organizations; 1) climate encompasses the entire organization as an "umbrella" variable 2) although a number of potential determinants of climate exist, collectively these determinants are reflected in the predominent personality types of the employees and are therefore indirectly measurable from the personality styles of employees, 3) since climates may be assessed from personal dimensions, Holland's personality typology is an appropriate framework within which to define and measure them and 4) the climates of organizational types are culturally pervasive and popularly understood in the form of stereotypes.

Based upon the perception of a need to develop an organizational selection model, the foregoing assumptions

suggested a research methodology with two phases: Phase I focused on the development of a rating instrument to be used in the classification of a number of experimental organizations on the basis of climate differences. Once the rating scale had been designed and an experimental classification established, a second phase of the study was implied which would in some manner validate the scale and the classification. The "experimental" phase took the form of a field study of employee work satisfaction using the experimental organizational types.

Sampling and Data Collection

Phase I, which centered on the development of the rating instrument used in the measurement of organizational climates required the use of two rating groups. The primary rating group represented an extraorganizational or outside perspective. This group was comprised of 90 community college students enrolled in freshman psychology classes. They were simply asked to rate the climates of the four experimental organizational types on the basis of their general knowledge of them. The only individuals who were asked to disqualify themselves were present or former employees of these particular organizational types. Since this group was comprised of non employees or outsiders, they were expected to classify the

four test organizations using popularly held notions or stereotypes.

Ratings of the student group were further verified by a second rating group comprised of insiders (employees) of the experimental organizations. Employee subjects selected for the study served two distinct functions. In the first part of the study, 126 subjects served as employee raters of their respective organizations and in the second Phase, 145 were used as experimental subjects. Since the research strategy required that employee rating groups be drawn from the four experimental organizational types, occupations common to the organizations were selected. It was decided that secretarial occupations would be appropriate for Phase II since they could be compared across all four organizational types. Social science instructor was selected as the second experimental occupation because of the potential for comparisons across two organizational types; Universities and Community Colleges.

Analysis of Data

Phase I

In the initial phase of the study, which focused on the classification of four experimental organizations within a six dimensional typology, 90 community college students were utilized as raters. The student raters represented an outside perspective of the climates of the experimental organizational types; Bank, University, Business School and Community College.

Single sample Chi Square (X^2) was used to determine if the rating response frequencies represented a significant departure from chance at the $P \leq .01$ level of probability. Climate ratings of all four organizational types were found to be significant.

Obtained stereotype ratings were next cross-verified by employee samples representing each of the experimental organizational types. Thirty university and 30 community college social science instructors were employed as raters. Secretaries comprised the rating groups from Business Schools and Banks; n = 30 and n = 36 respectively.

Single sample Chi Square (X^2) was applied to the frequency distributions of rating responses of the four employee groups. Employee generated ratings also proved to be significant at $P \leq .01$.

All of the stereotype climate ratings except Business School were supported or cross-verified by employee ratings. Both stereotype and employee climate ratings were used in Phase II of the study in order to further test their veridicality and utility when employed in a field study of work satisfaction.

Phase II

In the second phase of the study, climate ratings of the four experimental organizations were used in a field study in order to determine their usefulness under actual field conditions. A field study of work satisfaction was designed in which personal/organizational

congruence was employed as the predictor variable. An important extraneous variable, personal/occupational congruence, was controlled in order to determine if personal/organizational congruence alone, would effect work satisfaction levels. Therefore, experimental subjects were selected from two larger pools of Secretaries and Social Science Instructors on the basis of personal/occupational congruence. Since all field study subjects had this latter form of congruence, any differences in work satisfaction could be attributed to the effects of personal/organizational congruence or incongruence.

The field study was designed to measure differences in work satisfaction of Secretaries over all four organizational types and Social Science Instructors over two types, University and Community College.

Field study subject groups of Secretaries and Social Science Instructors were drawn from subject pools on the basis of personal/occupational congruence. These two groups were then classified as having personal/organizational congruence or personal/organizational incongruence. The operational definition of congruence required that <u>one</u> dimension comprising the Bi-Modal-Personal-Orientation (BMPO) of the subject, be common to <u>one</u> dimension which served to define the organizational climate whether the latter was classified bi-modally or modally (BMOO) or (MOO).

e.g.

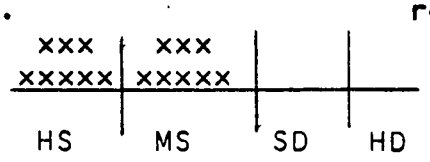
Subject A.....BMPO = SC
Climate-Community
College...MOO = S
> Congruent

Subject B.....BMPO = CE
Climate-Community
College...MOO = S
> Incongruent

The Secretarial field study subject group (n=38) and the Social Science Instructor field study subject group (n=26) were then examined for differences in degrees of satisfaction. Assertions of work satisfaction were classified on a four point continuum from "highly satisfied" (HS) through "mostly satisfied" (MS), "some dissatisfaction" (SD) to "highly dissatisfied" (HD).

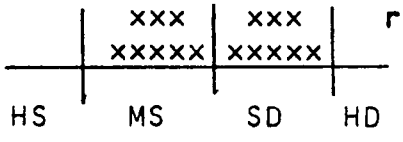
Clusters of responses on the satisfaction/dissatisfaction continuum indicated potential differences between (HS) and (MS) in the Secretarial group and between (MS) and (SD) in the Social Science Instructor group.

e.g.



response clusters
Secretary

Satisfaction-Dissatisfaction Continuum



response clusters
Social Science
Instructor

Satisfaction-Dissatisfaction Continuum

The Chi Square (X^2) for two independent samples was used to measure any significance of difference in the degrees of professed work satisfaction on the basis of personal/organizational congruence. Secretaries were measured for differences between (HS) and (MS) and Social Science Instructors were measured for differences between (MS) and (SD).

Significance was found for Secretaries when the (employee) rated climate classification was used to determine personal/organizational congruence.

The Phi ϕ coefficient was used to determine the magnitude of relationship between personal/organizational congruence and work satisfaction differences (HS vs MS). A Phi ϕ coefficient of .32 was derived. Phi ϕ was converted to a Proportional-Reduction-In-Error (PRE) index of .10. The latter represents the error reduction in the prediction of work satisfaction differences (HS vs MS) on the basis of personal/organizational congruence.

Organization of the Study

The presentation of information in this study is as follows: The introduction to chapter one established that career choice complexity is a new problem facing the contemporary worker/decision maker. The problem, which has been brought about from increased technology and worker mobility, challanges career development professionals and researchers to develop new tools and

techniques. This study addressed the problem at the level of organizational choice. Chapter I contained a rationale for the elaboration of an existing occupational choice paradigm to encompass the variable of organization. The assumptions of variable work settings, the existence of measurable organizational climates and the cultural pervasiveness of organizational stereotype were enumerated to support the five hypotheses of the study. The balance of Chapter I described sampling, data collection and the techniques of statistical analysis employed.

Chapter II described the Holland Theory of Careers as the basis of the proposed organizational selection model. Topics covered in Chapter II included occupational and organizational stereotype, climate research and organizational socialization.

Chapter III described the rationale and techniques employed in the selection of organizational types, experimental occupations and the uses of field study subjects. The importance of instrumentation was underscored in a discussion of the design of the MOO Rating Scale. Chapter III also included descriptions of data collection, research design, and statistical procedures.

Chapter IV provided a focal point for the data and findings of the study. The possible ramifications of this study were also discussed.

Chapter V provided a summary, tentative conclusions and recommendations for future research in the area.

CHAPTER II

REVIEW OF RELATED LITERATURE

Holland's Theory of Careers

Holland's (1966) typology of people and environments was selected as the theoretical basis for the analysis and classification of organizational climates. If the same factors used by Holland to classify individuals and occupational environments could be successfully applied in the differentiation of organizations, a logically consistent framework for both kinds of career decisions would be available.

Holland suggested that individuals in the American culture develop resemblances to six personal styles or orientations as they interact with the cultural environment. The six orientations were identified as Realistic, Investigative, Artistic, Social, Enterprising and Conventional (figure 1). Although the behaviors characteristic of each of these orientations are useful for overall environmental adaption and are, therefore, developed to some degree in all people, most individuals can be characterized by one or two. Individuals who strongly favor one or two orientations, referred to as their modal or bi-modal personal orientations (MPO), (BMPO), were said to have well differentiated or mature personalities.

Realistic.....preference for activities which involve manipulations of objects, tools, machines and animals

Corresponding Occupational Environment: cook

Investigative.....preference for activities which involve systematic, symbolic and creative investigation of physical, biological, and cultural phenomena

Corresponding Occupational Environment: engineer

Artistic.....preference for activities which involve ambiguous, free manipulation of physical, verbal or human materials to create art forms or products

Corresponding Occupational Environment: musician

Social.....preference for activities which involve manipulation of others in a teaching, helping, curing mode

Corresponding Occupational Environment: librarian

Conventional.....preference for activities which involve orderliness and systematic handling of data and record keeping for the attainment of business and economic goals

Corresponding Occupational Environment: accountant

Enterprising.....preference for activities which involve manipulation of others for the purpose of managing, selling and leadership

Corresponding Occupational Environment: lawyer

Figure 1. Holland's Six Orientations

Source: Holland, J.L., Theory of Careers, Englewood Cliffs, New Jersey: Prentice Hall, 1973, pg. 14-18.

Holland observed that individuals appeared to develop their personal orientations from an interaction of family, peer, social class, economic, and physical environmental influences. Presumably, early preferences for objects and activities are reinforced from the environment, which in turn cause them to evolve into more enduring interests, competancies, attitudes and values. The summary effect of these influences is the development of a characteristic style of viewing and acting upon the environment. Once a person develops a style, he or she will seek out environments, which offer opportunities for the expression of attitudes, values and special competancies. This noted tendency for individuals to seek out environments compatible with their personal orientations prompted Holland to make an important addition to his personal typology. He observed that specific occupations presented characteristic tasks and demands and seemed to be dominated by people with similar orientations. Therefore, he hypothesized that occupational environments might be largely determined by the orientations of their typical practitioners. On this basis, Holland classified a large number of occupations along his six typological dimensions.

Once Holland had accomplished the task of classifying both individuals and occupations within the same typological framework, he generated a number of hypotheses concerning their interaction. He suggested that people seek out compatible environments in the process of making their

vocational decisions. Further, he predicted improved performance, social behavior and satisfaction when personal and occupational (environmental) congruence was achieved.

In addition to the three major aspects of the study, which concerned the personal typology, occupational classification and probable interactive effects, Holland also developed a number of secondary principles, which added measurably to the usefulness of his theory. He constructed a spatial model in the form of a hexagon, which defined the interrelationships of the six dimensions. This model was conceived after inter-correlational studies of the six types had shown that certain typological dimensions were highly related, others moderately related and some inversely related. The physical proximity of the representative points on the geometric hexagon is indicative of strength of relationship among the types (Figure 2). Dimensional pairing produced three levels of strength of relationship and was the basis for Holland's principle of "consistency" (Figure 3). As noted previously, most individuals develop behaviors in all six dimensions as a natural adaption to the general environment. However, special influences often induce orientation preferences or priorities. When an individual's two most favored orientations are highly related, the individual is said to have a high degree of consistency. Middle and low levels of consistency are also quite possible.

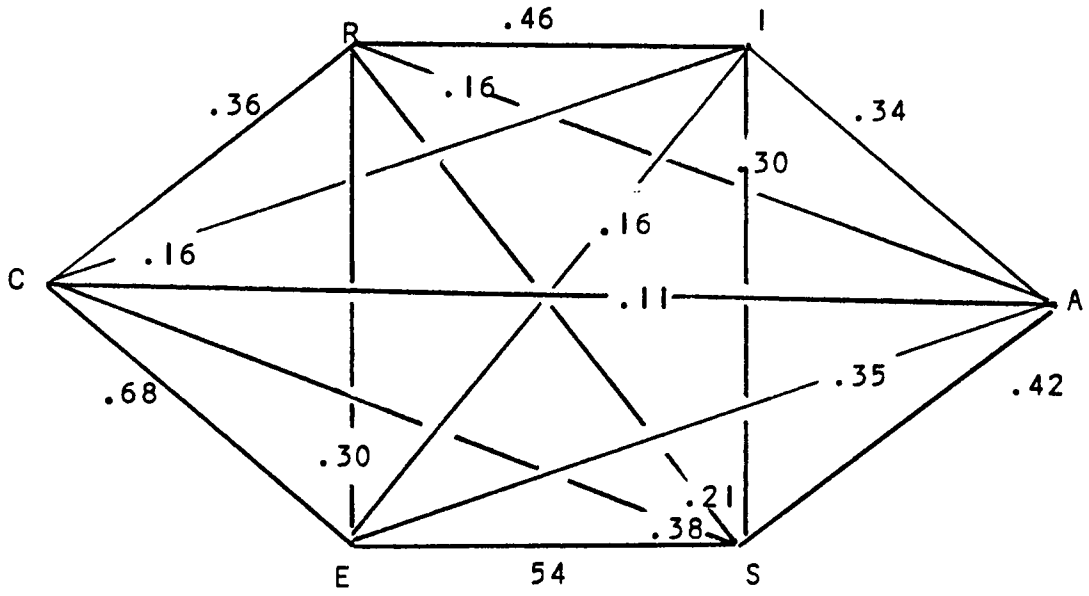


Figure 2. A hexagonal model for defining the psychological resemblences among types and environments and their interactions.

Source: Holland, J.L., Whitney, D.R., Cole, N.S., and Richards, J.M. Jr. An empirical occupational classification derived from a theory of personality and intended for practice and research. Act Research Report No. 29, Iowa City, The American College Testing Program, 1969.

Levels of Consistency	Personality Patterns
High	RI, RC, IR, IA, AI, AS, SA, SE, ES, EC, CE, CR
Middle	RA, RE, IS, IC, AR, AE, SI, SC, EA, ER, CS, CI
Low	RS, IE, AC, SR, EI, CA

Figure 3. Levels of Consistency among Typological Dimensions.

Source: Holland, J.L., Theory of Careers, Englewood Cliffs, New Jersey: Prentice Hall, 1973, pg. 22.

A second principle, which pertained to the relationship among the dimensional types is known as "differentiation." This factor evolved from the observations that dimensional types which were low in consistency also appeared to have oppositional characteristics. An "artistic" orientation, for example, is characterized by preferences for ambiguous, unstructured tasks. The task preferences for a "conventional" type on the other hand are quite the opposite. Conventional types prefer well-structured environments with well-defined tasks. The oppositional characteristics of these types are an example of Holland's principle of differentiation. A well-differentiated orientation pattern is manifested as a preference for structured tasks and a disinterest in ambiguous tasks or vica versa. Artistic and conventional orientations, then, would not be noted as the two most favored dimensions of a mature or well-differentiated personality. Conversely, an individual with two favored orientations which are highly related such as social and enterprising (figure 4) exemplifies a highly consistent orientation. Accordingly, if the same individual manifests few behaviors associated with a distantly related orientation such as investigative, his/her personality is also well differentiated and considered mature.

The secondary principles of consistency and differentiation were important to the usefulness of Holland's theory. They allowed individuals and environments both to be

viewed in gradations of resemblance to the typology as opposed to "all or nothing" models, which would suffer from an absence of face validity, particularly when applied to the complexities of the human personality. These principles formed the conceptual basis for the use of the Bi-Modal Personal Orientation (BMPO) and the Bi-Modal Organizational Orientation (BMOO) which were prominent constructs of this research. These constructs are described in detail in a later section of Chapter II.

