



SCHOOL of
GRADUATE STUDIES
EAST TENNESSEE STATE UNIVERSITY

East Tennessee State University
**Digital Commons @ East
Tennessee State University**

Electronic Theses and Dissertations

Student Works

May 1990

The Relationship of Personality Type to Leader Style and Perceived Effectiveness among Dental Hygiene School Administrators

Susan J. Willette

East Tennessee State University

Follow this and additional works at: <https://dc.etsu.edu/etd>

 Part of the [Educational Administration and Supervision Commons](#), and the [Other Psychology Commons](#)

Recommended Citation

Willette, Susan J., "The Relationship of Personality Type to Leader Style and Perceived Effectiveness among Dental Hygiene School Administrators" (1990). *Electronic Theses and Dissertations*. Paper 2826. <https://dc.etsu.edu/etd/2826>

This Dissertation - Open Access is brought to you for free and open access by the Student Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.

INFORMATION TO USERS

The most advanced technology has been used to photograph and reproduce this manuscript from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

U·M·I

University Microfilms International
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313/761-4700 800/521-0600

Order Number 9025383

**The relationship of personality type to leader style and
perceived effectiveness among dental hygiene school
administrators**

Willette, Susan Jane, Ed.D.

East Tennessee State University, 1990

U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

THE RELATIONSHIP OF PERSONALITY TYPE
TO LEADER STYLE AND PERCEIVED EFFECTIVENESS AMONG
DENTAL HYGIENE SCHOOL ADMINISTRATORS

A Dissertation
Presented to
the Faculty of the
Department of Educational Leadership
and Policy Analysis
East Tennessee State University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Susan J. Willette
May, 1990

APPROVAL

This is to certify that the Graduate Committee of

Susan Jane Willette

met on the

14th Day of December, 1989

The committee read and examined her dissertation, supervised her defense of it in an oral examination, and decided to recommend that her study be submitted to the Graduate Council and the Associate Vice-President for Research and Dean of the Graduate School, in partial fulfillment of the requirements for the degree of Doctor of Education in Educational Administration.

W. Hal Knight

Chairman, Graduate Committee

Ernest S. Bentley, Jr.

Ronald L. McEwen

William J. Fisher

Signed on behalf of
the Graduate Council

James W. Potts
Associate Vice-President
for Research and Dean
of the Graduate School

ABSTRACT

THE RELATIONSHIP OF PERSONALITY TYPE TO LEADER STYLE AND PERCEIVED EFFECTIVENESS AMONG DENTAL HYGIENE SCHOOL ADMINISTRATORS

by SUSAN J. WILLETTE

The purpose of this study was to identify personality types among dental hygiene school administrators and faculty and to determine if correlations existed between leader style, ideologies of leader style, perceived effectiveness, and personality type. Selected demographic variables were also examined. The dimensions of personality investigated were derived from the Myers-Briggs Type Indicator: extroversion, introversion, sensing, intuition, thinking, feeling, judging, and perceiving. The leadership behavior dimensions were the two dimensions of the real and ideal Leadership Behavior Description Questionnaires: consideration and initiating structure. Effectiveness was measured by a 39 item Likert-type instrument based on Tucker's (1981) categorical listing of chairperson activities and responsibilities.

The study was conducted using a random sample of faculty and administrators from 32 dental hygiene programs across the United States. Thirty-two administrators and 148 faculty were surveyed. Responses were received from 23 administrators (71.9 percent) and 96 faculty (64.8 percent).

Personality type was correlated with subordinate perception of leader style, ideal leader style, and effectiveness, with the strength of the relationships ranging from weakly negative to moderately positive. Among the correlations observed, those between real initiating structure and introversion, thinking and feeling were significant at the .05 level, as were the relationships between ideal consideration, and thinking and feeling. Relationships significant at the .05 level were also found between instruction and extroversion, introversion, sensing, intuition, and judging and between budget and resources and extroversion. Gender of the administrator and length of tenure did not account for significant differences in leader behavior ratings or effectiveness scores. Age of the administrator, however, was found to account for significant differences in leader behavior ratings, but not effectiveness ratings. A negative relationship was observed between amount of administrative training and effectiveness scores indicating that as administrative training increased effectiveness decreased. Ideal scores reported by faculty

were significantly higher than real scores reported by faculty, but no significant difference was observed between the real and ideal scores reported by administrators. Administrators rating low on real consideration and real initiating structure received the lowest effectiveness ratings.

INSTITUTIONAL REVIEW BOARD APPROVAL

This is to certify that the following study has been filed and approved by the Institutional Review Board of East Tennessee State University.

Title of Grant or Project The Relationship of Personality Type to Leader Style and Perceived Effectiveness among Dental Hygiene School Administrators

Principal Inventigator Susan Jane Willette

Department Educational Leadership and Policy Analysis

Date Submitted August, 1989

Institutional Review Board Chairman Anthony J. DeLuca

DEDICATION

Dedicated to
my parents, Douglas and Lillian Willette
for their love, support, and encouragement,
and for teaching me to be self disciplined and
confident in my ability to meet life's challenges.

ACKNOWLEDGEMENTS

The responsibility for bringing this project to fruition has not been mine alone. There are a number of individuals who share in this accomplishment.

My most sincere appreciation is extended to my committee chairman, Dr. W. Hal Knight, whose scholarship and enthusiasm influenced my decision to enter the program and whose continued support, encouragement, and guidance were instrumental in my educational development and completion of the dissertation. I thank Dr. Knight for providing intellectual stimulation, for being a true mentor, and most importantly for being a friend. I also wish to thank the members of my committee: Dr. Ernest Bentley, Dr. William Fisher, and Dr. Robert McElrath. Each of my committee members contributed to my professional growth through offering their friendship, constructive criticism, and encouragement.

A word of thanks must also be extended to my fellow students who offered their support through out the program and to my students and colleagues whose patience and understanding was most appreciated.

Finally I wish to thank Zonola T. Garzo, a neighbor and friend for being a patient listener, for sharing in my frustrations and triumphs, for offering constant support

and encouragement, and most importantly for the joy her
friendship has brought to me.

CONTENTS

	Page
APPROVAL	ii
ABSTRACT	iii
INSTITUTIONAL REVIEW BOARD	v
DEDICATION	vi
ACKNOWLEDGEMENTS	vii
LIST OF TABLES	xiii
Chapter	
1. INTRODUCTION	1
The Problem	4
Statement of the Problem	4
Significance of the Study	5
Research Hypotheses	6
Assumptions	10
Limitations	10
Definitions	11
Procedures	17
Organization of the Study	19
2. REVIEW OF RELATED LITERATURE	21
Organization of the Chapter	21
Leadership	21
Definition and Overview	21
Individual Leadership Theories	22
The Trait Approach	22
Beliefs and Values	24

McGregor: Theory X and Theory Y	24
Leader Style	25
Origins	25
An Overview of Style Theories . .	27
Michagan Studies	27
Ohio State Studies	28
Getzels and Guba: Nomothetic- Ideographic Transactional Model	30
Blake and Mouton: Managerial Grid	31
Interactional Leadership Theories . .	31
Hersey and Blanchard: Situational Life Cycle Theory	31
Contingency Theory of Leadership	32
Path Goal Theory	35
Summary	36
Personality	37
Definition and Overview	37
Personality Typing	39
Personality and Leadership	41
Summary.	43
Department Chairperson	44
Historical Development	44
Roles and Responsibilities	46
Leader Style and Effectiveness	48

Leadership and Personality Studies in Dental and Dental Hygiene Education	53
Summary	55
3. METHODOLOGY AND PROCEDURES	58
Data Collection Instruments	58
Leadership Behavior Description Questionnaire	58
Reliability	59
Validity	60
Myers-Briggs Type Indicator	61
Reliability	63
Validity	64
Leader Effectiveness Rating	65
Validity	66
Demographic Survey	66
Data Collection Procedures	67
Population	67
Sample Selection	67
Procedure	67
Data Analysis Methodology	68
4. ANALYSIS OF DATA	71
Description of the Sample	73
Demographic Variables	75
The Relationship of Personality Type to Self Ratings of Leader Style and Leader Perception of Ideal Style	82

The Relationship of Personality Type to Subordinate Perception of Leader Style, Ideal Leader Style and Effectiveness	83
Administrator and Faculty Scores on the Consideration and Initiating Structure Dimensions of the Real and Ideal Leadership Behavior Description Questionnaire	89
Other Findings	95
5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS.	97
Summary	97
Conclusions	103
Recommendations	108
BIBLIOGRAPHY	109
APPENDICES	128
A. CATEGORICAL LISTING OF CHAIRPERSON ACTIVITIES AND RESPONSIBILITIES	129
B. LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE	134
C. IDEAL LEADER BEHAVIOR	139
D. SCORED ITEMS ON THE CONSIDERATION AND INITIATING STRUCTURE DIMENSIONS OF THE LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE	144
E. MYERS-BRIGGS TYPE INDICATOR	147
F. CHAIRPERSON EFFECTIVENESS RATING	160
G. DEMOGRAPHIC SURVEY	164
H. CORRESPONDENCE	166
VITA	170

LIST OF TABLES

1.	AGE DISTRIBUTION AMONG FACULTY AND ADMINISTRATOR RESPONDENTS	74
2.	CONSIDERATION SCORES BY SEX OF THE ADMINISTRATOR	75
3.	INITIATING STRUCTURE SCORES BY SEX OF THE ADMINISTRATOR	76
4.	EFFECTIVENESS RATINGS BY SEX	77
5.	FREQUENCY DISTRIBUTION OF PERSONALITY TYPE AMONG MALE AND FEMALE ADMINISTRATORS	79
6.	FREQUENCY DISTRIBUTION OF PERSONALITY TYPE AMONG MALE AND FEMALE FACULTY	80
7.	CORRELATIONS BETWEEN LEADER PERSONALITY DIMENSIONS AND SELF RATINGS OF REAL AND IDEAL LEADER BEHAVIOR	84
8.	CORRELATIONS BETWEEN FACULTY PERSONALITY DIMENSIONS AND RATINGS OF REAL AND IDEAL LEADER BEHAVIORS	86
9.	CORRELATIONS BETWEEN FACULTY PERSONALITY DIMENSIONS E, I, S, AND N AND CHAIRPERSON EFFECTIVENESS RATINGS	88
10.	CORRELATIONS BETWEEN FACULTY PERSONALITY DIMENSIONS T, F, J, AND P AND CHAIRPERSON EFFECTIVENESS RATINGS	89
11.	IDEAL AND REAL CONSIDERATION SCORES REPORTED BY FACULTY	90
12.	IDEAL AND REAL INITIATING STRUCTURE SCORES REPORTED BY FACULTY	91
13.	IDEAL AND REAL CONSIDERATION SCORES REPORTED BY ADMINISTRATORS	92
14.	IDEAL AND REAL INITIATING STRUCTURE SCORES REPORTED BY ADMINISTRATORS	93
15.	TOTAL EFFECTIVENESS SCORES OF ADMINISTRATORS PERCEIVED TO BE HIGH IN CONSIDERATION AND LOW IN INITIATING STRUCTURE AND LOW IN CONSIDERATION AND HIGH IN INITIATING STRUCTURE	94

16. CORRELATIONS BETWEEN LEADER PERSONALITY
DIMENSIONS AND REAL CONSIDERATION AND REAL
INITIATING STRUCTURE SCORES AND
TOTAL EFFECTIVENESS 96

Chapter 1

Introduction

In the past two decades higher education has experienced a crisis characterized by decreased resources, increased accountability, vigorous competition for fewer students, and changes in the demographics and values of students (Cheit, 1971; Mayhew, 1979; Henry, 1975).

Dental and dental hygiene education have not been immune to the problems of this decade. According to Brown (1981) dental education was facing major issues in the 1980s and beyond, some of which will reach or perhaps already have reached crisis proportions. Program financing, tuition costs, student loans, and declining applicant pools are issues which have been frequently cited as requiring serious attention from dental school administrators (Rogers, 1979; Brown, 1981; Bruce, 1981).

The problems plaguing higher education have been a focus of concern and an impetus for a vast amount of research within the past decade (Peterson & Mets, 1987). In a review of the literature on "Organization and Administration in Higher Education" over the preceding decade, Peterson (1974) found 500 publications of which 200 were research based. In contrast, by 1985 Peterson noted that one could easily find that many new

publications each year (Peterson & Mets, 1987). According to Astin and Scherrei (1980) much of this research has been directed toward improving leader effectiveness. In dental and dental hygiene education, however, the topic of leadership had essentially been ignored. A review of the Index to Dental Literature from 1979 to 1989 (American Dental Association, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989) revealed 24 citations on the topic of leadership. Among these citations only three (Goral, 1979; Mann, 1980; & Draffin, 1981) were relevant to dental or dental hygiene education. Only Goral's was a scientific study.

According to Burns (1978, p. 43), "the potential for influence through leadership in any polity is the recognition of real need, the uncovering and exploiting of contradictions among values and practice, the realigning of values, the reorganization of institutions where necessary and the governance of change." Given the problems facing higher education in general, and dental and dental hygiene education specifically, it seemed that leadership research is not only indicated but imperative.

Studies examining leadership in higher education have found the department chair to be instrumental in resolving problems. This point was illustrated by Tucker's (1981, p. 1) remarks:

Can institutions of higher education maintain

flexibility and viability, preserve quality, remain accountable and respond effectively to the changing needs of society within the context . . . of steady state or even declining resources, academic departments are the organizational units within institutions that are most severely effected by steady state or declining resources. Those who chair these departments have considerable influence in resolving these problems.

Bennett (1983, p. 1) stated, "a chair is the person responsible for getting things done." As department chairs are responsible for up to 80 percent of all administrative decisions made in colleges and universities (Roach, 1976), continued research directed toward the chairperson was indicated. Immegart (1988) has stated that it was important for those in education and educational administration to give greater priority to the study of leadership and that linkages of variables should be systematically explored.

Among the interacting variables that warrant examination are leader behavior, personality type, and effectiveness ratings. Knight and Holen (1985) found that the leadership style of department heads along two dimensions, "initiating structure" and "consideration" affect faculty perceptions of effectiveness. How personality type specifically effects leader style and

subordinate perception of effectiveness is a question which remains unanswered. According to Boles and Davenport (1983) the behavioral style exhibited by a leader was in many ways influenced by superordinates, peers or subordinates. However, Boles and Davenport contended "that style is more strongly influenced if not determined by the personality structure that is unique to the individual functioning within the organization" (p. 232). Lewis Terman (1904) wrote that leader performance (style) depended on the function of the situation as well as the personality of the leader. This position was supported by Getzels and Guba (1957) and Fiedler (1967). As personality has been found to influence leader style, it may be hypothesized that specific personality types may be correlated with specific leader styles and further that subordinate personality type may influence their perception of leader behavior and effectiveness.

The Problem

Statement of the Problem

There was evidence to suggest that all academic administrators need to become effective leaders to respond to present problems and the challenges of the future. Although the literature is replete with leadership studies, the topic of leadership has been inadequately

addressed in dental educational research. The literature also suggested that leader style is influenced by the personality structure unique to the individual; however, there is no empirical evidence showing specific relationships between leader style and personality type.

In light of these findings the purpose of this study was to identify personality types of dental hygiene administrators and faculty and to determine if correlations exist between leader style, ideologies of leader style, perceived effectiveness, and personality type. The study focused on five major aspects of the problem:

1. The distribution of personality types among dental hygiene administrators and faculty.
2. The relationship of personality type to leader style and ideologies of style.
3. The relationship of personality type to leader effectiveness ratings.
4. The relationship of faculty personality types to perceived leader style and ideologies of style.
5. The effect of demographic variables on leader behavior ratings and effectiveness scores.

Significance of the Study

Leaders and leadership have long been the subjects of extensive research, analysis and reflection. Stogdill

(1974) cited over 3,000 selected sources and Bass (1981) added an additional 2,000 sources in his revision of Stogdill's volume. In dental hygiene education, however, the study of leadership has virtually been ignored.

Early leadership studies focused on the leader, but in recent years that focus has shifted to a study of specific leader behaviors and situational contingencies. Exploring the relationship of personality type to leader behavior and effectiveness ratings will provide insight into how personality influences leader style and subordinates' perception of leader effectiveness. Gaining an understanding of personality type should also benefit the participants. According to Myers (1973), knowledge of type may help supervisors (leaders) analyze weaknesses, improve motivation, and reduce conflicts among employees of different type preferences. Given that leadership research in dental and dental hygiene education was sparse, this study was designed to provide baseline leadership data for the discipline.

Research Hypotheses

Hypothesis 1. There will be a significant difference in mean consideration scores exhibited by female administrators when compared to the mean consideration scores exhibited by male administrators as perceived by faculty.

Hypothesis 2. There will be a significant difference in the mean initiating structure scores exhibited by female administrators when compared to mean initiating structure scores of male administrators as perceived by faculty.

Hypothesis 3. There will be a significant difference in mean effectiveness scores ratings of female administrators when compared to mean effectiveness ratings of male administrators as perceived by faculty and measured by the chairperson effectiveness rating.

Hypothesis 4. There will be a significant difference in the distribution of personality type among female administrators when compared to the distribution of personality type among male administrators as measured by the Myers-Briggs Type Indicator.

Hypothesis 5. There will be a significant difference in the distribution of personality types among female faculty when compared to the personality types among male faculty as measured by the Myers-Briggs Type Indicator.

