PERCEPTIONS OF LEADERSHIP AMONG PREPROFESSIONALS IN DIETETIC PROGRAMS

By

BARRY ROY HERMANN

Bachelor of Science in Home Economics

New Mexico State University

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CHAPTER I

INTRODUCTION

Estimates made by the Department of Labor Bureau of Labor Statistics foresee the demand for competent dietitians to increase faster than the average for all occupations in the 1980s. The 1981 American Dietetic Association (ADA) membership census revealed a 43 percent growth in jobs for dietitians to 1990 (1). Currently, there are approximately 25,000 administrative or management dietitians in this country (2).

The labor force is extremely different than it was back in the 1960s and even in the early 1970s. Today's labor force is highly educated and more mobile; more teenagers have entered the work force and elderly people are coming back into the labor force or staying in the labor force and working longer before retiring and more women have entered the labor force. What leadership characteristics worked before are becoming outdated and newer ones have developed. A national stress survey results indicated that stress is very high in health care positions; this may have a significant relationship or impact upon leadership style. The above mentioned factors have changed previously employed leadership characteristics to newer styles which are able to handle the changes that the labor force has undergone within the last decade.

At the entry level to the dietetic profession, the primary responsibility of the administrative dietitian is to utilize technical skills competently within an established frame of reference of policies and standard operating procedures. The dietitian should be well versed about current theories of motivation and should utilize this knowledge in the further development of human skills. Because the entry level of management provides the greatest number of human interactions, there is unlimited opportunity to test human skills and with proper counseling, to improve these skills. The entry-level dietitian in foodservice management should also have an understanding of the conceptual skills required at the high levels of management and should be given the encouragement and opportunity to develop competence in these skills (3).

The Standards of Education (ADA, 1985) are now available for dietetic programs to follow. Within these standards are core knowledge requirements (24 competency statements) and core performance requirements (20 competency statements) for entry-level dietitians. To ensure the leadership styles and abilities of dietetic students are developed, special emphasis must be placed on the core knowledge requirements and performance requirements that pertains to the management aspect of dietitians. These are:

Core Knowledge Requirements for Entry-Level Dietitians

1. Knows principles of menu planning for optimal nutrition of individuals and groups in health and disease.

2. Knows principles of effective communication and documentation.

3. Knows use of computers for data processing and information management in dietetics.

4. Knows techniques of interviewing and counseling.

5. Knows principles of organization and management.

6. Knows fundamentals of human relations and group dynamics.

7. Knows fundamentals and techniques of financial management.

8. Knows principles and techniques of human resource management.

9. Knows fundamentals of quality assurance.

10. Knows the principles of procurement, food production, distribution and service.

11. Knows fundamentals of the political and legislative process.

12. Knows laws, regulations, and standards affecting dietetic practice.

13. Knows fundamentals of merchandising and promoting food and nutrition services.

Core Performance Requirements for Entry-Level Dietitians

1. Assures that foodservice operations meet the food and nutrition needs of clients served and target markets.

2. Utilizes computer and other technology in the practice of dietetics.

3. Integrates food and nutrition services in the health care delivery system.

4. Promotes positive relationships with others who impact on dietetic service.

5. Participates in the management of cost effective nutrition care systems.

6. Utilizes menu as the focal point for control of the foodservice system.

7. Participates in the management of foodservice systems, including procurement, food production, distribution, and service.

8. Participates in the management of human, financial, material, physical, and operational resources.

9. Participates in the management of a Quality Assurance (QA) Program.

10. Recognizes the impact of political, legislative, and economic factors on dietetic practice.

11. Utilizes effective communication skills in the practice of dietetics.

12. Engages in a program of self-development and continuing education.

13. Complies with the Standards of Professional Responsibility and Standards of Practice for the Profession of Dietetics.

Purpose and Objectives

The purpose of this study is to identify the perceived leadership subscale scores of dietetic interns and CUP students as they are proceeding through a dietetic internship or CUP program.

The objectives are:

1. To determine the relationship between the perceived leadership subscale* scores and selected characteristics of the dietetic interns and CUP students.

2. To determine if the perceived leadership subscale* scores are affected by program characteristics and location of dietetic internship and CUP.

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*Leadership Subscales = Representation, Demand Reconciliation, Tolerance of Uncertainty, Persuasiveness, Initiation of Structure, Tolerance of Freedom, Role Assumption, Consideration, Production Emphasis, Predictive Accuracy, Integration and Superior Orientation.

Hypotheses

$H_0$1: There will be no difference in response patterns to each of the 12 leadership subscales scores between dietetic interns and CUP students based on selected personal variables:

a) Age

b) Sex

c) Marital status

d) Race/ethnic class

e) Area of personal interest

f) Experience in management

$H_0$2: There will be no difference in response patterns to each of the 12 leadership subscales scores between dietetic interns and CUP students based on selected institutional variables:

a) Type of program (internship vs. CUP)

b) Type of emphasis in each program (internship vs. CUP)

c) Location of internship or CUP (ADA area classification)

d) Number of students in the program (internship vs. CUP).

Assumptions

The assumptions made pertaining to this study include the following:

1. That the dietetic internship and CUP directors only administered the questionnaire to students and interns who were interested in a management or generalist emphasis in their respective internship or CUP.

2. That the dietetic interns and CUP students answered the questionnaire objectively "what is" and not "what should be."

Limitations

The specific limitations of the study include the following:

1. Dietetic internships and CUPs begin at different times of the year.

2. This study only included dietetic interns and CUP students who were in either a management or generalist internship or CUP in 1986.

3. Some of the internships and CUPs were in the process of closing at the end of their spring or summer commencement.

Definitions

The following definitions will pertain to this study.

1. Dietitian (A.D.A.): A nutritional specialist educated and trained for the nutritional care of groups and individuals (4).

2. Administrative Dietitian, R.D.: An individual of the management staff who influences the nutritional well-being of populations through the administration of foodservice systems that ensure quality food and nutrition (4).

3. American Dietetic Association, (ADA): A professional association responsible for organizing and implementing educational and supervised clinical experience requirements and standards of practice in the dietetics profession (4).

4. Coordinated Undergraduate Program (CUP): (established in 1962) A specific baccalaureate educational program in dietetics offered by an accredited university or college and approved by the American Dietetic Association. Its purpose is to arrange didactic and supervised clinical experiences to meet qualifications for practice in the dietetics profession (4).

5. Dietetic Internship: (established in 1927) A specific post-baccalaureate educational program in dietetics arranged and conducted by an organization and approved by the American Dietetic Association. The internship is set up to offer didactic and supervised clinical experience to meet the qualifications in the dietetics profession (4).

6. Dietetic Intern: An individual who has successfully finished the academic requirements of a formalized education in dietetics and is enrolled in a dietetic internship approved by the American Dietetic Association. The intern must complete a didactic and supervised clinical experience that meet educational standards in becoming a practicing dietitian (4).

7. Dietetic Student: An individual enrolled in an undergraduate dietetic educational program approved by the American Dietetic Association. The dietetic student must complete the academic program and successfully finish the didactic and supervised clinical experience requirements to attain status of a practicing dietitian (4).

8. Foodservice Systems Management: Systems - a collection of individual components brought together to perform a systematic, purposeful activity. When implemented in association with foodservice, it would be the individual components which make up the production and service of food. Management - the method of attaining desired results by the efficient use of human efforts and available resources (4).

9. Entry-Level Dietitian: An individual who has successfully completed the educational requirements set forth by the American Dietetic Association (5).

10. Leadership: An individual's behavior when directing group activities toward a goal. It encompasses behavior having a social and positive content as suggested by supervising a group (6).

CHAPTER II

REVIEW OF LITERATURE

ADA Manpower

The American Dietetic Association (ADA) conducted the Dietetic Manpower Demand Study (DMDS) in August of 1979 through 1981 (7). The 1984 Study Commission concluded that the best information pertaining to dietetic manpower was stated by the 1982 Dietetic Manpower Demand Study (7, 8). The DMDS was designed to assist the professions planning endeavors by forecasting the numbers of dietetic practitioners who will be demanded by different employers in 1985 and 1990. The main objective of the organizations manpower concerns has been the growth of a work force population through recruitment and education, thereby assuring an adequate number of adequately trained dietetic personnel. Planning for the profession's future has been restrained by the scarcity of quantitative and qualitative information pertaining to the demand for dietetic practitioners (2, 7, 8).

The DMDS estimated a slow, steady growth in the number of dietitians who will be working between 1980 and 1990. Some of the conclusions reached included: a growing desire for dietitians to develop their own positions both inside and outside the traditional institutional setting; increasing diversity of dietetic employers; a reduction in the number of positions for the generalist dietitian; and no increase of dietitians needed at the university and college level (2). The Profession of

Dietetics was published by the Study Commission on Dietetics in 1972. This report stated "the changes in the health care system and the social and political picture placed increasing demands for changes on the health care delivery system and the health profession." The Bureau of Health Manpower (BHM) paper (1979) regarding allied health personnel stated that the shortages of allied health personnel prevalent in the last decade had been remedied or even abolished for certain occupations. The BHM paper reported shortages were still prevalent in dietetics (8).

Different methodologies were considered for estimating manpower demand; ranging from simple extrapolation of current ratios of dietitians to the U. S. population and existing patterns of utilization of dietetic services to complex econometric models. A modified professional judgment was selected (8). This method is set up to forecast ideal or "professionally acceptable" standards of care, which through the employment of manpower-to-population ratios, are converted into work force figures. The professional judgment method was modified by the addition of descriptive information on factors affecting the utilization of dietetic professionals. The information was examined by a panel of 11 technical experts. The panel convened for four meetings. The final meeting included scenario writing by the technical panel (7, 8). Scenario writing is a forecasting approach for examining different futures. A scenario is not a prediction; it may encompass elements of the possible, the probable, and the preferable outcomes (8). The scenarios are potential alternative futures and are estimates based on assumptions rather than future predictions (7). Scenarios may make statements about what may transpire if a trend continues into the future, anticipated possibilities if trends do not continue and the most likely

course of events, taking all variables into consideration. Three scenarios were used as the basis for the final dietetic manpower demand estimates (8).

As the basis for scenario building, panel members set a series of assumptions to guide future estimates. Some assumptions to consider as 1990 approaches are a) the number of older Americans will increase; b) the U. S. economy will grow at the same average rate (3.7% with approximately 7.5% unemployment); c) the political scene will become more conservative; d) there will be no major transformations in international policy affecting health care; e) consumer involvement in health care selection and payment for services will increase; f) the emergence of technological advances will continue, especially in the field of computer information systems, communications, food technologies and biomedical research; g) there will be no major breakthroughs in acute and chronic disease cures; h) the regulatory environment will stress deregulation and competitive alternatives to health care costs, access, and quality; i) there will be no national health insurance; j) competition will increase for current and future markets for dietitians; k) ADA will proceed to investigate ways it can affect the demand and supply of dietitians (8).

The panel, through discussion, explained the changes in dietetic demand under three sets of conditions: a) suboptimal trends and responses of the profession, b) probable or more objective trends and actions, and c) the optimal situation. The panel, implimenting the Delphi technique, reached a general agreement pertaining to the estimation of the demand for dietetic practitioners in four employer classifications: a) nongovernment companies, b) government companies,

c) individual or group dietetic practices, and d) other dietetic or health professionals (8). The 11 technical panel experts were given work sheets to finish their estimates for demand of dietetic services in 1985 and 1990. The estimates were of two types: quantitative estimates of demand and qualitative estimates of the future direction for demand of dietetic services (7).

Suboptimal Scenario

The suboptimal scenario is depicted by significant competition for employment currently held by dietitians. Practically every facet of dietetic practice is restrained by the competition. Despite this, there is continued growth of the profession in traditional environments. There is a reduction in the demand for dietitians in two nongovernment areas (health care facilities/organizations and educational institutions), while two areas encounter no overall change (foodservice and other non-government business). All areas of government employment are reduced. There is no change in demand for dietitians in solo or partnership practice or in employment by other dietitians. Employment in the private sector showed a slight increase (8). Demand for professional activities of dietitians is anticipated to remain the same or decline. There is no expectation of growth in higher education's demand for dietitians by 1990. In this scenario, higher education will lower its demand for dietitians (7).

Probable Scenario

The probable scenario is expected to be the most likely plan. Employment of dietitians will increase in public communications,

computer systems management, and the food service industries (8). Since a counterbalance to high technology is becoming more important, dietitians will locate more opportunities for individuals who can make clear technical data for consumers (9). Government deregulation reduces the preservation of job opportunities for dietitians in public sector programs. In public health programs, little or no growth is anticipated for employment of dietitians. In home health care, it appears most agencies will keep on using skilled dietitians for consultation pertaining to certain cases and for training aides. Private institutions are expected to dispense nutritional services on a fee-for-service basis and appeal to dietitians (8).

For-profit hospitals will significantly add to their portion of the market to lure dietitians as employees. Significant growth will be noticed in the commercial environment, which will appeal to dietitians because of lucrative salaries, opportunities for advancement, and problems in other employment settings, especially public sector programs. Private practice is anticipated to yield new opportunities for dietitians with expert skills and abilities in public communication and counseling. Limited growth is expected in home health care and health maintenance organizations. Recognition by the public of the R.D. credential will increase job opportunities for dietitians. Food service organizations will acknowledge the importance of a dietitian trained in nutrition care and food service management (8).

In this scenario, demand for dietitians in nongovernment settings will grow in health care facilities and commercial environments, but remain unchanged in educational institutions and other employment settings, including nonprofit, trade and professional association. No

change is anticipated in overall demand for dietitians by the government. Private and partnership practices continue to grow and more dietitians and allied health professionals hire dietitians (8). There is likely to be more demand for dietitians in nongovernment-owned health care facilities, commercial environments, private practices, nutrition education, direct clinical care services, dietitian-owned practices, other allied health providers and business and industry (7).

Optimal Scenario

The optimal scenario is almost the same as the probable and suboptimal settings in that it indicates both positive and negative events in the forecasted job opportunities for dietitians. Consumers demand and pay out-of-their pocket for nutritional services, which enhances growth in third-party payments for inpatient nutrition services and doctor referral arrangements. Consumers perceive dietitians as the nutrition experts, complimenting both community and clinical practice. Health maintenance organizations (HMOs) are expected to grow and hire dietitians (8). Changes in the use and reimbursement for health care activities are anticipated to enhance the demand for dietitians in various health facilities, such as ambulatory clinics and home health care (7). Studies in nutrition and aging provides a relationship between preventive health care and management of chronic disorders which will increase employment positions for dietitians (8).

In this scenario, nongovernment facilities in commercial industry and health care will employ more dietitians. There is expected no change in demand for dietitians in educational facilities and other nongovernment facilities (8). School food service opportunities are

anticipated to stay the same or to shrink because of a decline in the school age population and reduced support of school lunch programs by the government (7). Government health care organizations at the federal, state and local levels employ more dietitians; government educational organizations do not expect to hire more dietitians (8). Little or no employment opportunities for dietitians is anticipated in government facilities, with an overall decrease or reversal in public service program growth (7). Private practice employment and the demand for nutritional services by other dietitians and other health professionals increase. Fewer dietitians are working in hospitals, government facilities and higher education. More dietitians locate positions in private industry, non-institutional health care organizations and consulting practices (8).

On the basis of the panel's estimates of the employment opportunities of dietitians in 1990, the general picture indicates slow and consistent growth in the total number of dietitians working between now and 1990. The total number employed and working full-time will grow in all three scenarios (7).