Very broad classifications of personality types such as Holland's orientations were necessarily based on quite general characteristics. Moreover, Holland believed that the general descriptions of the types were also descriptions of the occupations which were dominated by the types. Further, Holland became convinced that the general characteristics of many occupations were well understood within the culture in the form of stereotypes. Accordingly, his typological formulations were premised on the existence, validity and pervasiveness of occupational stereotypes. Holland maintained that without a cultural "library" of occupational stereotypes, individuals would be required to devote excessive lengths of time researching various areas of work prior to making vocational decisions. A variety of investigations have generally supported this line of logic (Gonyea & Lunneborg, 1963; Osipow, 1962; Triandis, 1959). O'Dowd and Beardslee, (1960, 1967) found that fifteen occupations

were perceived similarly by high school students, college students, and college faculty as well as men and women in general. This study also showed that despite the complexity of attributes, which comprise a stereotype, a number of basic factors clearly differentiate amongst occupations. Marks and Webb (1969) studied two occupations, industrial manager and electrical engineer and the perceptions of their respective characteristics by a group of college students and workers with varying degrees of experience. Two groups of students, freshmen and seniors and a work group, which was questioned before, during and after their initial company training, all shared accurate perceptions of the characteristics of these occupations. Banducci (1968) studied a variety of student characteristics as they related to occupational stereotypes. He found that whereas brighter students had clearer perceptions of higher level occupations, poorer students had more accurate perceptions of lower level occupations. In general, however, he found that social status, academic potential and vocational interest of students had only a minor impact on the accuracy of occupational perceptions. Banducci's work appeared to suggest that the accuracy of stereotypes was affected by a variety of personal and social factors, but typically, culturally pervasive stereotypes maintain. In addition to general stereotypes of occupations, cultural values ascribed to various forms of work have been investigated in a number of

occupational "prestige" studies. Simmonds (1962), found that stereotypes of prestige levels were manifested in children at a young age. Fourth grade boys and eighth grade girls were found to share common perceptions with adults concerning the relative worth and importance of various occupations. Prestige studies provide further evidence for the cultural pervasiveness of occupational characteristics. Holland (1963,1964) showed that student samples perceived occupational titles as representative of his types, clearly giving credence to his dimensional formulations. In summary, the evidence for the existence and validity of occupational stereotypes is quite convincing. Although "selective perception" of stereotypical characteristics may obtain on the basis of intelligence, social status and degree of involvement, general characteristics of occupations seem to be well understood and easily recognized within the larger culture.

Acceptance of the notion of occupational stereotypes became the basis for the construction of Holland's first assessment instrument, The Vocational Preference Inventory. The V.P.I., which is composed of lists of occupational titles, was premised on the existence and familiarity of occupational stereotypes. Equally important, Holland suggested that individuals reveal important psychological information about themselves in the process of professing an attitude in the form

of a "like" or "dislike" for the various occupational titles listed in the V.P.I. The V.P.I., then, served both to validate the existence of occupational stereotypes and utilize them to project psychological characteristics. Holland viewed interest inventories, such as the V.P.I. as actually sampling personality factors. This view was shared by a number of writers (Baird, 1970; Medvene, 1969; Cruchfield, Woodworth and Albrecht, 1958). Bordin, (1943) suggested that interest inventory scales were measurements of self description. Darley and Hagenan (1955) asserted that interest measurements were an aspect of personality. Holland's own statement on the use of interest inventory items as an important projective technique for revealing personality factors summed up his postion best.

> The choice of an occupation is an expressive act which reflects the person's motivation, knowledge, personality, and ability. Occupations represent a way of life, and environment rather than a set of isolated work functions or skills. To work as a carpenter means not only to use tools, but also to have a certain status, community role and a special pattern for living. In this sense, the choice of an occupational title represents several kinds of information: The S's motivation, his knowledge of the occupation in question, his insight and understanding of himself, and his abilities. In short, item responses may be thought of as a limited but useful expressive or projective protocols. (Holland, 1965. p.7)

Holland's view of occupational titles as representations of culturally familiar "environments" and as useful projective protocols was of central importance to the present research on organizational climates. An extension of these two conceptions pointed to the possibility that common organizational types could also be viewed as representing specific and familiar kinds of environments. These stereotypes of organizations might also be probed using common generic titles as projective protocols. These latter assumptions formed the basis for the construction of a research instrument which was used in defining organizational climates along Holland's six dimensions. The instrument was called the Modal-Organizational-Orientation Rating Scale (MOO). The details of its construction and use is discussed in Chapter three.

The Extension of Holland's Environmental Model to the Level of "Organization"

As noted in Chapter I, Holland extended his personal typology to occupations when he observed that individuals of the same or similar type seemed to be engaged in the same or similar kinds of work. He hypothesized that individuals have a tendency to seek out environments which are hospitable to their particular array of talents, interests, and attitudes. Holland further proposed that once a significant number of people with

the same or similar personal orientations were concentrated within one occupational area, they would strengthen the task and demand expectar
occupation. For example, when
uals with social orientations
tion of nursing aquires more
requisite social skills for nursing are strengthened because most nurses have these skills. In addition, the values of social types such as caring and supporting others likewise become strengthened as occupational characteristics of nursing. In short, people not only seek out compatible environments, but also become part of the occupational environment which seeks out (attracts) particular types of people. As we have seen, Holland views an occupation as more than a job in the sense that common values, skills and interests are shared by its practitioners. Occupations are environments which appear to be generated largely by the modal personality types, who function as practitioners.

Despite his demonstration of a strong relationship between personal orientations and occupations, Holland's theory has not accounted for the variability of work settings manifested within the same occupation. Super (1957) alluded to the differential character of the work setting in his theory of Vocational Development by positing that occupations have tolerances wide enough to

embrace a variety of personality types. If Holland was correct in pointing out that individuals seek out environments compatible with their own particular personality styles, then an inference from both positions might be made as follows:

> Individuals will seek out work environments compatible with their personalities and will often make distinctions on the basis of work-setting as well as occupation.

It is generally recognized that the same occupation may be practiced within a variety of settings or "organizations." For example, the occupation of "teaching" is practiced within the following organizational settings:

elementary school	armed forces
middle school	industry
high school	golf course
vocational school	tennis club
community college	ski resort
university	hospital
proprietory school	social service agency

The foregoing list is certainly not exhaustive! Individuals with social orientations are often attracted to teaching as an occupation, but the kind of teaching that they do is largely determined by the setting or organizational environment. Casual observation of this list of potential work settings for teachers makes it clear that a consideration of occupational environment alone is insufficient for the process of matching individuals and compatible work environments. If this process is indeed relevant to career decision making, the additional factor

of variable work settings must be taken into account! A teacher working in an elementary school might have many characteristics in common with a teacher involved with industrial training, but the stark differences in their respective work settings would logically have a strong impact on their respective perceptions of their overall work environment.

The influences of the organization are undoubtedly, strong enough to mediate the teacher's sense of achievement, and satisfaction as well as his/her feelings of competence.

The need, then, appears to be for a method of classifying work settings in order to achieve measurably higher levels of worker/environment compatibility than can be achieved through person/occupation matching alone! As noted earlier, one of the goals of this research was to develop a sample classification of organizational work settings utilizing Holland's typological dimensions. This form of classification will be tantamount to an extension of Holland's model and will serve to refine the process through which individuals and work environments can be compatibly matched.

The concept of "organization" has been selected to represent the wide variety of work settings found within the culture. It is generally understood that most occupations are practiced within the context of organizations (Etzioni, 1964). An organization has been defined

as a social unit deliberately constructed to seek specific goals (Parsons, 1960). This definition shall also serve for operational purposes in this paper.

It will be useful, at this juncture, to further examine the significance of the organization in the career decision-making process. Hall (1976) stated that the choice of an organizational work setting is second only in importance to the selection of an occupation. According to Porter, Lawlor and Hackman (1975), individuals often choose a job and an organization with little regard for a longer term career, despite what he viewed as equal importance of occupation, organization and career. Evidence also exists which suggests that people select organizations which they perceive as congruent with their personal goals and expectations of success (Vroom, 1966; Soelberg, 1966). Further, individuals with personal goals, which are consistent with the expectational climate of a particular organization have been found to be more satisfied with their work than others without this "fit" (Downey, 1975). Despite these examples, the area of organizational choice has not been significantly researched. The linkage of the organization with an established occupational choice paradigm such as Holland's, should greatly benefit the individual career decider and help to fill a conceptual gap brought about by the divergent research interests of industrial/organizational and educational/vocational psychology.

The incorporation of the concept of organization into Holland's occupational choice paradigm required an investigation of several questions related to characteristics of organizations. These questions concerned the issue of stereotypes of common organizational types. Did they exist? What form did they assume? Could the concept of "organizational climate" be of use in understanding cultural perceptions of organizations? What were the known effects of climate and how were they brought about? In the following sections, the issues of organizational stereotype, organizational climate and organizational socialization are examined for the purpose of establishing a logical connection between the concept of organization and Holland's occupational choice paradigm.

Organizational Stereotype

Any reduction of organizational variations to a six dimensional typology necessitated that global characteristics be used to differentiate among the types. Moreover, these characteristics must be culturally pervasive in order to be understood as stereotypes. It will be recalled that Holland's environmental models were based on a few outstanding and well understood characteristics of occupations. If occupations are recognized and distinguished within the culture on the basis of a few stereotyped characteristics, it may reasonably be assumed that many generic organizational types are also quite likely to be

understood on the basis of stereotype. Porter, Lawler and Hackman (1975) found that potential employees derived information on organizations from a variety of sources including schools, personal experiences as part-time employees, and from friends, relatives and employment agencies. These bits of information, cues and experiences were homogenized into an overall form, which summarized an impression of an organization. This impression may be viewed as tantamount to a stereotype of an organization. Thus, it can be seen that the "environments" of common organizational types are transmitted into the culture. This phenomenon was supported by the principles enumerated in General Systems Theory which purported that organizations with energy return or access to the environment or culture are "open systems".. (Litterer, 1965). Closed systems, on the other hand, were defined as having zero interaction with the environment and existed only as hypothesized models. In terms of "systems theory," then, the concept of open systems suggested the liklihood of an interaction of organizations with their environments which in turn precipitated the development of organizational stereotypes.

It appeared then, that the common characteristics of organizations penetrated the larger cultural environment and became understood in the form of stereotypes. Studies of organizational climate provided additional evidence for

the existence and importance of organizational environments. These studies provided the key to understanding stereotyped environments and the factors leading to their development.

Organizational Climate

Earlier in this study, it was proposed that individuals should and often do display concern for the qualities of a particular work setting as well as for a particular occupation. Since occupations, themselves manifest variable work settings, the issue of appropriate selection of work setting looms important in the general career decision-making process.

According to Tagiuri (1968), many behavioral scientists began to recognize during the 1960's that individual behavior was a function of context or environment as well as individual personality and attributes. Prior to that time efforts to understand behavior from the viewpoint of context had been minimal. Litwin (1965) summarized the environmental perspective of three contemporary schools of psychological thought. He reported that the "psychoanalytic" school had given very little attention to the matter of setting in behavior development. "Stimulus-Response" psychology had considered only the narrow characteristics of stimuli and their particular effects on behavior. The broader context has not played a prominent role within

this school of thought. Finally, Litwin suggested that "expectancy-value" theories such as that developed by Tolman (1920), have concentrated on the molecular elements of an organism's reaction to environment. Tolman's "cognitive map" represented an organism's subjective blueprint of the environment, which was used to develop routes to particular goals. Tolman's subjective approach to environment does not expand our understanding of the objective qualities of environmental influences.

Two researchers who did construct theories which considered environment or climate prominently were Litwin (1951) and Brunswick (1939). In evaluating the efforts of these researchers, Litwin stated that they have been generally criticized for not proposing measurements which might be used to validate their propositions empirically. Despite this shortcoming, these researchers did recognize the importance of contextual influence on behavior.

Interest in behaviors which typically occur within organizations and the factors which influence them led to the study of environment as a factor. The popular term for this area of research became known as "organizational climate." Although this term is now in common usage among social researchers, precise definitions have been elusive (Tagiuri, 1968). Gilmer (1966) offered this general definition:

> By organizational climate, we mean those characteristics that distinguish the organization from other organizations and that influence the behavior of people in the organization. (Tagiuri, Litwin, 1968, p.22)

In the introductory chapter of this paper, another definition of climate was cited which referred to the array of situational demands and opportunities which may be found in a particular work place (Hall, 1976). In popular writing, work climate is often discussed in terms of an environmental quality or condition which affects the behavior of workers in a particular organization. For example, (Kushell, 1979) writing in the August, 1979 issue of the Personnel Journal described the "working climate" as a set of conditions which bring about a positive or negative response from employees. He asserted that turnover could be reduced through the creation of a positive climate.

It appears, then, that the general understanding of climate in both technical and popular writing refers to some quality of the work environment which influences worker behavior. The emphasis of climate is on effect rather than cause. The former may be seen in the behavior and attitudes of workers. The causes for climate development are not fully understood at this time. Hall, (1976) reported that investigators often referred to a number of organizational characteristics such as size, complexity, leadership style, goals and employee personalities as

prime contributors in the creation of a given climate. The genesis of climate was not of importance in this paper. The effect of climate or work environment as an influence on worker behavior was the focus of interest and concern in this research. Climate was viewed as a quality of an organization which could be used to differentiate it from other organizations on the basis of behavioral/attitudinal effects on workers.

The formal definitions and popular conceptions of climate were subsumed within an operational definition which was utilized in this paper. The operational definition was as follows:

> Organizational climate is regarded as an umbrella concept which can be used to differentiate organizational work settings in terms of gross behavioral influences upon employees.

The approach to measurement of climate was consistent with the behavioral/attitudinal modality used in the foregoing definition.

Tagiuri (1968) listed among the properties of climate that it is an "indirect determinent of behavior in that it acts upon attitudes, expectations, states of arousal, which are direct determinents of behavior." If this analysis is correct, individuals would react to a particular climate by first modifying attitudes and then behavior. It would follow that measurement of climate

must somehow involve measurement of the attitudes and/or behavior of workers who have been exposed to climate for some reasonable period of time. If it is accepted that the loci of climate is to be found within the perceptual field of the workers within an organization, then the approach to measurement should involve a probe of the attitudes of working incumbents. Accordingly, an attitude scale was developed which was used in conjunction with both employees and an outside (cultural) sample to measure this concept. The development of climate rating (attitude) scales is described in chapter three of this paper.

Evidence of climate has been found both in large and small organizations. Andrews (1967) reported that organizations have a tendency to reward individuals whose behavior and values are consistent with organizational climate. He found that power-oriented organizations rewarded individuals for being high achievers. Other research in the area of climate and personal/organizational congruence has been conducted by Argris (1954) and Hall, Schneider and Nygren (1970). In the former study, it was found that banks tended to reward employees with the correct combination of personal characteristics such as submissiveness, politeness and and a propensity to take directions. Employees who did not have the personal qualities that fit the climate of bank work were more likely to leave their jobs after a

time. The Hall, Schneider and Nygren study investigated the climate of the United States Forest Service and its effect on employees. The public service goals of the service appealed to individuals who perceived themselves as supportive and involved. These employees tended to be more satisfied with their work than individuals who did not possess these personal characteristics. Studies with non-worker groups has shown similar effects of personal/organizational congruence. Pervin (1968) found that college students were more satisfied with their college if they perceived a similarity in the institutional environment and their own self-image. In summary, ample research evidence exists to support the premise that organizational climates do manifest, do vary in character and do bear a strong relationship to the personalities of the employees who inhabit them! Moreover, the behavioral slant of climate definitions and influences suggest the compatibility of the concept with the behavioral typology developed by Holland. Additional evidence for the effects of personal orientations of employees on organizational personality or climate may be gleaned from the research on organizational socialization!

Socialization Process Within Organizations

Child (1954) defined socialization as follows:

> The whole process by which an individual, born with behavioral potentialities of an enormously wide range, is left to develop actual behavior which is confined within a much narrower range, the range of what is customary and acceptable to the standards of his group. (Porter, Lawler, Hackman, 1975, p.162)

The importance of organizational socialization both to the individual and the employer was emphasized by Schein (1971), who claimed that it "can either perpetuate or destroy a career and seriously inhibit systems of manpower planning." Schein stated further that the basic efficiency and stability of an organization depends upon the effectiveness of its socialization of employees.

Considering the importance of this process to the individual and organization alike, it is not surprising to learn that organizations employ a variety of mechanisms to insure that group members learn conforming behaviors. When an individual enters an organization, he/she strikes a psychological "bargain" with the new status group which presages a variety of mutual expectencies. Schein (1970) saw the process as an elimination of many of the individuals old values and an incorporation of often totally new organizational values. The significance of this process may be seen in its tendency to promote behavioral homogeneity. A familiar example of the process of socialization may be recognized in the training programs of the military services. When a recruit arrives for basic training, his physical appearance is modified with a haircut

and the imperative to wear a uniform. His past behavior patterns are modified by his training schedule and obligations as well as his personal relationships with senior military personnel. He is, in effect, transformed into a new entity, a soldier, whose appearance and behavior become appropriate for his membership in his new "organization."