Hypothesis 6. The chronological age of the administrator will account for differences in leader behavior ratings as perceived by faculty and measured by the LBDQ-Real.

Hypothesis 7. The chronological age of the administrator will account for a significant difference in faculty perception of effectiveness as measured by the

chairperson effectiveness rating.

Hypothesis 8. Administrators rated as most effective will have had more administrative training than administrators rated as less effective as perceived by faculty and measured by the chairperson effectiveness rating.

Hypothesis 9. Administrators occupying positions for a greater length of time will be rated as more effective than administrators occupying positions a shorter period of time.

Hypothesis 10. There will be a correlation between leader style as measured by the consideration and initiating structure dimensions of the real and ideal Leadership Behavior Description Questionnaires and personality type as measured by the extroversion, introversion, sensing, intuition, thinking, feeling, judging, and perceiving dimensions of the Myers-Briggs Type Indicator.

Hypothesis 11. There will be a correlation between leader style as perceived by faculty and measured by the consideration and initiating structure dimensions of the real and ideal Leadership Behavior Description Questionnaires and personality type as measured by the extroversion, introversion, sensing, intuition, thinking, feeling, judging, and perceiving dimensions of the Myers-Briggs Type Indicator.

Hypothesis 12. There will be a correlation between personality type measured by the extroversion, introversion, sensing, intuition, thinking, feeling, judging, and perceiving dimensions of the Myers-Briggs Type Indicator, and subordinate perception of effectiveness as measured by departmental governance, instruction, faculty affairs, student affairs, external communications, budget and resources, office management, and professional development dimensions of the chairperson effectiveness rating.

Hypothesis 13. Ideal consideration scores reported by faculty will be significantly higher than real consideration scores reported by faculty.

Hypothesis 14. Ideal initiating structure mean scores reported by faculty will be significantly different than real initiating structure mean scores reported by faculty.

Hypothesis 15. Ideal consideration mean scores reported by administrators will not be significantly different than real consideration mean scores reported by administrators.

Hypothesis 16. Ideal initiating structure mean scores reported by administrators will be significantly different from the real initiating structure mean scores reported by administrators.

Hypothesis 17. Administrators rated high in real

consideration and low in real initiating structure will receive higher effectiveness ratings than administrators rated low in real consideration and high in real initiating structure.

Hypothesis 18. Administrators rated low in real consideration and low in real initiating structure will receive the lowest effectiveness ratings.

Assumptions

The basic assumptions related to this study are as follows:

1. The participants responded candidly and seriously to the questionnaires.
2. The participants were representative of the total population of dental hygiene school administrators and faculty.
3. The size of the work group did not exceed 30 as dental hygiene programs by design are small in size.

Limitations

1. The dimensions of leader behavior were limited to those measured by the Leader Behavior Description Questionnaire (LBDQ).
2. Personality typing was limited to types measured by the Myers-Briggs Type Indicator (MBTI).
3. Measurement of effectiveness was limited to

responses on a 39 item, eight category, Likert type effectiveness instrument (Chairperson Effectiveness Rating).

4. Participants of the study were limited to administrators and faculty from randomly selected accredited dental hygiene programs in the United States.

5. Faculty participants were limited to full-time faculty.

6. The period of data collection was limited to September and October, 1989.

Definitions

To clarify terms which appear throughout this study the following operational definitions are provided:

Consideration. Consideration refers to "behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and members of the staff" (Halpin, 1966, p. 86).

Dental Hygiene School Administrator. The dental hygiene school administrator is the person formally assigned to administer a dental hygiene department in a college or university (may be called "Director," "Head," "Chairman," or "Chairperson").

Initiating Structure. Initiating Structure refers to "the leaders behavior in delineating the relationship between himself and members of the work group, and in

endeavoring to establish well defined patterns of organization, channels of communication, and methods of procedure" (Halpin, 1966, p. 86).

Leader Behavior. Leader behavior is "the behavior of the formally designated leader of a specified work-group (Halpin, 1966, p. 25). In this study the "specified work group" is the dental hygiene department, the formally designated leader is the dental hygiene school administrator, and the dimensions of leader behavior to be examined are initiating structure and consideration.

Leadership Behavior Description Questionnaire (LBDQ). The LBDQ is an instrument developed at Ohio State University by Halpin and Winer. This instrument measures two dimensions of leader behavior: consideration and initiating structure.

Myers-Briggs Type Indicator (MBTI). The MBTI is an instrument developed by Isabelle Briggs Myers and Katharine C. Briggs (Myers, 1962). The instrument based on Jung's theory of type ascertains an individuals basic personality preference along four dichotomies: extroversion or introversion (EI), Sensing or Intuition (SN), thinking or feeling (TF) and judging or perception (JP). Given the four dichotomies there are 16 potential personality types.

Myers-Briggs Personality Types. (Myers, 1962, pp. A1-A8).

ESTJ. An individual with this personality type is an extroverted thinker who is practical, realistic, factually minded, and concerned with the here and now. This personality type prefers to have ideas, plans, etc. based on solid facts.

ENTJ. An individual having this personality type is also an extroverted thinker who has vision and more intellectual interests than the ESTJ type. The ENTJ individual is attracted to complex problems and shows both concern and insight in strategic planning.

ISTP. The ISTP is an introverted thinker who sees realities and has a great capacity for facts and details. An ISTP individual is good at applied science and mechanics. This individual uses general principles to bring order out of confused data and meaning out of unorganized facts. Primary occupations associated with this type include legislator, jurist, statistician, market analyst, and securities. An ISTP type is likely to be patient, accurate, good with his hands, fond of sports and the outdoors, and fun loving.

INTP. The INTP, an introverted thinker, sees possibilities, values and facts in relation to theory, and is good at math, science, research, and complicated problems. This type is likely to have insight, ingenuity, quick understanding, intellectual

curiosity, and fertility of ideas about problem solving. The INTP type is more interested in reaching solutions than in implementing them.

ESFJ. The ESFJ is an extroverted feeling type who sees realities, is practical and concerned with the here and now. This type is interested in material possessions and details of direct experience. The ESFJ type usually adapts excellently to routine and bases decisions upon known facts.

ENFJ. The ENFJ type is also an extroverted thinker who sees possibilities and has both concern and vision for future possibilities. The ENFJ type is generally more interested in books and tolerant of theory, and may have a gift of expression which may be used more in speaking than writing.

ISFP. The ISFP is an introverted feeling type which mildly resembles the extroverted sensing type, especially in seeing the needs of the moment and adapting to them. This personality type consistently underestimates and understates himself. ISFP individuals love nature and animals and work well at jobs requiring devotion.

INFP. The INFP is an introverted feeling type who sees possibilities and mildly resembles an extroverted intuitive, particularly in liking to concentrate on a project and disliking all the

details not relevant to any deep interest. This type is marked by insight and long range vision, curious about new ideas and interested in books and language. The INFP type is gifted in expression, particularly written and is ingenious and persuasive on the subjects of his enthusiasms, which are quiet and deeply rooted.

ESTP. The ESTP is an extroverted sensing type who has a grasp of underlying principles and finds it easy to master mathematical or theoretical problems. An ESTP type is likely to be interested in machinery, and will discipline himself when the situation calls for it.

ESFP. An ESFP type is also described as extroverted and sensing. This type is more interested in people and has more tact and sympathy with their feelings. The ESFP type easily handles human contacts and may be too easy in matters of discipline. An ESFP type is likely to possess artistic taste and judgement.

ISTJ. The ISTJ is an introverted sensing type who is super-dependable. This type is analytic, logical, and decisive. As an executive this type may have some difficulty unless he takes extra pains to understand and appreciate.

ISFJ. An ISFJ is an introverted sensing type who mildly resembles an extroverted feeling type. ISFJs

emphasize loyalty, consideration, and the common welfare. The ISFJ has more tact, more sympathy, more interest in people, and concern for their feelings than the ISTJ. ISFJs are likely to have artistic taste and judgement.

ENTP. The ENTP is an extroverted intuitive type who is more independent, more analytical, and critical of his inspirations, more impersonal in his relations, and more apt to consider their effect on his project rather than on their feelings. This type may be an inventor, scientist, trouble-shooter, promoter or almost anything that interests him.

ENFP. The ENFP, an extroverted intuitive, is enthusiastic and concerned with and skilled at handling people. This type has remarkable insight into developing the interests of others. Occupational interests include teacher, scientist, artist or almost anything.

INTJ. The INTJ is an introverted intuitive type who resembles the extroverted thinker in organizational skill and in ignoring other's feelings and views. This type is the most independent and most individualistic of all the types. An INTJ type is likely to be an effective relentless reorganizer and may be an efficient executive rich in ideas.

INFJ. An INFJ is also an introverted intuitive type

who somewhat resembles the extroverted feeling type both in sympathetic handling of people and in the danger of ignoring harsh and uncongenial facts. This type is less obviously individualistic than the INTJ and more apt to win cooperation than demand it. INFJs may apply ingenuity to problems of human welfare, independently and in their own way. This type may be a good executive especially when affairs can be conducted on a personal level.

Procedures

A review of related literature was conducted using the print and microfilm resources of the Sherrod Library at East Tennessee State University and the University of Tennessee at Knoxville Library. A computer search of the topic was conducted using the services provided by the Sherrod Library. The computer search encompassed Dissertation Abstracts International, Psychological Abstracts, General Periodicals, and ERIC documents.

The population of the study was the 201 accredited dental hygiene programs in the United States, their administrators and full-time faculty. From this population a random sample of 32 programs (15.9%) was drawn to participate in the study.

The instruments selected for use in this study were the Leadership Behavior Description Questionnaire (LBDQ)

(Halpin & Winer, 1957) and the Myers-Briggs Type Indicator (MBTI) (Myers, 1983). These instruments were selected as they provided an opportunity for comparative analysis. A demographic survey which included age, sex, length of tenure, and level of education was also completed by the respondents. Leader effectiveness was determined by subordinate responses to an eight part 39 item Likert type effectiveness instrument. This instrument, based on Tucker's (1981, p. 2-3) categorical listing of chairperson's activities and responsibilities, was developed and validated by the author.

Participant administrators were requested to complete an LBDQ-Real, an LBDQ-Ideal, the MBTI, and the demographic questionnaire. Faculty were requested to complete the MBTI, the LBDQ-Real, the LBDQ-Ideal, the demographic survey, and the chairperson effectiveness rating. Participants who had not responded within two weeks received a follow-up reminder.

As questionnaires were returned, the LBDQ-Real, LBDQ-Ideal, and the MBTI were scored, and all data were recorded. The level of significance was established at the .05 level and data were analyzed as follows.

1. Pearson correlations were run between relevant variables.
2. T tests were run between the various Consideration/Initiating Structure scores for

both administrators and faculty (means); Pearson Correlations were calculated and Ideal/Real scores were compared in the same manner.

3. Cross tabulations of selected variables were computed and Chi Square tests for independence were run on them.
4. Regression analysis was utilized to describe the linear relationship among selected variables.
5. Analysis of variance (ANOVA) was run between various Consideration/ Initiating Structure scores for both administrator and faculty means.

Organization of the Study

This study was organized into five chapters as follows:

Chapter I consists of an introduction, a statement of the problem, significance of the study, research hypotheses, assumptions, limitations, operational definitions, procedures and organization of the study.

Chapter II contains a review of the related literature.

Chapter III describes the methods and procedures employed in this study.

Chapter IV presents and analyzes the data collected in this study.

Chapter V includes the summary, discussion,

conclusions and recommendations for future studies.

1954; Richards & Greenlaw, 1972) offer similar definitions. Although each of the definitions varies somewhat there are three similar components. First leaders must have followers; second, each definition indicates that a leader must have more power to influence followers than followers have to influence the leader; and third, the object of leadership is to direct the group toward the achievement of mutual goals.

The concept of leadership has existed as long as men have formed groups. Leadership activities may be traced to the construction of the Pyramids as long ago as 3000 B.C. and references are made to task delegation in the Bible, in Chapter 18 of Exodus.

Individual Leadership Theories

The Trait Approach

Early leadership studies emphasized the exploration of traits since it was thought that specific personal attributes distinguished leaders from followers. Galton (1879) explained leadership in the context of heredity background. Woods (1913) indicated that the quality of national life among 14 nations could be equated with the ruler's capabilities. Wiggam (1931) believed that the aristocratic class differed biologically from lower classes and that the superior class must provide leaders.

The "great man," or trait approach, dominated the

Chapter 2

Review of Related Literature

Organization of the Chapter

This chapter is divided into four major sections: (1) leadership, (2) personality, (3) the department chairperson and (4) leadership studies in dental and dental hygiene education.

In the first section leadership is defined and individual and interactional leadership theories are examined. Section two provides a definition and overview on personality and examines personality typing and personality and leadership. In section three the historical development of the position of chairperson in higher education is reviewed, the roles and responsibilities of the chairperson are examined, and the leader style and effectiveness of department chairperson is discussed. Section four addresses leadership and personality studies in dental and dental hygiene education.

Leadership

Definition and Overview

Stogdill (1950) defined leadership as the process of influencing group activities toward the setting and achievement of goals. Other writers (e.g., Hemphill,

study of leadership during the early years of the twentieth century, but gradually this approach waned. In a review of 124 trait studies Stogdill (1948) concluded that the results of trait studies were inconsistent, that no single characteristic was common to all leaders, and that no relationship was found between traits and the likelihood of becoming a leader. In this same review of trait studies Stogdill (1948, p. 63) found that "ability, achievement, responsibility, sociability, and status tended to differentiate leaders from followers." Stogdill, therefore, conceptualized leadership in terms of the interaction of dynamic variables such as the interaction of leader characteristics and the characteristics, activities, and goals of the followers. Myers (1954) agreed with Stogdill that no single characteristic was common to all leaders and he too supported the position that leaders acquire status through the interaction of the group.

Early researchers of organizational behavior concentrated on the identification of those human traits which produced good leaders. The trait approach to leadership gave way to research examining beliefs and values, leader style, and organizational effectiveness.

Beliefs and Values

Beliefs are ideas that people have about the world around them. Although similar, values are people's assessment of the goodness or badness of various aspects of life. The most important beliefs and values that influence a leader are those having to do with others. This basic conceptualization was used in the development of McGregor's famous Theory X and Theory Y.

McGregor: Theory X and Theory Y. Douglas McGregor (1960) presented two fundamental sets of beliefs that leaders may have regarding subordinates. These beliefs (Theory X and Theory Y) are described by McGregor as assumptions a leader makes about people. According to McGregor, leaders having Theory X assumptions about subordinates are pessimistic about subordinates' skills and abilities. In contrast leaders having Theory Y beliefs are optimistic.

Peter Drucker (1973) supported McGregor's theory and related it to Maslow's hierarchy of needs. Theory Y, in Maslow's terms, assumes that individuals strive for self actualization. Drucker contended that if one expects better performance, even to a limited extent, better performance follows. Drucker, however, warned that Theory Y should not be viewed as an administrative panacea as the model is over simplified and has shortcomings. Among the

limitations are the fact that employees are viewed as being either Theory X or Theory Y, a view that is not realistic. A more realistic view would be that employees' work habits fall along a continuum from Theory X to Theory Y. The theory also places a great deal of responsibility on both administrators and employees and fails to recognize individual variations in dealing with responsibility.

Having extensively studied an organization which strictly adopted Theory Y, Maslow (1965, p. 47) sharply criticized both McGregor and Drucker for what he called their "inhumanity" to the weak, vulnerable, and the damaged, those unable to assume the responsibility of self-discipline demanded by Theory Y." Maslow concluded that even the strong and healthy need the security of order and direction, while the weak need protection from the burden of responsibility. Despite his criticisms Maslow did not abandon his advocacy for Theory Y, rather he noted its shortcomings and contributed to its improved application.

Leader Style

Origins. The earliest attempts to categorize leader behavior seem to have been made well into the twentieth century. The earliest description of style may be traced to Weber (1922) who discussed selected behavior of leaders

as to whether their authority was traditional bureaucratic or charismatic. Weber's assumption was that a leader functioned according to the source of his authority. Weber believed that the future belonged to those who exhibited a bureaucratic style. The basic principles of a bureaucratic organization outlined by Weber included:

1. A division of labor by functional specialization.
2. A well defined hierarchy of authority.
3. A system of rules covering the rights and duties of employees.
4. A system of procedures for dealing with the work situation.
5. Impersonal relations between people.
6. Promotion and selection based on technical competence.

Lippit and White were among the early researchers who attempted to identify style (Lippit & White, 1943). In these studies, conducted at the University of Iowa in the 1930s synthetic styles of behavior were used by adults in supervising children. The behavior styles were synthetic in that supervisors behaved as they were instructed to behave. The styles specified were autocratic, democratic, and laissez-faire. The assumption underlying the work of Lippit and White (1943) was that supervisor style is contingent upon values and attitudes

that could be altered at will, depending upon what the supervisor found most satisfying.

In a study which attempted to relate style to the situation, LaPierre (1938) also assumed that a leader could consciously vary the manner of behaving to fit the situation. This assumption seems questionable as pointed out by Cawelti (1979) and Sergiovanni (1979). A more accepted assumption is that leader performance depends on the situation and the personality of the leader.

An Overview on Style Theories. Theories of leadership behavior propose that leader influence may be understood by examining leadership style which is "the typical or consistent behavior a leader tends to use while interacting with subordinates" (Hitt, Middlemist & Mathis, 1986, p. 649). Style theory focuses on the effects of behavior rather than the causes.