The 1984 Study Commission believed that even though hospitals would continue to be the main employer of dietitians, fewer dietitians would be working in hospital facilities each year. Consultants to the Study Commission anticipate those dietitians still working in hospitals would be expected to perform at a higher professional level than today (2, 7). Changes in the utilization of nutritional services and payment methods are expected to increase the demand for dietitians in health care environments other than hospitals (2). The panel anticipates an increased demand for dietitians in clinical nutrition care and a

lesser demand for dietitians in food service administration. The optimal and probable scenarios are based on the premise that third party payers will render reimbursement to inpatient and outpatient facilities for nutritional care services (7).

The consultant/self-employed group is comprised of nutritionists in private practice and dietitians consulting with long-term care organizations and/or small hospitals. All three scenarios predict a leveling off in demand for dietitians by the long-term care industry due to anticipated deregulation and public cost-cutting tendencies. Growth is expected in the development of private practice nutrition care services. Demand for the self-employed/consultant dietitian is expected to increase at a significant rate. The expected increase in demand for dietitians in commercial settings is comparable to the self-employed/consultant group. In all three scenarios, growth is in a positive direction (7). The selection and manufacturing method of foods and the dispersion of medical supplies are changing, thereby presenting new employment opportunities for dietitians (9).

It is highly likely the present supply of dietitians meet or very closely meets today's demand. Responses to employment advertisements in metropolitan areas are usually to be many times the number of obtainable positions. There does not seem to be a high number of unemployed dietitians. Consultants to the 1984 Study Commission saw low employment for dietitians through the next decade. Job opportunities appear limitless and the consultants expect the present heterogeneity of dietetic practice to continue to grow. The 1984 Study Commission does not support an attempt to alter the turnout of dietitians downward or upward in an effort to meet estimates; it supports allowing the marketplace to establish production levels (2).

Theories of Leadership

Great Man Theory

The term leadership can be traced as far back as early Greek and Latin and is derived from the verb to act. Arendt demonstrates the two Greek verbs archein (to begin, to lead, and finally, to rule) and prattein (to pass through, to achieve, to finish) correspond to the two Latin verbs agere (to set into motion, to lead) and gerere (the original meaning of which was to bear). It was thought that each action was split into two parts, the beginning, made by a single person, and the achievement, performed by others who "bearing" and "finishing" the enterprise see it completed. Arendt suggests, over time the original interdependence of action between follower and leader became divided into two separate activities, the task of dispensing commands, which became the option of the leader and the task of carrying the commands out, which became the responsibility of the followers (10).

Plato is often given credit for first making the distinction between individuals who know and do not act and individuals who act and do not know, so that knowing what to do and doing it became separate performances which dictated different types of abilities. Plato differentiated between thought and action with the idea that he who knows does not have to do, and he who does needs no thought or knowledge (10). For centuries, philosophers have disputed the importance to history of "great men" versus the situation in which they are placed. The 18th century rationalists argued that the personal qualities of important individuals combined with good luck controlled the course of history (11).

In 1910, Thomas Carylyle prosed the "great man theory," the principle of which was that the advancement the world had experienced is a product of individual accomplishments of great men who lived during the time frame in which advances had taken place (12). Carlyle who was the prominent supporter of the "Great Man Theory" believed a genius would be very influential no matter where he was found (11). They are followed, respected and obeyed to the point of idolization. From Carlyle's hypothesis emerges an image of a great leader who has exceptional insight and to whom the masses bow (10).

In opposition to the great man theory was a sociological theory of "cultural determinism." This theory presented the concept that great men were not extraordinary individuals in themselves, but were products of forces existing at the time in which they lived. Had one "great man" not appeared, another "great man" would have (12).

The exercise of power is the most significant activity in any type of cooperative action, therefore, the most significant social dilemma is that of developing productive leadership. The effectiveness of leadership is largely dependent upon the cultural awareness of the population. Leadership continually undergoes change in its nature and personality in order to adjust itself to corresponding changes in the traits and conditions of the population. Effective leadership relies upon an individual's potential to attain distinction and upon the capability of the people to identify a superior individual (13).

Even though it is the oldest theory of leadership, the concept of the "great man" is still current. Any time periods are rationalized by referring to the distinctive qualities of prominent individuals. A second opposing view comes under the heading of the theory of "the

times." This theory stresses events as variables that lay the foundation for some individuals to assume the leadership role and exert authority in accordance with the force of these events. Such a view may verify that certain people do appear to shape events (14).

Frederick Woods, the historian, researched monarchs and Gustav Spiller, the sociologist, studied a wide variety of leaders. Both were curious in the soundness of the "great man" theory. Woods decided that the prosperity of a nation was dependent upon a strong monarch. Woods was unable to substantiate whether the monarch was the creator of that flourishing state or whether the powerful monarch was the creator of the prosperous times. Spiller surmised that greatness was established by a blending of personal, social and historical factors (14).

Trait Theory

Early developments in leadership, from the pre-Christian era to the late 1940s, stressed the investigation of leader traits in an endeavor to recognize an array of universal traits and qualities that would permit a leader to be productive in all situations. Initially, a few traits appeared to be equally important for effective leadership, but research provided contradictory outcomes involving these traits. During the late 1940s, leadership researchers started to proceed away from trait research. Current sentiment holds the trait viewpoint in ill-regard and believes the possibility in generating an array of general leadership effectiveness traits as virtually impossible (15).

Barnard explained the trait theory of leadership in terms of traits or qualities of character, psycho-social qualifications and personality. Character traits often explain exposed features of personality, a fact true of leaders as well as followers. A review of affirmed

traits of leaders is that leadership is regarded predominantly from the standpoint of admiration (16).

Various traits have been assigned to leaders; only a couple of traits have been found to be universal to most of the lists. None of the lists of personality traits include anti-social or negative traits which casts suspicion on their usefulness to actual personalities. Either the measuring instruments are defective in pointing out anti-social traits or undesirable qualities, or the inclination to admire leaders did not allow the researcher from considering them. The variety of situations demanding leadership questions the habit of labeling universal personality traits to all leaders. A major problem is to specify the personality traits distinguishing leaders from each other and from nonleaders (16).

Bird compared the results from approximately 20 controlled investigations. There were 79 traits listed; little overlapping was indicated from study to study. Fifty-one traits or 65 percent were mentioned once, 16 or 20 percent were common to two lists, four or five percent were found in three and another five percent in four lists. Two traits were common to five lists, one trait, initiative, was common to six lists and high intelligence was common to 10 lists. The overlapping of traits between leaders and nonleaders signify that the total situation must be taken into consideration in searching for explanations of leadership (16).

Following World War II, Stogdill in 1948 reviewed 124 studies carried out to establish leadership traits. Stogdill's review tried to discover the traits and characteristics of leaders. He examined 29 variables usually associated with leadership. Stogdill's findings appeared to

support the theory that leaders do have some distinctive quantifiable traits. Stogdill surmised that it may be more advantageous to think about leadership as an association that exists between individuals in a social situation, instead of a single trait of the person who is acting as the leader (17).

According to trait theories, the leader is perceived as a great person whose superior abilities influence others to follow him. It was theorized that leadership should be secured by the person who is bestowed with different aspects of intelligence, personality and physique. A variation of traits such as intelligence and ability, social background, physical, social and personality and task orientation, was found to distinguish leaders from followers and effective leaders from ineffective leaders. Traits do not function by themselves, but in combination, to control followers (18). If the leader is bestowed with superior traits that distinguish him from his followers, it should be conceivable to identify these traits (19).

Traits such as "wisdom," "character," and "courage" were examples of those qualities indicated to allow an individual to become a leader (14). Tead tabulated 10 desirable traits in leaders, including a nervous and physical energy, a sense of direction and purpose, friendliness, decisiveness, teaching skills, technical mastery, intelligence, integrity, enthusiasm, affection and faith (20). The possibility of increasing social mobility meant that becoming a leader was viewed as related more to personal abilities instead of conditions of birth. The leader's own character and other traits were then seen as of greater importance (14).

In the two decades prior to World War II, extensive effort was devoted in pursuing the specific personal traits which separated leaders

from nonleaders. This was evident in the increasing number of "personality" tests which were supposedly effective in measuring different qualities or traits of personality (12). From the studies H. L. Smith and L. M. Kruegar examined in 1933, they listed a number of traits that were found to represent leaders. These traits included the following: nine personality traits, six social traits and four physical traits. Leaders do tend to exhibit specific traits and the feeling appears strong that these individuals usually, but not in every case, become leaders because they exhibit these specific traits (21). If by nothing else, the traits of a group's leaders are restrained by the traits of the people who make up the universe from which leaders are drawn (22).

Research over the last 55 years has failed to indicate distinctive leadership traits that are uniform from situation to situation. A leader with distinctive traits may be productive in one situation and nonproductive in another. Leaders may be productive in the same situation with dissimilar combinations of traits. For a trait theory of leadership to be true, it would have been necessary to find that leaders in one situation were leaders in other situations (12). Leadership traits differ from situation to situation and from group to group (22). If it can be assumed that leadership is the result of distinctive traits, or a combination of distinctive traits, then any person who emerged as leader in one situation should have been leader in other situations in which he participated (23).

W. O. Jenkins pointed out that a) leaders tend to have certain qualities in common with members of their group, such as interests and social background, and b) leaders may have distinctive but "poorly defined personality traits" in addition to being superior to followers in education, physique, and age (24). The dissemination of leadership

traits varies with education, age, occupation and sex. Members of particular groups will generally possess certain traits both more and less than others (22). Leadership has usually been considered a particular character of personality, a trait which some individuals possess and others do not, or at least some attain and others do not. Leadership is not a characteristic of the personality, but a quality of the role within a specific and distinctive social system (25).

E. M. Boardus developed the theory of the balance of leadership traits. This theory states that traits are paired and the leader supposedly maintains them in perfect balance. Such pairs include inhibition and aggressiveness, standardization and spontaneity, concentration and vision, versatility and specialization, and pessimism and optimism. Balance in leadership indicates a configuration or a system not of opposing personality traits but of opposites working in balance with each as the night works with the day (26).

C. M. Case stated that leadership traits were the overall total of the personal, social and historical conditions. Case tried to break down the situation into those three conditions. In his review of personality traits that influenced leadership he included character, social expression, prestige, physical characteristics, temperament, the individual's conception of his role, his drive, insight, perceptual ability and emotional breadth. In his review of the situation, he incorporated the pre-existing attitudes of the person and the group, the objective state in which the person and society act, and the definition of the situation, or a clear idea of attitudes. Case's review of the historical condition was primarily concerned with change and its effect on leadership (27).

An Army handbook issued for the benefit of officers lists about 17 traits and characteristics. What is important about this approach is that it analyzes the traits of the leader, not in terms of the personality of the leader but in terms of the needs, objectives and interests of the groups led (28). There is a high probability that leaders of some groups have different traits from the leaders of other groups and that "leadership traits" are not universal (22). There has not been overall agreement on the generalizability of traits in all situations (28). One possible explanation for this lack of comparability is that the language being used may not be uniform to allow the same basic trait to always be labeled by the same name (12).

The nominal social conditions which allow the presence of leadership include a) a group (of two or more persons), b) a common task (or goal-oriented activities), and c) differentiation of responsibility (some of the members have different duties). Much of the readings on leadership indicate an endeavor to study the leader as an individual having distinguishing traits and holding a status role in regard to other individuals who are not too clearly related to him (29). The common goal is different in kind on the part of the follower from the recognized leader (30).

The trait theory of leadership does not indicate when the traits are most effective. Disillusioned with the trait theory, researchers started to stress the significance of personal interaction and behavior in the study of leadership (18). For years, researchers have pondered over the applicability of a trait approach to leadership which assumes that leaders acquire certain personality qualities that separate them from followers. No clear cut conclusions can be drawn from the hundreds

of studies that have examined this assumption by relating leadership behavior with measures of personality; nonetheless a number of personality variables appear to be more closely associated with leadership than others (31).

In psychology, the trait theory found a pleasant reception because of the psychologist's indispensable interest in individual characteristics. To measure and determine the personality of "leaders" appeared appropriate to the psychologically-oriented investigator. What was overlooked in the view that leaders are uniquely blessed, was the actual fact of daily life, that individuals function as leaders in a specific place and time, and these are both varying and delimiting conditions. There are different pathways to leadership, occasionally from high authority, other times from group approval, and at times from both. If any point stands forth in the current view of leadership, it is that leaders are made by circumstances even though some leaders come to circumstances better equipped than others (32).

Because leaders are able to deal with different factors of situations, they have specific corresponding traits in common. They appear, overall, to be brighter, stronger, more energetic and usually more able than the average person. These traits usually, but not all the time, will characterize leaders. The more significant variable is the situation (or the group) in which the activities and abilities of leaders must operate satisfactorily. This interoperation is the leadership (33). No group of characteristics or single trait has been isolated which reveals the leader from the members of his group (24).

C. A. Gibb concluded that leaders are smarter than followers. One of the most interesting results surfacing from studies in this area is

the discovery that leaders must not surpass the followers by too much of a margin. A significant difference between the intelligence of leaders and followers may work against the development of the leadership relations, because such wide inconsistencies render improbable the unified purpose of the individuals concerned (34).

L. S. Hollingsworth believed that a leadership pattern will not exist or will break up when a difference of more than 30 points of I.Q. comes to exist between the leader and the led (35). Overall, people of very high intelligence do not easily become leaders which may indicate remoteness of their values and interests from those of the crowd. The evidence indicates that an increase in intelligence means a wiser government, but that the crowd chooses to be ill-governed by individuals it can understand (34).

Environmental Theories

In any leadership situation there is a third variable not in any way less significant than the leader and the led. That is the environment, the general situation. It is events that bring together individuals into a group which is more than the sum of the individuals, provide the group its motivation, objective, want, desire, program and share with the group itself in deciding which person may become leader. The environment has not only shaped the leader, and the diverse individuals into a group, but it has also developed the critical situation which unites the leader and the group together (36).

Most of the research aroused by current interest in leadership neglect to consider the importance of examining the characteristics of the environment in which a leader becomes a leader as well as the

biological, psychological and other traits of the leader as a person (36). Traits are names of processes; they are flexible and in no strict sense are they "attached" to anybody as "innate" or "acquired" qualities (33).

Individuality gives rise to leadership. Every individual acquires by birth qualities that separate him from every other person. It is this degree of uniqueness that gives each person a natural leadership advantage. Uniqueness of innate traits mixed with uniqueness of experience generates individuality. Every individual develops a point of view that is uniquely his own, this separates him from the rest of his associates and which is the principle of originality (37).

Leadership originates from the aggressive impulses of personality. It is a crystallization of self-aggressiveness (37). The "why" of leadership does not seem explainable by any personality characteristic or cluster of traits. The "why" of leadership seems to exist in the inter-personal contribution of which each person grows more confident in a particular environment drawing out contributions from him (38). Leadership research calls for a situational point of view; this is not psychological, but sociological. Leadership does not dwell in an individual. It is an activity of the whole situation. The situation requires particular types of action, the leader does not force leadership, but is the principle variable through which the situation is brought to a solution. The situation is essential and in all instances produces the leader. Many elements of leadership that are so fundamental will change with the situation (33). Regarding elements of environment as well as personality traits, it requires both to produce leadership. Leadership is a characteristic of the followers as well as of the

leader and that any research of leadership is not complete if it gives consideration only to traits of the leader (36).