Caplow (1964), reported the pervasiveness of organizational socialization within the culture by referring to it as a continuous process which begins with learning in other institutional structures such as the family and schools. He stated that social systems such as organizations provide information to individuals on their particular value systems. This expanded awareness of various organizational normative structures gives rise to the development of cultural stereotypes. Although Caplow's analysis concerned normative structure of sub-systems within an organization, i.e., levels or departments, the same assumptions concerning the transmission of cues into the culture can be safely made for the broader concept of climate.

Socialization, then, is an elaborate and dynamic process involving the interactive selection of individuals and organizations and significant peer pressure, which tends to encourage behavioral conformity. The research on organizational socialization supported an important theoretical premise of this research which

connected the personal orientations of employees to the creation, perpetuation and cultural transmission of a group personality or climate. The measurement of these climates was based on the assumption that the personalities (climates) of well known organizations are culturally understood as stereotypes. A measurement device was designed to tap the reservoir of organizational stereotypes available within the general culture. This instrument was called the Modal-Organizatioanl-Orientation Rating Scale (MOO). The nature and design of this instrument is discussed in Chapter three.

In summary, the present research represented an elaboration of Holland's theoretical formulations and a synthesis of concepts related to organizational climate. Holland's basic premises that individuals and occupations were classifiable within a global six dimensional typology and that people tended to be more successful and satisfied in occupations similar to their personalities, formed the basis for the connection to organizational climate. For Holland's theory had not accounted for variable work settings. Therefore, the extension of his theory to the organizational level was seen as both logical and necessary. Moreover, the same assumptions that Holland made concerning the stereotypical qualities, cultural pervasiveness and projective protocols of occupations were logically applied to organizational types.

Climate was selected as the concept to be used in the differentiation of organizations because of its global quality and its potential measurability in the attitude/behavioral mode.

Finally, a measurement device, the MOO Rating Scale was designed to tap the assumed characteristics of organizations and adapt them to the environmental qualities of organizational climate. The latter step formed the logical connection of Holland's formulations to the level of organization.

CHAPTER III

METHODS AND PROCEDURES

Selection of Subjects

Since the basic strategy of this research engendered the extention of the Holland model to the level of organization, one of the initial decisions concerned the selection of a number of experimental organizations. Although an infinite variety of organizational types could have been selected for this purpose, two considerations became the basis for the final choice. First, certain organizational differences are more pronounced than others. For example, the climate of a steel mill and that of a city library are logically quite disparate. Although climate measurements of these organizations would have been interesting, their apparently gross difference in goals and activities make them less a test of the sensitivity of a climate rating instrument than was believed desirable. Therefore, three of the experimental organizations were selected from the same field. Since University, Community College and Business (proprietary) School are all educational institutions, measured differences in their climates should be logically founded on more subtle environmental qualities. The fourth organizational type, Bank, was selected from a different field as a distinct point of comparison with the other three.

The second factor considered in the selection of the experimental organizations was the necessity of using employee subjects with the same occupational specialities. Since one of Holland's basic theoretical propositions is focused on the environmental qualities of occupations, it became necessary to hold this factor constant. For this reason, two occupations were selected which were common to the experimental organizations. The occupation of "Secretary" is typically found in all of the organizational types and was selected for this reason. "Social Science Instructor" is an occupational specialty common to two of the organizational types; University and Community College. The use of these occupational groups as subjects had the added benefit of including two hierarchical levels; professional and clerical. Social Science Instructors, as part of the larger faculty group, had an additional characteristic of importance to this study. Since the faculty as a whole enjoy a central position within institutional power structures, they may be contrasted with the secretarial group, which is typically peripheral within institutional power structures. This dialectic among the subject occupations served to spread the potential effects of political leverage on rating and field study results.

In a further effort to eliminate extraneous variables which might have confounded results, secretaries and social science instructors were both utilized as

rating groups. Secretaries were asked to "rate" Banks and Business Schools and Social Science Instructors were used to classify Universities and Community Colleges.

In summary, both the experimental organizational types and the experimental occupations were selected to allow subtle climate differentiations to be generated without undue structural biases. Complexity within organizations as a recognized threat to global climate classification, was addressed through selection of simpler organizational types and occupations which spread the effects of functional specialization and hierarchical status.

As previously described, two rating groups were utilized providing both an inside and an outside perspective of organizational climate. The outside rating group was comprised of freshman psychology students at Housatonic Community College. The student raters were drawn from a pool of students enrolled in freshman psychology classes at Housatonic Community College in the Spring 1980 term. The only individuals who were disqualified were current or former employees of the experimental organizations. This measure was taken to help assure that the rating responses would be based upon stereotype images of the experimental organizations. The sample represented over 75% (excluding absences on the unannounced sampling day) of this particular subpopulation. The rating responses of the freshman psychology students were expected to yield

results which were representative of local community opinion. Although randomization procedures were not employed in rater selection, the diversified nature of the Community College student population was expected to engender a degree of representativeness. Verification of their responses was addressed structurally with the use of employee ratings and field study experimentation. Employee samples from the experimental organizational types were drawn by requesting that all employed individuals in the experimental occupational categories within sample organizations be asked to participate in the study. The request was tendered by a contact person within the sample organizations. Full participation was not anticipated and did not occur. However, a majority of the employees in target occupations did agree to participate,(see Table I).

Table I

Proportion of Potential Participants Completing Full Study Instruments

Potential Participants (Sec'ty & Soc Sci Instr)	Actual	%
259	155	60

As previously described, the occupations of Secretary and Social Science Instructor were chosen for a number of reasons. These occupational specializations

were common within the test organizations, and differed in hierarchical level within their organizations. Moreover, Secretaries are commonly found throughout the organizational structure, a characteristic which served to limit the effects of sub-climate (departmental) influences. Social Science Instructors, as a group within the larger faculty unit, are characterized by a broad disciplinary diversification. Included within their ranks are sociologists, historians, psychologists, economists, political scientists, anthropologists, educationists and marketing specialists. This broad diversification moderated potential sub-climate biases in the same manner that the ubiquitous nature of the secretarial occupation limited the confounding effect. The employee rating samples by organizational type are shown in Table 2 below:

Table 2

Employee Rating Samples - Phase I

Samples	Organizational Type	Occupational Type	Raters
9	Bank	Secretarial	36
7	Business School	Secretarial	30
16 total		total	66
2	University	Soc Sci Instr	30
3	Community College	Soc Sci Instr	30
5 total		total	60
	21 Total Samples	126 Total Raters	

The secretarial and social science instructor rating groups were asked to rate the climate of their own organizations. This data was used to verify ratings generated by the outside rating group. The employee groups were expected to rate the climates of their own organizations using felt perceptions rather than stereotypes. The felt perception of climate was measured on two hierarchical levels to minimize the possible effects of employee "status" on ratings. Although perceptions of climate are, by definition, similarly felt throughout an organizational structure, it was considered prudent to conduct assessments on at least two levels. Therefore, secretarial personnel were used to rate Banks and Business Schools whereas Social Science instructors were used to classify Universities and Community Colleges.

In Phase II of the study, all previously drawn employee rating groups plus additional samples of University and Community College secretaries were combined to form subject pools for use in the field study of work satisfaction. Actual field study subjects were drawn from subject pools on the basis of personal/occupational congruence. As previously discussed, congruence at the occupational level was held constant in Phase II in order to measure the effects of <u>organizational</u> congruence.

Table 3 indicates the use of organizational samples, subject pools and field study subjects in Phase II of the study.

Table 3

Field Study Subject Samples - Phase II

Samples	Organ Type	Occ Type	Subject Pool	Field Study Subjects
9	Bank	Sec'ty	53	20
7	Bus School	Sec'ty	16	6
4	University	Sec'ty	16	3
3	Comm Coll	Sec'ty	27	9
23			112	38
2	Univ	Soc Sci	16	11
3	Comm Coll	Soc Sci	17	15
5			33	26
23 Total Samples		Total Subj	145	64

The strategy of Phase II of the study was to compare the occupation of Secretary over four organizational types and the occupation of Social Science Instructor over two organizational types which were expected to manifest different climates. This approach allowed a comparison of relatively satisfied and dissatisfied workers over two, three, or four differentially rated organizational types.

Once the data for the field study phase was compiled, subject pools consisting of 112 secretaries and 33 social science instructors were established. Individuals in the subject pools were then analyzed for personal/occupational

congruence. It will be recalled that only individuals with this level of congruence could be used in the field study. Further discussion of this issue may be found on pp. (65, 66).

Individuals who were found to have personal/occupational congruence were assigned to the field study subject group. Thirty eight secretaries and 26 social science instructors were included in this category.

In summary, employee raters and field study subjects were drawn from the full population of secretarial occupations within each sample organization. The types of employees to be included in the study was determined by the experimenter in consultation with the contact person within the sample organization. The operational definition of secretary was broadened somewhat to include the varied classifications of clerical, clerical/secretarial, typing pool secretary etc. Caution was taken not to include specializations that were incompatible with a self concept of secretary, i.e. bank teller. Although full participation was not expected or obtained, a large proportion of the target employees did participate. The employee subject groups are a strong representation of the experimental occupations within sample organizations. The sample organizations in turn are a strong representation of the population of organizational types in the Bridgeport region.

Instrumentation

MOO Rating Scale Type I

In Chapter II, evidence was presented to support the existence of general environmental characteristics of organizations called climates. The design of an appropriate instrument with which to measure climates was a critical objective of this research.

The method chosen for the measurement of climate was the development of a rating scale. Rating scale construction was based on the assumption of a "projective" quality of generic organizational titles. If stereotypes of organizations are pervasive within the culture, an organizational title such as "bank" should conjure up particular kinds of mental images for most people. The rating scale design was premised on the assumption that these mental images could be related to the Holland typology through the use of adjectives which serve as descriptors of the types. The adjectives selected for the scale were those developed by Holland in conjunction with his typology. Holland specified between twelve and sixteen descriptive adjectives for each of his six dimensions.

The use of descriptive adjectives as the basic structural component of the scale offered two alternatives in scale design. These alternatives revolved around the question of whether to use the adjectives in singular or

group comparisons. It was determined that the scale would be initially designed using singular comparisons and that a pilot study would be conducted to evaluate design effectiveness. This design approach led to the development of the Modal Organizational Orientation (MOO) Rating Scale - Type I. The strategy underlying Type I rating scale construction was to allow culturally representative "raters" to project on common organizational titles by selecting an adjective which represented a particular Holland dimension. A sample of the rating scale design is as follows:

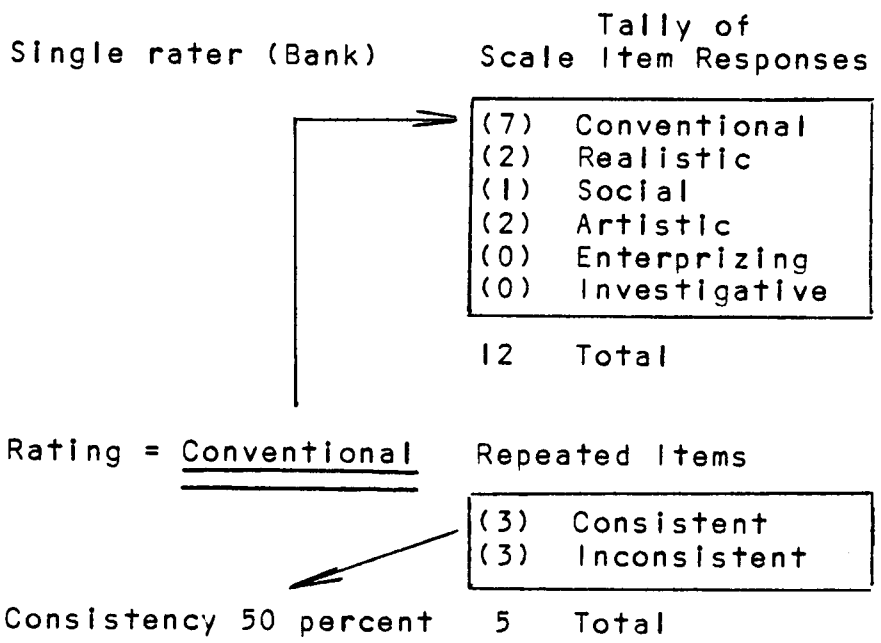
Describe...Banks

1. ( ) frank
   ( ) analytical
   ( ) complicated
   ( ) cooperative
   ( ) acquisitive
   ( ) conforming

Rating scale instructions directed the rater to consider the work environment of a bank and to select the closest descriptive adjective. The generic title, "bank", was expected to tap the stereotype image in such a way that the same adjective would be consistently selected by a large number of raters. Since each of the six adjectives represented a separate Holland dimension, the test item was expected to have the effect of "channeling" the stereotype image of bank into a specific Holland dimension. For example, if raters consistently selected the adjective "conforming" as the best descriptor of bank,

scale item #1 would be scored as conventional since Holland has designated the adjective "conforming" as a conventional dimension descriptor. A total of twelve separate scale items were used to measure climate for each of the sample organizational types: Bank, University, Business School and Community College. In addition, six items were repeated (with adjective order modified) in order to check response consistency. Two factors were used to determine the "rating" (designation of Holland dimension) for each sample organization. Each rater was required to select a majority of adjectives which pertained to a particular dimension and show a 50 percent or greater consistency with repeated items:

e.g.



The entire scale for banks is shown in Appendix A. Note that items 13-18 are repeats of 1, 3, 5, 7, 9, and 11 with adjective order modified.

The MOO Rating Scale - Type I was evaluated in a pilot study in the spring of 1979 using a group of 30 freshman applicants to Housatonic Community College. The results of the pilot study revealed serious weaknesses in the design of the scale.

MOO Rating Scale Type III

The lack of positive results in the pilot study conducted with the Type I scale, led to an evaluation of the alternative Type III design approach. The MOO Scale Type III was designed to tap the environment generating power of seven Holland adjectives used in group form. The 12 adjectives which had been used with each Holland dimension in the Type I Scale, were analyzed for a "similarity" factor. Adjectives which were not clearly distinctive descriptors of a particular dimension were eliminated. The seven most highly differentiating descriptors were retained for use in the Type III Scale.(see Appendix B) The principle advantage of the Type III Scale was seen in the aggregate discrimination power of the seven adjectives. Since raters were assessing climates which were environmental in nature, it appeared inherently logical that a group of descriptors would be advantageous in guiding the

mental images of the raters.

A second pilot study was conducted to determine the effectiveness of the Type III Scale. Thirty freshmen psychology students enrolled at Housatonic Community College were administered the Type III Scale. The results of this pilot study indicated that the design of the Type III Scale was effective. The use of descriptive adjectives in clusters appeared to form clear images of the organizational climates in the minds of the raters.

The pilot study of the Type I Scale revealed serious structural weaknesses in the instrument. The problems occurred in two areas; the difficulty level of the Scale items, and the absence of sufficient discrimination power among the adjective descriptors. The arduous task of concentrating on the 72 item scale and making fine distinctions between six often subtly differentiated adjectives per item was apparent from the responses of the raters upon completion of their assignment. The difficulty was further evident in the apparently random nature of some responses. In the six items which were repeated to test for a consistent response pattern, raters often responded to the same item options with a completely different choice of adjective. In some cases, all six repeated items were answered with perfect consistancy suggesting that the rater recognized the pattern of repeated items.

The principle structural weakness in the Type I Scale however, was the apparent lack of discrimination power of the adjectives when used in singular comparisons. Many of the adjectives were similar in meaning, i.e. precise=Investigative; orderly=Conventional, posing an inappropriate challenge to the raters' verbal abilities, rather than measuring stereotype images. It became evident that the adjectives which Holland had ascribed to each of the respective dimensions were not intended to be used in singular comparisons. Rather, the adjective descriptors were intended to generate the "sense" of a particular dimension when used in groups. This insight into the potential strength of the adjective descriptors suggested the feasibility of the second approach to scale design.

As has been previously discussed, the Type III Scale design was based upon the discriminative power of the adjectives employed in group form. The inherent logic in using multiple descriptors to identify an environmental quality was validated by the results of the pilot study conducted with this instrument. An additional advantage of the Type III Scale was found to be its simplicity. Designed as a single page instrument, the Type III Scale was less imposing at first glance, a feature which served to increase rater interest and concentration.