Several researchers who attempted to describe style have proceed from the hypothesis that style is a function of the leaders task vs. relationship orientation.

Michigan Studies. Researchers at the Survey Research Center of the University of Michigan studied the relationship between supervisor's behavior and subordinates' morale, satisfaction, and productivity. Through this research conducted in 1948, two distinct

leader styles were identified: employee-centered and job-centered (Likert, 1961). Employee-centered leaders were found to demonstrate personal interest in subordinates, to behave in a supportive non punitive manner toward subordinates, and concentrate on training workers for better jobs. In contrast job-centered leaders avoided personal interest in subordinates, were demanding and punitive, and they became personally involved in worker's tasks. There is much research to support that employee-centered leaders are more successful than job-centered leaders.

Ohio State Studies. Research conducted at the Bureau of Business Research of Ohio State University at about the same time of the Michigan studies yielded similar findings. The Ohio State group identified two basic dimensions of leader behavior: consideration (similar to employee-centered) and initiating structure (similar to job-centered). Consideration refers to "behavior indicative of friendship, mutual trust, respect and warmth in the relationship between the leader and members of the staff" (Halpin, 1966, p. 86). Initiating structure refers to the leader's "behavior in delineating the relationship between him/her self and members of the staff and in trying to establish well defined patterns of organization, channels of communication, and method of procedure"

(Halpin, 1966, p. 86). The Ohio State researchers found that the two basic dimensions identified were not pure in form but that the two dimensions overlapped as demonstrated below.

High	High Consideration	High Structure
	Low Structure	High Structure
Low	Low Consideration	Low Consideration
	Low Structure	High Structure

The Ohio State studies are of particular significance as they comprise one of the most comprehensive leadership research programs. According to Kerr, Schriesheim, Murphy and Stogdill (1974) the published literature is particularly meaningful as the leadership scales (LBDQ and LOQ) were factor-analytically determined and numerous studies have used the scales providing good quality normative data.

The definitive study which identified consideration and initiating structure as major dimensions of leader behavior was the Air Force project in which a Leader Behavior Description Questionnaire, developed by Hemphil and Coons (cited in Stogdill & Coons, 1957), and having ten subscales, was administered to Air Force crews (Halpin & Winer, 1952). Through factor analysis the researchers found that 83 percent of the total variance was attributable to two factors which were subsequently labeled Initiating Structure and Consideration.

The LBDQ has been used extensively in leadership studies in industrial, military and educational settings. Fleishman, Harris and Burt (1956) utilized the instrument in their studies of factory foreman and found the two dimensions helpful in evaluating the results of supervisory training. In a study of aircraft commanders Halpin (1954) presented evidence that the most effective commanders scored high on both dimensions of leader behavior. Similarly Hemphill (1955), in a study of department chairpersons, found the departments with the "best" reputations had chairmen who were above average on both Consideration and Initiation of Structure. Likewise McCarthy (1972) found that scores on Consideration and Initiation Structure were related to effectiveness ratings. In several studies in higher education, Skipper (1976, 1977, 1978) found that those recognized as being the most effective leaders, at the dean level and above, scored high on both dimensions.

Getzels and Guba: Nomothetic-Ideographic - Transactional Model. The task relationship conceptualization is also central to Getzel's and Guba's (1957) Nomothetic - Ideographic-Transactional model. They claim a leader is "nomothetic" (task oriented) to the extent that he is influenced by organizational demands, idiographic (relationship oriented) to the extent that he

is influenced by personal need disposition, "transactional" to the extent that he recognizes that social system goals must be carried out.

Blake and Mouton: Managerial Grid. The "Managerial Grid" developed by Blake and Mouton (1964) plots the leader's behavioral description in terms of his "concern for people" (relationship orientation) and "concern for production" (task orientation). For each of the two dimensions, scores range from 1 to 9 yielding 81 potential styles. Blake and Mouton, however, concern themselves primarily with five combinations: 1,1: low concern for production and low concern for people; 9,1: high concern for production and low concern for people; 1,9: high concern for people and low concern for production; 5,5: moderate concern for both people and production; 9,9: high concern for both people and production. Blake and Mouton believed that ideal leadership behavior is one that most closely approaches a 9,9 style.

Interactional Leadership Theories

Hersey and Blanchard: Situational Life Cycle Theory. The Life Cycle Theory, developed at Ohio State University and published by Hersey and Blanchard (1969), also addressed the relationship between task behaviors and relationship behaviors of the leader and the maturity

level of the follower. Maturity was defined as the ability to do the task and the willingness to do the task. The immaturity-maturity continuum referred to psychological age rather than chronological age. The Life Cycle theory suggested that as the level of maturity of the follower increases, appropriate leader behavior requires less structure and more consideration. The model has four quadrants descriptive of leadership behavior: 1) low task and low relationships, 2) high task and low relationships, 3) high relationships and low tasks, 4) high tasks and high relationships. Appropriate leadership style for subordinates of below average maturity is quadrant 1; for subordinates of average maturity, quadrant 2 and 3 are appropriate, and for those of above average maturity quadrant 4 is appropriate.

Hersey and Blanchard (1969) contended that leader behavior should move from high task-low relationship behavior (quadrant 1) to low task, low relationship behavior as one's subordinate progresses from immaturity to maturity.

Contingency Theory of Leadership. The contingency theory of leadership states that a leader's effectiveness depends on the interaction of his or her behavior with certain organizational factors. Fiedler (1967) developed the first major theory to propose a contingency

relationship in leadership. Fiedler's model may be best understood by examining the individual leader, the organizational factors (leadership situation) and the interaction of these factors in determining leader effectiveness.

The individual (leader factor) in the contingency model of leadership is the leader's need hierarchy which is based on Maslow's need theory. The basic premise of all need hierarchies is that in a harsh environment the individual primarily seeks satisfaction of lower order (prepotent) needs. These needs relate to the task-relationship dimension of leadership behavior which dominate many leadership conceptualizations. The difference between Fiedler's theory and others is that Fiedler's "needs" deal with the motivational aspect of leadership.

Fiedler suggested that leader needs can and do vary from leader to leader; some leaders place more emphasis on task achievement needs while others place a higher value on interpersonal relationship needs.

To identify leader styles Fiedler developed the least preferred co-worker scale (LPC). The LPC is a semantic differential scale consisting of 16 bipolar items. The respondent is asked to use the questionnaire to describe his least preferred co-worker. Each item is scored on a scale from one to eight with eight being the most

favorable score. A person scoring high on the LPC describes his co-worker positively and is relationship oriented, while one scoring low on the LPC describes his least preferred co-worker negatively and is task oriented.

According to Fiedler the harshness or pleasantness of the leadership situation activates the leader's needs. In Fiedler's model three environmental factors determine whether the situation is favorable or unfavorable:

1. Leader member relations: The degree to which the group respects and supports the leader.
2. Task Structure: The degree to which the task can be specified; whether it is simple or complex.
3. Position Power: The degree to which the organization gives the leader power.

The interaction of leader needs and the situation are utilized by Fiedler to determine which leaders are best suited for a given type of situation. Having developed a method for classifying group situations and a model for characterizing leader behavior, Fiedler found that task oriented leaders tend to perform better in very favorable or unfavorable situations and relationship oriented leaders perform better in situations described as moderately favorable. Fiedler concluded that one should match the leader to the situation and should not attempt to change one's leadership style.

Path Goal Theory. While the contingency theory of leadership focuses on leader motivation, House and Mitchell's (1974) path goal approach examines subordinates' motivation. The path-goal theory based on expectancy theories of motivation expresses two basic ideas: 1) the leader's function is to motivate subordinates by clarifying their goals and the path to those goals; and 2) the particular style of leader behavior that will accomplish this motivational function is situationally determined by subordinates' characteristics and environmental factors. According to House and Dressler (1974), subordinate characteristics were likely to affect their perception of whether the leader's behavior was an immediate source of satisfaction or an instrumental factor in future satisfaction. Attributes such as the subordinate's level of authoritarianism or whether they were "externals or "internals" in terms of the Locus of Control scale or their perceptions of their own task-related abilities were proposed as potential moderators of the effects of particular types of leader behavior. Situational factors comprise the nature of the subordinates tasks, the formal authority system of the organization, and the primary work group.

The path-goal theory proposes four leadership styles:

1) Instrumental (similar to initiating structure), 2)

Supportive (similar to consideration), 3) Participative (the sharing of ideas and decision making with subordinates), and 4) Achievement oriented (the setting of challenging goals and the seeking of the highest levels of performance from subordinates).

The Path-Goal leadership concept was concerned with the leader's behavior, not the leader's characteristics. More specifically it was concerned with the leaders activities and the motivation of subordinates. The basic premise was that with a leader who could motivate subordinates, a group was more likely to achieve its goals; therefore, it was more likely to be effective.

Summary. Leadership was clearly an important topic in the literature. Definitions of leadership vary as do the approaches taken to its study. Originally leadership research focused on identifying traits, but the trait approach gave way to research examining beliefs and values, leader style and organizational effectiveness. Today leader traits, leader style and situational variables are all recognized as important in explaining leadership.

Two dimensions of leadership behavior--consideration (relationship orientation) and initiation of structure (task orientation)--have consistently emerged as central elements in many leadership theories. These dimensions

have been incorporated into both individual and interactional theories. Regardless of the approach taken to study leadership, the research indicated that the most effective leaders were those who scored high on both dimensions--consideration and initiation of structure (Flieshman, 1973).

Personality

Definition and Overview

A definition of personality that is widely accepted by psychologists is one offered by Eysenck (1970, p. 2): Personality is a more or less stable and enduring organization of a person's character, temperament, intellect, and physique, which determines his unique adjustment to the environment. Character denotes a person's more or less stable and enduring system of conative behavior (will); temperament, his more or less stable and enduring system of affective behavior (emotion); intellect his more or less stable and enduring system of cognitive behavior (intelligence); physique, his more or less stable and enduring system of bodily configuration and neuro endocrine endowment.

Man has studied man since the beginning of time, but the formal approaches to personality appraisal are a relatively recent phenomena. Early conceptions of man

were concerned with the reflection of the macrocosmic order of nature and the microcosmic make-up of the individual. These conceptions were advanced by classical scholars such as Hippocrates, Plato and Aristotle (cited in Brawer, 1968).

The foundations for a more structured approach to personal evaluation, however, were laid by Galton's (1883) pioneering efforts in the psychology of individual differences and by Cattell's (1947) measurement of the intelligence of school children. Stemming from the work of these men, attempts were made to develop psychological theories built upon a variety of dimensions and to classify human beings according to particular typologies. Jung (1923), Kretschmer (1925), and Sheldon (1942) classified traits into various types. Freud (1957) and Jung (1923) brought the unconscious into focus as they investigated the dynamics underlying human action, thought and feeling. Adler (1927), Fromm (1941), Horney (1950), Sullivan (1923), and Lewin (1935) took a different approach in examining the interaction of people in social groups. Allport (1937) stressed the psychology of the individual while Maslow (1954) and Goldstein (1940) posed organismic theories, and Cattell (1947) and Guilford (1954) sought to isolate characteristic features of human functioning. As the study of personality continued, Hull (1952) and Miller (1951) developed learning theories based

on the stimulus response concept. Murphy's (1947) biosocial theory, Murray's (1938) personology theory, and the self theories of Rogers (1951) and others have also impacted the present day understanding of human behavior.

There were many efforts directed toward understanding human functioning. These efforts generated a vast amount of research on the topic. Investigations were conducted for the purpose of describing populations, selecting and predicting effectiveness in various situations, and dividing groups of people into various typologies.

Personality Typing

Typal categorization is one of the oldest ways of distinguishing individuals with respect to personality differences. Numerous typologies have been proposed by writers, psychologists, and psychiatrists. Social behavior, pathology, modes of imagery, values, interests, and attitudes have all been used to classify personality types. The intense interest in and the popularity of typal categorization, may be best understood in terms of the fact that personality typing is an economical way of summarizing complex configurations of variables--a way of characterizing the whole person in terms of a small number of very broad categories (Coan, 1984). The literature on personality type is so pervasive that a comprehensive review is not feasible. Therefore, the focus of this

discussion was placed on Jung's typology which served as the conceptual framework for the instrument used in this study.

Jung (1923) saw the main cause of typological differences in the introverted or extroverted tendency of the libido, that is in the tendency of the individual's instinctual energies to be directed to the outer world (objects) or toward his own inner mental states (subject). Jung believed that each individual has a predisposition toward one or the other of these two dichotomies: extraversion or introversion. According to Jung these two dichotomies operate in combination with four basic psychic functions---two rational or judgmental functions (thinking or feeling) and two irrational or perceptual functions (sensation and intuition). As described by Jung each individual tends to favor one of the four functions in conscious adjustments. This function is designated the superior or dominant function. A second function, designated the auxiliary function interacts with the dominant function. There are 16 possible combinations of a dominant attitude, superior function and auxiliary function in Jung's typology. Jung assumed that everyone uses both attitudes and all four functions in some way; the attitudes and functions that are less developed or favored by an individual tend to operate with less conscious control.

Personality and Leadership

Leadership has been defined as the process of influencing group activity toward the setting and achievement of goals (Stogdill, 1950). To influence group activity requires interaction. Personality, therefore, plays a significant role in both leadership and group effectiveness as personality by definition dictates how an individual responds to or interacts with the environment.

Two approaches have been taken in explaining leadership and group behavior: the trait approach and the situational approach. For many years the trait approach dominated the study of leadership and social behavior, but the acceptance of the trait approach declined following Stogdill's (1948) review of trait studies which found that no single characteristic was common to all leaders. Consequently the focus of leadership studies jumped from the approach that leaders are born not made to leaders are made by the situation not born. Fortunately, however, industrial psychologists continued to conduct trait research, but the emphasis of the research shifted from trait studies on the selection of leaders to the relation of leader traits to leader effectiveness (Yukyl, 1981). In reviewing the second generation of trait studies, Stogdill (1970) concluded that there is evidence that personality is an important factor in leadership. Other major writers and theorists concurring with Stogdill

include Getzels and Guba (1957), Boles and Davenport (1983), Fiedler (1967), and McGregor (1960). The acknowledgement that personality is an important factor in leadership did not, however, represent a return to the assumption that leaders are born, not made. Instead a more balanced view integrating both the trait and situational approaches was adopted.

To date specific relationships between personality, leadership and group behavior have not been established although characteristics of effective leaders have been identified and suggestions have been made regarding personality, leadership and group behavior. In summarizing the second generation of trait studies Stogdill (1970, cited in Bass, 1981, p. 81) concluded:

The leader is characterized by a strong drive for responsibility and task completion, vigor, and persistence in pursuit of goals, venturesomeness and originality in problem solving, drive to exercise initiative in social situations, self-confidence and sense of personal identity, willingness to accept consequences of decision and action, readiness to absorb interpersonal stress, willingness to tolerate frustration and delay, ability to influence other persons' behavior, and capacity to structure interaction systems to the purpose at hand.

Having studied the personality types of 579

preservice teachers, Henjum (1984) concluded that knowledge of personality can help administrators be more effective. Similar conclusions were drawn by Barrett and Connot (1986) regarding teacher effectiveness and knowledge of student personality types. Katz's (1974) typology of three managerial skills (technical, human and conceptual) has provided an influential model within the trait approach. Technical skill (professional expertise) was found to be important at lower managerial levels. Human relation skills were found to be important at all levels while conceptual skills were found to be most important at the upper level of administration. McClelland (1975) found that the need for achievement, power, and affiliation play an important role in determining leader effectiveness. Power was found to be most influential in large organizations and when the leader was assertive and self confident. McClelland contended that those with high social power were more apt to sacrifice the welfare of the organization. He also found that leaders with a high need for affiliation were less effective than leaders having a high need for achievement.

Summary

A vast amount of research has been conducted in an effort to understand human functioning. Research focused

on describing populations, selecting and predicting effectiveness in various situations and dividing groups of people into various typologies.

Typal categorization is a popular and economical method of distinguishing individuals with respect to personality differences. One method of personality typing which gained acceptance was Jung's typology which explained personality differences according to two dichotomies: extroversion and introversion which operates in combination with four basic psychic functions yielding 16 possible personality types.

There was evidence to suggest that personality is an important factor in leadership. Trait studies identified characteristics of effective leaders and suggestions were made regarding the influence of personality on group behavior. Knowledge of personality type was found to help administrators be more effective, but to date specific relationships between personality type, leader style, and leader effectiveness as perceived by subordinates has not been established.

Department Chairperson

Historical Development

The position of department chairperson in traditional academic disciplines in American colleges and universities is just over 100 years old. From the inception of

American higher education at Harvard in 1636 until after the Civil War, the administrative hierarchy of American institutions of higher education was very simple.

According to Emmet (cited in Bennett, 1983), three events significantly impacted the evolution of the position of department chairperson:

1. Use of the title dean in the 1792 appointment of Samuel Bard to head the medical school at Columbia University. This title was chosen as it was felt that the institution could not have two presidents.
2. Thomas Jefferson's establishment of six colleges within the University of Virginia with a professor heading each college.
3. The implementation of modern languages into the curriculum at Harvard (1828-1830) and the addition of schools of natural science at Yale and Harvard in 1848. (p. v-vi)

These events led to the emergence of the department chair, but according to Emmet (cited in Bennet, 1983, p. vi) several other events occurred before the department began to come into its own: the establishment of the land-grant university at Cornell in 1868, the Harvard administrative reforms of 1870, and the founding of the graduate school at John Hopkins in 1876. One other event of significance in the evolution of the department was the

adoption by community colleges of an organizational system of divisions, headed by a divisional chairperson, following World War II. In this system the division chairperson had limited teaching responsibilities and acted as an assistant or associate dean within a group of disciplines. This model was later utilized by liberal arts colleges having small enrollments (Emmet, cited in Bennett, 1983). Beginning in the 1960s the model of divisions with or without departments replaced the traditional department structure in community and small colleges.