Leaders rise and fall as the situations differ, so the same person goes back and forth leading and following (33). People who rise up as leaders in one group may or may not rise up in a similar role in another setting or even in another group in the same setting (38).

Upon close examination of the role played by environment in leadership, there are two factors which are significantly different to justify separate consideration. There is the nature and influence of the environment which develops a person's impulses so when a leadership situation reveals itself, this person accepts the responsibility. There is the nature and influence of the specific environment - the leadership situation itself - which requires those abilities and chooses the person who possesses them (36). Environment produces a particular situation and a particular group motivated by a purpose or a want, and the nature of these determine what combination of abilities are required for leadership. One of the most fundamental characteristics that makes one a leader is one's comprehension of the situation (36).

Leadership seems to be the procedure in which not one person plays the principal role, but in which many may share. The superior ability that one person may have to identify and respond to the needs of others does not reveal itself as a generalized ability which may relate that person to other individuals. It emerges in the unique sensitivity among the person and certain other individuals, resulting in interaction between them (38). Every group member is thereby to some degree a leader (39).

Focusing attention to leadership in the vital affairs of society, there may be a distinction in any leadership situation with three significant variables that influence leadership. They include the following: the leader and his qualifications; the followers, their qualifications for following and their power in selecting - in establishing the type of leader; and the environment of leader and followers that generates the dilemma of leadership and plays its major role in establishing the type of leader to be selected (36).

Personal-Situational Theories

P. Pigors suggested that leadership is a concept applied to the personality-environment association to illustrate the situation when one or very few personalities are put in the environment that an individual's initiative, ambition and insight guide and control others in the pursuit of a cause. Leadership emerges from a complicated combination of individual and social variables and is dependent upon the maintenance of a fragile balance between variety and cooperation (40).

For any theory of leadership, some of the deviation in what transpires is due to the situation, some is due to the individual and some to the interplay between the situation and the individual (11). The situation is a concept encompassing various factors: the leader with his capacities and motivation, the group (containing potential leaders), material means, attitudes, desires and needs, and a state of readiness for leadership. This situational approach is an ever-changing sequence of influences and modifications (33). The guidelines for accomplishing one kind of goal may be totally different from the guidelines for accomplishing another kind. This is the reason the situation

is a significant factor in deciding who will come forth as leader in a certain group (12).

The sociometrist, Helen H. Jennings, emphasized that leadership is the result of interpersonal cooperation and not of characteristics residing within persons. Leadership is considered as the interaction between the situation and abilities (22). F. E. Sanford believed that the research findings revealed a need to explicitly include in any leadership theory characteristics of the leader, situation and followers (41).

Leadership is control in specific kinds of situations, actual or potential, and fellowship is relative helplessness in identical situations. The amount of competent experience and understanding that an individual has in a situation decides the part he may fill - leader or follower. The situational viewpoint reveals how leadership combines both analysis or study and skill or control. It stresses the way to leadership through analyzing and controlling situations (42).

Ralph M. Stogdill, after a comprehensive study of leadership literature, concluded that leadership is not a passive status, or of the acquisition of some combination of attributes. It appears to be an on-going association among members of a group, in which the leader attains position through active participation and evidence of his ability for carrying tasks through to completion (17). A group member attains the position of a group leader for the time being in proportion as his participation in group activities and exhibits his ability for contributing more than others to the group accomplishment of the group goal. The situation is vulnerable to reorganization through changes in goals, changes in syntality, changes in interpersonal relations, the entry of

new members and the leaving of others and pressures from other groups (34). The evidence, accumulated by R. M. Stogdill, indicates that leadership is an association which occurs between individuals in a social situation, and that individuals who are leaders in one social setting may not be leaders in other social settings (17). Who will be the leader is selected by the nature of the situation (43).

As the situation shifts, the roles which are leadership roles shift and because of personal differences among group members, there is the probability that various members will be expected to fill these roles (34). C. A. Gibb felt that the same person in the same group may shift between the role of leader and follower as the group goal changes (23). Many observers validate the tendency for leadership to pass from one person to another as the situation changes (25, 34).

The leader comes forth as a result of the needs of a group and of the nature of the situation within which that group is trying to function. The leader tries to find a way through the actions of the group members for the fulfillment of his needs. At the same time the group members are in the relationship with the leader because he is perceived as their best means available for the fulfillment of their needs as can be satisfied through this group (29). A person's assumption of the leader role is dependent not only upon the role requirements of the group and upon the person's personality traits, but also upon the individual's perception of himself filling the group role requirements. These will differ as the situation and the task differ. It may be said that leadership is a function of personality and the social situation and of these two interacting (34).

The situation contains: a) the makeup of interpersonal relations within a group, b) group characteristics, c) qualities of the culture in which the group lives and from which group members have been chosen and, d) the physical conditions and the undertaking with which the group is faced with (34). The situation is a group of values and attitudes with which the group or the individual has to consider in a process of activity and with regard to which this endeavor is planned and its results understood (44). The situation determines the characteristics of leadership and process of leadership selection (25, 36). Situations occur alongside situations. A leader in a situation must keep in mind other situations in which he may take part and to act not in response to the stimuli of one, but of all (42).

No leadership situation stands entirely by itself. Each situation is a segment of something bigger that must be considered if the best leadership is to be attained. It is stressed that leadership usually does not move from one situation to another, but that leaders must consider any situation as a portion of a larger situation. A person who leads in one kind of situation will generally do well in various other types of situations, provided they contain characteristics similar to the first (42).

Leadership exists not entirely in the person but in his association with other group members. Qualities that enable a person to emerge into the leadership role is dependent upon the group goal or project of the moment (25). Each social interaction entails a degree of focalization of attention upon one member. That individual, for the time being, is the leader of the situation (43).

To succeed at leadership, an individual must be recognized as a member of the group. This individual must be seen as "one of us" by the

members of the group and must be perceived as making positive and significant contributions to group progressiveness (34). The leader, as a rule, has many characteristics of the followers and must share the group aspirations and objections (25). W. O. Jenkins felt that leaders tend to show specific attributes in common with the members of their group (22). La Piere and Farnsworth point out there is such a close interaction between the leader and the followers that it is usually hard to determine who influences whom and to what degree (45).

Leader behavior is subjected to group determination. The expectations of the followers, the kind of chore, and the established practice of the group are all variables in the situation in which the leader behaves and to which he conforms to (34). There is no one specific leadership type of character. Generally, the person is catapulted into a leadership role by virtue of his ability for interpersonal contribution in the particular situation (25).

Behaviors that portray leadership in one kind of chore and situation do not necessarily portray it in other chores and situations (34). Consistency of leadership behavior is a trait, but behavior may differ according to situations, even on the part of any individual. An individual may usually be consistent in some situations and inconsistent in other situations (42). That may explain why the leader in one situation is not always the leader, even of the same group, in another different situation (32, 34).

Leadership has generally been considered as a particular quality of personality that some people acquire and others do not or at least some achieve in high degree and others hardly at all. There is no officer type or leader type, there are only people whose qualities of character,

personality and skill vary as to place them in different leadership roles in particular situations. Leadership is an interactional operation of the personality and of the social situation (25). J. Schneider points out, it is the social circumstances that make certain characteristics of personality characteristics of leadership (46).

The situation decides which of many characteristics of personality will be characteristics of leadership at any given moment. What could be labeled the traits of leaders are abstracts from an overall interactional situation and are characteristics of a specific social role (25). Traits are dynamic, not static and are dependent upon the situation (14). Leadership traits are all of those personality qualities which in any specific situation allow an individual to a) contribute to group locomotion toward a recognized goal, and b) be seen as doing so by fellow group members (34).

There are possibly groups of situations for which leadership is fairly universal for any work falling in that group. There will be other groups in which the leadership requirements will be distinct from those in the first group of situations (47). Since individual personality qualities are very stable, it can be assumed that group leadership by the conscious hierarchical arrangement of the group will be flexible and will pass from one member to another along the line of those specific personality traits that for the time being become characteristics of leadership (34).

The progress of leadership is dependent upon the study of situations and on attainment of skill in them. In order to "learn" leadership an individual examines situations and devises appropriate methods for controlling them. All social situations are made up of variable

human nature, they may take unexpected turns and overwhelm upstart leaders (42). An analysis of leadership studies by W. O. Jenkins gave specific interest to studies that tried to deal with the dilemma of choosing military leaders. Jenkins concluded that, no individual attribute or group of traits has been isolated which distinguishes the leader from the members of his group. The question of who becomes leader in a particular group endeavor is determined to a large extent by the particular situation, as are the leadership qualities displayed. The only overall variable which leaders appeared to surpass their group members seemed to be that of technical or general competence, or knowledge, in the specific area that constituted the group's activity (24).

Irving Knickerbocker surmised that the leader is not an individual bestowed with a list of qualities which make him what he is. When considered in terms of the dynamics of human social behavior, leadership is a range of needs residing in a particular situation and is composed of an association between an individual and a group. The leader may "arise" as a way to the attainment of goals desired by a group (29). It is obvious that the scope to which it is conceivable for any leader to effect the course of an interaction is ascertained by the variables existing in the specific situation (43).

Analyzing leadership theory one may say that its three most significant principles are that: leadership is always relative to the situation-relative in two senses: a) that leadership grows and expands only in a problem situation and b) that the nature of the leadership role is established by the goal of the group; this is the second principle of leadership, that it is always toward some objective goal. The third principle is that leadership is a system of mutual stimulation - a

social interactional occurrence where the ideals, aspirations and attitudes of the followers play a significant role in determining the personality and individuality of the leader (24, 25).

Psychoanalytical Theories

Psychoanalytical theorists have emphasized a view of leadership according to which the leader is depicted in a father relation to the followers and uses many of the unrealized attitudes built up in the follower during childhood as part of the relation to the father. Freud interpreted these attitudes as fundamentally those of dependence and viewed them as the continuation throughout life. Psychoanalytical theorists identify a father substitution in the attitudes of followers to their leader. In some situations the leader is an object for transference of long-established feelings of submissiveness and dependence by followers in such a manner that the leader's authority spreads through large areas of their followers' lives (34).

E. Fromm suggested that as long as the infant is small it is naturally dependent on the parents, but as soon as the parents, acting as the agents of society, start to subdue the child's freedom and natural behavior, the growing child feels, over time, unable to stand on its own feet; it searches for the magic helper and often makes the parents the personification of 'him.' Eventually these feelings of dependence and the need for a "magic helper" are transferred to other individuals. The power of some leaders in specific group events originates from this type of dynamic interaction. The leader becomes the target for transference of these long-standing feelings of submissiveness and dependent in his followers (48).

In every instance where leaders emerge to charismatic status, followers have undergone the trauma of losing a beloved object and have unknowingly projected their love onto the leader, and are knowingly experiencing that love as coming from the leader (49). S. Freud even developed his own "scientific myth" of the first instance of charisma development as a result from the hypothetical murder of the primal father (50). The primal father is the leader of the first group. Because the primal father dominates the females, he becomes the target for sexual envy and is eventually killed by his sons. After the slaying, love for the father is left without an object. Meanwhile, suppressed hate for the father is set free and conflicts with love for dominance of the individual's mind. The conflict prolonged is felt by the person as despondency or depression. To ease the hurt, love is projected through the unconscious onto a new object, a new leader. This projection furnishes a new center for the family because it is the object of all members' love and serves an ordering function. The new center is the "hero," the brother who initiated or physically carried out the killing (49, 51).

Freud's theory states that the young child establishes a primitive "identification" with the protective adult. "Identification" signifies the inclusion of the characteristics of a powerful figure in one's psychological system. Freud believed identification provided a way of combining the strength of another in ourselves. Humans can identify with strong individuals and with groups. An individual feels strong if he has an association with another strong individual. The individual produces this close tie by becoming a follower and thereby becoming essential to his stronger colleague as a way to the latter's

gratification of a need to lead (34).

Leadership satisfies essential personality needs of the leader who is motivated to work by these needs that can be fulfilled by devoted followers who are excited to do as they are instructed in the advancement of regressing and expanding goals. In addition, leadership satisfies the followers personality needs who hope for the security of a rigid and forceful program where they can, by compliance and non-resistance, find their place in life (52).

The active emotional character of leadership shapes the leader's career who continues to procure new followers only so far as his own ambitious drives proceed to search for expression in action. For leadership to be effective, it must incite an emotional trigger in the followers that will tie them to the leader in faithful, unquestioning dedication to him and faith in his program. Without this psychological bind the leader is unable to accumulate a following, since he can recruit only the sensible individuals who perform upon serious thought and endorse his plan only for its intrinsic merits (52).

Identification with the aggressor, a psychodynamic defensive reaction explained by Anna Freud plays a significant part in the growth of group ties. The followers' affection toward the leader change between love and fear. By emulating the leader-aggressor, the followers are able to reduce their fears, divert aggressive behavior and increase their security. In ways adjunct to those which transpired through the childhood years, the followers psychologically turn the leader into a parental figure, thereby making it possible for followers to associate with the leader-aggressor (53).

Interaction-Expectation Theories

Reinforced Change Theory

Leaders attain their status by virtue of their distinct ability to applaud the actions of group members by giving or withholding rewards and punishments. Group success is judged by the group's ability to compensate its members; leaders are highly regarded when they allow a group to provide expected rewards (54). In a theory presented by B. M. Bass, leadership is the observed attempt of one member to alter other members' behavior by changing the motivation of the other members or by changing their habits. If the leadership is effective, what is seen is a change in the member acknowledging the leadership. The observed transformation in the conduct of the follower results from the modification of his motivation or from initiation of structure by the leader. Motivation is influenced by altering the expectations of reward or punishment. Bass reasoned that the development of leadership and what would advocate effectiveness depended upon the interaction potential in the situation (54).

A high interaction potential signifies a given pair of members are very likely to interact with each other in order to achieve their goals. A low interaction potential signifies that the probability of a given pair of members interacting is low. A pair of individuals are more likely to interact if they are: a) members of a small group, b) geographically and socially close, c) connected by a communication channel free of "noise" or blockage, d) intimate and/or familiar with each other, e) mutually esteemed, f) attracted to each other, g) similar in abilities and attitudes, and h) mature (54).

Path Goal Theory

Starting with the assumption that individuals in the work situation have certain goals in common, the attainment of which would please specific corresponding needs. B. S. Georgopoulos and others developed the path-goal theory of leadership which is based on the following assumptions: individual productivity is a part of one's motivation to produce at a specific level; this motivation is dependent upon a) the specific needs of the individual as reflected in the goals toward which he is moving, and b) an individual's perception regarding the usefulness of productive behavior as an instrumentality, or as a path to the achievement of these goals. The "path-goal hypothesis:" If an individual perceives high productivity as a path leading to the achievement of one or more of his personal goals, he will more likely be a high producer. If this individual perceives low productivity as a path to the attainment of his personal goals, he will more likely be a low producer. This association is more distinct among individuals who have a high need with respect to a specific goal and who are exempt from constraining forces than among individuals deficient in these characteristics (55).

The path-goal leadership theory presented by R. House is based on expectancy theory of motivation. Its central idea states that the force prompting an individual to participate in a particular behavior is a part of both his expectations that the behavior will result in a particular outcome and the sum of the personal advantages or satisfactions he gains from that outcome (56). According to this theory, behavior is seen as a function of needs, expectations, and situations.