The results of the Type III Scale pilot study were remarkably different from the one previously conducted

with the Type I Scale. The raters were able to complete the scale in approximately 5 minutes compared to an average of 20 minutes required for completion of the Type I Scale. Moreover, the raters appeared to have little difficulty understanding the accompanying verbal and written instructions or in responding to scale questions.

In summary, pilot study results indicated that the comparative group design of the MOO Rating Scale Type III was superior to Type I in simplicity of design, ease of administration, rater comprehension and most importantly in tapping the culturally pervasive stereotype images of the experimental organizational climates. The Type III rating instrument was therefore adopted for use in the study. The successful development of a climate rating scale represented a vital component of the primary hypothesis of the study.

Single group Chi Square (x^2) was used to insure that apparent differences in climates ascribed to experimental organizations were significant at $P \leq .01$. Results indicated that frequencies of climate ratings were beyond chance at $P \leq .01$. Data analysis of the Type III pilot study is presented in Chapter four.

Vocational Preference Inventory

In Phase II of the study, two additional instruments were employed to determine a) subject modal personal orientation (MPO) and b) degrees of work satisfaction among field study subjects. It will be recalled that MPO's of subject

pool participants were used to determine both personal/occupational and personal/organizational congruence. Holland's Vocational Preference Inventory, (VPI) was incorporated into the study to provide measurements of the MPO's of field study subjects. The V.P.I. is a 160 item interest inventory employing occupational titles to elicit like/dislike responses. Holland has developed the V.P.I. to tap the projective qualities of occupational titles and relate them to his six dimensional typology. The first six scales yield scores which indicate preferences for work activities representative of the six Holland types. Within the context of this study, the two highest scores among the first six scales were used to determine the Bi-Modal Personal Orientation (BMPO's) of the subjects. If five of the six scales rendered scores of zero, the single scale with at least one positive score was used to generate a modal personal orientation (MPO) for the subject.

e.g. V.P.I. Scales

4	2	11	1	4	9
R	I	S	C	E	A

BMPO = SA

0	0	0	1	0	0
R	I	S	C	E	A

MPO = C

Work Satisfaction Scale

The criterion variable in Phase II of the study was work satisfaction. Measurements of degree of work satisfaction were derived from a specially constructed scale representing a continuum of work satisfaction with four index points; highly satisfied, mostly satisfied, somewhat dissatisfied and highly dissatisfied (appendix C). The scale was designed to elicit an uncomplicated assertion of general work satisfaction. The simplicity of design was calculated to avert the focus of satisfaction/dissatisfaction from specific areas of concern, i.e. income, supervision, underutilization etc., although it was expected that these factors would have some effect on degree of satisfaction among the subjects. However, the scale's general nature was expected to elicit reactions to broad person/environment compatibilities. Accordingly, the scale responses were calculated to have greater relevance to the inherently general nature of the independent variable, personal/organizational congruence.

Collection of Data

Samples of organizations from the four generic organizational types were drawn principally from the Bridgeport, Connecticut area. In addition, a number of samples were drawn from other Connecticut cities and a single sample from New York City. Table 4 provides a breakdown of organizational samples according to location:

Table 4

City Locations of Organizational Samples

City Location	Number of Samples
Bridgeport	9
New Haven	4
Wallingford	2
Meridan	1
Branford	1
Torrington	1
Hartford	1
Fairfield	1
Farmington	1
Norwalk	1
New York City, N.Y.	1
	Total 23

The principle index employed for selection of organizational samples was the yellow pages of the Bridgeport telephone directory. Participant organizations from outside the Bridgeport area were selected on the basis of access to contact persons within the organizations. Three community colleges and one university were representative of four cities outside of Bridgeport. The remaining samples were comprised of five banks and five business schools.

The basic approach to data collection entailed a contact with all universities, community colleges, banks, and business schools in the Bridgeport area. These organizations were reached through a contact person by phone, mail or in person. The contact person was selected on the basis of previous acquaintance, third party recommendation or at random. Although three selection methods were used, in most

instances, the contact person occupied a position of authority such as bank vice-president or personnel manager, academic department chairperson or administrative officer. Once the request for organizational participation was tendered, the contact person determined the number of potential participants according to occupational classification. The contact person agreed to allow the distribution of instrument and questionnaire packets to all potential participants. Participation in the study was completely voluntary with no offer of renumeration suggested or implied. The only compensation offered to participants was an interpretation of Vocational Preference Inventory (instrument used to determine personal orientation) results. Two participants requested this information.

Instruments contained in the instrument and questionnaire packet were designed to be completely self-administrable. The packet contained the Rating Scale Type III, Vocational Preference Inventory, Work Satisfaction Scale, participation agreement and letter of introduction.

Returned packet materials were sorted into two data groups; rating scales and field study materials. The rate of return of packet materials compiled in Table 5 indicated a reasonable interest in study participation among the subject groups.

Table 5

Proportion of Potential Participants
Completing Field Study Instruments

Type	Number Distributed	Returned	% of Return
Banks	71	53	75%
Univ	74	32	43%
Bus Sch	54	30	56%
Comm Coll	74	44	59%

A number of partially completed packets were returned. Since a minimum of 30 employee ratings per organizational type were required for Phase I, a resolicitation of organizational samples of Universities, Community Colleges and Business Schools was conducted to make up initial deficits. The resolicitation was premised on the assumption that non-participants, who would not take the twenty to thirty minutes to complete the entire packet, would complete the rating scale which required only five minutes. In this manner, the deficits in employee raters was adjusted. Contact persons were cautioned against asking the original participants to complete a second rating scale. Since the participation within banking organizations was heavy, 36 rating scales were randomly drawn from the total Bank sample of 53.

Research Design

In phase I, the focus of this research engendered the development of a classification instrument (rating scale) for the purpose of identifying the general environmental characteristics of certain common organizational types. Although a conventional research design was not necessitated in Phase I, the important formal design property of "control" was incorporated into rating scale development methodology.

The principal use of control in Phase I was embodied in the comparison of organizational ratings rendered by a student group with those of employer groups representing the various experimental organizations. Although evidence has been presented to support the hypothesis that ratings derived from cultural stereotypes of organizational types are valid, control over the accuracy of ratings was sought from the perceptions of the employees who inhabited the organizations. Since employees of the test organizations had personally experienced the climates of their respective organizations, their ratings were expected to reflect a different viewpoint than the outside rating group. Moreover, employee ratings were more likely to be derived from felt perceptions of environmental qualities. This subjective element within employee ratings served as an excellent check on the accuracy of stereotype ratings. The latter were expected to be

formed as impersonal concepts reflecting objective evidence prevailing within the culture.

The student rating group was drawn from six freshman psychology classes at Housatonic Community College. The 90 student raters represented all enrolled students in the six class sections with the exception of 1) absentees and 2) students disqualified on the basis of past or present employment in one or more of the experimental organizations. Instructions were issued to the six psychology classes by the same experimenter using a prepared script to prevent the occurrence of experimenter effects on subject perceptions of the research. Single sample Chi Square was applied to the student rating frequencies.

The student derived stereotype ratings were then compared to ratings derived from samples of employees of the experimental organizations. This comparison was completed as a control on the accuracy of the stereotype ratings.

Correspondence between stereotype and employee ratings was operationally defined as the overlap or "sharing" of <u>one</u> common dimension. On this basis, all employee ratings except Business School were found to correspond to stereotype ratings.

A further measure was taken to validate the accuracy of organizational climate ratings derived in Phase I of this research. This additional control was manifested in Phase II of the study and involved a <u>utilization</u> of

the climate ratings under realistic field conditions. In accordance with this control objective, a field study of work satisfaction was conducted as Phase II of the study.

As noted earlier, Holland has asserted that many positive outcomes emanate from conditions of personal/occupational congruence. An individual whose personal/orientation is congruent with his occupational environment is expected to be a better achieving and more satisfied worker because his preferred activities, skills, attitudes and values are supported and utilized within his occupational area. We have also noted, however, that many occupations have variable work settings which in turn generate their own environments (climates). If the organizational climate is not compatible with the personal orientation of the workers, the effects are expected to be less positive than would be the case with complete congruence, i.e., personal/occupational/climate congruence.

The field study aspect of this research was based on the premise that a greater degree of work satisfaction would be found among workers with complete congruence than among those who had achieved the partial congruence of personal orientation and occupation. A self-rating scale of work satisfaction was utilized with employee samples to determine degree of work satisfaction. In this study, work satisfaction is viewed as a continuum

with four reference points; Highly Satisfied, Mostly Satisfied, Somewhat Dissatisfied, and Highly Dissatisfied. It was expected that the presence or absence of personal/organizational congruence would effect the degree of work satisfaction. Since field study subjects were selected from a larger pool of participants based on personal/occupational congruence, differences in satisfaction were attributed to incompatibilities in the personal/organizational dimension.

The selection of field study subjects from the larger subject pool on the basis of personal/occupational congruence represented an important control measure in Phase II of the study. If the effects of this level of congruence were not held constant, outcome differences in work satisfaction would have been confounded. In the absence of personal/occupational congruence, it could not be ascertained what effect that level of congruence would have had on obtained differences in work satisfaction.

Personal/occupational congruence was operationally defined in this study as the overlap of <u>one</u> dimension of the Bi-Modal Personal Orientations (BMPO) of participants with the <u>primary</u> first dimension of the following occupational sub-types listed in Table 6:

Table 6

Holland's Occupational Sub Types

Secretary	Soc Sci Instructor
CS	SI
CI	SE
C	IS
CR	IA
CE	

The (BMPO) of each subject participant was established from responses to items on the Vocational Preference Inventory (VPI). Only subject participants who demonstrated personal/occupational congruence were used as field study subjects. Examples of personal/occupational congruence and incongruence are as follows:

e.g.

	Modal Personal Orientation (MPO)	*Congruence
Secretary	CI	yes
	CA	yes
	AC	yes
	IE	no
Social Science Instructor	SE	yes
	IR	yes
	RI	yes
	IS	yes
	AE	no
	ER	no

*(See Table 6)

Thirty-eight secretaries and 26 social science instructors were found to have personal/occupational congruence.

These individuals served as Phase II field study subjects.

Field study subjects were assessed for personal/organizational congruence. As described in Chapter I, personal/organizational congruence was operationally defined as the overlap of a single dimension of the (MPO) or (BMPO) with a single dimension of the classified organizational climate (MOO) or (BMOO). So defined, field study subjects were seen as having personal/organizational congruence or personal/organizational incongruence.

Since the use of (BMPO) and (BMOO) with one common dimension defining climate congruence created the possibility that subjects with both climate congruence and incongruence could be found in the same organization, comparisons on this dimension were conducted both inter-organizationally and intra-organizationally.

In Tables 7, 8 below, the 38 secretaries and 26 social science instructors who were found to have personal/occupational congruence, were categorized on the basis of professed level of work satisfaction. The distribution of these subjects along the satisfaction/dissatisfaction continuum indicated the likeliest points of comparisons of satisfaction differences. It was decided that secretaries could be compared between HS (highly satisfied) and MS (mostly satisfied) and that social science instructors between MS (mostly satisfied) and SD (some dissatisfaction).

Table 7

Secretary Stereotype and Employee
Rated Climates - BMOO, MOO

Organizational Type	Rated Climate	Subject BMPO			
Community College	Employee (S)	sc	ce, ce	ec	
	Stereotype (S)	cs	ec		
			c, c, c		
University	Employee (IS)	cs	sc	cs	
	Stereotype(IE)				
Business School	Employee (S)	cs	cs	ca	
	Stereotype(EC)	cs	ce	ac	
Bank	Employee (SC)	ce	ec	ca	ce
	Stereotype(C)	ca	ce,ce	cs	ce
		sc	sc,sc		
		sc	cs,cs,cs		
		c	c,c		
			ci		
		HS	MS	SD	HD

Satisfaction/Dissatisfaction
Continuum

Table 8

Social Science Instructor Stereotype and Employee Rated Climates - BMOO, MOO

Organizational Type	Rated Climates		Subject BMPO			
University	Employee	(IS)	si,si	ir	ri	
	Stereotype	(IE)	ia	ai	si,si	
				si,si	ai	
				sa		
Community College	Employee	(S)	is	is	sa,sa	
	Stereotype	(S)	se	ir	is,is	
				ai	as	
				se	s	
				es	se	
				si		
				sa		
			HS	MS	SD	HD

Satisfaction/Dissatisfaction Continuum

Personal/organizational congruence and incongruence was derived from Tables 7, 8 through a comparison of subject (BMPO) with the climate ratings of each organizational type shown at the left hand column. As earlier indicated, an overlap of a single dimension between (BMPO) and (BMOO) indicates congruence.

e.g.

University-Soc Sci Instr

stereotype BMOO = IE	ir	ri
	ai	si, si
congruence------	si, si	ai
incongruence----	sa	
	MS	SD

In the example shown above, the two subjects with BMPO's of (SI) and (SA) are shown to be congruent and incongruent respectively when using the stereotype climate rating of (IE) for comparison of compatibility. The subject with a BMPO of (SI) shares the (I) dimension with the climate classification (IE).

In the above manner, the 38 secretaries were divided into two groups on the basis of personal/organizational congruence or incongruence. Next, these two groups were further subdivided on the basis of satisfaction level, HS or MS. The 26 social science instructors were grouped in like manner using MS and SD satisfaction differences.

In summary, the formal research design property of "control" was the guiding principle in this study. In Phase I, control was exercised structurally in the selection of organizational types, subject occupational types and in the comparison of classified climates derived from two dissimilar groups of raters. Moreover, additional control over the accuracy of climate rating was sought from a practical test under actual field conditions. Phase II of the study utilized a formal field study design to determine work satisfaction differences on the basis of personal/organizational congruence when employing climate classification from both outside and inside reference groups.

Statistical Procedures

The foregoing data were organized for statistical analysis in the following manner: Two by two (2 x 2) tables were established for both the Secretarial and Social Science groups comparing the variable of personal/organizational congruence (x) with work satisfaction level differences (variable Y), using both stereotype and employee rated climates. The Chi Square (X^2) test for two independent samples was then used to determine if observed 2 x 2 table frequencies represented significant departures from chance at the $P \leq .05$ level of probability (one-tailed test). The Yates correction was employed to adjust for small cell frequencies. A

significant difference in the observed frequencies of personal/organizational congruence and level of work satisfaction was determined with the use of employee rated climates for Secretaries. These data were further evaluated for magnitude of relationship. The Phi coefficient (ϕ) was employed for the purpose of deriving a correlation between the variables of congruence and degree of work satisfaction.

Once a Phi (ϕ) correlation was generated, attention was turned to the conversion of Phi (ϕ) to some index of prediction. A conversion of this type was sought in order to provide direct statistical support to H:5 of the study which involved the prediction of work satisfaction differences when personal/organizational congruence is achieved. It was found that the square of Phi (ϕ) is directly convertible to a Proportional-Reduction-in-Error (PRE) index. The PRE index indicates the proportion of the error accounted for in making a prediction of the occurrence of one variable from another. In the case of variable (X), personal/organizational congruence and variable (Y), difference in satisfaction, a conversion to PRE allowed the probability of (Y) to be predicted from (X). In this manner, the <u>efficiency</u> of prediction of work satisfaction differences from personal/organizational congruence was determined.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

Approach to Climate Measurement

The primary research hypothesis of this study $H:_1$ predicted that the climates of four generic organizational types could be classified within Holland's typology using an experimentally developed rating scale. The design characteristics of the Modal Organizational Orientation Rating Scale were required to be theoretically related to Holland's classification system of personal orientations and occupations in order to provide an organizational selection model based upon similar information systems. Since the development of a useful rating scale was a critical determinant in bringing about a favorable outcome in $H:_1$, a brief review of the important elements of the scale design will follow. Moreover, since the rating scale was developed to measure organizational climate, a brief review of the climate concept is also provided as an informational background for the discussion of rating scale design and development.

As previously discussed, climate is an umbrella concept which encompasses a number of structural and interpersonal dynamics of organizations including goals, management style and the personal orientations of employees. Although an assessment and analysis of the separate factors which affect organizational climate might be of value in other

studies, the premise of this research was restricted to the Holland conception of environment. Since Holland posited that the character of an environment is created by the people who comprise or inhabit it, organizational climate was viewed similarly within the context of this study. This perspective assumes that factors such as goals and management style are reflected in the personal orientations of employees and need not be measured separately.