Roles and Responsibilities of the Department Chairperson

Brann (cited in Brann & Emmet, 1972) described the department chairpersons role as follows:

The department chairman or head is the foreman in higher education--the person who sees that work gets done. It is a difficult and ambiguous role, and so ill defined that at many colleges no descriptions of his duties appears on paper. And he is the man or woman caught at the middle in any serious effort to alter the way American higher education functions. The evolving battles over academic reform and faculty unions are generating combat that finds the department chair trapped in the cross fire. (p. 5)

McKeachie (1968) offered a similar description of the importance of the department chair and also discusses the complexity and paradoxical nature of this role.

Although the department chairmen in most colleges and universities are key individuals in determining the educational success of the institution, they are generally ill-prepared, inadequately supported and more pitied than censured. In many departments, the attitude of the faculty toward a colleague that accepts the departmental chairmanship is much like that of nuns toward a sister who moves into a house of prostitution. (p. 221)

Since the time of Brann's and McKeachie's observations increased attention has been focused on the development of the department chairperson through both training and research. However, nearly a decade later Tucker (1981) found that chairpersons were underprepared for their jobs. Tucker identified the tasks and duties frequently assigned to the chairperson. These tasks and duties were extremely broad in scope and encompassed the following areas: department governance, instruction, faculty affairs, student affairs, external communication, budget and resources, office management, and professional development. Within the eight categories, Tucker identified a total 53 tasks and activities commonly assigned to chairpersons (Appendix A). This listing,

however, should not be construed as a standard job description as Tucker pointed out that the job of chairperson varies from institution to institution and is also shaped according to individual talents and skills within a framework that is compatible with organizational goals and objectives.

Leader Style and Effectiveness

Several frameworks have been utilized to examine leader style in higher education although each of them have not been used specifically to examine the leader style of the department chair. It would seem appropriate, however, to examine this body of research as generalizations may be made to the leader style of the department chairperson. The models used to examine leader style and effectiveness in higher education include (1) power-influence models of leadership, (2) trait models, (3) behavioral models, (4) situational and contingency models, and (5) transformational models.

French and Raven's (1968) typology of power has been used on several occasions to examine leader style in higher education. French and Raven (1968) define five bases of power: (1) reward power in which the leader shapes and controls behavior through reward dispersal; (2) coercive power, in which control is accomplished through the use of sanctions and punishments; (3) legitimate

power, in which acquired position gives the leader the right to make requests of followers; (4) expert power, in which the leader has specialized knowledge and skills exceeding those of followers; and (5) referent power, in which the leader, by virtue of personal attributes, inspires followers to seek approval and emulate his or her behavior. Bachman (1968), Kanter (1983), Pfeffer (1981), and Yukyl (1981) found that power based on knowledge and expertise is the most critical base in higher education.

Recent trait research utilizing the an "assessment center approach" has suggested that certain patterns of traits and skills can be predictive of managerial advancement and success. These studies have reawakened interest in the trait approach (Peterson & Mets, 1987). Katz (1974) found effective administrators displayed proficiency in human relation skills, technical skills and conceptual skills. In a study of an academically related environment Rosen, Billings, and Turney (1976) found that technical expertise is the best predictor of success in periods of rapid change when strategic decisions are critical.

Several studies have been conducted using behavioral models as the framework. Behavioral models focus on identifying those leader behaviors that are instrumental for the attainment of group and organizational goals. Dill's (1984) review of the research on the behavioral

model of leadership found much support for the Ohio State Leadership studies. Interestingly, he also found that at the department level considerate behavior is more critical in social science and humanities departments, while task oriented behavior was more effective in disciplines with greater intellectual coherence, such as physical and biological science.

Knight and Holen (1985) found that the more effective department head was one who maintained high levels of both consideration and initiating structure. According to Vroom (1983) situational and contingency approaches have been found to lack applicability to the field of higher education. In a systematic examination of Fiedler's (1976) model, Hersey and Blanchard's (1969) model and Vroom and Yetton's (1973) model, Vroom (1983) concluded that each of these models lacked applicability to higher education due to peculiarities of institutions of higher education. Peculiarities cited included degree of freedom of upward communication and relative lack of downward control; extreme diversity of specialization, even within a department; and unprecedented individual freedom to control and direct the amount and type of work performed. Despite these findings a number of studies have been conducted utilizing situational and contingency models.

Tucker (1981) utilized Hersey and Blanchard's situational life style theory (1969) to explain the

leadership styles employed by department chairpersons. According to Tucker a directive (autocratic) style may be desirable when a new department is established or when an older department is strife torn or divided. As the department matures however, a more participative style is deemed to be more effective. In an unpublished survey conducted by Tucker in 1977 (cited in Tucker, 1981), a chairperson who is an effective leader and efficient facilitator often possesses many of the following characteristics:

1. Good interpersonal skills; ability to work well with faculty members, staff, students, deans, and other chairpersons.
2. Ability to identify problems and resolve them in a manner acceptable to faculty.
3. Ability to adapt leadership styles to fit different situations.
4. Ability to set department goals and to make satisfactory progress in moving their departments toward those goals.
5. Ability to search for and discover the optimum power available to them as chairpersons; ability to maximize power in motivating faculty members to achieve department goals and objectives.
6. Active participation in their professions; respect of professional colleagues. (p. 41)

Groner (1978) used Fiedler's group atmosphere scale to measure the quality of leader-member relations in departments of community colleges and universities. He found the quality of department head-faculty relations to be positively associated with feelings of control over the destiny of the department and with the extent to which the department reflected Fiedler's paradigm (high physics; low sociology). Groner (1978) also found a strong negative relationship between heterogeneity of faculty research interests and department head-faculty relations.

The Vroom-Yetton (1973) model of leadership has also been used to study the decision making behaviors of academic administrators. In such a study Taylor (1982) found that administrators in community colleges, four year colleges, and universities tend to ignore situation-specific factors in deciding how to reach a decisions.

Transformational models of leadership incorporate the issues of power, traits of leadership behavior and analysis. Essentially transformational models rely on a primitive form of research: biographies and analysis of great leaders. As transformational models are not based on sound research practices only a cursory review will be presented.

The concept of transformational leadership is attributed to Burns (1978) who distinguished among administration, management and leadership.

Characteristics important are creation of vision, mobilization of necessary commitment, and institutionalization of change. Bass (1985) described the behaviors of transformational leaders as follows:

1. They take a strongly developmental orientation toward their subordinates.
2. They rely on charisma as a basis for power, particularly as shown through determination, self confidence, and a strong sense of personal integrity.
3. They are intellectually stimulating.

Leadership and Personality Studies in Dental and Dental Hygiene Education

To date the topic of leadership and personality among administrators in dental and dental hygiene education has virtually been unaddressed. Over the past two decades there was one study which addressed leadership behavior among this group (Goral, 1979), and there were no studies on personality traits. Personality studies have been conducted among dental faculty, students and alumni (McDaniel, Siler, & Isenberg, 1985, 1988; Silberman, 1976; Walker, 1971), but no research focused on the personality traits of dental hygiene faculty.

In the single study of leadership behavior in dental hygiene education Goral (1979) found no significant

correlation between leadership behavior and leadership effectiveness as measured by the Leadership Behavior Description Questionnaire (LBDQ) Form XII (Stogdill, 1963). Goral (1978) also collected demographic data, but no significant correlation was made between leadership effectiveness and demographic data. There were, however, 4 interesting findings. All faculty rated the leadership behavior of the respective administrator lower than the administrator rated his own behavior. Dental hygiene administrators with the most positive ratings tended to have occupied their position a very short or a very long time. Those administrators ranked as demonstrating moderately positive leadership behavior occupied their positions a moderate length of time. The leadership behavior patterns of dental hygiene administrators more closely paralleled those of a group of aircraft commanders than those of educational administrators.

The most current research on personality traits was conducted by McDaniel, Siler, and Isenberg (1988) utilizing the Myers-Briggs Type Indicator (MBTI) (Myers, 1983). To assess personality variables among dental students, graduates and faculty. The authors found that all subjects conformed to the picture of the dental personalities reported in the literature. There were, however, differences in this study and others. None of the groups were clearly extroverted or introverted and no

significant difference existed among students, graduates and faculty. Consistent with other studies (McDaniel, Siler, & Isenberg, 1988) found graduates and faculty were sensitive rather than intuitive, thinking rather than feeling and judging rather than perceiving. Students reflected the same personality profile except they were more feeling than the other two groups. In studies where other indices were used to measure dental students' personalities, dental students were also described as more utilitarian than humanitarian, and utilitarianism was found to increase as their education progressed (DiMarco & Pearlmutter, 1976; Heist, 1960; Moody, Vantassell, & Cash, 1974; Reilly, Yuffit, & Mattson, 1965; Rosenberg, 1965; & Steinberg, 1973). It was also found that dental students became less considerate as their education progressed (Heist, 1960). These findings were consistent with comparable studies among medical students (Gray, Moody, & Newman, 1965; Rosenberg, 1965).

Summary

Leadership was defined and individual and interactional leadership studies were discussed in the first section of this chapter. It was found that there are numerous definitions of leadership. The major components of leadership regardless of the definition were leaders must have followers, leaders must have more power

to influence followers than vice versa, and the object of leadership was to influence followers to achieve group goals. There were a number of leadership theories that a leader may apply to improve their effectiveness. These theories fall into two categories: individual and interactional. Individual theories of leadership focused on the leaders traits, beliefs, values and style of behavior. These theories suggested that there is one best way of leading. Interactional theories emphasized the relationship between individual and organizational factors in effective leadership.

Section two of this chapter addressed the topic of personality. It was found that the literature was replete with studies examining personality and human behavior. Personality research encompassed the description of populations, selecting and predicting effectiveness in various situations, and dividing groups of people into various typologies. Typal categorization was found to be one of the oldest ways of distinguishing individuals with personality differences. Jung's typology which categorized personality along two dichotomies: extroversion and introversion was discussed as it provided the theoretical framework for the instrument used in this study. In discussing personality, the topic of personality and leadership was also examined. The major finding emerging from this review was that personality is

an important factor in leadership.

In section three of this chapter the historical development of the department chairperson was discussed as were the roles and responsibilities of the chairperson and leader style and effectiveness. It was found that the position of chairperson is just over 100 years old in American higher education. The roles and responsibilities of the chairperson were found to be vast and divergent. Research focusing on leader style and effectiveness in American higher education employed five conceptual models: power influence models, trait models, behavioral models, situational and contingency models and transformational models. A finding common to each was that certain behaviors could be associated with leader effectiveness.

The final section of this chapter examined the personality and leadership studies in dental and dental hygiene education. It was found that the topic of leadership had been inadequately addressed within the discipline. One leadership study had been conducted in dental hygiene and no studies had been conducted in dental education. Personality studies were also limited and only addressed dental students, faculty, and alumni.

Chapter 3

Methodology and Procedure

This chapter describes the methods and procedures utilized to conduct the study. The chapter is divided into three sections. The first section describes the instruments used to collect the data. Section two addresses the data collection procedures and section three describes the methods employed in analyzing the data.

Data Collection Instruments

Leadership Behavior Description Questionnaire

The Leadership Behavior Description Questionnaire (LBDQ) (Halpin & Winer, 1957) was utilized to examine the dimensions of leadership behavior. The instrument identifies two major dimensions of leadership behavior-- Consideration and Initiation of Structure. Consideration refers to the behavior that reflects friendship, mutual trust, respect and warmth in the relationship between the leader and group members. Initiating structure refers to the leaders behavior in delineating the relationship between himself and group members and the way he structures or organizes tasks. The LBDQ is comprised of 40 short statements describing the ways in which a leader may behave. The respondents, usually subordinates, indicate the frequency of the leader's behavior as always,

often, occasionally, seldom, or never. The leader may also use this form to rate his or her own behavior. The form on which the group members score their leader is called the LBDQ-Real (Appendix B). A modified form, the LBDQ-Ideal (Appendix C), measures either the leader's or subordinates' ideologies. The score for the LBDQ is determined by summing the scores assigned to responses marked on fifteen items for each of the two dimensions-- Consideration and Initiation of Structure. The possible range of scores on each dimension is 0 to 60. The 10 unscored items have been retained in the questionnaire in order to maintain conditions comparable to those used in standardization. The scored items for each of the two dimensions are included in Appendix D.

Reliability. Reliability was defined by Borg and Gall (1983) as the level of internal consistency or stability of the measuring device over time. Halpin (1954) reported the estimated reliability of the LBDQ using the split-half method to be .83 for Initiating Structure scores and .92 for Consideration scores, while Seeman (1957) reported split-half reliabilities of .89 and .87 for Consideration and Initiating Structure. Halpin and Winer (1957) reported "odd-even" estimates of reliability to be .87 for Consideration and .75 for Initiating Structure. In assessing the data found in the

manual and subsequent research, Dipboye (1978) found both the initiating structure and consideration factors to have high coefficients of internal consistency. Dipboye further found interrater agreement to be sufficiently high enough to justify the procedures stated in the manual. In a comprehensive review of LBDQ research, Schriesheim and Kerr (1974) assessed the test-retest reliability as marginally acceptable, while Greene (1974) found test-retest reliability coefficients ranging from .57 to .72 for Initiating Structure and .71 to .79 for Consideration.

Validity. Validity has been defined as the degree to which a test measures what it is supposed to measure (Borg & Gall, 1983). Schriesheim and Kerr (1974), in a review of numerous studies, found the LBDQ to have high internal consistency. However, they found the content validity to be marginally acceptable and evidence regarding construct, predictive and discriminant validity was too limited to permit definitive conclusions regarding their adequacy. Taylor, Crook, and Dropkin (1961) and Philipsen (1965, cited in Stogdill, 1977) found the descriptions of consideration and initiating structure to be highly stable and consistent from one situation to another.

Myers-Briggs Type Indicator

The Myers-Briggs Type Indicator (MBTI) (Myers, 1983) was utilized to measure the personality traits of the participants (Appendix E). This instrument is one of the most widely used measures of personality in non-psychiatric populations (Devito, 1985). The MBTI, based on Jungian theory, yields four indices of personality structure: extroversion or introversion (E-I), sensing or intuition (S-N), thinking or feeling (T-F) and judgement and perception (J-P). Extroversion or introversion is probably the best known Jungian dichotomy. Extroverts (E) prefer to focus perception and judgement on people or things, introverts (I) on ideas and concepts. The second index, Sensing or Intuition (S-N), reflects two different modes of perceiving. Sensing persons (S) prefer to perceive the environment through their senses, intuitive person (N) through the unconscious. The third index or dichotomy reflects different forms of judging. Thinking persons (T) prefer to judge the environment impersonally between that which is true or false, feeling persons (F) between that which is valued or not valued. The last index, Judgement or Perception measures the affinity for judging or perceiving. In interactions with the environment, judging individuals (J) rely on the judging processes of thinking or feeling, perceiving persons (P) on the perceptive process of sensing or intuition. For

each index three scores are obtained: a raw score (points) for each polarity, (e.g., E and I), a preference score showing the strength of polarity and eliminating ties, and a continuous score along the EI dimension.

According to type theory, an individual's four preferences interact yielding 16 possible four letter types. An ESTJ person, for example, would focus on the environment rather than on ideas (E), on facts rather than possibilities (S), on thinking rather than feeling (T), and on structuring the environment rather than adapting to it (J). The converse would describe the INFP individual.

The MBTI was designed for use with normal populations and is a nonjudgemental measure. This quality facilitates sharing of the information with the respondents. In fact, the MBTI was designed more for the respondent than for the professional (Devito, 1985).

The MBTI consists of 126 items within a forced choice format. Each item has two or three possible responses and generally requires the respondent to select a single response. A prediction ratio, giving the goodness of a response as an indicator of preference, is used to assign scoring rates to individual responses. The size of the prediction ratio determines whether the item receives 1 point, 2 points or is not scored. The prediction ratio is used to score each index except for the TF scale which is scored differently for each sex. Individual questions

deal with only one polarity so that responses within an item reflect two opposing rather than competing choices. This design facilitates normative rather than ipsative scoring.

Reliability. The reliability of the MBTI was established through the use of the split-half procedure on samples of students in National Merit Scholarship finals, students attending Brown University and Massachusetts twelfth graders enrolled in an academic curriculum. The Spearman-Brown prophecy formula was utilized for correlation reliability. Correlation on each of the dimensions, EI, SN, and JP ranged from .80 to .94. The correlation for the TF scale was lower with a range from .44 to .86. Test-retest reliability coefficients for continuous scores on all four dimensions ranged from .69 to .83 and were statistically reliable (Levy, Murphy, & Carlson, 1972). According to Myers (1962) these reliabilities were deemed credible as they represented the upper range of coefficients for self-report instruments of this nature and length. Myers and McCaulley (1985) have presented reliability data from two perspectives in the Manual: A Guide to the Development and Use of the Myers-Briggs Type Indicator. They found that the type remains constant upon readministration and continuous scores are stable. Carskadon (1977), Carlyn (1977), Levy, Murphy,

and Carlson (1972) and Stricker and Ross (1964) have all found the test-retest reliability to be adequate with reliability coefficients ranging from .48 (14 months) to .87 (7 weeks), with the test retest reliability of males on TF being the least stable (Devito, 1985).