It is considered a function of path-goal perception, level of need and level of freedom (55).

Path-goal instrumentality is explained as the individual's perception of how his behavior (path) may be associated to the individual's peculiar outcomes (goals); path-goal instrumentality is the degree to which the path is viewed as assisting or hampering the person in achieving his goals. A person's reason to partake in certain behavior is a part of the perceived instrumentality of that behavior for the achievement of his goals, the association will be stronger for the more important goals of the individual. The regularity of which a path is followed will be a function of the person's motivation to follow it and the constraints on him in his selection of behavior. The degree to which a path is adhered to will influence the extent to which the individual's goals are achieved (57).

It is the nature of the leader's role that the leader is called upon to influence his subordinates to carry out relevant chores, therefore supervisory behavior may be at its most effective when it has some influence upon the subordinate's path-goal instrumentalities (57). J. N. Mosel indicated that subordinate's having "supportive" leaders reveal that there are increased probabilities that their behavior will lead to specific rewards (58).

In attempting to influence a path-goal instrumentality, it would seem that there are three aspects involved: A) The worker must perceive that it will be possible for him to attain his goals. He must perceive a situation where there happens to be a supply of rewards and punishments. In most situations in formal organizations, the leader is one of the sources of the supply. The highly considerate leader is viewed

as having a wider range of rewards than the less considerate leader. B) The person must perceive that his rewards and punishments are coming to him as a result of his particular behavior. There must be a perceived link between his behavior and the rewards and punishments that he receives. The leader who is high on initiation of structure reveals to the subordinates the types of paths that he (the leader) wants followed and connects his reward behavior to the successful compliance to the path. These two factors indicate that leadership consideration and initiation of structure are working together in an interaction to affect path-goal instrumentality. Consideration influences the surplus of possible outcomes, but does not influence the possibility that a specific path will lead to these outcomes. Initiation of structure influences the likelihood that paths will be rewarded but does not influence the amount of the reward. C) The leader who is high in consideration and high in initiation of structure presents ample rewards to those individuals who adhere to high performance path. His subordinates distinguish consistently high, positive path-goal instrumentalities for high performance paths and consistently high, negative path-goal instrumentalities for low performance paths. It would seem that for any association to occur between leadership behavior and worker satisfaction, two intervening relationships are essential: a) leadership behavior is related to path instrumentality, and b) the result of path instrumentality and path regularity is associated to goal achievement (57).

Through the leader's interaction with the worker, he can expand the worker's path instrumentality involving the rewards forthcoming as an outcome of work-goal achievement. If the leader is consistent in

his decision process with regard to identifying and compensating work-goal attainment, he will define the relationship between work-goal attainment and compensation. If the leader consistently compensates accomplishment, this will quite possibly enhance the employee's path instrumentality for valent personal results. Through the leader's own behavior he can furnish assistance for the employee's efforts and effect the likelihood that this attempt may result in work-goal accomplishment (59).

Contingency Model

The earliest and best known of the situational theories of leadership was the one presented by Fred Fiedler. Fiedler tried to predict leader effectiveness employing a scale of leader attitudes called the LPC score. The letters "LPC" signify "least preferred coworker." A leader's LPC score is obtained from his responses to a semantic differential instrument, which is a questionnaire made up of bipolar items. The leader is instructed to think of all past and present coworkers and told to choose the one individual with whom he could work least well. The leader rates this least preferred coworker on each bipolar item. The leader who is discriminating in rating his least preferred coworker will receive a low LPC score. The leader who is tolerant in his ratings will receive a high LPC score. Fiedler's Contingency Model describes the type of situation in which a leader with a high LPC score will be more successful than a leader with a low LPC score and vice versa (60). Fiedler believes that leaders are motivated mainly by gratifications gained from interpersonal relations and task-goal achievement (15).

The Contingency Model states that the group's accomplishment will be contingent upon the proper matching of leadership style and the degree of favorableness of the group situation for the leader. The theory suggests that the performance by the group can be improved by altering the leader's style or by changing the group-task situation. The appropriateness of the leadership style for optimizing group performance is dependent upon the favorableness of the group-task situation (61).

The principal motive of a high LPC leader is to have friendly, interpersonal relationships with other people including workers. This type of leader will stress socializing with employees and will perform in a thoughtful, supportive way if relations need to be improved. Accomplishment of task objectives is a secondary motive that will become significant only if the leader's main affiliation motive is already satisfied by friendly personal relationships with employees and colleagues (60). Under circumstances where the accepted leader faces a vague, uncertain chore, or one where the chore is structured but the leader is not well received, the attentive, relationship-oriented leadership style is more apt to result in successful team performance (61). A high LPC score does not suggest that a leader will be more considerate or less directive in his attitude toward subordinates. High and low LPC leaders behave differently, but the exact style of behavior differs according to the situation (60).

The principal motive of a low LPC leader is accomplishment of task objectives. This type of leader is very interested about doing a good job and will stress task-oriented behavior in handling workers whenever task problems are involved. The secondary motive of building good

interpersonal relations with workers will be pursued only if the work group is performing adequately and there appear to be no serious task problems (60).

Task-oriented leaders execute well in situations that are highly favorable for them or in those situations that are unfavorable. Relationship-oriented leaders execute well in situations where they have only average authority, either because the job is unstructured or because they are not well accepted even though their position power is high and the job is structured (61).

In Fiedler's theory, the association between leader LPC score and leader effectiveness is dependent upon a complex situational factor with many parts. This situational factor is called "situational favorability" or "situational control." It is explained as the extent to which the situation provides the leader authority over subordinate performance. Situation control is generally evaluated in terms of the following three factors of the situation: a) leader-member relations, b) position power, and c) task structure. Fiedler discovered that leader-member relations were the most important of the three factors of situational control, followed by task structure and lastly position power (15, 60). Situational control is the best when leader-member relations are good, the job is very structured and the leader has considerable position power. Situational control is lowest when leader-member relations are poor, the job is unstructured, and the leader has little position power (60).

Relationship-oriented leaders reveal task-oriented behavior, such as initiating structure, in situations that are favorable for them to display authority over their work group. They exhibit relationship-

oriented behaviors, such as consideration, in situations that are moderately favorable or unfavorable. Task-oriented leaders exhibit relationship-oriented behavior in favorable situations and task-motivated behaviors in moderately favorable and unfavorable situations. Fiedler's model explains that relationship-oriented leaders will be more successful in situations that are moderately favorable for the leader to use authority and that they will be less successful in favorable or unfavorable situations. The opposite is the case for task-oriented leaders. They are most successful in favorable or unfavorable situations and least successful in moderately favorable ones (15). Fiedler claims that when the situation is very high or very low in situational control, leaders with low LPC scores will be more successful than leaders with high LPC scores. When intermediate situational control is indicated, leaders with high LPC scores will be more successful (60).

Multiple Screen Model

This model assumes a number of "screens" of variable permeability through which the leader's intellectual output must go through in order to influence task performance. A "screen" is a variable that is able to partly or completely block the leader's intelligence from contributing to the performance of the task. The model postulates that a high relationship between leader intelligence and task performance is dependent upon the permeability of the different screens. Certain screens are attributable to the leader and may include the leader's own disposition toward the chore, experience that is pertinent for managing the group, and the ability and willingness to take control of the group. Other screens are situational in character and may include conditions in

the organization that are favorable to the utilization of intellectual resources, and the extent to which the work group is responsive and capable of adhering to the leader's instructions (62).

Four screen variables that can be identified in current research include the following:

a) Leader motivation. It is predicted that unmotivated leaders' intellectual ability will not assist the group to the same degree as will leaders who are highly motivated (62).

b) Leader experience. L. S. Csoka revealed that the leader's influence and expertise of the task seems to be dependent upon the leader's intelligence and experience. The intelligent leaders without experience will be unable to understand the task since they lack the required background. The experienced but unintelligent leaders will not be able to combine their past experience in a way that will allow its appropriate application (63).

c) Leader-boss relations. Little is known about the effect of the leader's relationship with his boss. It is apparent that the leader's boss, who explains not only the task, but the standard for the leader's performance evaluation plays a very significant role. The leader's career and self-esteem relies heavily on the relationship with the boss, possible stress produced by this relationship is likely to cause considerable anxiety (62).

d) Leader-group relations. A second situational factor of possible significance is the leader's relationship with group members. R. Heslin found that the relationship between leader intelligence and performance is greater in groups that have a formal leader as opposed to an informal leader (64).

This model expects that the leader's intelligence will correlate highly with task accomplishment to the degree to which the course between leader intellectual output and task behavior is unoccluded. Where leader motivation, leader experience, and group support are unavailable, or where relations with the boss are stressful, the relationship between leader intelligence and task accomplishment will be reduced, and lower than when these factors are in the permeable state. A number of different screen factors are likely to regulate the relationship between leader intelligence and task accomplishment. These would include the kind of task which the group is expected to carry out and the part that the leaders play in the group (62).

Two-Stage Model

G. Yukel presented a leadership theory that describes how leader behavior, situational variables, and intermediate variables interact to establish employee productivity and satisfaction with the leader. The different decision-making strategies employed by a leader, such as delegation, joint decision-making, consultation, and autocratic decision-making, can be ranked along a scale ranging from high employee influence to complete leader influence. A leader will generally permit more employee participation and responsibility for some decisions than for others. The average degree of participation can be computed for any particular set of typical decisions (65). F. Heller and G. Yukel utilize the term "Decision-Centralization" to refer to this computed average. A high Decision-Centralization score implies a low amount of employee participation (66).

Most procedures that have been utilized to measure employee participation may be regarded as a measure of Decision-Centralization. Participation and Decision-Centralization have been measured by employee ratings of their perceived independence or responsibility in decision-making, by employee responses to an instrument regarding the leader's decision behavior, and by leader responses to a decision behavior instrument (65).

Yukel presented a "discrepancy model" of satisfaction to illustrate the association of three leadership dimensions to employee satisfaction with the leader. In the discrepancy model, satisfaction is a function of the variance between an individual's preferences and his actual experience. The less the discrepancy between preferences and experience, the greater the gratification (65).

When a decision is very important to employees, they are likely to prefer as much responsibility as possible. When decisions do not include matters of importance, consultation or even autocratic decision-making is more likely to be preferred. The more that employees trust their leader to make a decision favorable to them, the less likely they will feel to participate in order to protect their welfare. A leader who slowly permits increased employee participation may find that the employees' propensity for decision-making increases over time. Employee preferences characterize one of several sources of role expectations for the leader. These role expectations combine with other situational factors and leader personality to influence his behavior (65).

The primary features of the discrepancy model can be summarized in terms of the following hypotheses:

Hypothesis 1: Employee satisfaction with the leader is a function

of the discrepancy between actual leader behavior and the behavior preferences of employees.

Hypothesis 2: Employee preferences are ascertained by the combined influence of employee personality and situational factors.

Hypothesis 3: Employees generally prefer a high degree of leader consideration, and this bias results in a positive association between consideration and employee satisfaction (65).

Multiple Link Model

When a leader is dependent upon his employees to do a job, employee performance is not likely to improve unless the leader can influence one or more of the following three intermediate factors: a) employee task motivation, b) employee task skills, and c) task-role organization. Consideration, initiating structure, decision-centralization and other situational factors interact in their influence upon these intermediate variables. The intermediate factors combine in turn to influence group performance (65).

The principal characteristics of the multiple linkage model can be summarized in terms of the following hypotheses:

Hypothesis 1: Group effectiveness is a function of the interaction among employee task motivation, employee task skills and task-role organization for the group.

Hypothesis 2: Initiating structure and consideration combine in determining employee task motivation. Task motivation is greatest when the leader is high on both behavior variables.

Hypothesis 3: Decision-centralization is negatively correlated with employee task motivation when employee relations with the leader are favorable, the decisions are pertinent to employee tasks, and

employees view their participation to be a test of valued abilities.

Hypothesis 4: Initiating structure combines with decision-centralization in determining task-role organization. The relationship is controlled by the level and distribution of task knowledge and planning ability in the group.

Hypothesis 5: Initiating structure is positively related to the degree of employee task skill (65).

Other Research Using the Leader Behavior Description Questionnaire (LBDQ)

Other leadership studies have incorporated the LBDQ. The following paragraphs will briefly cover six studies where the LBDQ was employed to seek leadership information. In one such study, it was postulated that high ranking political leaders, such as United States Senators would be characterized as high in persuasiveness and representative of followers. One hundred copies of the LBDQ were mailed, two to each senator in the United States Senate. Forty-four usable instruments were returned. This number indicates 44 descriptions, not necessarily 44 senators. Fifteen instruments were checked as descriptions of Republicans and 29 were checked as descriptions of Democrats. The highest mean score (42.5) was obtained on Persuasiveness as postulated. The lowest average score (35.3) was on Tolerance of Uncertainty. The findings indicated that the new subscales may be implemented to attain useful and meaningful descriptions of the leader behavior of elected political leaders (67).

Another study showed an analysis of the association between the crew's perceptions of leadership behavior of the airplane commander

and a) ratings of the commander's performance in combat made by his superiors, and b) an index of his crew's satisfaction with him as commander. The analysis consisted of a comparison between the crew's description of the commander's performance and two independent evaluations of the effectiveness of that performance, one by his crew and the other by his superiors (68).

The 130-item form of the LBDQ was given to 353 members of 52 B-29 crews who attended the Combat Crew Training School at MacDill Air Force Base during the autumn of 1950. Later, 29 of the 33 commanders were evaluated again on the LBDQ (80-item form). The interrelationship between the number of votes the incumbent commander received and the number of votes cast was used as an indication of the crew's satisfaction with his leadership. The data was comprised of two descriptions of the leader's performance - one in training and one in combat - and two evaluations of his combat behavior - one by his superiors and the other by his crew (68).

In the training and combat situation, there was a tendency toward negative correlations between the superior's ratings and the Consideration scores, and positive correlations between these ratings and the Initiating Structure scores. The inconclusive correlations emphasize this trend, which is more noticeable in the combat situation than in the training situation. Both inconclusive correlations based upon the crews' perception of the commander's performance in combat are statistically significant. The correlations between the leadership dimensions and the Satisfaction Index indicate a movement in the opposite direction (68).

In another study, descriptions were obtained from two samples of subjects: a) ministers of different religious denominations and b)

leaders in community development activities. For evaluations of community leaders, one LBDQ was mailed to 150 citizens throughout Ohio who had participated in a Community Development Conference at Ohio State University. Fifty-seven usable instruments were returned; 25 described business men, 18 professional men, 12 city and county officials, and 2 women's club presidents. The communities ranged in size from approximately 1000 people to more than a million. For the ministers, two LBDQs were mailed to 150 of the approximately 600 ministers located in Columbus, Ohio and surrounding area. One hundred three usable questionnaires were returned and found to be representative of the different Protestant, Catholic and Jewish denominations. The United Presbyterian churches were over-represented. The Baptist, Community Nazarene, Pentacostal Apostalic, and Spiritualist churches were under-represented. The 103 instruments did not represent 103 separate ministers, since some were probably described twice. The results indicated that if the Leader Behavior Descriptions are to be employed for comparative research across populations, there is value in retaining the identity of the different subscales, and in trying to strengthen the identity of each (69).