Although Holland's conception that "people create environments" was accepted as a basis for understanding the occurrence of organizational climate, the method of assessment utilized in this study was quite different from Holland's approach. Whereas Holland advocated a "census" methodology, which entailed a count of personality types within organizations to determine the nature of their environment, the assessment technique used in this study was based instead upon cultural stereotypes.

The design requirements for the MOO Rating Scale then, were determined by a number of factors. The scale had to channel culturally pervasive stereotype notions of organizational environments into Holland's six dimensions. Therefore, commonly understood terms which were related to Holland's typology and also recognizable as logical descriptors of social-cultural environments were needed. All of these requirements were met with the use of lists of descriptive adjectives which Holland

had developed for use in his typology of personality types. The adjectives were common, relevant to the typology and were easily related to environmental qualities when considered in group form.

Climate Measurement - Use of Outside (Student) Group - $H:_1$

$H:_1$ stated that an outside (student) group could be used to successfully classify the climates of four organizational types using the experimentally developed rating scale. This hypothesis was supported at the $P \leq .01$ level of probability for each of the four organizational types. Ninety community college psychology students serving as raters, consistantly rated the climates of the four organizations through their reactions to the groups of descriptive adjectives which had been linked to Holland's six environmental dimensions. The following four tables indicate the rating frequencies for Bank, Business School, University and Community College. Since the climates of the experimental organizations were rated at the $P \leq .01$ level of probability, the assumption underlying the efficacy of a student rating group was also supported. That is, the students perceived the work climates of the experimental organizations as having certain general characteristics even though they had never worked in those organizations themselves. Their information on probable climate qualities, then, was quite

likely based upon commonly held notions or stereotypes. This assumption was of some importance in the study since as earlier described the design of the climate rating scale (Type III) was calculated to specifically tap culturally pervasive stereotypical information. In Table 9, 57 of 90 student raters indicated that Bank climates were characterized by Conventional qualities. This rating frequency was tested for level of probability at $P \leq .01$. A one-sample chi square test was employed. The obtained $x^2 = 156.93$, df= 5, was significant at the .01 level of probability, (two tailed test).

Table 9

Stereotype Rating Frequencies - Bank

	Ratings						
Number	S	E	C	R	I	A	x^2
90	14(15)*	7(15)	57(15)	9(15)	3(15)	0(15)	156.93**

* Numbers in parentheses are expected values.

** $P \leq .01$.

In Table 10, student raters characterized Business School climates as both Enterprising and Conventional. A one-sample chi square test was used to determine whether the frequency of observed ratings differed from expected ratings. The obtained $x^2 = 64.13$, df =5, was significant at the .01 level of probability (two tailed test).

Table 10

Stereotype Rating Frequencies - Business School

Number	Ratings S	E	C	R	I	A	x^2
90	6(15)*	33(15)	32(15)	7(15)	7(15)	5(15)	64.13**

* Numbers in parentheses are expected values.

** P ≤.01.

In Table 11, 36 raters selected Investigative while 28 selected Enterprising to characterize the climates of Universities. A one-sample chi square test was used to determine whether differences in rating frequencies were significantly different. The obtained x^2 =61.86, df =5, was significant at the .01 level of probability (two tailed test).

Table 11

Stereotype Rating Frequencies - University

Number	Ratings S	E	C	R	I	A	x^2
90	6(15)*	28(15)	5(15)	4(15)	36(15)	11(15)	61.86**

* Numbers in parentheses are expected values;

** P ≤.01.

In Table 12, 49 of 90 raters indicated that Community Colleges were characterized by Social climates. A one-sample chi square test was applied to the distribution of rating frequencies. The obtained x^2 =95.33, df =5, was significant at the .01 level of probability (two tailed test).

Table 12

Stereotype Rating Frequencies - Community College

	Ratings						
Number	S	E	C	R	I	A	x^2
90	49(15)*	8(15)	4(15)	9(15)	7(15)	13(15)	95.33**

* Numbers in parentheses are expected values.

** $P \leq .01$.

In summary, a one-sample chi square probability model was used to determine the "goodness of fit" of all rating frequencies. Fifteen responses per rating dimension were expected from a total of 90 responses for each organizational type. It can be seen from the frequency data in Tables 9 and 12, that Bank and Community College received a disproportionate number of ratings in a single dimension. Bank received 57 of 90 responses in the Conventional dimension and Community College 49 of 90 within the Social dimension. Since the second highest dimensional frequencies for these organizations (Bank, S=14; Community College, A=13) were

quite distant, these organizations were classified modally, (MOO). Business School and University, however, received the greatest proportion of ratings within two dimensions (Business School, E=33, C=32; University, I=36, E=28) and were therefore classified bi modally (BMOO).

As noted previously, the frequency distributions of stereotype rating responses for all four organizations were beyond the level of chance at $P = .01$, providing statistical support for $H:_1$. Table 13 Summarizes the stereotype ratings:

Table 13

Stereotype Ratings of Organizational Types

Type	MOO (BMOO) Ratings	
Bank	(C)	Conventional
University	(IE)	Investigative/ Enterprising
Business School	(EC)	Enterprising/ Conventional
Community College	(S)	Social

Climate Measurement - Use of Inside (Employee) Groups

In order to substantiate the accuracy of the student generated stereotype ratings, a comparison was made with ratings derived from groups of employees within the experimental organizations. The basic assumption underlying this

form of comparison was that employees would react to their own organizational climates on the basis of felt perceptions rather than stereotype notions. The following four tables indicate the rating frequencies for the four organizational types based upon the perceptions of the employee rating groups.

In Table 14, it may be seen that 16 of 36 employee raters indicated that Bank climates were characterized by Social qualities with Conventional ranked second with 11 rating responses. A one-sample chi square test was used to determine whether the frequency of observed ratings differed from expected ratings. The obtained x^2 =37.7, df =5, was significant at the .01 level of probability (two tailed test).

Table 14

Employee Rating Frequencies - Bank

Number	Ratings S	E	C	R	I	A	x^2
36	16(6)*	8(6)	11(6)	1(6)	0(6)	0(6)	37.7**

* Numbers in parentheses are expected values.

** $P \leq .01$.

Table 15 frequency data indicated that Business School climates were viewed as Social by 14 of 30 employee raters. Obtained x^2 = 39.2, df =5, was significant at the .01 level

of probability (two tailed test).

Table 15

Employee Rating Frequencies - Business School

Number	Ratings S	E	C	R	I	A	x^2
30	14(5)*	2(5)	6(5)	5(5)	2(5)	1(5)	39.2**

* Numbers in parentheses are expected values.

** P ≤.01.

Table 16 presents rating frequency data for University. The Investigative dimension was rated by 12 of 30 employees while the Social dimension was selected by 8 of 30 employees. Obtained x^2 =17.6, df =5, was significant at the .01 level of probability (two tailed test).

Table 16

Employee Rating Frequencies - University

Number	Ratings S	E	C	R	I	A	x^2
30	8(5)*	2(5)	3(5)	4(5)	12(5)	1(5)	17.6**

* Numbers in parentheses are expected values.

** P ≤.01.

Data in Table 17 indicated that Community College climates were viewed as Social by 16 of 30 employee raters. Obtained x^2 =32.0, df =5, was significant at the .01 level of probability (two tailed test).

Table 17

Employee Rating Frequencies - Community College

	Ratings						
Number	S	E	C	R	I	A	x^2
30	16(5)*	2(5)	4(5)	5(5)	3(5)	0(5)	32.0**

* Numbers in parentheses are expected values.

** $P \leq .01$.

One-sample chi square was used to determine if the employee generated rating frequencies were beyond chance at $P \leq .01$. As indicated in Tables 14, 16, Banks and Universities were rated bi modally (Bank, S=16, C=11; University, I=12, S=8). Business School and Community College in contrast were rated modally by the employees (Business School, S=14; Community College, S=16). Frequencies of employee rating responses were all beyond chance at $P \leq .01$.

Employee generated classifications are summarized in Table 18 below.

Table 18

Employee Ratings of Organizational Types

Type	MOO (BMOO) Ratings
Bank	(SC) Social/Conventional
University	(IS) Investigative/ Social
Business School	(S) Social
Community College	(S) Social

Student and Employee Ratings Compared - $H:_2$

Since $H:_2$ predicted that the student generated stereotype ratings would correspond to employee generated ratings, the two classifications were compared. See Table 19 below.

The comparative analysis of stereotype and employee generated ratings manifested a high degree of similarity in the two classification approaches:

Table 19

Comparison of Stereotype and Employee Ratings of Organizational Types

	Rating	
Type	Stereotype	Employee
Bank	C	SC
University	IE	IS
Business School	EC	S
Community College	S	S

In the comparison of stereotype and employee ratings, overlap in a single dimension was assumed to suggest a commonly perceived climate type. Using this criterion to determine operational correspondence yielded the following results as shown in Table 20 below:

Table 20

Correspondence of Stereotype and Employee Ratings

	Ratings		
Type	Stereotype	Employee	Correspondence
Community College	S	S	Yes
University	IE	IS	Yes
Bank	C	SC	Yes
Business School	EC	S	No

Therefore, with three of the four organizational types, $H:_2$ which predicted correspondence between the two classification approaches was supported by the data. Ratings of employee groups did correspond to student ratings, but were not identical to them. The differences might be attributed to the aforementioned assumptions regarding the different perceptual basis for ratings between the groups (stereotype versus felt perception). An analysis of the climate classifications of the two rating groups, indicates

that one organizational type was rated identically by both groups (Community College), one was rated differently (Business School) and two were rated similarly (University and Bank). Moreover, of the three ratings which were deemed to have operational correspondence, Community College was given a single dimensional rating (MOO) of Social while the others differed only in the Social dimension. Both University and Bank were rated as partly Social by employee raters. This difference may be attributed to employee's felt perception of their own work environments as having prominent social qualities, i.e. understanding, cooperativeness, kindness, helpfulness etc. An appreciation for these social environmental qualities would not ordinarily be expected in ratings derived from an outside group. The Community College might be seen as an exception in this regard, however because of its widely understood mission as a "last chance" educational institution for poorly prepared or older students. Thus, it is likely that Community Colleges are viewed both internally and externally as organizations with a social mission to fulfill. The consistancy of the Social rating derived from both rater groups supported this conclusion.

Employee raters from the Business Schools classified their organizations as singularly social. Although it would be expected that Business School employees would also perceive additional qualities within their work environments, more akin to the stereotype ratings of enter-

prising and conventional, this did not occur. In contrast to Business School employees, University and Bank raters did perceive other qualities in addition to social characteristics within their organizations.

Business School was the only organization which did not obtain ratings with intergroup correspondence. The lack of rating correspondence for Business School may be seen as partially a function of operational cut-off points, however. The three highest rating frequencies for Business Schools were S=14, C=6, and R=5. The social rating frequency of 14 was judged sufficiently disproportionate as to consider it a modal (MOO) rating. Conventional and realistic rating scores were insufficiently differentiated to justify a Bi Modal (BMOO) rating of (SC). The point to be made is that lack of correspondence between the two rating groups of Business Schools was partially a function of operational definitions within the study and not entirely because employees failed to see a number of conventional qualities in their work environments.

As previously mentioned, the most striking difference in the ratings of the employees was the prominence of the social dimension. All of the employee ratings contained this particular dimension. Employees of Banks, while acknowledging the conventional qualities of their work setting, rated the Social aspects more strongly.

by contrast, the stereotype rating of Bank was strictly Conventional. A similar relationship is seen with University. Employees of the latter rated their climate as Investigative-Social (IS). Stereotype ratings of University focused on the Investigative-Enterprising (IE) aspects, ignoring the Social dimension and pinpointing Enterprising qualities. This latter rating may reflect certain of the changes taking place in higher education. Certainly, universities have had to become stronger politically for purposes of survival. Perhaps universities are now commonly viewed by the public as ambitious, acquisitive, energetic and domineering. Social science faculty still view their institutions from the traditional Investigative perspective with Social qualities a close second. Community Colleges have already been discussed as institutions which are clearly understood within the culture as well as by its employees as being Social in character. The rating undoubtedly reflects this well understood mission. Business Schools were rated Enterprising-Conventional by the student group. Since these institutions are profit making and center their teaching activities on business areas, the rating assumes a type of face validity. The Social rating attributed to Business School by employee raters is consistent with the other employee ratings, all of which contained a prominent Social dimension. Since Business School employees also did orient their second highest ratings to the Conventional dimension, agreement with the stereotype

can be seen. The absence of the Conventional dimension in the final climate rating is a result of the cut off points established in this study as previously discussed.

In summary, stereotype climate ratings of the four experimental organizations seem to be logically related to the occupational types who typically inhabit them. In this respect, the findings support Holland's census approach to determining environmental qualities. The employee ratings, however, seem to reflect the spatial proximity of the raters to the organizations as well as a tendancy, perhaps based on affiliation needs to see their working environments in terms of their social qualities.

In summary, support was found for the first two research hypotheses in the study, $H:_1$ and $H:_2$. Four organizational climates were rated with statistically significant internal consistancy by both a student rating group and a number of employee rating groups. The inter-rating comparisons showed operational correspondence in three of the four organizational types. No correspondence was found between the two ratings for Business schools.

Field Study of Work Satisfaction - $H:_1$, $H:_2$, $H:_4$

Once the feasibility of classifying organizational climates using an outside rating group was established, statistically validated and operationally cross-verified by similar ratings taken from employee groups, the next

phase of the study involved a practical field test of the usefulness of these climate ratings. $H:_3$, $H:_4$ and $H:_5$ were developed for Phase II of the study which involved a field study of work satisfaction. Since Holland had determined that personal/occupational congruence would lead to greater work satisfaction than the absence of congruence, a similar hypothetical relationship was constructed for personal/organizational congruence.

Whereas $H:_5$ predicted that personal/organizational congruence would result in higher levels of work satisfaction, $H:_3$ and $H:_4$ were designed to test the <u>comparative</u> usefulness of the two types of ratings (student and employee) when the latter were used to formulate the predictor variable, personal/organizational congruence.

$H:_3$ and $H:_4$ were constructed in part, as contingencies in the event that operational correspondence between the two rating approaches was either partially or totally lacking. $H:_3$ was formulated to evaluate the two rating approaches if <u>partial</u> inter-rating correspondence was the outcome of $H:_2$. If inter-rating correspondence was found with some but not all of the four experimental organizational types, $H:_3$ hypothesized that the climate classifications with inter-rating correspondence would be better predictors of work satisfaction than the non corresponding student and employee ratings used alone.

$H:_4$ was constructed to evaluate the contingency in which no operational correspondence was found as an outcome of $H:_2$. $H:_4$ was developed from the perspective that the more important ratings from the standpoint of this research were embodied in the student generated stereotype approach and that the employee ratings were conceived primarily as a check on their accuracy. Therefore, $H:_4$ stated that in the event of complete absence of inter-rating correspondence, the utility of the student ratings as predictors of work satisfaction would be established if these ratings were equal or superior to employee ratings when employed in the field study.

$H:_3$ proved to be untestable even though inter-rating correspondence was found in three of the four organizational types. Despite the fact that this outcome represented partial inter-rating correspondence, it became impractical to contrast the single rating which did not manifest correspondence (Business School) because of the small number of Business School participants who qualified as field study subjects (n=6).