Validity. Validity data provided by Myers (1962) included documentation of both concurrent and congruent validity. Instruments used to establish congruent validity included the Gray-Wheelwright psychological Type Questionnaire, Strong Vocational Interest Blank, Edwards Personal Preference Inventory, Allport-Vernon-Lindsey Study of Values and the Personality Inventory. Carskadon (1977) found that those emerging as extroverts on the MBTI exhibited behaviors indicative of extroversion.

The validity of the instrument was criticized by Mendelsohn (1965). He contended that the questions were shallow, one-sided and that the basic assumptions were not supported by evidence. Mendelsohn further questioned whether the scales were dichotomous and if the scales interacted in a complex manner. Mendelsohn (1965) did, however, offer a statement relative to the value of the instrument:

the instrument has considerable potential utility
type scores relate meaningfully to a wide range of
variables, including personality, ability, interest,

values, aptitude and performance measures, academic choice and behavior ratings . . . There are better predictors for a particular task but, few instruments appear to provide as much information as can be derived efficiently from the MBTI. It would seem useful then, for personality research and, given its relationships to measure interest, value, aptitude and achievement for academic counseling. (p.325)

Leader Effectiveness Rating

A seven part, 39 item Likert-type instrument was utilized to measure leader effectiveness (Appendix F). The instrument was constructed by the author utilizing Tucker's (1981) categorical listing of chairperson's activities and responsibilities as a framework (Appendix A). Categories addressed included departmental governance, instruction, faculty affairs, external communication, budget and resources, office management and professional development. For items listed under each of the aforementioned categories, the respondents were instructed to rate their respective chairperson on a continuum of 1 to 7 with 1 being ineffective and 7 being effective. A not applicable response choice was also included and was to be scored only if the activity or responsibility was not assigned to the chairperson. Items included in the instrument were those which were deemed

relevant to dental hygiene administrators and those for which validity was established through field testing.

Validity. Documentation of validity was provided through the administration of the instrument to 63 allied health faculty at three community colleges and 22 nursing faculty from one university. This population was selected for field administration as they were discipline related and similar in size and organizational composition to the population being studied. The instrument was found to be valid by this test population as only nine nonapplicable responses were reported.

Demographic Survey

A demographic survey (Appendix G) which included age, sex, race, level of education, and major, present position, years in present position, other work experience and duration, and a listing of administrative/leadership training was also completed by the respondents. The demographic variables included met the requirements of the study and were found to account for differences in results in similar studies. Peer analysis of the demographic data sheet was performed by doctoral students enrolled in the doctoral seminar and the advanced research class at East Tennessee State University. The instrument was accepted as being valid for the study.

Data Collection Procedures

Population

The population included all program directors and full-time faculty of the 201 accredited dental hygiene programs in the United States. These programs were identified from the September 19, 1988 American Dental Hygienists' Association (ADHA) listing of dental hygiene schools.

Sample Selection

Thirty-two programs (15.9%) were randomly selected from the ADHA listing to participate in the study. The sample was drawn using a table of random numbers which were coordinated with the randomly numbered listing provided by the ADHA.

Procedure

Permission to conduct the study was obtained from the Institutional Review Board of East Tennessee State University. The administrator and designated faculty coordinator from each of the programs selected to participate in the study were contacted by phone to elicit cooperation. Following the phone contact, a letter explaining the purpose of the study was sent to the administrator and faculty coordinator at each participating program (Appendix H). Included under the

same cover were the data collection instruments. Participant directors were requested to complete an LBDQ-Real, an LBDQ-Ideal, the MBTI, and the Demographic Questionnaire. The director was requested to return his/her questionnaires in the prepaid envelope marked A (Administrator). Faculty were requested to complete the MBTI, the LBDQ-Real, the LBDQ-Ideal, the demographic survey and the chairperson effectiveness scale. Faculty were instructed to place his/her completed questionnaires in a business envelope, seal it, and deposit in the prepaid return envelope B (Faculty). Faculty returns were coordinated by a predesignated faculty coordinator.

Anonymity and confidentiality were guaranteed via a coding system. A numerical code designated the program and an alphabetic code distinguished individual faculty and administrators within departments. Follow-up phone calls were made at two and four week intervals to participants who had not returned the questionnaires. LBDQ-Real, The LBDQ-Ideal, and the MBTI were scored by the researcher and data from the demographic survey and the chairperson effectiveness rating were recorded.

Data Analysis Methodology

Hypotheses were stated in the null form for the purpose of statistical testing and the .05 level of significance was established for rejection. Data from the

completed instruments were entered into a personal computer and analyzed as follows:

1. Pearson product moment correlations were calculated between relevant variables.
2. T tests were calculated between the various Consideration/Initiating Structure scores for both administrators and faculty (means); Pearson Correlations were calculated and Ideal/Real scores were compared in the same manner.
3. Cross tabulations of selected variables were computed and Chi Square tests for independence were calculated.
4. Regression analysis was utilized to determine the linear relationship between selected variables.
5. To differentiate between levels of leader behavior, chairpersons were categorized as high, medium or low on each dimension of the LBDQ following a procedure similar to that used by Graen, Dansereau, and Minami (1972). Medium scores were those from $-.5$ standard deviations to $+.5$ standard deviations around the group mean score. High scores were more than $.5$ standard deviations above the group mean, and low scores were more than $.5$ standard deviations below the group mean.
6. Analysis of Variance (ANOVA) and t tests were

calculated between various consideration and initiating structure scores for both administrator and faculty means and between various consideration/initiating structure scores and effectiveness ratings.

Chapter 4

Analysis of Data

The purpose of this study was to identify personality types of dental hygiene administrators and faculty and to determine if relationships exist between leader style, ideologies of leader style, perceived effectiveness and personality type. Demographic variables which had been found to influence the findings of other studies were also examined. Personality type was measured by the Myers-Briggs Type Indicator which yields four dichotomous indices of personality structure: extroversion or introversion (E-I), sensing or intuition (S-N), thinking or feeling (T-F) and judgement or perception (J-P). The administrator's leader style was defined and measured as those behaviors identified by the Leader Behavior Description Questionnaire: consideration and initiation of structure. Administrator and subordinate ideologies of leader style were measured and defined as those behaviors identified by the ideal Leadership Behavior Description Questionnaire: consideration and initiation of structure. Effectiveness was measured and defined as those activities measured by a 39 item Likert-type instrument based on Tucker's (1981) categorical listing of chairperson's activities and responsibilities. The data were analyzed through utilization of Pearson's product moment

correlations to measure the extent to which personality type was related to leader style, perceived leader style, ideologies of leader style, and perceived effectiveness. T tests were utilized to test for the significance of difference between faculty and administrator mean scores on the consideration and initiating structure dimensions of the real and ideal Leadership Behavior Description Questionnaires. Regression analysis was utilized to identify relationships among selected variables. The Chi Square test of independence was employed to determine the magnitude of the relationship or difference among selected variables and their overall significance level. Analysis of variance (ANOVA) was calculated between various consideration and initiating structure scores for both administrator and faculty means. The level of significance to reject the null hypothesis was set at .05.

A description of the sample and analysis of the data are presented in this chapter. Section one contains the description of the sample, section two presents the findings relevant to hypotheses addressing demographic variables among administrators and faculty. The relationship of personality types to leader self-ratings of style and ideal style are presented in the third section, while the fourth section addresses the relationship of personality type to subordinate perception of leader style, ideal leader style, and effectiveness.

The fifth section presents a comparison of administrator and faculty scores on the consideration and initiating structure dimensions of the real and ideal Leadership Behavior Description Questionnaire. The chapter concludes with a presentation of other findings which were not addressed by the hypotheses.

Description of the Sample

The sample included the administrators and faculty of 32 randomly selected dental hygiene programs across the United States. Twenty-three of the administrators (71.9%) responded. One hundred forty-eight faculty were included in the study and responses were received from 96 (64.8%) representing 25 programs (78.1%). In total there were 23 paired responses giving an overall response rate of 71.9 percent.

Among the faculty responding 9 (9.3%) were male, 79 (82%) were female and 8 (8.3%) who failed to report. Of the 23 administrators 6 were male (26%), 16 were female (69.5%) and 1 (4.5%) who failed to report. The racial representation among faculty included 4 blacks (4.1%), 82 caucasians (85.4%), 1 (1%) "other" designation, and 9 (9.3%) who failed to report. Among administrators 2 (86%) were black, 20 (86.9 %) were caucasian, and 1 (4.3 %) who failed to report. The age distribution among faculty and administrator respondents are presented in Table 1.

Table 1
Age Distribution among Faculty
and Administrator Respondents

	Faculty	Percent	Administrator	Percent
29 and under	11	11.5	0	0
30 - 39	38	39.6	8	34.8
40 - 49	29	30.2	6	26.1
50 - 59	7	7.3	8	34.8
60 and over	5	3.1	0	0
Missing cases	8	8.3	1	4.3
Total	96	100.0	23	100.0

The highest degree earned by faculty respondents included 27 (28.1%) bachelor's degrees, 48 (50%) master's degrees, 4 (4.1%) Ed.D. degrees, 6 (6.2%) D.D.S. degrees, and 11 (11.4%) did not report. Highest degrees earned among administrators included 11 (47.8%) master's degrees 4 (17.3%) Ed.D. degrees, 1 Ph.D.(4.3%), 6 (26%) D.D.S. degrees, and 1 (4.3%) failed to report. In addition to degrees earned, 86 of the faculty respondents (91.4 %) had additional training in administration, while all of the administrator respondents had additional administrative course work.

Demographic Variables

There were a number of demographic variables thought to have potential to influence findings. Findings relevant to each of the hypotheses addressing demographic variables are presented in this section.

Null hypothesis 1 stated that there will be no significant difference in mean consideration scores exhibited by female administrators when compared to the mean consideration scores exhibited by male administrators as perceived by faculty. Analysis of data indicated no significant difference. Female administrators were found to have a mean score of 36.42 with a standard deviation of 5.35 while male administrators had a mean score of 40.58 with a standard deviation of 5.61. The t test yielded a t score of 1.56, therefore, the null hypothesis was retained. Data are presented in Table 2.

Table 2
Consideration Scores By Sex
of the Administrator

Sex	N	M	SD	t
Female	15	36.42	5.35	1.56 NS
Male	6	40.58	5.61	(df) = 20

Null Hypothesis 2 stated there will be no significant difference in mean initiating structure scores exhibited by female administrators when compared to mean initiating structure scores of male administrators as perceived by faculty. No significant difference was observed in the findings. The data for female administrators, with LBDQ data reported for 15 of 16 female administrators, revealed a mean score of 19.86 with a standard deviation of 7.78. The mean score for male administrators with LBDQ data reported for each of the 6 male respondents was 22.03 with a standard deviation of 4.39. The t value was .80, therefore; the null hypothesis was retained. Data are presented in Table 3.

Table 3
Initiating Structure Scores by Sex
of the Administrator

Sex	N	M	SD	t
Female	15	19.86	7.78	.80 NS
Male	6	22.03	4.39	(df) = 20

Null Hypothesis 3 stated that there will be no significant difference in the mean effectiveness ratings of female administrators when compared to the mean effectiveness ratings of male administrators as perceived by faculty and measured by the chairperson effectiveness rating. The mean effectiveness rating of female administrators was determined to be 192.81 with a standard deviation of 38.68, and male administrators had a mean score of 223.43 with a standard deviation of 28.80. The calculated t statistic was 1.83, resulting in failure to reject the null hypothesis. Data are presented in Table 4.

Table 4
Effectiveness Ratings by Sex

Sex	N	M	SD	t
Female	13	192.80	38.68	1.83 NS
Male	5	223.43	12.88	(df) = 17

Null hypothesis 4 stated there will be no significant difference in the distribution of personality type among female administrators when compared to the distribution of

personality type among male administrators as measured by the Myers-Briggs Type Indicator. Among female administrators one was an ESTJ, four were ENTJs, one was an ESFJ, one was an ENFJ, one was an ISFP, one was an INFP, two were ISTJs, and one was an ISFJ. The representation of type among male administrators included one ESFJ, two ISTJs, one ISFJ, and one ENTP. There were six missing cases, five among female administrators and one among the males. Analysis of data utilizing the Chi square technique yielded a Chi Square of 8.56 with 8 degrees of freedom. Based on these findings the null hypothesis failed to be rejected. Data are presented in Table 5.

Null hypothesis 5 stated there will be no significant difference in the distribution of personality types among female faculty when compared to the personality types among male faculty as measured by the Myers-Briggs Type Indicator. Analysis of data utilizing the Chi Square procedure yielded a Chi Square score of 16.13, with 13 degrees of freedom. The hypothesis, therefore, failed to be rejected. The frequency distribution among male and female faculty is presented in Table 6.

Null hypothesis 6 stated that the chronological age of the administrator will not account for differences in leader behavior ratings as perceived by faculty and measured by the LBDO - Real. To test the hypothesis a

Table 5
 Frequency Distribution of Personality Type
 among Male and Female Administrators

Personality	Male	Female	Total
ESTJ	0	1	1
ENTJ	0	4	4
ESFJ	1	1	2
ENFJ	0	1	1
ISFP	0	1	1
INFP	0	1	1
ISTJ	2	2	4
ISFJ	1	1	2
ENTP	1	0	1
Total	5	12	17

one-way analysis of variance was computed. This yielded an F ratio of 3.69 which was significant at the .05 level. The mean LBDQ scores for age groups 2 (30 - 39), 3 (40 - 49) and 4 (50 - 59) were 58.42, 52.82 and 61.76 respectively. The results of the Scheffe procedure found Group 4 to be significantly different from groups 2 and 3 at the .05 level. Age groups 1 and 5 were not represented.

Table 6
 Frequency Distribution of Personality Type
 among Male and Female Faculty

Personality	Male	Female	Total
ESTJ	1	16	17
ENTJ	0	3	3
INTP	0	1	1
ESFJ	1	10	11
ENFJ	0	4	4
ISFP	0	5	5
INFP	0	3	3
ESTP	1	2	3
ISTJ	2	12	14
ISFJ	1	9	10
ENTP	0	3	3
ENFP	2	4	6
INTJ	0	2	2
INFP	1	2	3
Total	9	74	83

Null Hypothesis 7 stated that the chronological age of the administrator will not account for a significant

difference in faculty perception of effectiveness as measured by the chairperson effectiveness rating. The data was tested using a one-way analysis of variance. This yielded an F ratio of 1.35 which was not significant at the .05 level; therefore, the null hypothesis failed to be rejected.

Null hypothesis 8 stated that administrators rated as most effective will not have had more administrative training than administrators rated as less effective as perceived by faculty and measured by the chairperson effectiveness rating. To test the hypothesis administrator earned hours of college, and continuing education credit, and non-credit courses, reported on the demographic survey were summed and a regression was computed utilizing total administrative training as the dependent variable. The analysis of data revealed a negative, yet non-significant relationship between administrative training and total effectiveness, with a slope of $-.036$ and a y intercept of $.109$. The t and significant t values were $-.33$ and $-.74$ respectively. The null hypothesis failed to be rejected.

Null hypothesis 9 stated that administrators occupying their positions for a greater length of time will not be rated as more effective than administrators occupying their position a shorter period of time. A plot of years in position with total effectiveness showed no

significant relationship between years in the position and total effectiveness. Results of a regression analysis showed an r of .239, and r square value of .057 and an adjusted r square value of $-.001$; therefore, the null hypothesis was retained.

The Relationship of Personality Type to Self Ratings of Leader Style and Leader Perception of Ideal Style

Null hypothesis 10 stated that there will be no correlation between leader style as measured by the consideration and initiating structure dimensions of the real and ideal Leadership Behavior Description Questionnaires and personality type as measured by the extroversion, introversion, sensing, intuition, thinking, feeling, judging, and perceiving dimensions of the Myers-Briggs Type Indicator. To test the hypothesis, administrator scores from each of the dimensions of the Myers-Briggs Type Indicator and administrator scores from each of the dimensions of the LBDQ-Real and Ideal were used to calculate Pearson Product Moment Correlations. To describe the strength of relationships a scale outlined by Elifson, Runyon and Haber (1982) was employed. The scale is as follows:

1. 0.00 = no association
2. $\pm 0.01 - \pm 0.30$ = a weak relationship
3. $\pm 0.31 - \pm 0.70$ = a moderate relationship

4. $\pm 0.71 - \pm 0.99$ = a strong relationship

5. ± 1.00 = a perfect relationship

Correlations were found to exist between each of the dimensions of the Myers-Briggs Type Indicator and each of the dimensions of the real and ideal Leadership Behavior Description Questionnaire. The strength of the relationships observed between real consideration and real initiating structure and each of the personality dimensions ranged from weakly negative to moderately positive with no personality dimension having a strong relationship with either real consideration or initiating structure. Each of the moderate correlations, however, were found to be significant at the .05 level. The relationships observed between each of the personality dimensions and ideal consideration and ideal initiating structure were all either weakly negative or weakly positive. Data are summarized in Table 7.