Factor analysis of the intercorrelations among the 10 subscales provided the following results. Only four of the subscales (Persuasiveness, Initiating Structure, Role Enactment and Production Emphasis) were highly weighted on the general factor for both groups. Three of the subscales (Representation, Predictive Accuracy, and Initiating Structure) revealed moderately high weightings on specific factors in both groups. Demand Reconciliation showed up in the same factor with low Role Enactment for community leaders, but with low Consideration for ministers. High Persuasiveness was associated with low Role Enactment for both populations (69).

Another leadership study used corporation presidents listed in the Manual of Excellent Managements. The LBDQ was sent to 140 corporation presidents chosen in a way to spread the sample proportionately through the various types of goods and services represented by the corporations listed in the manual. Fifty-five usable instruments were returned. The results indicated that each subscale was strongly weighted on a separate factor, with other subscales indicating low loadings on the factor. The only exception was with Factor I, whereby two subscales (Production Emphasis and Initiating Structure) revealed high loadings. Three of the subscales (Predictive Accuracy, Initiating Structure and Demand Reconciliation) revealed loadings between .21 and .48 on three or four factors in addition to the ones in which their dominant loadings appeared. The findings revealed that the leader behavior of corporation presidents can be described in terms of several differentiated factors. Each factor was defined to a high degree by a separate subscale. Each subscale revealed a high loading on a separate factor. With one exception, no two subscales were highly loaded on the same factor (70).

Another leadership study attempted to reveal a relationship between aircraft commanders' ideology of how they perform as leaders and their crews' perception of how they perform on two dimensions of leader behavior: Initiating Structure and Consideration. Halpin has produced evidence which indicates that the most "effective" commanders are those who score high on both dimensions of leader behavior (71).

The subjects were 132 B-29 and B-50 aircraft commanders. Since the two groups of commanders did not differ significantly either in leadership ideology or leader performance, the populations were combined into a single sample. The 132 commanders were described on the LBDQ by 1103

members of their crews. This particular LBDQ contained 80 items. The 132 commanders answered the LBDQ with different instructions. They revealed how they perceived they should perform as leaders. This form of the questionnaire was referred to as LBDQ-Ideal contrary to the LBDQ-Real which was answered by the crew members (71).

The 1,235 completed instruments were scored on the Consideration and the Initiating Structure. The corresponding unbiased correlation ratios were .44 for Initiating Structure and .60 for Consideration, revealing that crew members appear to agree in describing their commander's leader behavior. The correlation between the two dimension scores on the LBDQ-Ideal was .29; the LBDQ-Real was .45. The evidence indicates that the aircraft commander's knowledge of how he should perform as a leader has little effect on how he is perceived as performing by the members of his crew (71).

Another leadership study involved members of 52 newly assembled B-29 crews. The crew members described the leader performance of their particular commanders on the LBDQ. In addition, they rated each other and the crews as units on such items as crew morale, friendship, proficiency, and willingness to go to combat with each other. Crew attitudes were extracted by a sequence of 10 items whereby the crew members rated each other individually and collectively as a crew. These items were given at the beginning and end of the training period in order to quantify a change in attitudes (72).

The analysis of changes in attitudes revealed that ratings of crew morale and of willingness to stay with the crew drop off significantly during training. In comparing the movement of the changes in crew averages revealed that attitudes toward crews and attitudes toward

members were distinctive. At the beginning of training, the attitudes toward crews were more auspicious than those toward members, while little variance existed at the end of training. Crew members rated their crews noticeably high on morale, cooperation and their own attitudes toward staying with the crew. Their ratings of fellow crew members as individuals were a little lower, signifying discretion in rating members with whom they have known for a short time (72).

The correlations between the LBDQ scores and changes in attitudes revealed that crews whose commanders were reported high on Consideration raised their ratings of each other on four of the attitude items. Crews whose commanders were reported high on Initiating Structure appeared to raise their ratings of one another on friendship and confidence. In understanding these results, it is significant to note a limiting factor of this study; that the demands of the training situation did not allow the use of either a control group or of alteration in the time interval over which changes in attitude were studied. The results suggest that during the initial time of crew assembly, the members of crews whose commanders scored high on both Consideration and Initiating Structure appeared to produce more favorable crew attitudes than the individuals of crews led by commanders who were rated as less Considerate and less likely to Initiate Structure (72).

CHAPTER III

METHODOLOGY

This research will examine the leadership perceptions and attitudes of dietetic interns and Coordinated Undergraduate Program (CUP) students on a national level. The purpose of this study is to identify the perceived leadership subscale scores of dietetic interns and CUP students as they are proceeding through a dietetic internship or CUP program. The first objective is to determine the relationship between the perceived leadership subscale scores and selected characteristics of the dietetic interns and/or CUP students. The selected characteristics include age, sex, marital status and race. Race will include two categories: whites versus nonwhites.

The second objective is to determine if the perceived leadership subscale scores are affected by selected program and location of dietetic internship and/or CUP. These characteristics include: type of internship or CUP, area of interest of dietetic intern or CUP student, geographical location of internship or CUP and number of dietetic interns or CUP students in each specific internship or CUP. There are 12 leadership subscales. They include: representation, demand reconciliation, tolerance of uncertainty, persuasiveness, initiation of structure, tolerance of freedom, role assumption, consideration, production emphasis, predictive accuracy, integration and superior orientation.

Research Design

The research design used in this study was the descriptive status survey. Descriptive research entails the description, recording, analysis and interpretation of existing conditions. It encompasses a kind of contrast or comparison and attempts to ascertain associations between existing nonmanipulated variables (73).

Population and Sample

The population was dietetic interns and CUP students surveyed. The sample included responses from 720 dietetic interns and 595 CUP students from programs with a management or general emphasis. Program emphasis, addresses, and number of students in each CUP and dietetic internship were taken from the ADA Directory of Dietetic Programs (1986). Dietetic internships and CUPs only offering clinical and/or community emphasis were omitted along with any of the internships or CUPS not recently reaccredited. An introductory letter describing the study was sent to 45 CUP directors and 78 dietetic internship directors. Forty-two CUPs offered a general emphasis; two offered both a management and a clinical emphasis and one offered both a general emphasis and management emphasis. Seventy-four dietetic internships offered a general emphasis, two offered both a general emphasis and a clinical emphasis and two offered a management emphasis.

Data Collection

Instrumentation

The researcher used the Leader Behavior Description Questionnaire

(LBDQ) in this study. This instrument is generally administered to followers or subordinates to describe the behavior of their supervisor or leader and may also be employed by superiors or peers to describe a particular leader whom they know well enough to accurately describe. With modifications in instructions and sentence structure, the instrument may be used by a leader or supervisor to describe his own behavior (74).

In this study, the instrument was modified in a manner where each sentence was altered to allow the dietetic intern or CUP student to rate their own leadership perceptions or attitudes they feel thay have acquired thus far in their own experiences. A scenario was described to assist the dietetic intern or CUP student to picture themselves in a working environment. The scenario assumed that each individual intern or CUP student was a manager or a supervisor in a leadership position in charge of a work group. Each dietetic intern and CUP student was asked to determine or assess how they would react or respond to each individual item listed in the questionnaire.

The researcher added the general information sheet to collect and analyze the demographic information regarding the population used. The general information sheet was devised by reviewing numerous other research instruments in published articles and unpublished theses and dissertations. Content validity, format and clarity were examined by Oklahoma State University dietetic interns and graduate committee and suggestions were incorporated into the questionnaire.

Procedure

The questionnaires were color-coded and mailed directly to the

dietetic internships (blue) and CUP directors (green) who were asked to distribute the questionnaires to their students. Each questionnaire was coded with a three-digit identification number which indicated the geographical location of each internship and CUP to facilitate response and also to analyze the data. Each dietetic internship and CUP were mailed the number of questionnaires that was indicated by the number of interns or CUP students enrolled in each respective program as listed in the ADA Directory of Dietetic Programs (1986).

The questionnaires had already been prefolded and assembled in a manner where once completed, the intern or CUP student was instructed to refold, staple and mail the completed questionnaire back to an address already on the backside of the questionnaire. Postage was paid for all returned questionnaires. The interns and CUP students were given approximately two weeks to complete and send back the questionnaire. Questionnaires were, however, accepted and tabulated approximately two months after the initial cut-off date.

Upon arrival, the questionnaires were given another identification code. The first three characters signified the geographical location of the internship or CUP. The fourth and fifth characters indicated the individual response number. This was determined in the order in which the questionnaires were received. The sixth and seventh characters indicated the numerical size of the internship or CUP, this included the total number of interns or CUP students in any particular program. This figure ranged anywhere from 04 up to and including 30. The eighth character indicated the area or region the internship or CUP was located. This study used the ADA area classification comprised of seven regions. The ninth character which was a letter indicated an internship = I or

CUP=C. This was self-evident upon the color of the questionnaire. There was only one mailing due to financial constraints and the time of year.

Scoring Key

The dietetic intern or CUP student selected his response by drawing a circle around one of the five numbers: 5=always; 4=often; 3=occasionally; 2=seldom; 1=never. There are 20 items that are scored in the reverse order as follows: 5=never; 4=seldom; 3=occasionally; 2=often; 1=always. (The 20 reverse order items are: 6, 12, 16, 26, 36, 42, 46, 53, 56, 57, 61, 62, 65, 66, 68, 71, 87, 91, 92 and 97.)

Items in Subscales

Representation consists of items: 1, 11, 21, 31 and 41.

Demand Reconciliation consists of items: 51, 61, 71, 81 and 91.

Predictive Accuracy consists of items: 9, 29, 49, 59 and 89.

Integration consists of items: 19, 39, 69, 79 and 99.

All four of these leadership subscales consist of five items. The sum of the score of these five items for each individual leadership subscale constitute the score for each subscale.

Tolerance of Uncertainty consists of items: 2, 12, 22, 32, 42, 52, 62, 72, 82 and 92.

Persuasion consists of items: 3, 13, 23, 33, 43, 53, 63, 73, 83 and 93.

Initiation of Structure consists of items: 4, 14, 24, 34, 44, 54, 64, 74, 84 and 94.

Tolerance of Freedom consists of items: 5, 15, 25, 35, 45, 55, 65, 75, 85 and 95.

Role Assumption consists of items: 6, 16, 26, 36, 46, 56, 66, 76, 86 and 96.

Consideration consists of items: 7, 17, 27, 37, 47, 57, 67, 77, 87 and 97.

Production Emphasis consists of items: 8, 18, 28, 38, 48, 58, 68, 78, 88 and 98.

Superior Orientation consists of items: 10, 20, 30, 40, 50, 60, 70, 80, 90 and 100.

All eight of these leadership subscales consist of 10 items. The sum of the score of these 10 items for each individual leadership subscale constitute the score for each subscale. The maximum score for the leadership subscales with five items is 25 and the maximum score for the subscales with 10 items is 50.

Data Analysis

Data analysis in this study consisted of chi-square analysis for the non-numerical data including sex, region, marital status and race. Regression analysis was used on numerical data such as age and number of dietetic interns/CUP students in each respective program. The test for interaction was carried out on each individual leadership subscale for internship versus CUP by age, sex, race, single/married, married/non-married, area of interest and location. Mean tables were compiled indicating leadership subscale scores by type (internship vs. CUP) and age; by type and sex; by type and race; by type and marital status-single/married, married/non-married; by type and area of interest and by type and region.

CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this study was to identify the perceived leadership attitudes and perceptions of dietetic interns and Coordinated Undergraduate Program (CUP) students as they proceeded through a dietetic internship or CUP program. A cover letter and a five-page Leader Behavior Description Questionnaire (LBDQ) was mailed to internship and CUP directors. The cover letter explained the research and requested that the directors distribute the questionnaires to their interns or students. The questionnaire was to determine the association between the perceived leadership subscale scores and selected personal characteristics of the dietetic interns and CUP students. The selected personal characteristics included age, sex, marital status and race. The LBDQ was also to determine if the perceived leadership subscale scores were influenced by selected program characteristics such as type of internship or CUP, area of interest, location of dietetic internship or CUP and the number of dietetic interns or CUP students. The list of dietetic internships and CUPs were taken from the 1986 ADA Directory of Dietetic Programs. The study included dietetic interns and CUP students who were in a Generalist and/or Management program. Excluded from this study were dietetic internships and/or CUPs which only offered a clinical or community emphasis.

Response to Survey Questionnaire

A total of 1,305 Leadership Behavior Description Questionnaires were mailed to dietetic interns and CUP students (Table I). The overall response rate combining both internships and CUPs was 35% (N=461). There were 78 dietetic internships included in this study. The overall dietetic internship response rate was approximately 77% (N=60). There were 720 dietetic interns surveyed. The dietetic intern response rate was 43% (N=306). There were 44 CUPs included in this study. The overall CUP response rate was 64% (N=28). There were 585 CUP students surveyed. The CUP student response rate was 26% (N=155).

TABLE I

RETURN OF QUESTIONNAIRES FROM RESPONDENTS

	Programs			Students	
	Mailed	Responded		Mailed	Responded
Internships	N=78	N=60 (77%)	Interns	N=720	N=306 (43%)
CUPs	N=44	N=26 (64%)	CUP students	N=585	N=155 (26%)
Totals	N=122	N=88 (72%)		N=1305	N=461 (35%)

Note: The program responses were considerably higher than individual student responses because the researcher counted the programs even if only one or two students responded from that program.

Characteristics of Respondents

Age and Sex

The age of the respondents ranged from 18 to 31 years and above (Figure 1). In the first age range, 18-22 years of age, the frequency response was 35% (N=160), while in the second age range, 23-26, the frequency response was 45% (N=208). In the third age range, 27-31 years of age, the frequency response was 11% (N=49), while in the fourth age range, 31 and and above, the frequency response was 9% (N=42). The response rate for females was 96.5% (N=444). For males, the frequency response rate was 3.5% (N=17). In 1981, approximately 2.7% of ADA's members were male (2).

Marital Status

The marital status of most of the respondents was single (N=351 or 76%). Married respondents had a frequency response of 19% (N=89). Divorced respondents had a frequency response of 4% (N=19). Only one respondent, 0.2% was separated (Figure 2).

Race

Race on the questionnaire encompassed six categories (Figure 3). White, non-Hispanic had the highest frequency response of 92.6% (N=425). Hispanics had a frequency response of 4.1% (N=19). Asian or Pacific Islander had a frequency response of 1.3% (N=6), while Black, non-Hispanic had a frequency response of 1.3% (N=6). Non-Resident Alien International had a frequency response of 0.4% (N=2), and American Indian or Alaskan had a frequency response of 0.2% (N=1).