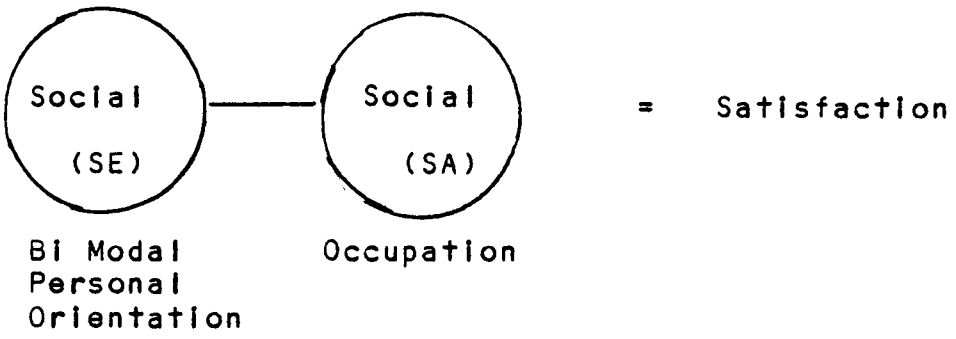
$H:_4$ which was formulated to cover the contingency of zero inter-rating correspondence was not needed as originally conceived because of the high level of inter-rating correspondence which resulted in $H:_2$. However, despite the operational correspondence found in three of

the four organizational climate ratings, the employee climate ratings did prove to have greater utility as predictors in Phase II. Therefore $H:_4$ which hypothesized the equal or superior predictive utility of the student ratings, was not supported by the data. This was true despite the fact that this determination was made within a context of high inter-rating correspondence. This situation resulted because inter-rating correspondence was operationally defined as the overlap of a single Holland dimension. This operational definition was conceived as a broad measure of correspondence. With the use of (BMPO) of subjects and the (BMOO) of organizational climates to determine congruence, however, it became possible for a subject to have personal/organizational congruence using a student rated climate and not when employing an employee rated climate and vica versa. Therefore, it is important that the inter-rating correspondence as operationally defined in this study be viewed as a broad measure of relative correspondence. Although this correspondence served as an excellent check on the relative accuracy of the student generated stereotype ratings, it proved to be too broad a measure when bimodal measurements of both personal orientations (BMPO) and organizational orientations (BMOO) were used. In this study, as will now be discussed in conjunction with $H:_5$, the employee generated climate ratings were partially supported as predictors of work satisfaction differences whereas

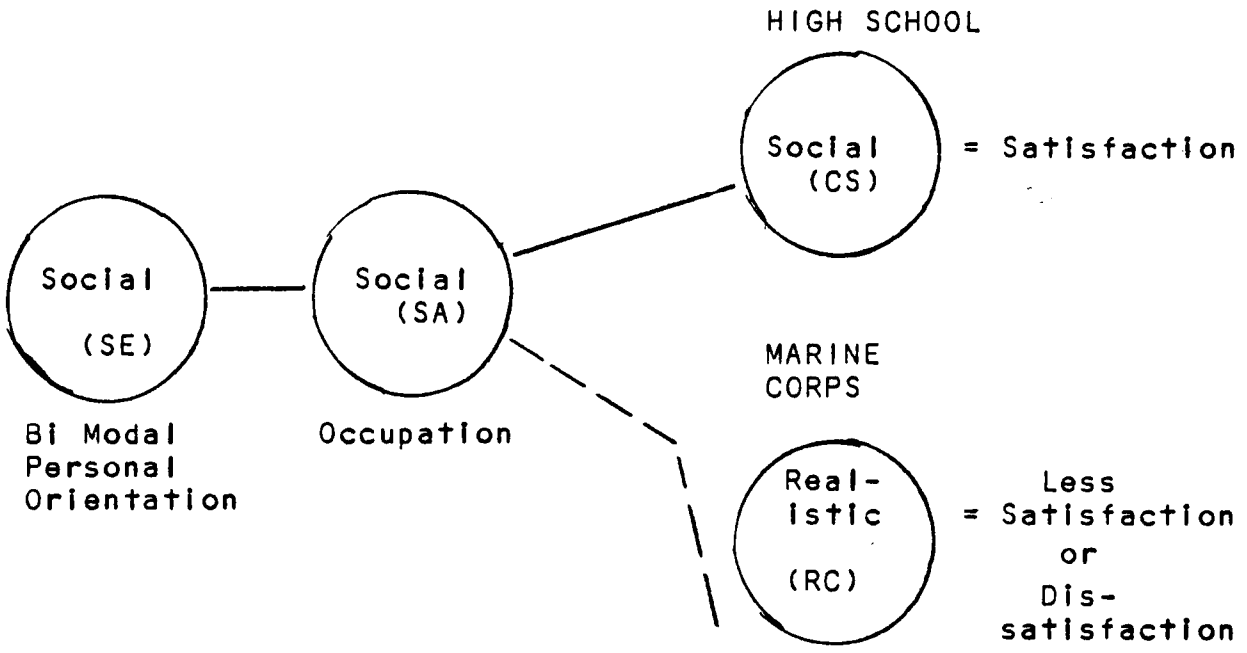
student generated ratings were unsupported by the data.

Hypothesis $H:_5$, was the principal hypothesis of Phase II of this study. $H:_5$ manifested the general predictive relationship between personal/organizational congruence as an employee characteristic and differences in general work satisfaction as an employee behavior. Figure 4 illustrates the satisfaction model used as the basis for $H:_5$. The field study design model may be seen as a theoretical extension of the earlier satisfaction model suggested by John Holland.

In Figure 4, a comparison of Holland's satisfaction model and the field study model is illustrated. Using Holland's model, a subject with a Social-Enterprising (BMPO) who became a teacher (rated as a Social-Artistic occupation) is predicted to have higher levels of work satisfaction when employed in a Social organizational climate, i.e. high school and less satisfaction or dissatisfaction when employed in a Realistic-Conventional setting such as the marine corps. It should again be noted that the use of subjects with personal/occupational congruence will hold constant this level of compatibility.



A. Holland's Satisfaction Model



B. Field Study Satisfaction Model

Figure 4. A Comparison of Holland's Satisfaction Model and Field Study Model.

Using the field study satisfaction model illustrated in Figure 4 to determine personal/organizational congruence of the two field study employee groups. (Secretaries, Social Science Instructors), 2 x 2 tables were used to compare frequencies of congruence and incongruence with the pattern of work satisfaction assertions of the subjects. Tables 21, 22 indicate the frequencies of congruence and satisfaction differences for the Secretarial and Social Science Instructor groups respectively. These frequencies are compared using both stereotype (student) and employee generated climate ratings as the basis of the personal/organizational congruence formulation.

Table 21

2 x 2 Contingency Tables for Values Indicating Congruence and Satisfaction Differences; Stereotype and Employee Rated Climates for Secretary

	Stereotype Climate Congruence		Employee Rated Climate Congruence	
	Yes	No	Yes	No
Highly Satisfied	9	1	10	0
Mostly Satisfied	13	7	13	7
	x^2 =1.11, P≤.05 (one-tailed)		x^2 =3.04, P≤.05 (one-tailed)	

Table 22

2X2 Contingency Tables for Values Indicating Congruence and Satisfaction Differences; Stereotype and Employee Rated Climates for Social Science Instructor

	Stereotype Climate Congruence		Employee Rated Climate Congruence	
	Yes	No	Yes	No
Mostly Satisfied	9	3	10	2
Some Dissatifaction	11	0	11	0
	x^2 = 1.45, P≤.05 (one-tailed)		x^2= 1.69, P≤.05 (one-tailed)	

It may be observed that the 2 x 2 tables were designed to establish personal/organizational congruence as the independent or predictor variable. Difference in "work satisfaction" is the dependent or criterion variable.

The Chi Square (x^2) test for two independent samples was used to determine if observed 2 x 2 table frequencies represented significant departures from chance at $P \leq .05$ (one-tailed test). The Yates Correction was used to adjust small cell frequencies.

Data analysis yielded Chi Square values of 1.11 and 1.45 for Secretaries and Social Science Instructors respectively when stereotype climate ratings were used to determine personal/organizational congruence. These values were not significant at $P \leq .05$.

When employee rated climates were used in the analysis, Chi Square values of 3.04 and 1.69 were derived for Secretaries and Social Science Instructors respectively. The former was found to be significant at $P \leq .05$; whereas the latter was not.

Thus, a null hypothesis of no difference in degree of work satisfaction on the basis of personal/organizational congruence was not rejected when stereotype climate ratings were employed and when an employee generated climate rating was used with Social Science Instructors. When an employee rated climate was used to determine congruence with secretaries, a null hypothesis of no difference was rejected at $P \leq .05$.

In summary, for secretaries whose personal/organizational congruence was determined from employee rated climates, significant differences appeared in frequencies of self rated work satisfaction. These differences did appear but were not significant for Social Science Instructors when employee rated climates were used or for either subject group when stereotype rated climates were employed.

Since $H:_5$ was constructed to establish personal/organizational congruence as a predictor variable, an additional statistical technique was selected which would allow the conversion of 2 x 2 table frequencies to a predictive formulation. This was accomplished by a determination of the correlation between congruence and work satisfaction differences for the Secretarial group using

the employee generated climate classifications. The Phi (ϕ) Coefficient was employed for this purpose because of its convertability to a Proportional-Reduction-In-Error (PRE) index. The latter provides the magnitude of error reduction when using one variable to predict the occurrence of another. Applied to Secretary and "employee rated" climates, the Phi Coefficient of Relationship between personal/organizational congruence and differences in work satisfaction was $\phi = .32$.

The Phi (ϕ) Coefficient of .32 indicates that positive association of low to moderate strength existed between personal/organizational congruence (variable x) and degree of work satisfaction (variable y) for the secretarial samples.

When the Phi (ϕ) of .32 was converted to a Proportional-Reduction-In-Error index, a PRE value of .10 was obtained. This value was derived by squaring the Phi Coefficient, $\phi = .32$. PRE is interpreted as the reduction in prediction error when using one variable to estimate another. A PRE of .10 indicated that 10% of the error of prediction was reduced when employing personal/organizational congruence as a predictor of degree of work satisfaction. This predictive value is not strong. It appears that, while helpful as a predictor of degree of work satisfaction, congruence only provides a small part of the picture. Other predictive concepts will be necessary to insure a high level of accuracy in estimating work satisfaction of employees within certain

organizational climates for individuals with particular orientations (MPO), (BMPO).

Statistical Support for Hypotheses

A summary of the statistically supported findings pertaining to the five research hypotheses was as follows: Hypotheses $H:_1$, the primary hypothesis of Phase I, predicted that a sample of generic organizational climates could be classified within Holland's typology by an extra organizational rating group using a specially designed rating instrument. This hypothesis was fully supported by the data and statistical analysis used in this study. It is apparent that organizational climates do exist as generic stereotypes within the culture. This conclusion adds conceptual support for both existing climate theory wiich has suggested the existence of a generic climate quality and for Holland's theoretical propositions which were based upon occupational stereotypes. The confirmation of $H:_1$ represents, in effect, a synthesis of these earlier findings. It appears that generic climates do indeed exist and that they are understood within the general culture as stereotypes in the same manner as occupational stereotypes. This latter point is of particular importance because it led to the tentative conclusion in

this study that generic organizational stereotype climates were probably measurable from culturally representative rating samples if the appropriate instrumentation could be designed. The Modal Organizational Orientation Rating Scale (MOO Type III) was designed and successfully employed for this purpose. Student generated climate ratings were shown to be statistically significant using a single sample Chi Square probability model.

The MOO Rating Scale - Type III was used to accomplish two objectives in this study. First it provided a convenient and accurate climate classification device which circumvented the difficulties involved in the census approach to environmental measurement. Secondly, the special design characteristics of the scale allowed climate classifications to be generated within an existing typology of personal types and occupations. The latter point was important to the central purpose of this study which focused on the development of a useful organizational selection model.

In summary, $H:_1$ represented a synthesis of concepts related to organizational climate and stereotype and the practical attempt to develop an effective measurement device with which to classify them. Hypothesis $H:_1$ was supported in full using Chi Square in the analysis of the frequency of rating responses generated by the student rating sample.

The second hypothesis, $H:_2$ which predicted that student generated climate ratings were verifiable from employee generated ratings, was developed as a control on the accuracy of the former. The notion that employees who inhapit the experimental organizations would have a different perspective of their work climate and therefore represent an excellent check on the veridicality of the cultural stereotype, proved to be valid. Within the operational definition of inter-rating correspondence, three of the four student generated ratings were verified by employee groups.

The bimodal (two Holland dimensions) classifications of organizational climates were employed in preference to modal ratings (single dimension) in order to provide some degree of sensitivity to differences as well as the similarities among the ratings groups. This approach was theoretically justified in view of the inter dimensional resemblances indicated by Holland as shown in Figure 2, page 29. Results of the inter-rating comparisons supported this anticipated need for greater precision in climate measurement. Although the employee ratings corresponded closely to the student generated classifications, consistant differences did emerge. In two of three organizational climates with operational correspondence, (University, Bank), employee ratings differed in the Social dimension. Moreover, Community College was classified modally as Social by both groups. The constancy of inter-rating differences

suggested a variant in the perspective of employees on their organization's climates which could have been due to the spatial contiguity of the employees and organizations. Despite this variation in perspective, however, the high degree of similarity evidenced by the perception of a common dimension between the groups, provided ample support for the accuracy of the student generated ratings as predicted in $H:_2$.

The third and fourth hypotheses $H:_3$, $H:_4$, were constructed as contingencies in the event that either partial or zero correspondence was found in the inter-rating comparisons. These two hypotheses were of minimum importance to the study. $H:_3$, designed to demonstrate the predictive power of employee verified student ratings over singular unverified ratings, proved to be untestable. The single unverified rating, Business School, did not generate a sufficient number of field study subjects to allow a comparison to the other three organizational climates. Hypothesis $H:_4$ was devised to test the comparative power of student generated ratings as predictors of work satisfaction within the field study in the event that zero inter-rating correspondence occurred in $H:_2$. Since high inter-rating correspondence did occur, $H:_4$ was untestable by definition. Unexpectedly, however, student and employee generated ratings did bring about variable outcomes in the field study of work satisfactions. This occurrence did manifest conditions which

$H:_4$ had been designed to evaluate. The variable outcomes in the field study phase resulted from the use of bimodal ratings in the determination of personal/organizational congruence. It will be recalled that personal/organizational congruence was determined from comparisons of bimodal personal orientations (BMPO's) of employee subjects and bimodal organizational orientations (BMOO's) representing the climates. Congruence, as an employee characteristic proved to be very much a function of the bimodal quality of the climate classifications from which they were formed. Therefore, despite the earlier noted interrating correspondence in three of the four organizational types, the use of bimodal classifications as the basis for the formation of congruence, led inevitably to variable outcomes in the field study phase of the study. As will be noted in the following summary of Phase II results, the student generated and employee generated climates as components of the congruence construct, proved to be of variable utility in the prediction of employee work satisfaction.

Since the existence, pervasiveness and measurability of organizational climate had been earlier demonstrated in this study, the usefulness of this organizational variable as a component of the construct, personal/organizational congruence, represented the next logical research question. Therefore, hypothesis $H:_5$ was constructed to predict the field utility of personal/organizational

congruence as an employee characteristic. Both student generated (stereotype) and employee generated climate classifications used as the basis for the formulation of personal/organizational congruence, were evaluated as predictors of work satisfaction differences of two employee subject groups.

The outcomes of the field study were mixed. One subject group, secretaries, manifested higher levels of work satisfaction when congruence was determined from employee generated climates. However, the secretarial group did not manifest a statistically significant difference in work satisfaction when student generated (stereotype) climates were employed. Social Science instructors, as the second subject group, did not manifest significant differences in work satisfaction on the basis of congruence determined from student or employee generated climates. Therefore, three of four statistical evaluations of personal/organizational congruence did not demonstrate a significant impact on self perceived work satisfaction of employee samples.

Two general explanations of these results were possible; a) no meaningful relationship exists between personal/organizational congruence and work satisfaction or b) weaknesses emanating from the field study design or instrumentation brought about variable outcomes.

The first general explanation was discounted because of the supportive empirical evidence found with the

secretarial subject samples in employee generated climates. Although the predictive power of congruence was not strong, it was demonstrated that 10% of the error in predicting work satisfaction differences was reduced when congruence was used as the independent variable. It appears that personal/organizational congruence as an employee characteristic does have some influence on work satisfaction among secretaries. The power of personal/organizational congruence as a predictor of work satisfaction differences, however, was not demonstrated to be strong. The field study results suggest that congruence at the organizational level is one variable which may be used to predict secretarial work satisfaction. Moreover, it appears that employee generated climate ratings would be required as the basis for the determination of congruence.

The second general explanation of the mixed field study results might be attributed to weaknesses in design and/or instrumentation. Since the important confounding variable of personal/occupational congruence was controlled in the field study phase, it was considered unlikely that design characteristics could have brought about the mixed outcomes.