The Relationship of Personality Type to Subordinate Perception of Leader Style, Ideal Leader Style, and Effectiveness

Hypothesis 11 stated that there will be no correlation between leader style as perceived by faculty and measured by the consideration and initiating structure dimensions of the real and ideal Leadership Behavior Description Questionnaires and personality type as

Table 7
 Correlations (r) Between Leader Personality
 Dimensions and Self Ratings of
 Real and Ideal Leader Behavior

Personality	Consideration		Initiating Structure	
	Real	Ideal	Real	Ideal
Extroversion	-.038	-.116	-.058	+.157
Introversion	+.217	+.028	-.053	-.017
Sensing	+.343*	+.273	-.070	+.095
Intuition	-.332*	-.222	+.178	-.112
Thinking	-.065	-.177	-.344*	-.268
Feeling	+.136	+.010	+.170	+.263
Judging	+.489*	+.240	-.553*	-.182
Perceiving	-.555*	-.347*	+.569*	+.157

* $p \leq .05$

measured by the extroversion, introversion, sensing, intuition, thinking, feeling, judging, and perceiving dimensions of the Myers-Briggs Type indicator. To test this hypothesis subordinate scores on each of the dimensions of the Myers-Briggs Type Indicator and subordinate scores on each of the dimensions of the LBDQ real and ideal forms were used to calculate Pearson

Product Moment Correlations.

Correlations were found to exist between each of the dimensions of the Myers-Briggs Type Indicator and each of the dimensions of the real and ideal Leadership Behavior Description Questionnaire. The strength of the relationships observed ranged from weakly negative to moderately positive with no personality dimension having a strong relationship with either real or ideal consideration or initiating structure. The majority of the relationships observed were either weakly negative or weakly positive. Moderate negative correlations did, however, exist between intuition ($r = -.332$) and perceiving ($r = -.555$) and real consideration and between real initiating structure and thinking ($r = -.344$) and judging ($r = -.553$). A moderate negative association also existed between ideal consideration and perceiving ($r = -.347$). Moderate positive relationships were observed between real consideration and judging ($r = .489$), as well as between real initiating structure and perceiving ($r = .569$). Among the correlations observed, those between real initiating structure and introversion, thinking and feeling were significant at the .05 level, as were the relationships between ideal consideration and thinking and feeling. Data are summarized in Table 8.

Null Hypothesis 12 stated that there would be no correlation between personality type as measured by the

Table 8
Correlations (r) Between Faculty Personality Type
and Perceptions of Real and Ideal Leader Behavior

Personality	Consideration		Initiating Structure	
	Real	Ideal	Real	Ideal
Extroversion	-.079	+.124	+.168	-.050
Introversion	+.084	-.085	-.232*	+.032
Sensing	-.034	-.016	-.030	-.088
Intuition	+.135	-.073	-.030	+.066
Thinking	-.152	-.285*	+.226*	+.093
Feeling	+.156	+.303*	-.237*	-.152
Judging	-.005	+.075	-.004	-.081
Perceiving	-.002	-.037	+.019	+.047

* $p \leq .05$

extroversion, introversion, sensing, intuition, thinking, feeling, judging and perceiving dimensions of the Myers-Briggs Type Indicator and subordinate perception of effectiveness as measured by the departmental governance, instruction, faculty affairs, student affairs, external communications, budget and resources, office management

and professional development dimensions of the Chairperson Effectiveness Rating. To test the hypothesis, subordinate scores on each of the dimensions of the Myers-Briggs Type Indicator and scores on each of the dimensions of the chairperson effectiveness rating were utilized to calculate Pearson product moment correlations.

Each of the dimensions of the chairperson effectiveness rating was found to be correlated with each of the dimensions of the Myers-Briggs Type Indicator with the strength of the relationships ranging from weakly negative to moderately positive (Tables 9 and 10). The majority of the relationships observed were either weakly positive or weakly negative. There were, however, three moderately positive associations and three moderately negative associations, each of which were found to be significant at the .05 level. Introversion, sensing, and judging were moderately positively correlated with instruction, with correlations of .415, .438 and .311 respectively. Moderate negative correlations were observed between extroversion and instruction ($r = -.381$) and extroversion and budget and resources ($r = -.321$). A moderate negative correlation was also observed between intuition and instruction ($r = -.334$).

An analysis of the data examining the relationship of each of the dimensions of the Myers-Briggs Type Indicator to total effectiveness found two moderately negative

correlations, two moderately positive correlations 3 weak negative correlations and one weak negative correlation. Each of the moderate correlations were significant at the .05 level. No personality dimension was found to have a strong correlation to total effectiveness. Data are summarized in Tables 9 and 10.

Table 9

Correlations (r) Between Faculty Personality Dimensions
E, I, S, and N and Chairperson Effectiveness Ratings

Effectiveness	E	I	S	N
Governance	-.159	+.194	+.191	-.138
Instruction	-.381*	+.415*	+.438*	.334*
Faculty Affairs	-.048	+.067	+.113	-.023
Student Affairs	-.076	+.066	+.178	-.006
Ex. Communication	-.114	+.111	+.097	+.027
Budget & Resources	-.321*	+.254	+.069	+.042
Office Management	-.149	+.173	-.142	+.247
Prof. Development	-.074	+.007	+.060	+.060
Total Effectiveness	-.439*	+.378*	+.248	-.237

* $p \leq .05$

Table 10
Correlations (r) Between Personality Dimensions
T, F, J, and P and Chairperson Effectiveness Ratings

Effectiveness	T	F	J	P
Governance	-.076	+.102	+.172	-.195
Instruction	-.001	+.089	+.311*	-.337
Faculty Affairs	-.067	+.026	+.121	-.145
Student Affairs	-.093	+.103	-.009	+.004
Ex. Communications	-.022	+.027	+.135	-.160
Budget & Resources	+.058	-.118	+.044	-.137
Office Management	-.142	+.052	-.231	+.192
Prof. Development	+.121	-.127	+.068	-.100
Total Effectiveness	+.422*	-.517*	-.046	-.024

* $p \leq .05$

Administrator and Faculty Scores on the Consideration and
Initiating Structure Dimensions of the Real and Ideal
Leadership Behavior Description Questionnaires

Null hypothesis 13 stated that ideal consideration
mean scores reported by faculty will not be significantly
higher than the real consideration mean scores reported

by faculty. Analysis of the data revealed no significant difference between the real and ideal consideration scores reported by faculty as the mean score for real consideration was 37.61 with a standard deviation of 5.62 and the mean ideal consideration score was 41.69 with a standard deviation of 2.22. The t test yielded a t value of 3.75, therefore, the null hypothesis was rejected. Data are presented in Table 11.

Table 11
Ideal and Real Consideration Scores
Reported By Faculty

Variable	N	M	SD	t
Ideal Consideration	21	41.69	2.22	3.75*
Real Consideration	21	37.61	5.62	(df) = 20

* $p \leq .05$

Null hypothesis 14 stated that ideal initiating structure mean scores reported by faculty will not be significantly different than real initiating structure mean scores reported by faculty. Analysis of the data revealed a significant difference in the ideal initiating

structure scores reported by faculty when compared to the real initiating structure scores reported by faculty. The mean ideal initiating structure score reported was 13.55 with a standard deviation of 3.01, while the mean of the real initiating structure scores was 20.48 with a standard deviation of 6.94. The calculated t value was 4.28. The null hypothesis, therefore, was rejected. The data are presented in Table 12.

Table 12
Ideal and Real Initiating Structure
Scores Reported by Faculty

Variables	N	M	SD	t
Ideal Initiating Structure	21	13.55	3.01	4.28*
Real Initiating Structure	21	20.48	6.94	(df) = 20

*p \leq .05

Null hypothesis 15 stated that ideal consideration mean scores reported by administrators will not be significantly different than real consideration mean scores reported by administrators. Analysis of the data

showed no significant difference between the ideal and real consideration scores reported by administrators. The mean ideal consideration score reported was 43.25 with a standard deviation of 2.31, while the real consideration mean was 42.50 with a standard deviation of 3.82. The calculated value of the t statistic was 1.18. The null hypothesis, therefore, failed to be rejected. Data are presented in Table 13.

Table 13
Ideal and Real Consideration Scores
Reported by Administrators

Variables	N	M	SD	t
Ideal Consideration	20	43.25	2.31	1.18 NS
Real Consideration	20	42.50	3.82	(df) = 19

Null hypothesis 16 stated that the ideal initiating structure mean scores reported by administrators will not be significantly different from the real initiating structure mean scores reported by administrators. Analysis of data revealed a significant difference in the ideal and real initiating structure scores reported by

administrators. The mean ideal initiating structure score was 13.20 with a standard deviation of 4.92 while the real initiating structure score was 16.62 with a standard deviation of 6.17. The reported t value was 2.35 resulting in the null hypothesis being rejected. Data are presented in Table 14.

Table 14
Ideal and Real Initiating Scores
Reported by Administrators

Variables	N	M	SD	t
Ideal Initiating Structure	21	13.19	4.93	2.35*
Real Initiating Structure	21	16.62	6.17	(df) = 20

* $p \leq .05$

Null hypothesis 17 stated that administrators rated high in real consideration and low in real initiating structure will not receive higher effectiveness ratings than administrators rated low in real consideration and high in real initiating structure. The results of an

ANOVA calculated between high consideration, low initiating structure and total effectiveness were nonconclusive as only two cases fit the criteria outlined in the procedures. The ANOVA, therefore, could not be calculated. A t test calculating the significance of difference between total effectiveness means for Group 1 (high consideration; low initiating structure) and Group 2 (low consideration; high initiating structure) resulted in a t statistic of 1.28 which was not significant at the .05 level. Data are presented in Table 15.

Table 15

Total Effectiveness Scores of Administrators
Perceived to be High in Consideration
and Low in Initiating Structure and Low in
Consideration and High in Initiating Structure

Groups	N	M	SD	t
1. High Consideration Low Initiating Structure	7	230.31	34.42	1.28 NS
2. Low Consideration High Initiating Structure	4	193.51	63.06	(df) = 10

Null hypothesis 18 stated that administrators rated

low in real consideration and low in real initiating structure will not receive the lowest effectiveness ratings. An ANOVA calculated between low consideration, low initiating structure scores was nonconclusive as only one case fit the criteria outlined in the procedures. The ANOVA, therefore, could not be calculated. Frequency distributions and plots, however, indicated that administrators rated low in real consideration and low in real initiating structure received the lowest effectiveness ratings.

Other Findings

Findings of interest that were not addressed in the hypotheses are those of the relationships between leader personality dimensions and leader style and leader personality dimensions and total effectiveness ratings as perceived by faculty. The majority of the relationships observed were either weakly negative or weakly positive with no strong associations found between any of the dimensions compared (Table 16). Moderate negative correlations were found to exist between intuition ($r = -.368$) and real initiating structure and between feeling ($r = -.409$) and perceiving ($r = -.334$) and total effectiveness. A moderately positive correlation was observed between feeling and real initiating structure ($r = .325$). None of the relationships observed were found

to be significant at the .05 level.

Table 16
 Correlations (r) Between Leader Personality
 Dimensions and Real Consideration, Real
 Initiating Structure Scores and Total
 Effectiveness Ratings Reported by Faculty

Personality	Real Consideration	Real Initiating Structure	Total Effectiveness
Extroversion	+.137	+.048	+.095
Introversion	-.107	-.024	-.160
Sensing	+.270	-.030	+.271
Intuition	-.126	-.368	+.127
Thinking	+.222	-.405	+.282
Feeling	-.115	+.325	-.409
Judging	-.015	-.128	-.253
Perceiving	-.021	+.085	-.340

Chapter 5

Summary, Conclusions, and Recommendations

Summary

The problem of this study was to identify personality types among dental hygiene administrators and faculty and to determine if correlations exist between leader style, ideologies of leader style, perceived effectiveness and personality type. The study also examined the effect of demographic variables on findings. The dimensions of personality investigated were those of the Myers-Briggs Type Indicator: extroversion, introversion, sensing, intuition, thinking, feeling, judging, and perceiving. The leadership behavior dimensions examined in the study were the two dimensions of the real and ideal Leadership Behavior Description Questionnaires: consideration and initiating structure. Effectiveness was measured by a 39 item Likert type instrument based on Tucker's (1981, p. 2, 3) categorical listing of chairperson activities and responsibilities.

The study was conducted on a random sample which included faculty and administrators from 32 dental hygiene programs across the United States. A total of 32 administrators and 148 faculty were surveyed. Responses were received from 23 administrators (71.9 percent) and faculty (64.8 percent). In total there were 23 paired

responses giving an overall response rate of 71.9 percent.

The study focused on five major aspects of the problem:

1. The distribution of personality types among dental hygiene administrators and faculty.
2. The effect of demographic variables on leader behavior ratings and effectiveness scores.
3. The relationship of leader personality to leader style and ideologies of style.
4. The relationship of leader style to leader effectiveness ratings.
5. The relationship of faculty personality to perceived leader style, ideologies of style, and perceived leader effectiveness.

Hypotheses 1 through 9 addressed the effect of demographic variables on findings. The tenth hypothesis focused on the relationship of administrator personality to self ratings of leader style and ideal leader style.

Hypothesis 11 addressed the relationship of faculty personality type to perception of leader style and ideal leader style. The relationship of faculty personality type to perception of effectiveness was the focus of hypothesis 12, and hypotheses 13 through 18 dealt with comparing administrator and faculty scores on the real and ideal Leadership Behavior Description Questionnaires.

Hypotheses were tested in the null format using

Pearson correlations, t tests, Chi Square, analysis of variance, and regression analysis as the methods of analysis. The data were tested at the .05 level of significance.

Findings relevant to each of the hypotheses were as follows:

1. Female administrators were not found to score significantly lower on the consideration dimension of the LBDQ-Real when compared to male administrators; therefore, null hypothesis 1 was retained.

2. No significant difference was observed between mean initiating structure scores exhibited by female administrators when compared to the mean initiating structure scores exhibited by male administrators resulting in retention of null hypothesis 2.

3. Hypothesis 3 examined the relationship of the sex of the administrator to effectiveness scores. The effectiveness ratings of females were not found to be significantly different than the effectiveness ratings of males. The null hypothesis was retained.

4. The distribution of personality types exhibited by male and female administrators were not found to be significantly different as tested by null hypothesis 4. The hypothesis was retained.

5. The distribution of personality types exhibited by male and female faculty were not found to be

significantly different resulting in retention of null hypothesis 5.

6. Hypotheses 6 and 7 addressed the relationship of chronological age to leader behavior ratings and effectiveness scores. Age did account for a significant difference in leader behavior ratings which resulted in rejection of null hypothesis 6. Age did not account for significant difference in effectiveness scores; therefore, null hypothesis 7 was retained.

7. A regression analysis revealed a negative relationship between administrator training and effectiveness scores indicating that as administrative training increased, effectiveness decreased. The null hypothesis which stated that administrators rated as most effective will not have had more administrative training was, therefore, retained.

8. Null hypothesis 9 stated that administrators occupying their position a greater length of time will not be more effective than administrators occupying their position a shorter period of time. This hypothesis was rejected.

9. Personality type was found to be correlated to administrator self ratings of style and to their perceptions of ideal leader style with the strength of the relationships ranging from weakly negative to moderately positive. Each of the moderate correlations were found to

be significant at the .05 level. The null hypothesis was, therefore, rejected.

10. Personality type was found to be correlated to subordinate perception of leader style, ideal leader style and effectiveness, with the strength of the relationships reported ranging from weakly negative to moderately positive. Among the correlations observed, those between real initiating structure and introversion, thinking and feeling were significant at the .05 level, as were the relationships between ideal consideration and thinking and feeling. Relationships significant at the .05 level were also found between instruction and extroversion, introversion, sensing, intuition and judging and between budget and resources and extroversion. Total effectiveness was found to be significantly correlated with extroversion, introversion, thinking and feeling. Null hypotheses 11 and 12 were, therefore, rejected.

11. Null hypothesis 13 stated that the ideal consideration mean scores reported by faculty will not be significantly higher than the real consideration mean scores reported by faculty. The difference between these scores was significant resulting in rejection of the null hypothesis.

12. Null hypothesis 14 stated that ideal initiating structure mean scores reported by faculty will not be significantly higher than real initiating structure mean

scores reported by faculty. As a significant difference was observed between these scores, the null hypothesis was rejected.

13. No significant difference was observed between the ideal consideration mean scores reported by administrators and the real consideration mean scores reported by administrators resulting in failure to reject null hypothesis 15.

14. No significant difference was found between ideal initiating structure mean scores reported by administrators and real initiating structure mean scores reported by administrators resulting in retention of null hypothesis 16.

15. Null hypothesis 17 stated that administrators rated high in real consideration and low in real initiating structure will not receive higher effectiveness ratings than administrators rated low in real consideration and high in real initiating structure. As no significant difference was observed, the null hypothesis was retained.

16. Administrators rated low in both consideration and initiating structure were not found to have the lowest effectiveness ratings, resulting in failure to reject null hypothesis 18.

Conclusions

The conclusions that follow are based upon the findings of this study and the noted limitations. The sample was limited to dental hygiene administrators and faculty; therefore, the conclusions are applicable to that population.

The sex of the administrator did not account for significant differences in either dimension of leader behavior. Effectiveness ratings of administrators were also not affected by their gender. These finding, however, may have been influenced by the limited sample and under-representation of males in the population.