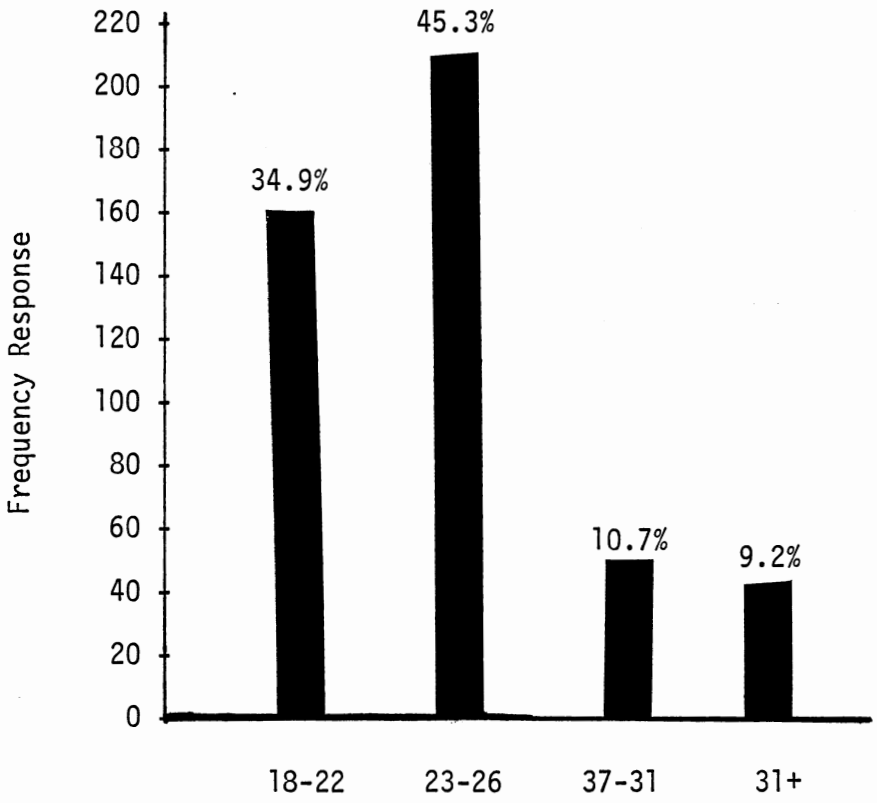

Figure 1. Age Classification of Dietetic Interns and CUP Students

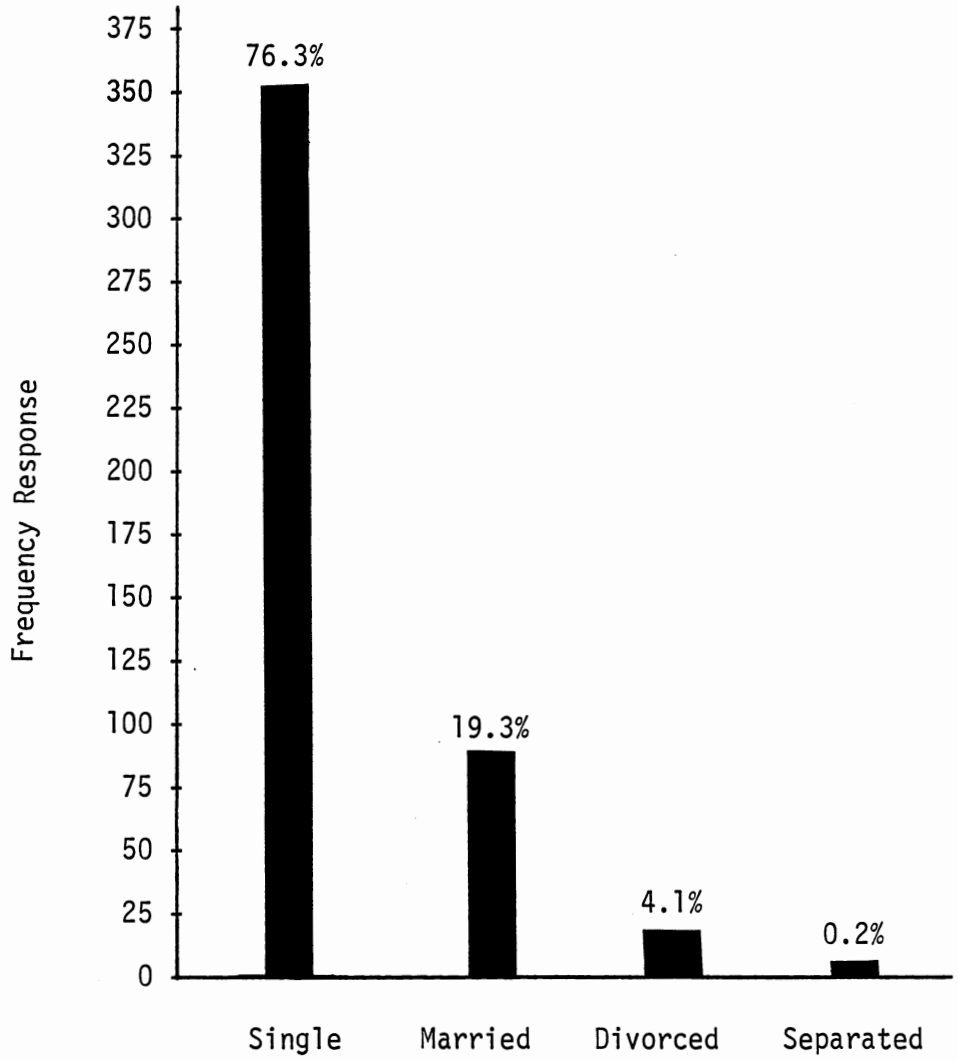

Figure 2. Marital Status of Dietetic Interns and CUP Students

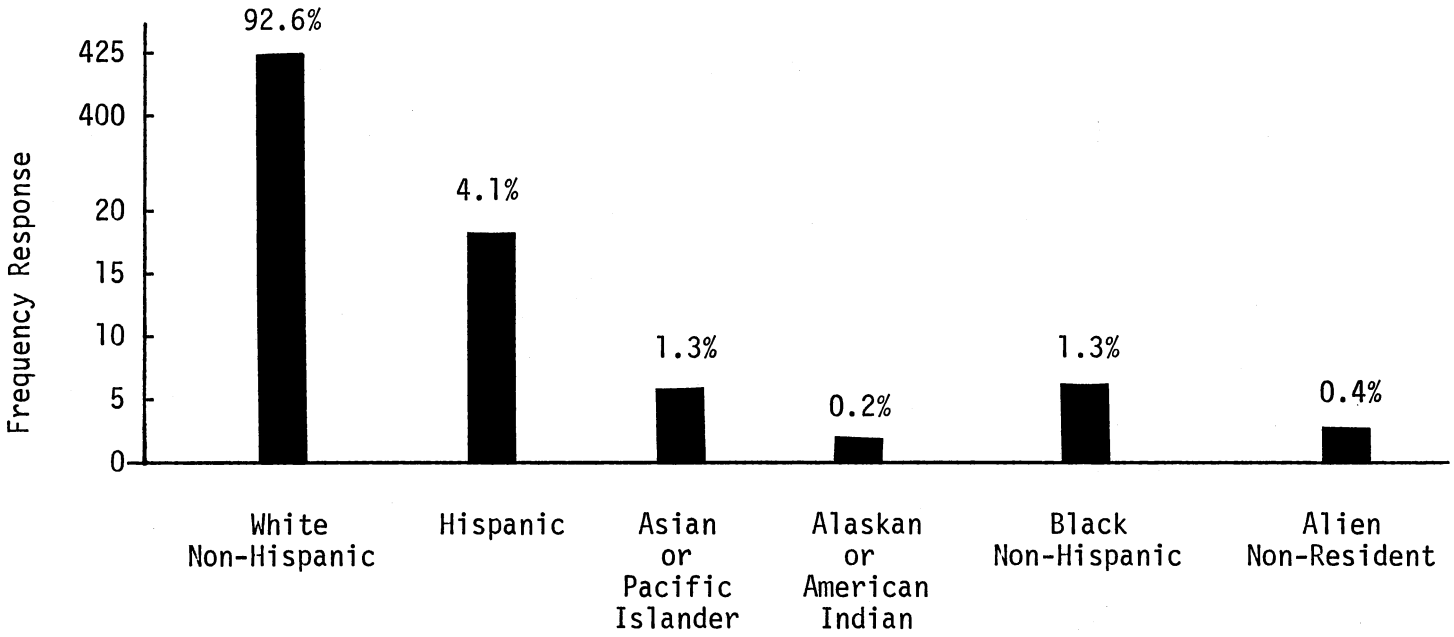

Figure 3. Race Classification of Dietetic Interns and CUP Students

Type of Program Enrolled In

For dietetic interns, the majority revealed that they were currently enrolled in a generalist dietetic internship with a frequency response of 62.2% (N=286), of the 306 respondents (Figure 4). The other interns indicated that they were in a management dietetic internship with a frequency response of 4.3% (N=20).

For the CUP students, the majority were currently enrolled in a generalist CUP program with a frequency response of 33.3% (N=154), of the 155 respondents. One other CUP student indicated he was in a management CUP with a frequency response of 0.2% (N=1).

Of all the responses received, 66.4% (N=306), indicated they were enrolled in a dietetic internship and 33.6% (N=155), indicated they were in a CUP program (Figure 5).

Primary Area of Interest

This question had four responses. In some instances, the dietetic intern or CUP student indicated more than one response. For 21 respondents who indicated more than one response on the questionnaire the data were not analyzed.

About one-third (N=134), 28.1% of the respondents indicated a generalist area of interest, while 85 students (17.8%) indicated the management area (Figure 6). For the clinical area 38.6% (N=184) of the respondents indicated an interest in this area, while 74 students (15.5%) were interested in the community area of dietetics. The clinical area appears to attract the most dietetic interns and CUP students with the generalist area being second and the management area

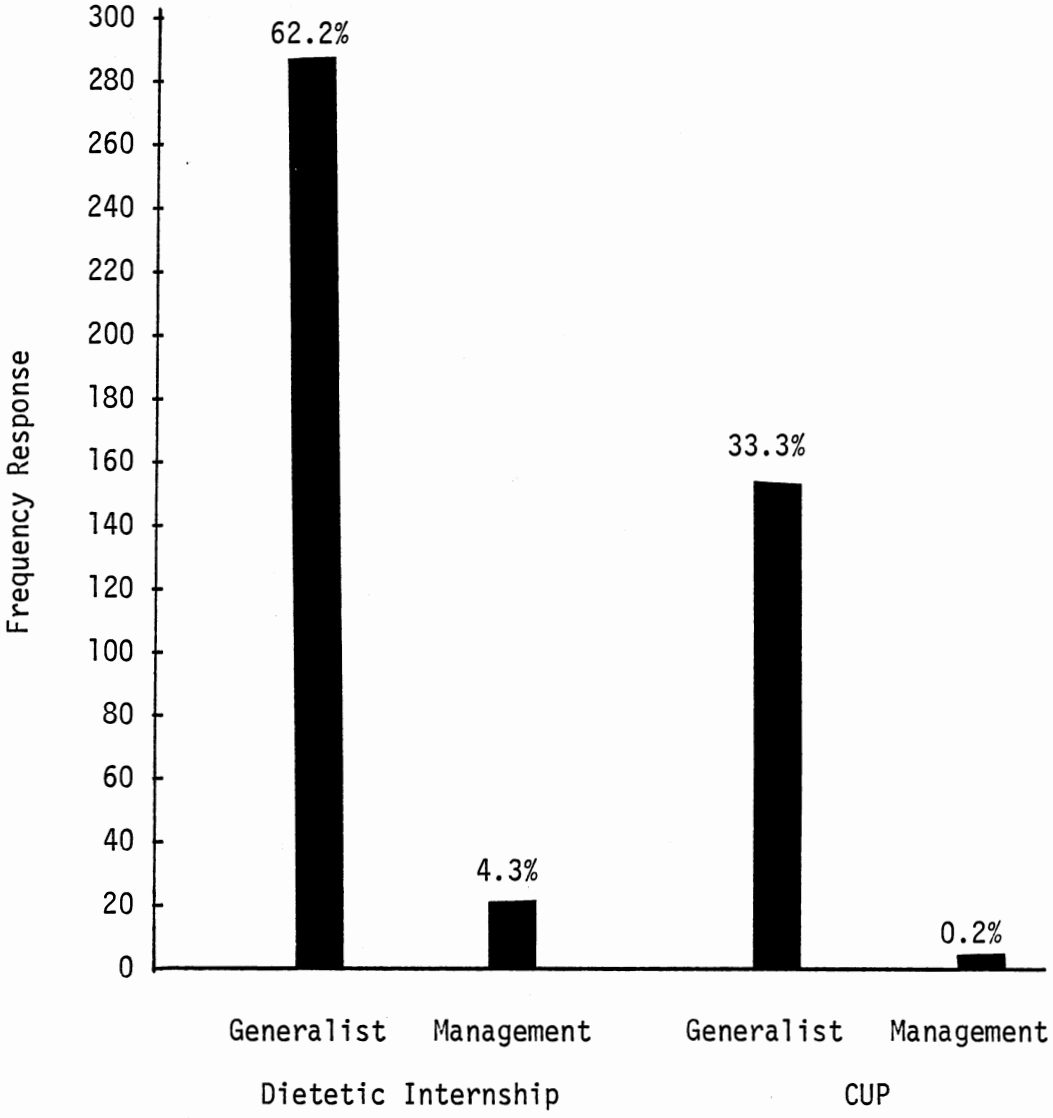

Figure 4. Type of Dietetic Internship and CUP in which Respondents were Currently Enrolled