Instrumentation, however, was viewed as a more likely causative factor. Of the three instruments employed in this study, the V.P.I. (used to measure BMPO's) is a standardized form and may be discounted as

a confounding influence. The experimental instrument, MOO Rating Scale Type III, was demonstrated to be statistically sound in Phase I. The third instrument was an experimentally developed work satisfaction scale. The scale design was quite general with no attempt to structure the different kinds of work satisfaction and dissatisfaction which were possible i.e., income factors, supervisor relations, job characteristics etc. Instead a general assertion of work satisfaction was requested. This general approach to measurement of work satisfaction might have confounded the results. It is quite conceivable that various factors weigh in an individual's work satisfaction at any point in time. This potential confounding factor could be addressed through the redesign of the instrument to relate satisfaction more specifically to environmental factors.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

In summary, the general environmental characteristics or climates of four common organizational types; Bank, Business School, University, and Community College were measured in this study. The measurement was accomplished with a rating scale designed to tap the stereotype climates of the organizational types. The rating scale, was developed from the adjective descriptors which Holland had employed to identify the six dimensions within his well known typeology. The latter represents the foundation of a vocational selection model which links personality types and occupations using the same informational protocols. In the present research, this selection model was extended to include the level of organization. Thus, a selection paradigm was suggested in which individuals, occupations and organizations could be characterized within like dimensions.

A sample of community college psychology students was selected to rate the four experimental organizations. Next, the climate ratings derived from the student sample were verified for accuracy by also administering the MOO Rating Scale to employees from the four organizations. Three of the four organizations were shown to have operational correspondence

between the two types of ratings. Although the ratings pertaining to Business School did not demonstrate operational correspondence, the rating frequencies suggested some degree of similarity between the two rating groups.

A hypothesis constructed to evaluate the comparative usefulness of corresponding versus singular ratings did not generate conclusive answers. However, the comparative utility of the two types of ratings (student versus employee) was evaluated in Phase II of the study with some indication that employee generated ratings had greater utility as a predictor of differences in work satisfaction.

Phase II of the study was designed as a field study with the expressed purpose of testing the usefullness of the rating scale and resulting organizational ratings.

The field study design employed personal/organizational congruence as the predictor (independent) variable. Work satisfaction differences as determined from a four point self rating satisfaction scale was employed as the criterion (dependent) variable.

The results of the field study phase of the study demonstrated a relationship of low to moderate magnitude between personal/organizational congruence and differences in work satisfaction for secretaries. However, this positive relationship was found when the employee generated climate ratings were utilized. Stereotype ratings did not yield positive results. Statistically significant differences were not found

with Social Science Instructors using either climate rating approach.

Thus, a relationship was shown to exist between personal/organizational congruence and work satisfaction differences for secretaries when employee ratings of climate were used. The relationship between these variables, although not strong, did offer support for the principle hypotheses in the study.

Findings

The principle findings of this research, then, were as follows:

1. A general environmental quality was identified in four common organizational types; Bank, University, Business School and Community College.

2. This general environmental quality referred to in other research as organizational climate was demonstrated to be measurable from the perceptions of two groups of raters; community college students and employee samples taken from the organizations.

3. Climate ratings rendered by both rating groups proved to be statistically significant.

4. Inter-rating correspondence was found for three of four organizational types; Bank, University and Community College.

5. No inter-rating correspondence was found for Business School.

6. A strong Social dimension bias was found in the employee ratings.

7. A field study designed to evaluate the usefulness of the climate ratings demonstrated that person/climate compatibility (personal/organizational congruence) could be used as a predictor of employee work satisfaction.

8. When employee rated climates were utilized in the determination of personal/organizational congruence, 10% of the error in predicting work satisfaction differences among secretarial employee samples could be estimated.

9. When student rated climates were utilized in the determination of personal/organizational congruence, no significance was found between personal/organizational congruence and work satisfaction differences for Secretary and Social Science Instructor.

Conclusions

This study demonstrated the feasibility of a comprehensive decision-making model which incorporated people, occupations and organizations within the same informational framework.

Other conclusions which were drawn from this research were as follows:

1. Additional evidence was provided for the existence of a general organizational descriptor identified in other research as organizational climate.

2. A number of generic organizational types were shown to be classifiable on the basis of climate differences.

3. The MOO Rating Scale Type III was demonstrated to be an effective instrument for the measurement of organizational climate.

4. An extraorganizational rating group was demonstrated to be effective in classifying (rating) generic organizational types using stereotype perceptions.

5. Congruence of personal orientation and organizational climate proved to have a positive effect on the work satisfaction of secretaries.

6. Climate, as an environmental quality of organizations, had variable effects on employees with occupation as an important moderating variable.

The foregoing conclusions were based upon both empirical and statistical evidence gathered in the study.

Additional support for the climate concept was apparent in the ratings of the four experimental organizational types.

Three different cohorts; students, secretaries, and social science instructors were able to identify specific environmental qualities peculiar to each of the organizational types. Rating groups appeared to readily comprehend that they were being asked to classify an intangible quality of organizations. Their demonstrated ability in consistantly classifying the four organizations beyond the level of chance at $P \leq .01$ provided solid support for the existence of climate.

The design of the MOO Rating Scale Type III proved to be highly effective in eliciting appropriate responses from the rating groups. The rating scale design was adapted to the environmental nature of climate and based on the premise that notwithstanding its origins, climate is indirectly measurable from the perceptions of individuals both within and outside of the organization.

Successful measurement of four organizational climates by an outside student rating group also supported the

presumption of organizational stereotypes within the culture. The latter formed the basis for what might be called the "stereotype" approach to measurement as contrasted with the census approach used by Holland and others. Moreover, the correspondence between the ratings of the student group responding on the basis of cultural stereotype and the employed groups reacting from spatially closer perceptions of their work climates, provided additional evidence for the authenticity and usefulness of the stereotype approach. The stereotype approach, then, proved to be a realistic as well as convenient way of classifying common organizational types.

Although operational correspondence was demonstrated between student and employee ratings, the classifications rendered by the two groups differed consistantly within the Social dimension. The consistancy of the employees perception of Social qualities in their work environments contrasted sharply with the stereotype ratings. In the latter, only Community College was viewed as Social. It was concluded that workers tended to think of their work climate in terms of its human elements. Although speculation on the genesis of this observed rating bias was of interest, the only conclusion which could be safely drawn was that employee ratings of climate manifested a strong Social orientation.

The utility of the rated or classified climates and attendant rating scale was tested in Phase II of the study. A statistically supported relationship between personal/

organizational congruence and work satisfaction differences provided support for the notion that organizational selection could be approached theoretically on the basis of climate differences.

Climate, however, proved to have variable effects on the two experimental occupational groups. It was concluded that the outcome of the field study indicated that an important employee behavior, work satisfaction, was successfully linked to personal/organizational congruence for secretaries. This linkage suggested that organizational climate is a concept, which should be studied more fully as a potential determinant of sound organizational selection. On the other hand, the field study results did not establish a statistically significant relationship between congruence and work satisfaction for the Social Science Instructor subject group. This might have resulted because congruence was not as important to the instructors as an aspect of work satisfaction. It could be conjectured that the faculty found greater intrinsic return from specific work activities than did secretaries, limiting somewhat the importance of environmental factors such as climate. Notwithstanding the genesis of the differences between the two occupational groups, it appears that climate, as an environmental quality has variable effects on worker satisfaction with occupation as an important intervening variable. Further research in the area will be required to answer this basic question.

The final and perhaps most significant conclusion drawn from the results of this study was that a comprehensive two level decisional model employing common criteria was feasible. This study demonstrated a successful classification of organizations on the basis of their climates by outside as well as inside rating groups using criteria compatible with the Holland typology. A comprehensive model of this type should provide the professional career counselor with an efficient tool. Moreover, the use of consistent criteria for occupational and organizational decisions will be easier for the client to understand and implement.

Implications

In addition to the previously discussed conclusions, a number of more tentative implications were drawn from the research. These generalizations were not firmly established from study results but rather were suggested as possible effects:

1. Although organizational climates have been demonstrated to be both palpable and measurable from the perceptions of rating groups, certain climates appear to manifest more clearly than others.

2. The analysis of climate may be useful as a barometer of organizational change.

3. Work satisfaction response patterns may have been biased by covert "Rosenthal effects" (experimenter bias)

4. A work satisfaction instrument designed specifically to probe for environmental factors might prove more effective than a general satisfaction instrument.

5. Personal/organizational congruence as an employer characteristic will prove to be only one of several factors which influence work satfaction.

A number of observations formed the basis for the first and second implications cited above. Community College was found to have the most well understood climate. This type was classified modally as Social (S) by both rating groups. As previously discussed, the quasi-social educational mission of these colleges is apparently well known.

Banks were also viewed consistently by both rating groups. Bank climates were perceived as clearly Conventional by both groups but were also viewed as Social by employee raters.

Universities were also rated consistently but showed an interesting difference as well. Both rater groups recognized the investigative qualities of the University environment, but the outside (student) raters also reported an Enterprising factor. Employees of Universities did not share this particular view of their institutions. The difference in these rating perspectives might have emanated from the profound changes which have taken place in higher education in recent years. Demographic as well as inflationary economic pressures have generally stimulated Universities to be more

cost conscious and marketing oriented. The implication which might be drawn from this Enterprising rating is that the foregoing factors are changing the image of the University in the United States. If such is the case, an interesting implication might be drawn. It might be that the stereotype rating approach is potentially useful as a barometer of organizational change. Although extraneous to the focus of this research, this possibility would be worthy of further investigation.

Business Schools, in contrast with the other organizational types in the study, did not appear to manifest the same degree of coherence in the climate ratings. Stereotype rating frequencies indicated a clearly differentiated (EC) cultural view of Business School climate. However, as previously noted, employee ratings did not corroborate this climate perspective. The difference in the ratings might have been the result of a lack of familiarity with Business Schools as manifested within the culture or may have emanated from the generally small size of these organizations. The smallness factor might have caused employee raters to focus disproportionately on the Social aspects of climate. This implication was supported by the clearly social bias found in all employee ratings as previously discussed.

In sum, certain climates might be more clearly understood within the culture than others. Factors such as size and the existence of a change process appear to be mediating factors. The responses of field study subjects were also notable. Sec-

retaries and Social Science Instructors were asked to assert their own level of general work satisfaction on a four-point scale. The clusters of responses within the four satisfaction/dissatisfaction dimensions (HS) (MS) (SD) (HD), were then analyzed for a) frequency of response and b) differences between dimensions. Secretaries were found to have the greatest frequencies within the Highly Satisfied (HS) and Mostly Satisfied (MS) dimensions. Social Science Instructors by contrast, responded most frequently within the Mostly Satisfied (MS) and Somewhat Dissatisfied (SD) realms. The differences in these observed patterns might be attributed to the difference in the status of the occupational groups. Social Science faculty might have been less reluctant to portray themselves as somewhat dissatisfied in their work because of a greater sense of security. On the other hand, satisfaction patterns might have been due to the operation of covert Rosenthal effects. The procedures employed in this study might have contributed to some degree of bias in the secretarial responses. Since an organizational intermediary, invariably an individual of rank, was asked to disseminate the instrument packets, the "Rosenthal Effect" cannot be discounted. The secretarial subjects were provided with a stamped, return envelope and instructed not to affix names to the instruments in order to insure privacy of opinion. However, it is possible that the use of an intermediary might have

suggested to the subjects that their individual responses would somehow be scrutinized by management. The effect of the intermediary would not have greatly influenced the responses of the Social Science instructors, however, The intermediary was ordinarily a department chairperson whose relationship to faculty is generally more peer than management oriented.

In summary, satisfaction/dissatisfaction response patterns differed between the two occupational groups. Differences were probably caused by differences in occupational group status within the organizations and possibly by experimenter bias effects. A third factor might have emanated from the general nature of the work satisfaction instrument.

As noted earlier, the magnitude of relationship between the variable of personal/organizational congruence and work satisfaction for the Secretarial samples was .32. The conversion to a predictive index (PRE) indicated that only 10% of the error of prediction could be accounted for by using congruence. It was apparent that other factors of some importance played a part in worker satisfaction. The low predictive index might also have resulted from the difficulty in controlling variables within a field study design. Although personal/occupational congruence, organizational size, and to some extent organizational complexity were controlled other potential factors could not be manipulated. Factors such as organizational philosophy, leadership style, economic health etc. were not controlled and might have effected results.

Recommendations

The basic purpose of this study was to demonstrate a theoretical linkage between an established occupational selection model and a useful organizational variable. It was domonstrated that organizational climate, as a general environmental descriptor was palpable, measureable and discriminative among four common organizational types.

The articulation of this theoretical linkage between personality types, occupations and organizational types, using six common and empirically well based dimensions, was seen as an important theoretical step toward the development of a comprehensive career decision-making paradigm.

Based upon the results of this research, recommendations of this researcher were as follows:

(1) that organizational climate be recognized as a variable of potential usefullness in organizational selection.

(2) that future research focus on the classification of greater numbers of organizational types using both the stereotype and employee rating approaches.

(3) that future research be focused on employee generated climate rating approaches as a viable alternative to the stereotype methodology.

(4) that the "social bias" of employee ratings be further investigated.

(5) that work satisfaction as an employee behavior be measured using a satisfaction instrument adapted more specifically to environmental work satisfaction.

LIST OF REFERENCES

LIST OF REFERENCES

Andrews, J. D. The Achievement Motive and Advancement in Two Types of Organizations. Journal of Personality and Social Psychology, 1967, 6, 163-169.

Argris, C. Human Relations in a Bank. Harvard Business Review, 1954, 32, 63-72.

Baird, L. L. The Relation of Vocational Interests to Life Goals, Self Ratings of Ability and Personal Traits, and Potential for Achievement. Journal of Counseling Psychology, 1970, 17, 233-239.

Banducci, R. Accuracy of Stereotypic Perceptions of Types and Levels of Occupations in Relation to Background and Personal Characteristics of High School Senior Boys. Unpublished Doctoral Dissertation, University of Iowa, 1968.

Blau, P. M., Gustad, J. W., Jessor, R., Parnes, H. S., Wilcock, R. G. Occupational Choice: A Conceptual Framework. In H. J. Peters, J. C. Hansen Ed., Vocational Guidance and Career Development, Second Edition, New York, 1971, 155-170.

Bolles, R. N. What Color Is Your Parachute? Berkeley, California: Ten Speed Press, 1977.

Bordin, E. S. A Theory of Interests as Dynamic Phenomena. Educational and Psychological Measurement, 1943, 3, 49-66.

Brunswick, E. The Conceptual Focus of Some Psychological Systems. Journal of Unified Science (Erkenntnis), 1939, 8, 36-49.

Caplow, T. Principles of Organization. New York: Harcourt, Brace & World, 1964.

Child, I. L. Socialization. In G. Lindzey (Ed.), Handbook of Social Psychology. Vol II, Cambridge, Massachusetts: Addison-Wesley, 1954.

Cruchfield, R. S., Woodworth, D. G., & Albrecht, R. E. Perceptual Performance and the Effective Person. Personnel Laboratory, U.S. Air Force, ASTIA Document No. AD 151039. Lackland Air Force Base, Texas, 1958.

Darley, J. G. A Prelimmary Study of Relations Between Attitude, Adjustment, and Vocational Interest Tests. Journal of Educational Psychology, 1938, 29, 467-473.

_____, & Hogenah, T. Vocational Interest Measurement. Minneapolis: University of Minnesota Press, 1955.

Downey, H. K., Hellriegel, D., & Slocum, J. W. Congruence Between Individual Needs, Organizational Climate, Job Satisfaction, and Performance. Academy of Management Journal, 1975, 18, 149-154.

Etzioni, A. Modern Organizations. Englewood Cliffs, New Jersey: Prentice Hall, 1964.

Gilmer, B. Industrial Psychology, Second Edition, New York: McGraw Hill.

Ginsberg, E., Ginsberg, S. W., Axerod, S., & Herma, J. L. The Ginsberg, Ginsberg, Axelrod, and Herma Theory. In S. H. Osipow, Theories of Career Development, Second Edition, Englewood Cliffs, New Jersey, 1973, 83-102.

Gonyea, G. G. & Lunneborg C. A Factor Analytic Study of Perceived Occupational Similarity. Journal of Counseling Psychology, 1963, 47, 166-172.

Hall, D. T. Careers in Organizations. Pacific Palisades, California, 1976.

Hall, D. T., Schneider, B. & Nygren, H. T. Personal Factors in Organizational Identification. Administrative Science Quarterly, 1970, 15, 176-190.

Holland, J. L. A Theory of Vocational Choice. Journal of Counseling Psychology, 1959, 6, 35-45.

Holland, J. L. The Psychology of Vocational Choice: A Theory of Personality Types and Model Environments. Waltham, Massachusetts, Blaisdell, 1966.

Holland, J. L. Making Vocational Choices-A Theory of Careers. Englewood Cliffs, New Jersey: Prentice-Hall, 1973.