The distribution of personality types between male and female administrators were not found to be significantly different despite the fact that few males were included in the sample. Differences in personality type, therefore, should not have accounted for differences in leader behavior ratings and effectiveness scores among males and females. The sample size, however, did not permit testing for analysis of variance and it may only be speculated that personality type did not influence the results.

Chronological age was not found to have a significant influence on leader effectiveness scores, but age did significantly influence leader behavior ratings. These findings, however, are not conclusive as the survey

utilized table ranges rather than actual chronological age.

Total administrative training measured by college courses and credit and non-credit continuing education courses was found to be negatively correlated with total effectiveness scores. The results imply that as administrative training increases, leader effectiveness decreases, and further that the courses in which dental hygiene administrators have enrolled have been ineffective. Given these results it would be appropriate to examine courses taken and seek alternatives which would enable the dental hygiene administrator to enhance his/her administrative skills.

Length of tenure in the administrative position was not found to significantly influence the total effectiveness rating. This finding was inconsistent with Goral's (1979) study of dental hygiene administrators.

Conclusions regarding the correlational data reported in this study are limited, as correlations only show the strength of relationships. It may be concluded that correlations exist between administrator personality dimensions measured by the Myers-Briggs Type Indicator and administrator self ratings of style and ideal style as measured by the consideration and initiating structure dimensions of the real and ideal Leadership Behavior Description Questionnaires. The strength of the

correlations among the variables compared ranged from weak to moderate across both polarities. Similar conclusions may be applied to the relationship between faculty personality types and their perception of real and ideal consideration and initiating structure scores and chairperson effectiveness ratings. Some of the findings do, however, warrant discussion.

Each of the moderate correlations observed were found to be significant at the .05 level. The relationship between faculty and administrator scores on each of the dimensions of the Myers-Briggs Type Indicator and each of the dimensions of the LBDQ-Ideal was not consistent. For example a weak negative correlation existed between administrator extroversion scores and ideal consideration, while a weak positive correlation existed between faculty extroversion scores and ideal consideration. These findings imply that as administrator scores on the extroversion scale increase, ideal consideration scores decrease; but as faculty scores on the extroversion scale increase, ideal consideration scores show a slight increase. There were, however, some relationships between personality dimensions and scores on the ideal dimensions of the LBDQ which showed consistency in the direction of the relationship for both administrators and faculty. These included negative correlations between thinking, perceiving, and ideal consideration and positive

correlations between feeling and judging and ideal consideration. A consistent negative relationship was also observed between faculty and administrator scores on ideal initiating structure and judging.

The relationships exhibited between faculty and administrator scores on each of the dimensions of the Myers-Briggs Type Indicator and the LBDQ-Real were also inconsistent although some relationships showed the same directional propensity for both administrators and faculty. Consistently negative relationships were found to exist between extroversion, thinking, and perceiving, and real consideration, and introversion, sensing, and judging and real initiating structure. Consistency in positive relationships were exhibited between introversion and feeling and real consideration and perceiving and real initiating structure.

The analysis of the data regarding the relationship of faculty personality dimensions to perceived effectiveness yielded no conclusions other than the associations demonstrated by the various correlations and presented in Chapter 4.

Analysis of the data regarding administrator and faculty scoring of the real and ideal Leadership Behavior Description Questionnaires revealed a significant difference between the real and ideal consideration and initiating structure scores reported by faculty. This

finding indicates that faculty perceive administrators as exhibiting leader behaviors that are unlike their perceptions of ideal leader behavior.

No significant difference was observed between real and ideal consideration scores reported by administrators. Faculty scores on the same dimensions were found not to be consistent with administrator scores indicating that administrators perceive themselves as being closer to ideal than do their faculty.

A significant difference was found to exist between real and ideal initiating structure scores reported by administrators, a finding consistent with the findings of the faculty. As both administrators and faculty perceived ideal initiating structure to be lower than their perception of real initiating structure, it would appear that both administrators and faculty agree that less initiating structure behavior would be preferable.

Analysis of the real LBDQ scores reported by faculty found that leaders rated high in consideration and low initiating structure were not rated significantly higher in effectiveness than administrators rated low in consideration and high in initiating structure. Administrators rated low in both dimensions were not found to have significantly lower effectiveness scores, a finding which was influenced by a limited number of cases. Frequency distributions and plots, among those observed,

however, found that those rated low in both dimensions tended to have the lowest effectiveness ratings.

Recommendations

As a result of the study it is recommended that researchers devote more attention toward the understanding of the relationship between personality and leadership as it relates to both leader style and subordinate perception of leader style and effectiveness. More specifically it is recommended that larger samples representing diverse groups be studied and that efforts be directed toward identifying better methods of assessing and analyzing these relationships. Replication studies are indicated to determine if specific relationships between personality type and leader style and subordinate perception of leader style are consistently evinced. Further study utilizing different instruments or methodology should also be conducted to verify the validity of the findings. Attention should also be directed toward the relationship of administrative training to administrator effectiveness as the findings of this study indicated that as administrative training increased, administrator effectiveness decreased. This relationship might be best examined through another study using a similar sample. Studies among other populations should also be conducted.

BIBLIOGRAPHY

Bibliography

- Adler, A. (1927). The practice and theory of individual psychology. New York: Harcourt.
- Allport, G. W. (1937). Personality: A psychological interpretation. New York: Holt.
- Allport, G. W. (1961). Pattern and growth in personality. New York: Holt, Rinehart and Winston.
- American Dental Association. (1979). Index to dental literature. Chicago: Author.
- American Dental Association. (1980). Index to dental literature. Chicago: Author.
- American Dental Association. (1981). Index to dental literature. Chicago: Author.
- American Dental Association. (1982). Index to dental literature. Chicago: Author.
- American Dental Association. (1983). Index to dental literature. Chicago: Author.
- American Dental Association. (1984). Index to dental literature. Chicago: Author.
- American Dental Association. (1985). Index to dental literature. Chicago: Author.
- American Dental Association. (1986). Index to dental literature. Chicago: Author.
- American Dental Association. (1987). Index to dental literature. Chicago: Author.

- American Dental Association. (1988). Index to dental literature. Chicago: Author.
- American Dental Association. (1989). Index to dental literature. Chicago: Author.
- Astin, A. W., & Scherrei, R. A. (1980). Maximizing leadership effectiveness: Impact of administrative style on faculty and students. San Francisco: Jossey-Bass.
- Bachman, J. G. (1968). Faculty satisfaction and the dean's influence: An organizational study of twelve liberal arts colleges. Journal of Applied Psychology, 52, 55-61.
- Barrett, L. & Connot, R. (1986). Knowing student personality can help school, classroom, activity participation. National Association of Secondary School Principals Bulletin, 70 (487), 39-45.
- Bass, B.M. (1981). Stogdill's handbook of leadership. New York: Free Press.
- Bass, B. M. (1985). Leadership: Good, better, best. Organizational Dynamics, 13, 16-40.
- Bennett, J. (1983). Managing the academic department. New York: American Council on Education: Macmillan.
- Blake, R. R. & Mouton, J. S. (1964). The managerial grid. Austin, TX: Scientific Methods, Inc.

- Borg, W. R. & Gall, M. D. (1983). Educational research: An introduction (4th ed.). New York: Longman.
- Boles, H. W. & Davenport, J. A. (1983). Introduction to educational leadership. Lanham, MD: University Press of America.
- Brann, J. & Emmet, T. A. (1972): The academic department or division chairman: A complex role. Detroit, MI: Balkamp Publishing Co.
- Brawer, F. B. (1968). Personality characteristics of college and university faculty. Washington, DC: American Association of Junior Colleges.
- Brown, W. E. (1981). The present status of United States dental education. Journal of Dental Education, 45, 628-634.
- Bruce, H. W., Jr. (1981). The impact of federal legislation and declining financial resources on dental education. Journal of Dental Education, 45, 646-651.
- Burns, J.M. (1978). Leadership. New York: Harper and Row.
- Carlyn, M. (1977). An assessment of the Myers-Briggs Type Indicator. Journal of Personality Assessment, 41, 461-473.

- Carskadon, T. G. (1977). Test-retest reliabilities of continuous scores on the Myers-Briggs Type Indicator. Psychological Reports, 41, 1011-1012.
- Carskadon, T. G. (1979). Behavioral differences between extroverts and introverts as measured by the Myers-Briggs Type Indicator. Research in Psychological Type, 2, 78-82.
- Cattell, R. B. (1947). Confirmation and clarification of primary personality factors. Psychometrika, 12, 197-220.
- Cawelti, G. (1979). Which leadership style --- from the head or from the heart? Educational Leadership, 36, 394-402.
- Cheit, E. F. (1971). The new depression in higher education. San Francisco: Jossey-Bass.
- Coan, R. R. (1984). Personality types. In Raymond J. Corsini (Ed.), Encyclopedia of Psychology, 3, 23-26, New York: John Wiley & Son.
- Devito, A. J. (1985). Test reviews: Myers-Briggs Type Indicator. In J. V. Mitchell, Jr. (Ed.). The ninth mental measurement yearbook (pp. 1029-1032). Lincoln: University of Nebraska Press.
- Dill, D. D. (1984). The nature of administrative behavior in higher education. Educational Administrative Quarterly, 10, 72-90.

- DiMarco, N. & Pearlmutter, K. (1976). Impact of class environment on Machiavellianism and leadership, interpersonal need, and life-style orientation of dental students. Journal of Dental Education, 40, 340-344.
- Dipboye, R. L. (1978). Test reviews: Leader Behavior Description Questionnaire. In O. K. Buros (Ed.), The eighth mental measurements yearbook (pp. 1746-1750). Highland Park, NJ: Gryphon Press.
- Draffin, W. C. (1981). The college and its individuals must demonstrate leadership. Journal of American College of Dentistry, 48, 13.
- Drucker, P. (1973). Management. New York: Harper Row.
- Elifson, K. W., Runyon, R. P. & Haber, A. (1982). Fundamentals of social statistics. New York: Random House.
- Eysenck, H.J. (1970). The structure of human personality. (3rd ed.). London: Methuen.
- Fiedler, F. E. (1967). A theory of leadership effectiveness. New York: McGraw-Hill.
- Fiedler, F. E. (1976). A theory of leadership effectiveness. New York: McGraw-Hill.
- Fleishman, E. A. (1973). Twenty years of consideration and structure. In Fleishman, E. A. & Hunt, J. G. (Eds.), Current developments in the study of leadership. Carbondale: Southern Illinois Press.

- Fleishman, E. A., Harris, E. F. & Burt, H. E. (1956).
Leadership and supervision in industry. Columbus:
The Ohio State University, Bureau of Educational
Research Monograph No. 33.
- French, J. R. P., Jr., & Raven, B. (1968). The bases of
social power. In D. Cartwright & A. Zander (Eds.),
Group dynamics: Research and theory. (3rd ed.) (pp.
607-623). New York: Harper & Row.
- Freud, S. (1957). The ego and the id. (J. Riviere
trans.). London: Hogarth. (Originally published,
1927).
- Fromm, E. (1941). Escape from freedom. New York:
Rinehart.
- Galton, F. (1879). Psychometric experiments. Brain,
1879-1880, 2, 149-162.
- Galton, F. (1883). Inquiries into human faculty. New
York: Macmillan & Co.
- Getzels, J. W., & Guba, E. G. (1957). Social behavior
and administrative process. The School Review, 65,
423-441.
- Goldstein, K. (1940). Human nature in the light of
psychopathology. Cambridge: Harvard University
Press.
- Goral, V. (1979). The leadership behavior of dental
hygiene administrators. Educational Directions, 4,
5-12.

- Graen, G., Dansereau, F., & Minami, T. (1972). Dysfunctional leadership styles. Organizational Behavior and Human Performance, 7, 216-213.
- Gray, R. M., Moody, P. M., & Newman, W. R. (1965). An analysis of physicians' attitudes before and after entering medical practice. Journal of Medical Education, 40, 760-766.
- Greene, C. N. (1974). A longitudinal study of relationships among leader behavior and subordinate performance and satisfaction. Academy of Management Proceedings.
- Groner, N. E. (1978). Leadership situations in academic departments: Relations among measures of situational favorableness and control. Research in Higher Education, 8, 125-145.
- Guilford, J. P. (1954). Psychometric methods, (2nd ed.). New York: McGraw-Hill.
- Halpin, A. W. (1954). The leadership behavior and combat performance of airplane commanders. Journal of Abnormal & Social Psychology, 49, 19-22.
- Halpin, A. W. (1966). Theory and research in administration. New York: Macmillan.
- Halpin, A. W., & Winer, B. J. (1952). The leadership behavior of the airplane commander. Columbus: The Ohio State Research Foundation.

- Halpin, A. W., & Winer, B. J. (1957). A factorial study of the leadership behavior description questionnaire. In R. M. Stogdill & A. E. Coons (Eds.), Leader behavior: Its description and measurement. Columbus: Bureau of Business Research, Ohio State University.
- Heist, P. (1960). Personality characteristics of dental students. Educational Record, 41, 240-252.
- Hemphill, J. K. (1954). A proposed theory of leadership in small groups, Second preliminary report. Columbus: Personnel Research Board, Ohio State University.
- Hemphill, J. K. (1955). Leadership behavior associated with the administrative reputations of college departments. Journal of Educational Psychology, 46, 385-401.
- Hemphill, J. K. & Coons, A. E. (1957). Development of the Leader Behavior Description Questionnaire. In R. M. Stogdill & A. E. Coons (Eds.), Leader behavior: Its description and measurement. Columbus: Ohio State University.
- Henjum, A. E. (1984). Recognizing personality differences among teachers can help supervisors. National Association of Secondary School Principal Bulletin, 68(469), 50-55.

- Henry, D. D. (1975). Challenges past, challenges present: An analysis of American higher education since 1930. San Francisco: Jossey-Bass.
- Hersey, P. & Blanchard, K. H. (1969). Life cycle theory of leadership. Training and Development Journal, 23, 26-34.
- Hersey, P., & Blanchard, K. H. (1982). Management of organizational behavior: Utilizing human resources. Englewood Cliffs, NJ: Prentice-Hall.
- Hitt, M. A., Middlemist, R. D., & Mathis, R. L. (1986). Management: Concepts and effective practice (2nd ed.). Saint Paul, MN: West.
- Horney, K. (1950). Neurosis and human growth. New York: Norton.
- House, R. J. (1973). A path goal theory of leader effectiveness. In E. A. Fleishman & J. G. Hunt (Eds.), Current developments in the study of leadership (pp. 141-177). Carbondale: Southern Illinois University Press.
- House, R. J., & Dressler, G. (1974). The path goal theory of leadership: Some post hoc and priori tests. In J. G. Hunt & L. L. Larson (Eds.), Contingency approaches to leadership. Carbondale: Southern Illinois Press.

- House, R. J., & Mitchell, T. R. (1974). Path-goal theory and leadership. Journal of Contemporary Business, 3, 81-97.
- Hoy, W. K. & Miskel, G. C. (1987). Educational administration: Theory research and practice. (3rd ed.). New York: Random House.
- Hull, C. L. (1952). A behavior system. New Haven: Yale University Press.
- Immegart, G. L. (1988). Leadership and leader behavior. In N.J. Boyan (Ed.), Handbook of research on educational administration. New York: Longman.
- Jung, C. G. (1923) Psychological types. London: Routledge Kegan Paul, LTD.
- Kanter, R. M. (1983). The change masters: Innovation for productivity in the American corporation. New York: Simon & Schuster.
- Katz, R. L. (1974). Skills of an effective administrator. Harvard Business Review, 52, 90-102.
- Kerr, S., Schriesheim, C. A., Murphy, C. J., & Stogdill, R. M. (1974). Toward a contingency theory of leadership based upon the consideration and initiating structure literature. Organizational Behavior and Human Performance, 12, 62-82.

- Knight, W. H. & Holen, M. C. (1985). Leadership and perceived effectiveness of department chairpersons. Journal of Higher Education, 56, 677-690.
- Kretschmer, E. (1925). Physique and character. New York: Harcourt Brace.
- LaPierre, R. T. (1938). Collective behavior. New York: McGraw-Hill.
- Levy, N., Murphy, C., Jr., & Carlson, R. (1972). Personality types among Negro college students. Educational and Psychological Measurement, 32, 641-653.
- Lewin, K. (1935). A dynamic theory of personality. New York: McGraw-Hill.
- Likert, R. (1961). New patterns of management and value. New York: McGraw-Hill.
- Likert, R. (1967). The human organization: Its management and value. New York: McGraw-Hill.
- Lippitt, R., & White, R. K. (1943). The "social" of children's groups. In Barker, R. G., Kounin, J. S., & Wright, H. F. Child behavior and development. New York: McGraw-Hill.
- Mann, W. V., Jr. (1980). Whatever happened to leadership? Journal of Dental Education, 44, 8-9.
- Maslow, A. H. (1954). A theory of human motivation. Psychological Review, 50, 370-396.