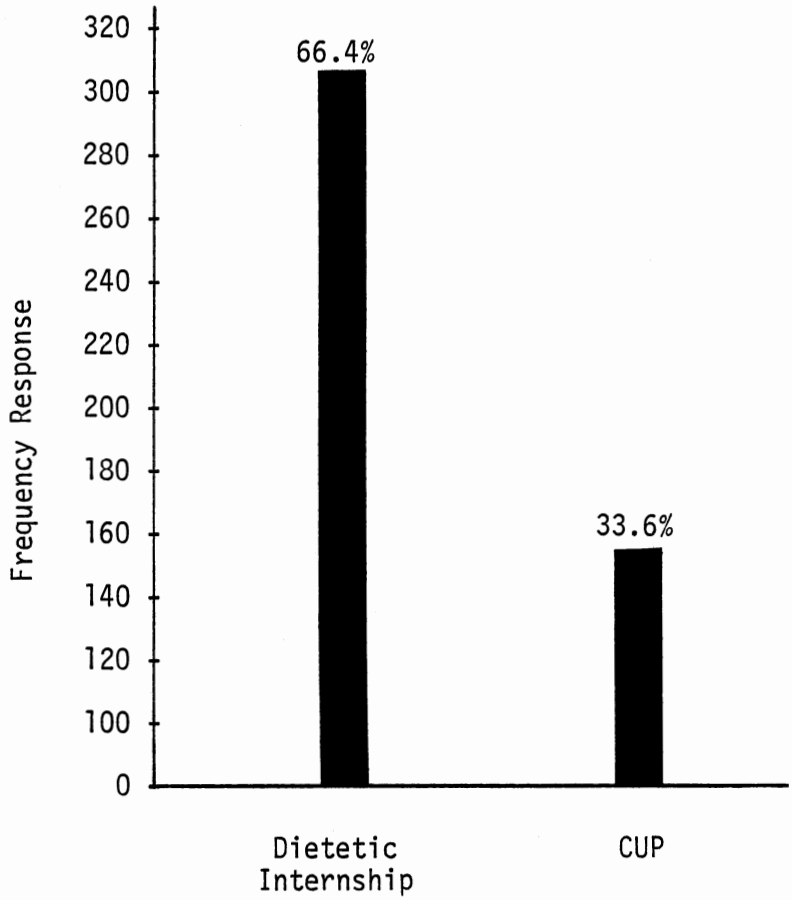

Figure 5. Type of Program in which Respondents were Enrolled

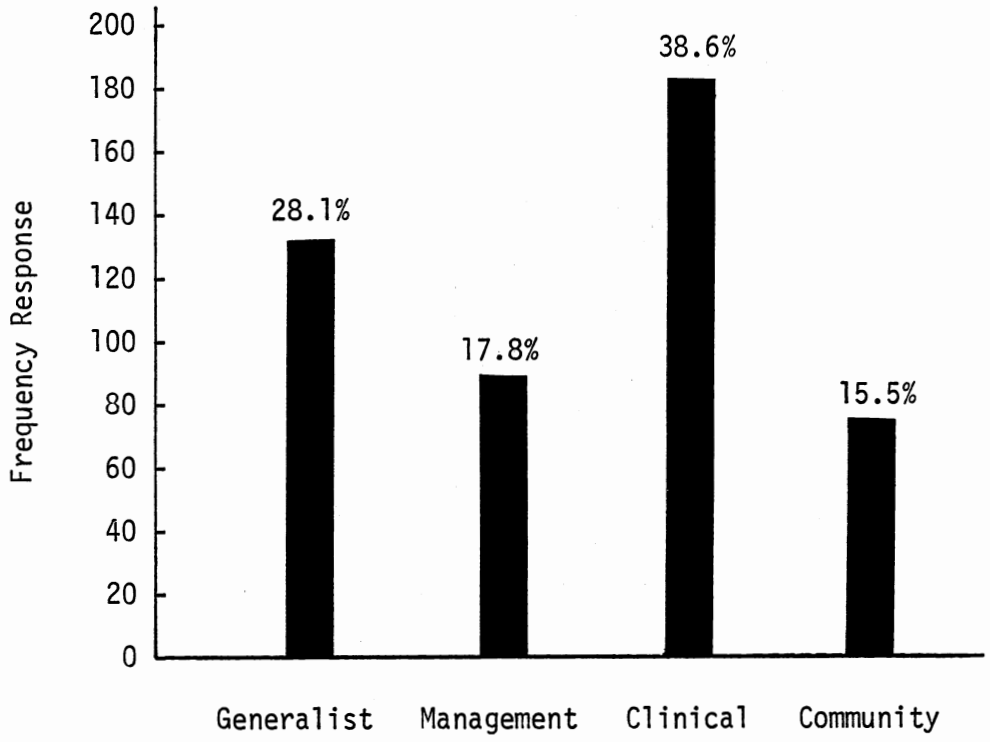

Figure 6. Primary Area of Interest of Interns and CUP Students

being third while the community area of dietetics appears to be the least attractive to the interns and CUP students. Undergraduate dietetic majors and clinical practitioners do not view the management area as equally important to the profession as the clinical area (75).

Geographical Location of Dietetic Internships and CUPs

Of the 50 states, including Puerto Rico, there was a total of 36 states that responded (Appendix C). Illinois had the highest frequency response of 12.4% (N=57); while Oregon, New York, and Washington had the lowest frequency response of 0.4% (N=2).

Experience in Personnel Human Resource Management

Twenty-three responses were deleted because the respondents had made multiple selections. For undergraduate courses, the frequency response to "yes" was 90% (N=394) (Figure 7). For the graduate courses, the frequency response to "yes" was 14% (N=60), in contrast, for work experience, the frequency response to "yes" was 61% (N=267). For other experiences, the frequency response to "yes" was 8% (N=36), and for experience in Personnel Human Resource Management during the internship the frequency response to "yes" was 8% (N=24).

Membership in Organizations

Approximately two-thirds of the respondents indicated they were a member of some organization (Appendix D). For many respondents, they belonged to more than one organization. The organizations were divided into four major categories including honor societies, professional

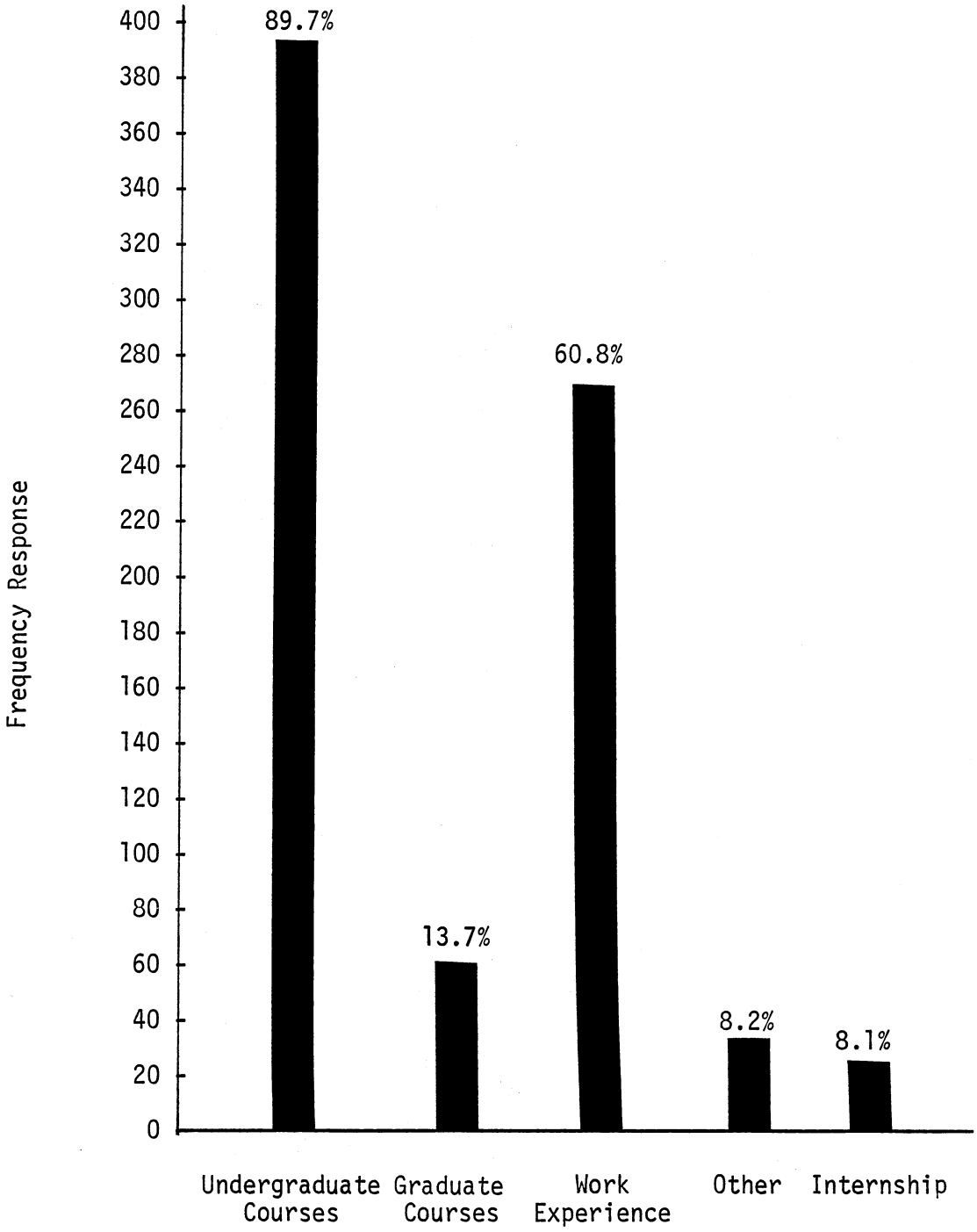

Figure 7. Experience in Personal Human Resource Management (Multiple answers were allowed.)

organizations, social/service organizations and volunteer organizations. These major organizations were subdivided into individual organizations.

In explaining the associations between dietetic interns and CUP students, (Table II), certain associations were found to be statistically significant at the $p<.05$ level and at the $p<.001$ level. The two demographic factors which turned out to be significant were race of the respondents and location of the internship or CUP program. For the demographic factor age, the leadership subscale, Predictive Accuracy, was found to be significant at the $p<.05$ level. The subscale, Tolerance of Uncertainty, was found not to be significant at the $p<.05$ level; however, it was significant at the $p=0.06$ to $p=0.10$ level.

For race of the respondents, the leadership subscale, Demand Reconciliation, was not significant. Two of the subscales, Tolerance of Freedom and Consideration, were not significant at the $p<.05$ level; however, they were significant at the $p=0.06$ to $p=0.10$ level. Five leadership subscales, Tolerance of Uncertainty, Persuasiveness, Production Emphasis, Predictive Accuracy and Integration were significant at the $p<.05$ level. Four leadership subscales, Representation, Initiation of Structure, Role Assumption, and Superior Orientation were significant at the $p<.001$ level.

For the location of the dietetic internships and/or CUP programs, the leadership subscales, Demand Reconciliation and Production Emphasis were not significant. Two subscales, Predictive Accuracy and Superior Orientation, were not significant at the $p<.05$ level; however, they were significant at the $p=0.06$ to $p=0.10$ level. Six leadership subscales, Representation, Persuasiveness, Initiation of Structure, Tolerance of Freedom, Role Assumption and Integration, were significant at the $p<.05$

TABLE II

STATISTICAL ASSOCIATIONS BETWEEN DIETETIC INTERNS AND CUP STUDENTS

	Representation	Demand Reconciliation	Tolerance of Uncertainty	Persuasiveness	Initiation of Structure	Tolerance of Freedom	Role Assumption	Consideration	Production Emphasis	Predictive Accuracy	Integration	Superior Orientation
Age	0.1994	0.7284	0.0702[a]	0.1492	0.5061	0.1587	0.8604	0.8614	0.9545	0.0199[b]	0.9897	0.1526
Sex	0.8856	0.7356	0.8197	0.7470	0.0777[a]	0.9471	0.7501	0.3099	0.2348	0.5060	0.6783	0.5893
Race	0.0001[c]	0.1443	0.0411[b]	0.0042[b]	0.0001[c]	0.0735[a]	0.0003[c]	0.0069[b]	0.0289[b]	0.0402[b]	0.0029[b]	0.0002[c]
Single/Married	0.4910	0.5781	0.4116	0.8572	0.3322	0.2357	0.8944	0.5701	0.2819	0.2487	0.9283	0.5195
Married/Nonmarried	0.4882	0.5879	0.3870	0.8658	0.3382	0.3079	0.8155	0.6092	0.3322	0.2157	0.8805	0.5333
Area of Interest	0.6795	0.5716	0.4484	0.5083	0.7460	0.3418	0.7041	0.6392	0.6748	0.1900	0.5657	0.2423
Location	0.0317[b]	0.7511	0.0002[c]	0.0532[b]	0.0198[b]	0.0015[b]	0.0191[b]	0.0001[c]	0.1710	0.0623[a]	0.0483[b]	0.0556[a]

[a]Not significant at 0.05; however, significant at p=0.06 to p=0.10. [b]$p<.05$. [c]$p<.001$.

level. Two of the subscales, Tolerance of Uncertainty and Consideration were significant at the $p<.001$ level. The demographic variables and the leadership subscales that were significant are explained in more detail in the following paragraphs.

In explaining the table of mean leadership subscale scores, the greatest variance (difference or discrepancy) between the CUPs and internships for each mean subscale score in each region was examined (Table III). The highest and lowest mean leadership subscale scores in CUPs and internships were also examined.

For Representation, there were two regions which revealed the greatest discrepancy in mean leadership subscale scores between CUPs and internships. Region 1, (Appendix E and Table III), had the greatest variance between the two groups and region 3 also revealed a discrepancy between the two groups. Both discrepancies were enough to make the leadership subscale, Representation, significantly different between the two groups at the $p=0.05$ level.

For Representation among CUP students, the highest mean leadership subscale score was in region 5, (Appendix E and Table III), while the lowest mean subscale score was in region 1. Region 5 CUP students would appear to speak and act as the representative of their work group. For the internships, region 3 interns indicated the highest mean leadership subscale score for Representation, while region 2 interns had the lowest mean subscale scores. Region 3 interns appeared to more likely act and speak as spokesperson for their work group.

For Demand Reconciliation, there was only one region which indicated a discrepancy between mean leadership subscale scores between CUPs and internships. Region 6, (Appendix E and Table III), had the greatest

TABLE III

MEAN LEADERSHIP SUBSCALE SCORES BY TYPE AND REGION

Region		Representation[c]	Demand Reconciliation[a]	Tolerance of Uncertainty[d]	Persuasiveness[c]	Initiation of Structure[c]	Tolerance of Freedom[c]	Role Assumption[c]	Consideration[d]	Production Emphasis[a]	Predictive Accuracy[b]	Integration[c]	Superior Orientation[b]
1	CUP	16.64 N=9	18.14 N=7	27.11 N=9	33.25 N=8	36.75	32.37	34.25	34.50	32.62	16.37	18.62	35.75
	Internship	18.65 N=23	18.65	35.52	35.96	39.22	38.22	37.74	41.00	33.30	18.30	20.83	39.91
2	CUP	18.74 N=31	18.10	31.74	36.39	39.84	38.00	38.13	39.71	33.77	18.52	19.52	40.52
	Internship	18.32 N=59	17.63	32.80	35.63	38.36	35.47	36.15	39.20	34.36	17.88	19.58	38.83
3	CUP	18.55 N=45	17.91 N=44	32.22 N=45	35.31	39.56	36.42	36.40	38.69	34.67	17.58	19.74	39.91
	Internship	20.44 N=34	18.09	30.82	39.35	42.85	36.29	39.30	40.85	36.88	18.68	21.18	41.44
4	CUP	19.00 N=29	18.07	34.14	35.52	39.66	36.62	37.28	40.31	34.14	18.28	20.59	41.24
	Internship	18.65 N=40	18.08	34.03	35.70	40.07	36.75	37.35	40.00	34.40	18.07	19.80	39.80
5	CUP	19.60 N=15	17.67	34.07	36.67	39.80	37.13	37.93	39.80	36.00	18.53	19.53	40.20
	Internship	18.36 N=92	17.65	31.96	36.16	38.79	36.70	37.09	39.58	34.16	17.93	19.51	39.13
6	CUP	18.64 N=22	18.77	33.18	36.73	40.45	36.86	37.77	42.00	35.77	18.36	20.36	40.27
	Internship	18.76 N=25	17.60	33.60	36.48	39.24	36.68	36.04	39.65	34.44	18.20	19.52	40.32
7	CUP	18.00 N=4	19.25	35.00	36.50	41.25	33.75	37.25	36.50	34.75	17.75	19.00	40.00
	Internship	18.79 N=33	18.85	34.15	37.09	39.39	36.73	37.58	40.24	34.48	18.70	20.06	40.39

Note: The leadership subscales: Representation, Demand Reconciliation, Predictive Accuracy and Integration contained only five items. The maximum score for these four subscales is 25. The leadership subscales: Tolerance of Uncertainty, Persuasion, Initiation of Structure, Tolerance of Freedom, Role Assumption, Consideration, Production Emphasis, and Superior Orientation contained 10 items. The maximum score for these eight subscales is 50.

[a]Not significant. [b]Not significant at 0.05; however, significant at p=0.06 to p=0.10. [c]$p<.05$. [d]$p<.001$.

discrepancy between the two groups. This difference was not however significant at the p=0.05 level.

For Demand Reconciliation in the CUPs, the highest mean leadership subscale score was in region 7, (Appendix E and Table III), while the lowest mean subscale score was in region 5. Region 7 CUP students appear to more likely to reconcile differences among or between group members and bring order to a system of disorder than CUP students in region 5. For the internships, region 7 revealed the highest mean leadership subscale score for Demand Reconciliation and the lowest mean subscale score was in region 6. Region 7 interns perhaps were more likely to reconcile conflicting demands and reduce disorder to order than would region 6 interns.