Jennings, E. E. Mobicentric Man. Psychology Today, 1970, 35-40.

Kushell, R. E. How to Reduce Turnover By Creating a Positive Work Climate. Personel Journal, 1979, 58, 551-555.

Litterer, J. A. The Analysis of Organizations, Second Edition, New York: John Wiley & Sons, 1965, 38-56.

Litwin, G. H. Climate and Behavior Theory. In R. Taguiri, G. H. Litwin, Organizational Climate, Boston, Harvard University, 1968- 35-59.

Marks, E., & Webb, S. C. Vocational Choice and Professional Experience as Factors in Occupational Image. Journal of Applied Psychology, 1969, 53, 292-300.

Medvene, A. M. Occupational Choice of Graduate Students in Psychology as a Function of Early Parent-Child Interactions. Journal of Counseling Psychology, 1969, 16, 385-389.

O'Dowd, D. D., & Beardslee, D. C. College Student Images of a Selected Group of Professions and Occupations. USOE, Cooperative Research Project No. 562 (8142), Middletown, Connecticut: Wesleyan University, 1960.

Osipow, S. H. Perceptions of Occupations as a Function of Titles and Descriptions. Journal of Counseling Psychology, 1962, 9.

Parsons, T. An Approach to Psychological Theory in Terms of The Theory of Action. In S. Kotch Ed., Psychology: A Study of a Science; Volume 3, New York, 1959.

Parsons, T. Structure and Process in Modern Societies. Glencoe, Illinois: Free Press, 1960.

Pervin, L. A. Performance and Satisfaction as a Function of Individual-Environment Fit. Psychological Bulletin, 1968, 69, 56-68.

Porter, L. W., Lawler, E. E., Hackman, R. J. Behavior in Organizations. New York: McGraw-Hill, 1975.

Schein, E. H. The Individual, The Organization, and the Career: A Conceptual Scheme. Journal of Applied Behavioral Science, 1971, 7, 401-426.

Simmonds, D. D. Children's Rankings of Occupational Prestige. Personnel & Guidance Journal, 1962, 41, 332-336.

Soelberg, P. O. Unprogrammed Decision Making. Papers and Proceedings, 26th Annual Meeting, Academy of Management, San Francisco, 1966.

Super, D. Super's Developmental Self-Concept Theory of Vocational Behavior. In S. H. Osipow, Theories of Career Development, Second Edition, Englewood Cliffs, New Jersey, 1973, 131-168.

Tagiuri, R., Litwin, G. H. Organizational Climate. Boston, 1968.

Tolman, E. C. Tolman's Purposive Behavior. In W. E. Hill, Learning, Third Edition, New York, Harper & Row, 1977, 134-144.

Triandis, H. C. Differential Perceptions of Certain Jobs and People by Managers, Clerks and Workers in Industry. Journal of Applied Psychology, 1959, 43.

Vroom, V. Organizational Choice: A Study of Pre- and Post-Decision Processes. Organizational Behavior and Human Performance, 1966, 1, 212-225.

Whyte, W. H. The Organization Man. New York: Simon and Schuster, 1956.

APPENDICES

Appendix A

MOO RATING SCALE TYPE I

An organization, as a place where people work, offers a characteristic "climate" or atmosphere which affects how people feel about it.

Based upon your knowledge and attitudes toward the organizations listed below, select the adjective which most closely describes the climate of the organization.

(Mark an X in the oval next to your choice)

describe . . . Bank

1. () frank
() analytical
() complicated
() cooperative
() acquisitive
() conforming

2. () conscientious
() adventurous
() friendly
() disorderly
() cautious
() genuine

3. () masculine
() emotional
() ambitious
() critical
() generous
() efficient

4. () curious
() helpful
() inflexible
() materialistic
() feminine
() argumentative

5. () natural
() pessimistic
() idealistic
() ascendent
() domineering
() inhibited

6. () obedient
() energetic
() insightful
() imaginative
() intellectual
() normal

7. () asocial
() impractical
() exhibitionistic
() methodical
() kind
() orderly

8. () passive
() persuasive
() persistant
() practical
() independent
() impulsive

9. () stable
() precise
() introspective
() responsible
() optimistic
() defensive

10. () prudish
() pleasure-seek
() sociable
() intuitive
() rational
() thrifty

11. () uninsightful
() non-conforming
() self-confident
() reserved
() tactful
() calm

12. () unassuming
() understanding
() prudish
() uninvolved
() original
() dependent

13. () frank
() complicated
() acquisitive
() analytical
() cooperative
() conforming

14. () masculine
() critical
() emotional
() generous
() ambitious
() efficient

15. () pessimistic
() ascendent
() inhibited
() natural
() idealistic
() domineering

16. () orderly
() exhibitionistic
() kind
() impractical
() methodical
() asocial

17. () stable
() introspective
() optimistic
() precise
() responsible
() defensive

18. () uninsightful
() reserved
() nonconforming
() tactful
() self-confident
() calm

describe . . . <u>University</u>

19. () frank
() analytical
() complicated
() cooperative
() acquisitive
() conforming

20. () conscientious
() adventurous
() friendly
() disorderly
() cautious
() genuine

21. () masculine
() emotional
() ambitious
() critical
() generous
() efficient

22. () curious
() helpful
() inflexible
() materialistic
() feminine
() argumentative

23. () natural
() pessimistic
() idealistic
() ascendent
() domineering
() inhibited

24. () obedient
() energetic
() insightful
() imaginitive
() intellectual
() normal

25. () asocial
() impractical
() exhibitionistic
() methodical
() kind
() orderly

26. () passive
() persuasive
() persistant
() practical
() independent
() impulsive

27. () stable
() precise
() introspective
() responsible
() optimistic
() defensive

28. () prudish
() pleasure-seeking
() sociable
() intuitive
() rational
() thrifty

29. () uninsightful
() non-conforming
() self-confident
() reserved
() tactful
() calm

30. () unassuming
() understanding
() prudish
() uninvolved
() original
() dependent

31. () frank
() complicated
() acquisitive
() analytical
() cooperative
() conforming

32. () masculine
() critical
() emotional
() generous
() ambitious
() efficient

33. () pessimistic
() ascendent
() inhibited
() natural
() idealistic
() domineering

34. () orderly
() exhibitionistic
() kind
() impractical
() methodical
() asocial

35. () stable
() introspective
() optimistic
() precise
() responsible
() defensive

36. () unsightful
() reserved
() nonconforming
() tactful
() self-confident
() calm

describe . . . <u>Business School</u>

37. () frank
() analytical
() complicated
() cooperative
() acquisitive
() conforming

38. () conscientious
() adventurous
() friendly
() disorderly
() cautious
() genuine

39. () masculine
() emotional
() ambitious
() critical
() generous
() efficient

40. () curious
() helpful
() inflexible
() materialistic
() feminine
() argumentative

41. () natural
() pessimistic
() idealistic
() ascendent
() domineering
() inhibited

42. () obedient
() energetic
() insightful
() imaginative
() intellectual
() normal

43. () asocial
() impractical
() exhibitionistic
() methodical
() kind
() orderly

44. () passive
() persuasive
() persistant
() practical
() independent
() impulsive

45. () stable
() precise
() introspective
() responsible
() optimistic
() defensive

46. () prudish
() pleasure-seeking
() sociable
() intuitive
() rational
() thrifty

47. () uninsightful
() non-conforming
() self-confident
() reserved
() tactful
() calm

48. () unassuming
() understanding
() prudish
() uninvolved
() original
() dependent

49. () frank
() complicated
() acquisitive
() analytical
() cooperative
() conforming

50. () masculine
() critical
() emotional
() generous
() ambitious
() efficient

51. () pessimistic
() ascendent
() inhibited
() natural
() idealistic
() domineering

52. () orderly
() exhibitionistic
() kind
() impractical
() methodical
() asocial

53. () stable
() introspective
() optimistic
() precise
() responsible
() defensive

54. () uninsightful
() reserved
() nonconforming
() tactful
() self-confident
() calm

describe . . . Community College

55. () frank
() analytical
() complicated
() cooperative
() acquisitive
() conforming

56. () conscientious
() adventurous
() friendly
() disorderly
() cautious
() genuine

57. () masculine
() emotional
() ambitious
() critical
() generous
() efficient

58. () curious
() helpful
() inflexible
() materialistic
() feminine
() argumentative

59. () natural
() pessimistic
() idealistic
() ascendent
() domineering
() inhibited

60. () obedient
() energetic
() insightful
() imaginative
() intellectual
() normal

61. () asocial
() impractical
() exhibitionistic
() methodical
() kind
() orderly

62. () passive
() persuasive
() persistant
() practical
() independent
() impulsive

63. () stable
() precise
() introspective
() responsible
() optimistic
() defensive

64. () prudish
() pleasure-seeking
() sociable
() intuitive
() rational
() thrifty

65. () uninsightful
() non-conforming
() self-confident
() reserved
() tactful
() calm

66. () unassuming
() understanding
() prudish
() uninvolved
() original
() dependent

67. () frank
() complicated
() acquisitive
() analytical
() cooperative
() conforming

68. () masculine
() critical
() emotional
() generous
() ambitious
() efficient

69. () pessimistic
() ascendent
() inhibited
() natural
() idealistic
() domineering

70. () orderly
() exhibitionistic
() kind
() impractical
() methodical
() asocial

71. () stable
() introspective
() optimistic
() precise
() responsible
() defensive

72. () uninsightful
() reserved
() non-conforming
() tactful
() self-confident
() calm

S E C R I A

Bank

S E C R I A

University

S E C R I A

Business School

S E C R I A

Community College

Appendix B

MOO Rating Scale Type III

An organization, as a place where people work offers a characteristic climate or atmosphere which affects how people feel about it. This climate may be thought of as the "personality" of the organization!

Below are descriptions of six types of climate. Read the descriptions carefully and decide which one best describes the climate of each of four organizations; Bank, University, Community College and Business School.

REALISTIC CLIMATE	Frank, Genuine, Masculine, Natural, Normal, Uninsightful
INVESTIGATIVE CLIMATE	Analytical, Curious, Rational, Intellectual, Pessimistic, Independent
ARTISTIC CLIMATE	Emotional, Imaginative, Original, Idealistic, Complicated, Intuitive
SOCIAL CLIMATE	Cooperative, Friendly, Helpful, Kind, Tactful, Understanding
ENTERPRISING CLIMATE	Ambitious, Acquisitive, Energetic Domineering, Self-Confident, Argumentative
CONVENTIONAL CLIMATE	Conforming, Efficient, Inflexible Orderly, Prudish, Conscientious

RATE THE CLIMATE OF THESE ORGANIZATIONS:

1. Bank _____

2. University _____

3. Business School _____

4. Community College _____

Appendix C

WORK SATISFACTION SCALE

Please rate your general work satisfaction by marking an (x) next to the most appropriate satisfaction category.

Highly Satisfied..... ( )

Mostly Satisfied..... ( )

Some Dissatisfaction... ( )

Highly Dissatisfied.... ( )

****

Appendix D

THE VOCATIONAL PREFERENCE INVENTORY

Developed by John L. Holland, Ph.D.

This is an inventory of your feelings and attitudes about many kinds of work. Fill out your answer sheet by following the directions given below:

1. Show on your answer sheet the occupations which *interest* or *appeal* to you by blackening Y for "Yes."
2. Show the occupations which you *dislike* or find *uninteresting* by blackening N for "No."
3. Make *no marks* when you are undecided about an occupation.

---

1. Criminologist
2. Private Investigator
3. Restaurant Worker
4. Detective
5. Photoengraver
6. Truck Gardener
7. Physical Education Teacher
8. Humorist
9. Photographer
10. Diplomat

11. Airplane Mechanic
12. Meteorologist
13. Sociologist
14. Bookkeeper
15. Speculator
16. Poet
17. Deep Sea Diver
18. Stock Clerk
19. Dramatic Coach
20. Lawyer

21. Fish and Wildlife Specialist
22. Biologist
23. High School Teacher
24. Business Teacher
25. Buyer
26. Symphony Conductor
27. Wrecker (Building)
28. Veterinarian
29. Elementary School Teacher
30. Physician

31. Auto Mechanic
32. Astronomer
33. Juvenile Delinquency Expert
34. Budget Reviewer
35. Advertising Executive
36. Musician
37. Prizefighter
38. Post Office Clerk
39. Experimental Laboratory Engineer
40. Bartender

41. Carpenter
42. Medical Laboratory Technician
43. Speech Therapist
44. Certified Public Accountant
45. Manufacturer's Representative
46. Author
47. Firefighter
48. Airline Ticket Agent
49. Entertainer
50. Novelist

51. Power Shovel Operator
52. Anthropologist
53. Marriage Counselor
54. Credit Investigator
55. Television Producer
56. Commercial Artist
57. Wild Animal Trainer
58. Administrative Assistant
59. Physical Therapist
60. Cashier

61. Surveyor
62. Zoologist
63. School Principal
64. Court Stenographer
65. Hotel Manager
66. Free-Lance Writer
67. Stunt Man/Stunt Woman (Movies)
68. Route Salesperson
69. Professional Athlete
70. Flight Attendant

71. Construction Inspector
72. Chemist
73. Playground Director
74. Bank Teller
75. Business Executive
76. Musical Arranger
77. Jockey
78. Interior Decorator
79. Airplane Pilot
80. Banker

(Continued)

THE VOCATIONAL PREFERENCE INVENTORY (Continued)

81. Radio Operator
82. Independent Research Scientist
83. Clinical Psychologist
84. Tax Expert
85. Restaurant Manager
86. Journalist
87. Motorcycle Driver
88. Department Store Manager
89. Referee (Sporting Events)
90. Mail Carrier

91. Filling Station Worker
92. Writer of Scientific Articles
93. Social Science Teacher
94. Inventory Controller
95. Master of Ceremonies
96. Portrait Artist
97. Blaster (Dynamiter)
98. Police Officer
99. English Teacher
100. U.N. Official

101. Tree Surgeon
102. Editor of a Scientific Journal
103. Director of Welfare Agency
104. IBM Equipment Operator
105. Salesperson
106. Concert Singer
107. F.B.I. Agent
108. Probation Agent
109. Astronaut
110. College Professor

111. Long Distance Bus Driver
112. Geologist
113. Youth Camp Director
114. Financial Analyst
115. Real Estate Salesperson
116. Composer
117. Mountain Climber
118. Cook/Chef
119. Stage Director
120. Ticket Agent

121. Locomotive Engineer
122. Botanist
123. Personal Counselor
124. Cost Estimator
125. Publicity Director
126. Sculptor/Sculptress
127. Explorer
128. Nursery School Teacher
129. Quality Control Expert
130. Judge

131. Machinist
132. Scientific Research Worker
133. Psychiatric Case Worker
134. Payroll Clerk
135. Sports Promoter
136. Playwright
137. Test Pilot
138. Computer Programmer
139. Clothing Designer
140. Truck Driver

141. Electrician
142. Physicist
143. Vocational Counselor
144. Bank Examiner
145. Sales Manager
146. Cartoonist
147. Racing Car Driver
148. Forester
149. Social Worker
150. Sales Clerk

151. Funeral Director
152. Mind Reader
153. Architect
154. Shipping & Receiving Clerk
155. Criminal Psychologist
156. Insurance Clerk
157. Barber
158. Bill Collector
159. Ward Attendant
160. Masseur/Masseuse

Copyright, 1953, 1958, 1977 by John L. Holland. Several Revised. Any reproduction of this form, entire or in part, without written authorization of the Publisher, is a gross violation of the copyright law of the United States.

CONSULTING PSYCHOLOGISTS PRESS
577 College Avenue, Palo Alto, California 94306

VITA

Bruce John Sherwin was born in Hartford, Connecticut on February 13, 1939. He attended public schools in the Hartford area and graduated from Newington High School in 1957. He went on to receive a Bachelor of Arts degree with a major in Economics from the University of Vermont in 1961.

After serving six years in the United States Army Reserve as a medical instructor, he was employed in private industry for seven years.

He received a Master of Science degree in Counseling Psychology from Southern Connecticut State College in 1969. At this stage, he left the private business sector and entered the field of Education. He became associated with Housatonic Community College in Bridgeport, Connecticut. At that institution, he has served in a number of administrative posts including Director of Admissions and Director of Cooperative Education.

He is married to the former Margaret McCarty of Torrington, Connecticut and currently resides in Guilford, Connecticut. Mr. Sherwin and his wife have one son.