- Maslow, A. H. (1965). Eupsychian Management. Homewood IL: Irwin.
- Mayhew, L. B. (1979). Surviving in the eighties: Strategies and procedures for solving fiscal and enrollment problems. San Francisco: Jossey-Bass.
- McCarthy, M. J. (1972). Correlates of effectiveness among academic department heads. Doctoral dissertation, Kansas State University. Dissertation Abstracts International, 33, 3209A.
- McClelland, D. C. (1975). Power: The inner experience. New York: Irvington.
- McDaniel, S. P. , Siler, W. M. & Isenberg, B. P. (1985). Analysis of personality traits of the contemporary dental student. Journal of Dental Education, 49, 579-583.
- McDaniel, S. P., Siler, W. M. & Isenberg, B. P. (1988). A comparison of personality variables and values among dental students, practitioners and faculty. Journal of Dental Education, 52, 156-159.
- McGregor, D. (1960). The human side of enterprise. New York: McGraw-Hill.
- McKeachie, W. J. (1968). Memo to the new department chairmen. Educational Record, 49, 221-227.
- Mendelsohn, G. A. (1965). Test Reviews: Myers-Briggs Type Indicator. In O. K. Buros (Ed.). The sixth mental measurement yearbook, 321-325.

- Miller, N. E. (1951). Learnable drives and rewards. In S. Stevens (Ed.), Handbook of experimental psychology. New York: Wiley.
- Moody, P. M., VanTassell, C., & Cash, D. M. (1974). Cynicism, humanitarianism, and dental career development. Journal of Dental Education. 38, 645-649.
- Murphy, G. (1947). Personality: A biosocial approach to origins and structure. New York: Harper.
- Murray, H. A. (1938). Explorations in personality. New York: Oxford University Press.
- Myers, I. B. (1962). Manual: The Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press.
- Myers, I. B. (1973). The Myers-Briggs Type Indicator. Princeton: Educational Testing Service.
- Myers, I. B. (1983) Manual: The Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press.
- Myers, I. B. , & McCaulley, M. H. (1985). Manual: A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press.
- Myers, R. B. (1954). The development and implications of a conception of leadership for leadership education. Dissertaton Abstracts, 14, 782.

- Peterson, M. W. (1974). Organization and administration in higher education: Sociological and social-psychological perspectives. In F. Kerlinger (ed.), Review of Research on Education, II, Itasca, IL: Peacock.
- Peterson, M. W., & Mets, L. A. (1987). Key resources on higher education governance, management, and leadership. San Francisco: Josey-Bass.
- Pfeffer, J. (1981) Power in organizations. Marshfield, MA: Pitman.
- Reilly, R. R., Yuffit, R. I. & Mattson, D. E. (1965). The dental student at the University of Illinois. Journal of Dental Education, 29, 162-174.
- Richards, M. D., & Greenlaw, P. S. (1972). Management decision making. Homewood IL: Richard D. Irwin.
- Roach, R. H. (1976). The academic department chairperson: Functions and responsibilities. Educational Record, 57, 13-23.
- Rogers, C. R. (1951). Client centered therapy; its current practice, implications and theory. Boston: Houghton Mifflin.
- Rogers, D. E. (1979). Forces affecting dental education. Journal of Dental Education, 43, 490-493.

- Rosen, N., Billings, R., & Turney, J. (1976). The emergence and allocation of leadership resources over time in a technical organization. Academy of Management Journal, 19, 165-183.
- Rosenberg, J. L. (1965). Attitude changes in dental and medical students during professional education. Journal of Dental Education, 29, 162-174.
- Schriesheim, C. A. , House, R. J. , & Kerr, S. (1976). Leader initiating structure: A reconciliation of discrepant research results and some empirical tests. Organizational Behavior and Human Performance, 15, 297-321.
- Schriesheim, C. A., & Kerr, S. (1974). Psychometric properties of the Ohio State leadership scales. Psychological Bulletin, 81, 756-765.
- Schriesheim, C. A., & Stogdill, R. M. (1975). Differences in factor structure across the three versions of the Ohio State leadership scales. Personnel Psychology, 28, 189-206.
- Seeman, M. A. (1957). A comparison of general and specific leader behavior descriptions. In Stogdill, R. M. & Coons, A. E. (Eds.), Leader behavior: Its description and measurement. Columbus: Bureau of Business Research.

- Sergiovanni, T. J. (1979). Is leadership the next great training robbery? Educational Leadership, 36, 388-394.
- Sheldon, W. H. (1942). The varieties of temperament: A psychology of constitutional differences. New York: Harper.
- Silberman, S. L. (1976). Standardization of value profiles of dental students and dental faculty. Journal of Dental Research, 55, 939-50.
- Skipper, C.E. (1976). Personal characteristics of effective and ineffective university leaders. College and University, 51, 138-141.
- Skipper, C. E. (1977). Administrative skills of effective and ineffective university leaders. College and University, 52, 276-279.
- Skipper, C. E. (1978). Factor analysis of university leader's behavior. College and University, 53, 330-334.
- Steinberg, D. N. (1973). Change in attitudes of dental students during their professional education. Journal of Dental Education, 37, 36-41.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. Journal of Psychology, 25, 35-71.
- Stogdill, R. M. (1950). Leadership, membership and organization. Psychology Bulletin, 47, 1-14.

- Stogdill, R. M. (1963). Manual for the Leader Behavior Description Questionnaire -- Form XII. Columbus: Ohio State University, Bureau of Business Research.
- Stogdill, R. M. (1970). Trait of leadership a follow-up study. In Bernard M. Bass (ed.), Stogdill's handbook of leadership. New York: Free Press, 1981.
- Stogdill, R. M. (1974). Handbook of leadership. New York: The Free Press.
- Stogdill, R. M. (1977). Leadership abstracts and bibliography 1904 to 1974. Columbus: Ohio State University, College of Administrative Science.
- Stricker, L. J., & Ross, J. (1964). Some correlates of Jungian personality inventory. Psychological Reports, 14, 623-643.
- Sullivan, H. S. (1923). The interpersonal theory of psychiatry. New York: Norton.
- Taylor, A. L. (1982). Decision-process behaviors of academic managers. Research in Higher Education, 16, 156-173.
- Taylor, M., Crook, R., & Dropkin, S. (1961). Assessing emerging leadership behavior in small discussion groups. Journal of Educational Psychology, 52, 12-18.
- Terman, L. M. (1904). A preliminary study of the psychology and pedagogy of leadership. Pedagogical Seminary, 11, 413-451.

- Tucker, A. (1981). Chairing the academic department: Leadership among peers. Washington, DC: American Council on Education.
- Vroom, V. H. (1983). Leaders and leadership in academe. Review of Higher Education, 6, 367-386.
- Vroom, V. H. & Yetton, P. (1973). Leadership and decision making. Pittsburgh: University of Pittsburgh Press.
- Walker, J. D. (1971). Favorable and unfavorable behaviors of dental faculty as evaluated by dental students. Journal of Dental Education, 35, 523-531.
- Weber, M. (1922). The three types of legitimate rule. In Preussische Jahrbucher. (Republished in Etzioni (Ed.), Complex organizations: a sociological reader. New York: Holt, Rinehart & Winston, 1961).
- Wiggam, A. E. (1931). What the scientists are doing in personnel research. Personnel Journal, 9, 392-400.
- Woods, F. A. (1913). Heredity and the hall of fame. Popular Science Monthly, 82, 445-452.
- Yukyl, G. A. (1981). Leadership in organizations. Englewood Cliffs, NJ: Prentice Hall.

APPENDICES

APPENDIX A

PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

App A 130-133
App B 135-138
App C 140-143
App D 145-146
App E 148-159

U·M·I

APPENDIX B

APPENDIX C

APPENDIX D

APPENDIX E

APPENDIX F

CHAIRPERSON EFFECTIVENESS RATING

Please provide your perception of your department chairperson's effectiveness in each of the activities listed below by circling the response that is most appropriate.

Scale: 1 = ineffective
 7 = effective
 NA = score as NA only if the activity is not assigned to the chairperson.

Departmental Governance

Conducting departmental meetings	1	2	3	4	5	6	7	NA
Establishing departmental committee	1	2	3	4	5	6	7	NA
Use of committees	1	2	3	4	5	6	7	NA
Development of long range plans.	1	2	3	4	5	6	7	NA
Implementation of plans, programs and policies	1	2	3	4	5	6	7	NA
Preparation of accreditation documents	1	2	3	4	5	6	7	NA
Serving as an advocate for the department	1	2	3	4	5	6	7	NA
Delegation of administrative responsibility	1	2	3	4	5	6	7	NA
Encouraging faculty members to communicate ideas to improve the department	1	2	3	4	5	6	7	NA

Instruction

Scheduling classes	1	2	3	4	5	6	7	NA
Supervision of off campus curriculum	1	2	3	4	5	6	7	NA
Updating department curriculum	1	2	3	4	5	6	7	NA

Faculty Affairs

Recruitment and selection of faculty members	1	2	3	4	5	6	7	NA
Assignment of faculty activities including teaching, research and committee activities	1	2	3	4	5	6	7	NA
Evaluating faculty performances.	1	2	3	4	5	6	7	NA
Dealing with unsatisfactory faculty and staff performances	1	2	3	4	5	6	7	NA
Keeping faculty informed of department, college and institutional activities	1	2	3	4	5	6	7	NA
Maintaining morale	1	2	3	4	5	6	7	NA
Preventing conflict among faculty	1	2	3	4	5	6	7	NA
Encouraging faculty participation	1	2	3	4	5	6	7	NA

Student Affairs

Recruitment and selection of students	1	2	3	4	5	6	7	NA
Student advisement	1	2	3	4	5	6	7	NA

External Communication

Communication of departmental needs to upper-level administrators	1	2	3	4	5	6	7	NA
Improving/maintaining the department's image	1	2	3	4	5	6	7	NA
Coordination of activities with outside groups	1	2	3	4	5	6	7	NA
Processing department correspondence	1	2	3	4	5	6	7	NA
Maintaining liaison with external budget	1	2	3	4	5	6	7	NA

Budget and Resources

Preparation of departmental budget . . .	1	2	3	4	5	6	7	NA
Prioritizing use of travel funds . . .	1	2	3	4	5	6	7	NA
Securing grants and other outside funds	1	2	3	4	5	6	7	NA
Encouragement of faculty to submit grant proposals	1	2	3	4	5	6	7	NA
Preparation of annual report	1	2	3	4	5	6	7	NA

Office Management

Management of department equipment and facilities including inventory . . .	1	2	3	4	5	6	7	NA
Supervision and evaluation of clerical and technical staff	1	2	3	4	5	6	7	NA
Maintenance of essential department records	1	2	3	4	5	6	7	NA

Professional Development

Fostering the development of each faculty member's interests and talents	1	2	3	4	5	6	7	NA
Fostering good teaching in the department	1	2	3	4	5	6	7	NA
Promotion of faculty research and publication	1	2	3	4	5	6	7	NA
Encouragement of faculty to participate in regional and national professional meetings	1	2	3	4	5	6	7	NA

APPENDIX G

APPENDIX H

Route 13, Box 269
Gray, Tennessee 37615
September 8, 1989

Dear,

As a fellow dental hygiene educator and doctoral candidate, I am involved in conducting research in preparation for my dissertation. The focus of the study is to determine the effects of personality types on leader behavior and effectiveness ratings among dental hygiene administrators.

Your dental hygiene program was randomly selected to participate in this study. For the results to be valid requires your participation as well as the participation of your full-time faculty. I have identified a contact person on your faculty, through whom faculty participation will be requested.

Please respond to each of the enclosed questionnaires as directed and return them at your earliest convenience in the prepaid, self-addressed envelope. Your anonymity and confidentiality is assured. The coding system has been used to correlate responses from within individual departments and to contact non-respondents.

As only fifteen percent of the dental hygiene programs in the United States were selected to participate in this study, your response is most important to the outcome of this research.

Each participating program will receive a copy of the results of this research upon project completion. Additional copies will be made available upon request.

I realize there are heavy demands on your time and I am most appreciative of your participation in this project. Should you have any questions feel free to contact me at any time.

Sincerely,

Susan J. Willette

Route 13, Box 269
Gray, Tennessee 37615
September 8, 1989

Dear,

As a fellow dental hygiene educator and a doctoral candidate, I am involved in conducting research in preparation for my dissertation. The focus of the study is to determine effects of personality types on leader behavior and effectiveness ratings among dental hygiene administrators.

Your dental hygiene program was randomly selected to participate in the study. As the design of the study requires full-time faculty to describe your leader's style and rate his/her effectiveness, I am eliciting your cooperation in serving as the faculty coordinator for your program. As the coordinator your role would be to distribute the enclosed questionnaires to each of the full-time faculty in your program and request that they privately respond as directed. Upon completion of the questionnaires, faculty should be instructed to seal their questionnaires in a business envelope (enclosed) and to deposit them in the prepaid, self addressed envelope which you will retain. When all those who intend to respond have responded please mail the return envelope to me.

Faculty should be informed that anonymity and confidentiality is assured. The coding system has been used to correlate responses within departments and to contact non-respondents. Individual faculty can not be identified by the coding system.

As only 15 percent of the dental hygiene programs in the United States were selected to participate in this study, your response and the response of your colleagues is detrimental to the outcome of this research.

Each participating program will receive a copy of the results upon project completion. Additional copies will be made available upon request.

I realize there are heavy demands on your time and I am most appreciative of your participation and service in acting as faculty coordinator. Should you have any questions feel free to contact me at any time at 615-929-4493.

Sincerely,

Susan J. Willette

VITA

VITA

NAME: Susan J. Willette

DATE OF BIRTH: February 6, 1951

PLACE OF BIRTH: Saranac Lake, New York

EDUCATION: University of Bridgeport
Bridgeport, CT
M.S. Instructional
Media/Curriculum Design 1974

Fones School of Dental Hygiene
University of Bridgeport
Bridgeport, CT
B. S. Dental Hygiene Education

Externship Yale New Haven
Hospital
Dental Department
New Haven, CT 1972-1973

S.U.N.Y. Brockport
Brockport, NY
Permanent Teaching Certification
1971

Hudson Valley Community College
Troy, NY
A.A.S. Dental Hygiene 1971

POST DEGREE TRAINING: University of Pennsylvania
School of Dental Medicine
EFDA faculty Institute
Periodontics/Anesthesia
May 1979 - July 1979
EFDA Certification

ACADEMIC APPOINTMENTS: East Tennessee State university
Department of Dental Hygiene
Assistant Professor 9/75-8/84
Associate Professor 9/84-present

Fones School of Dental Hygiene
University of Bridgeport
Instructor 9/73-9/75
Part-time instructor 9/72-6/72

Enlarged City School District of
Troy, NY
Dental Hygiene Teacher 9/71-6/72

**CERTIFICATION AND
LICENSURE:**

Dental Hygiene Licensure
 1. Tennessee 1976-present
 2. Connecticut 1973-1982
 (presently inactive status)
 3. New York 1971-1972)
 (presently inactive status)

EFDA Certification 1979-present

Permanent Teaching Certification
 New York 1971

HONORS AND AWARDS:

Phi Kappa Phi
 Kappa Delta Pi
 Tennessee Dental Hygiene
 Association Educator of the Year
 1979

Outstanding Young Women of the
 Year 1978

Clarissa S. D'Hont Memorial Award
 for excellence in dental hygiene
 education 1971

**PROFESSIONAL
AFFILIATIONS:**

American Dental Hygienists'
 Association 1971-present
 Instructional Materials
 Chairperson
 1973-1975

American Association of Dental
 Schools 1975-present

Tennessee Dental Hygienists'
 Association 1976-present

First District Dental Hygienists'
 Association 1976-present
 Continuing Education Chairperson
 1985-1988
 Ways & Means Chairperson 1989

Connecticut Dental Hygiene
 Association 1973-1975

Bridgeport Dental Hygiene
Association 1973-1975

New York Dental Hygiene
Association 1971-1972
Alternate Delegate

Capital District Dental Hygiene
Association 1971-1972

Phi Delta Kappa 1989

Tri Cities Clinical Oncology
Group 1981-present

International Union of Health
Education 1978-present

SCHOLARLY ACTIVITY:

McMillan, M.O. & Willette S. J.
(1988). Aseptic technique: A
procedure for preventing disease
transmission in the practice
environment. ASHA 30, 35-37.

Willette, S. J. & Gergel, J. M.
(1985). Enhancing the quality of
clinical performance: A
systematic approach. Journal of
Dental Education 49, 57.

Willette, S.J. (1985). Oral
treatment and preventive
procedures for the immuno and
myelosuppressed patient: A
preliminary study. Dental Health
Journal of the British Dental
Hygiene Association.

Willette, S. J. & Gergel, J. M.
(1986). E.T.S.U. Dental Hygiene
Clinical Handbook.

Yudkowsky, E. B. & Willette, S. J.
(1987). Selection and
Utilization of Dental Services in
Robert D. Patton, ed. Family
Health and human relations.
Lexington, MA: Ginn Publishing
Co.

Willette, S. J. & Gergel J. M. (1985). Enhancing the quality of clinical performance: a systematic approach. American Association of Dental Schools Annual Session, Las Vegas, Nevada March, 1985.

Willette, S. J. (1983). The role of the dental hygienist as an integral member of the Oncology Team. International Symposium on Dental Hygiene. Philadelphia, PA.

Ketron, F. R. & Willette, S. J. (1983). The effect of state legislation on dental hygiene education. American association of dental school annual session. Cincinnati, OH.

Willette, Susan J. (1982). A training program for hospital and visiting oral health care personnel. 11th International Conference on health education. Hobart, Tasmania, Australia.

Willette, S. J. (1973). Dental Hygiene on the continuing care unit Yale New Haven Hospital. International Symposium on Dental Hygiene, Amsterdam Holland.