For Tolerance of Uncertainty, there were two regions which revealed the greatest discrepancy in mean leadership subscale scores between CUPs and internships. Region 1, (Appendix E and Table III), had the greatest discrepancy, (8.41), while region 5 had a discrepancy of 2.11 between the two groups. Both discrepancies were enough to make the leadership subscale, Tolerance of Uncertainty, significant at the p=0.001 level. Region 1 mean leadership subscale score for Tolerance of Uncertainty indicates the greatest variance when compared to all other leadership subscales shown in Table III.

For Tolerance of Uncertainty in the CUPs, the highest mean leadership subscale score was in region 7, (Appendix E and Table III), with the lowest mean subscale score in region 1. Region 7 CUP students believe that they are able to tolerate uncertainty and postponement without anxiety or upset better than region 1 CUP students. For the internships, region 1 interns indicated the highest mean leadership

subscale score for Tolerance of Uncertainty, while region 3 interns had the lowest mean subscale score. Region 1 interns appear to tolerate postponement and uncertainty without becoming anxious or upset better than region 3 interns.

For Persuasiveness, there were two regions which showed discrepancies in mean leadership subscale scores between CUPs and internships. Region 3, (Appendix E and Table III), had the greatest discrepancy, while region 1 indicated a discrepancy between the two groups. Both variances were enough to make the leadership subscale, Persuasiveness, significant at the p=0.05 level.

For Persuasiveness in the CUPs, the highest mean leadership subscale score was in region 6, (Appendix E and Table III), while the lowest mean subscale score was in region 1. Region 6 CUP students appear to be more persuasive, argue more effectively and reveal stronger convictions than would region 1 CUP students. For the internships, region 3 indicated the highest mean leadership subscale score while region 2 had the lowest mean subscale score. Region 3 interns appear to be more persuasive, argue more effectively, in addition to possessing stronger convictions than region 2 interns.

For Initiation of Structure, there were three regions which indicated discrepancies in mean leadership subscale scores between CUPs and internships. Region 3, (Appendix E and Table III), had the greatest variance between the two groups. Regions 1 and 7 also indicated variances between the two groups. All three discrepancies were enough to make the leadership subscale, Initiation of Structure, significant at the p=0.05 level.

Region 7, (Appendix E and Table III), CUP students and region 3 interns indicated the highest mean leadership subscale scores for

Initiation of Structure, within their respective groups, while region 1 CUP students and region 2 interns had the lowest mean subscale scores. Region 3 interns and region 7 CUP students believed that they could define their role in relation to their followers role and could inform their followers what is expected of them.

For Tolerance of Freedom, there were three regions showing discrepancies in mean leadership subscale scores between CUPs and internships. Region 1, (Appendix E and Table III), had the greatest variance between the two groups. Regions 7 and 2 also revealed variances between the two groups. These discrepancies were enough to make the leadership subscale, Tolerance of Freedom, significant at the p=0.05 level.

For Tolerance of Freedom, region 2, (Appendix E and Table III), CUP students and region 1 interns revealed the highest mean leadership subscale scores within their respective groups, while region 1 CUP students and region 2 interns had the lowest mean subscale scores. Region 2 CUP students and region 1 interns believed they would allow their followers more freedom for initiative, decision and action.

For Role Assumption, there were three regions with discrepancies in mean mean leadership subscale scores between CUPs and internships. Region 1, (Appendix E and Table III), revealed the greatest discrepancy between the two groups. Regions 3 and 2 also indicated discrepancies between the two groups. All three discrepancies were enough to make the leadership subscale, Role Assumption, significant at the p=0.05 level.

Region 3, (Appendix E and Table III), interns indicated the highest mean leadership subscale score for Role Assumption, while region 6 had the lowest mean subscale score. Region 3 interns believed they could actively exercise the leadership role rather than giving up the

leadership to others. Region 2 CUP students had the highest mean leadership subscale score for Role Assumption, while region 1 had the lowest mean subscale score. Region 2 CUP students felt that they could actively exercise the leadership role rather than surrendering leadership to others.

For Consideration, there were four regions which revealed discrepancies in mean leadership subscale scores between CUPs and internships. Region 1, (Appendix E and Table III), indicated the greatest variance between the two groups. Regions 7, 6, and 3 also indicated variances between the two groups. All four variances were enough to make the leadership subscale, Consideration, significant at the p=0.001 level.

Region 1, (Appendix E and Table III), interns indicated the highest mean leadership subscale scores for Consideration, while region 2 interns had the lowest mean subscale score. Region 1 interns believed they considered the comfort, well-being, status and contribution of followers more important than region 2 interns. Region 6 CUP students had the highest mean leadership subscale score for Consideration while region 1 CUP students had the lowest mean subscale score. Region 6 CUP students felt they considered the comfort, well-being, status and contribution of followers more important than region 1 CUP students.

For Production Emphasis, there were two regions which indicated discrepancies in mean leadership subscale scores between CUPs and internships. Regions 3 and 5, (Appendix E and Table III), indicated variances between the two groups. Both variances were not enough to make the leadership subscale, Production Emphasis, significant at the p=0.05 level.

Region 3, (Appendix E and Table III), interns revealed the highest mean leadership subscale score for Production Emphasis, while region 1 interns had the lowest mean subscale score. Region 3 interns felt they would be more likely to apply pressure for productive output from their followers than region 1 interns. Region 5 CUP students indicated the highest mean leadership subscale score for Production Emphasis, while region 1 CUP students had the lowest mean subscale score. Region 5 CUP students believed they would be more willing to apply pressure for productive output than region 1 CUP students.

For Predictive Accuracy, there was one region that indicated a large variance between mean leadership subscale scores between CUPs and internships. Region 1, (Appendix E and Table III), indicated a variance between the two groups. This variance was not enough to make the leadership subscale, Predictive Accuracy, significant at the $p=0.05$ level; however, it was significant at the $p=0.06$ to $p=0.10$ level.

Region 7, (Appendix E and Table III), interns indicated the highest mean leadership subscale score for Predictive Accuracy, while region 2 interns had the lowest mean subscale score. Region 7 interns believed they are able to exhibit foresight and predict outcomes more accurately than region 2 interns. Region 5 CUP students revealed the highest mean leadership subscale score for Predictive Accuracy, while region 1 CUP students had the lowest mean subscale score. Region 5 CUP students felt they would be able to exhibit foresight and predict outcomes more accurately than region 1 CUP students.

For Integration, there were two regions which indicated discrepancies between mean leadership subscale scores between CUPs and internships. Regions 1 and 3, (Appendix E and Table III), revealed

discrepancies between the two groups. This discrepancy was enough to make the leadership subscale, Integration, significant at the p=0.05 level.

Region 1, (Appendix E and Table III), interns and region 4 CUP students indicated the highest mean leadership subscale scores for Integration, within their respective groups, while region 5 interns and region 1 CUP students had the lowest mean subscale scores. Region 1 interns and region 4 CUP students felt they would maintain a closely knit organization and resolve intermember conflicts.

For Superior Orientation, there were three regions which revealed discrepancies in mean leadership subscale scores between CUPs and internships. Region 1, (Appendix E and Table III), revealed the largest variance between the two groups. Regions 2 and 3 indicated discrepancies, but were not enough to make the leadership subscale, Superior Orientation, significant at the p=0.05 level; however, it was significant at the p=0.06 to p=0.10 level.

For Superior Orientation, region 4, (Appendix E and Table III), CUP students and region 3 interns revealed the highest mean leadership subscale scores within their respective groups, while region 1 CUP students and region 5 interns had the lowest mean subscale scores. Region 4 CUP students and region 3 interns felt they would more likely maintain pleasant relations with their superiors, in addition to having influence with them.

For the mean leadership subscale scores by type (internship vs. CUP) and race, there were significant associations among 11 of the 12 subscales (Table II). One subscale, Demand Reconciliation, showed no association at all. Another subscale, Tolerance of Freedom, was significant but at the probability level of 0.0735 and hence will be considered.

The first leadership subscale which indicated a significant association of 0.0001 by type (intership vs. CUP) and race (white vs. nonwhite) was Representation. The association was significant at the 0.001 level (Table II). The mean subscale scores for white CUP students was higher than nonwhite CUP students and the subscale scores for nonwhite interns was higher than for white interns (Table IV).

The leadership subscale Demand Reconciliation showed the same trend as Representation but the association was not significant enough to be noted. The mean subscale scores for white CUP students was higher than nonwhite CUP students, in contrast, the subscale scores for nonwhite interns was higher than for white interns.

The leadership subscale Tolerance of Uncertainty showed an association of 0.0411 (Table II), which is significant at the 0.05 level. The white CUP students and dietetic interns scored higher mean subscale scores than their nonwhite counterparts (Table IV).

The leadership subscale Persuasiveness showed a significant association of 0.0042. The white CUP students scored higher than the nonwhite CUP students and the nonwhite interns scored higher than the white interns.

The leadership subscale Initiation of Structure revealed a significant association of 0.0001. The white CUP students scored higher than the nonwhite CUP students. The reverse is true for the interns.

The leadership subscale Tolerance of Freedom showed an association but only at the 0.0735 level (Table II). For this leadership subscale the white CUP students scored higher than the nonwhite CUP students. In contrast, the nonwhite interns scored slightly higher than the white intern (Table IV).

TABLE IV

MEAN LEADERSHIP SUBSCALE SCORES BY TYPE AND RACE

	Representation[d]		Initiation of Structure[d]		Production Emphasis[c]	
	5	6	5	6	5	6
C	16.00	18.82	35.75	39.90	32.25	34.70
I	20.32	18.54	42.48	39.15	35.80	34.35
	Demand Reconciliation[a]		Tolerance of Freedom[b]		Predictive Accuracy[c]	
	5	6	5	6	5	6
C	17.71	18.14	33.37	36.24	16.75	18.12
I	18.92	17.84	36.81	36.57	18.68	18.10
	Tolerance of Uncertainty[c]		Role Assumption[d]		Integration[c]	
	5	6	5	6	5	6
C	27.00	32.92	33.75	37.36	18.25	19.93
I	31.04	33.09	40.28	36.85	21.32	19.75
	Persuasiveness[c]		Consideration[b]		Orientation[d]	
	5	6	5	6	5	6
C	32.75	35.99	35.62	39.72	35.50	40.40
I	39.00	36.20	40.32	39.84	41.76	39.50

Note: 5=Nonwhite, 6=White, C=CUP, I=Internship.
The Leadership Subscales: Representation, Demand Reconcilation, Predictive Accuracy and Integration contained only five items. The maximum score for these four subscales is 25. The Leadership Subscales: Tolerance of Uncertainty, Persuasion, Initiation of Structure, Tolerance of Freedom, Role Assumption, Consideration, Production Emphasis, and Superior Orientation contained 10 items. The maximum score for these eight subscales is 50.

[a]Not significant. [b]Not significant at 0.05; however, significant at p=0.06 to p=0.10. [c]$p<.05$. [d]$p<.001$.

The leadership subscale Role Assumption showed a significant association of 0.0003. The white CUP students scored higher than the nonwhite CUP students. Just the opposite was evident between the interns.

The leadership subscale Consideration showed a significant association of 0.0069 (Table II). The white CUP students scored higher than the nonwhite CUP students and the nonwhite interns scored higher than the white interns (Table IV).

The leadership subscale Production Emphasis showed a significant association of 0.0289. The white CUP students scored higher than the nonwhite CUP students. The opposite is true for the interns.

The leadership subscale Predictive Accuracy showed an association of 0.0402, which is significant at the 0.05 level. The white CUP students scored higher than the nonwhite CUP students. In contrast, the nonwhite interns scored higher than their white counterparts.

The leadership subscale Integration showed an association of 0.0029, which is significant at the .05 level. The white CUP students scored higher than the nonwhite CUP students. The reverse is shown between the interns.

The leadership subscale Superior Orientation showed an association of 0.0002, which is significant at the .001 level (Table II). The white CUP students scored higher than the nonwhite CUP students. In contrast, the nonwhite interns scored higher than the white interns (Table IV).

For the dietetic interns, in all but one leadership subscale, Tolerance of Uncertainty, the nonwhite dietetic interns scored higher mean leadership subscale scores than white dietetic interns. On all 12 of the subscales the white CUP students scored higher mean leadership

scores than nonwhite CUP students. The predominant nonwhite group is Hispanic, followed by Black, non-Hispanic and Asian or Pacific Islander, followed lastly by Alien, non-resident and Alaskan or American Indian (Table V).

TABLE V

NUMBER OF WHITE/NON-WHITE CUP STUDENT AND DIETETIC INTERN RESPONDENTS

Respondents	White	Non-White
Interns	283	23
CUP students	144	11

In this study, the non-white interns consistently scored higher leadership scores for 11 of the 12 subscales. An individual's culture and/or environment may be considered an important factor influencing the non-white intern's subscale score. An individual's culture and environment play a vital role in determining an individual's personality, behavior and outlook on life (76).

In reviewing the non-white interns mean leadership subscale score, remember these individuals are special people in that they are usually brighter and may possess more leadership potential or ability than their white counterparts. In their race and/or culture they are usually perceived to be the cream of the crop; they are some of the best individuals

their race has to offer. This may be true for International (foreign) students who do very well in their studies back home and are offered the opportunity to come over to America and continue their education.

The non-white interns may have answered the questionnaire in a very idealistic manner, responding in a way that they thought the researcher wanted them to respond rather than how they think they would really respond in the scenario that was set up for them. This may have attributed to higher leadership subscale scores.

For an individual to be an intern, one must possess a collection of special characteristics that the admission committee perceive as vital for a future dietitian. One of those qualities that an intern may invariably possess is to be an overachiever. Most interns are usually found to have this trait. To do more than was initially required; to go above and beyond the call in order to complete a task.

The white CUP students on 11 of the 12 leadership subscales scored higher than the nonwhite CUP students. Like the nonwhite interns, the CUP students may have responded to the questionnaire in such a manner that they thought the researcher wanted them to respond rather than how they think they would really react in the scenario which was set up for them. The majority of the white CUP students will most likely not have any managerial leadership experience. They may have overestimated their leadership abilities.

Nonwhite CUP students may not see very many role models in their area and don't feel like they have the leadership abilities. In which case they might underestimate their leadership potential. They may have grown up believing that a leadership role or position was beyond their scope.

Subscale Scores by Type and Age

The mean subscale scores by type (internship vs. CUP) and age, indicated one significant association among the 12 subscales (Table II). The leadership subscale Predictive Accuracy indicated an association of 0.0199, which was significant at the .05 level. In this same category, another leadership subscale, Tolerance of Uncertainty, was significantly associated but only at the 0.07 level (Table II).

Four different age ranges were listed on the Leadership Behavior Description Questionnaire (LBDQ) - General Information sheet. They were:

18 - 22	$\overline{X}$ = 20.5	N = 161
23 - 26	$\overline{X}$ = 25	N = 209
27 - 30	$\overline{X}$ = 28.5	N = 49
31 and over	$\overline{X}$ = 34	N = 42

Interpretation of the graph indicated that the Predictive Accuracy, (to be able to exhibit foresight and predict outcomes accurately), of dietetic interns was very consistent at the 18-22 age range, ($\overline{X}$=20.5), to the 23-26 age range, ($\overline{X}$=25). There was not much variance between the mean leadership subscale scores for those two age groups, however, at the 27-31 age range, (X=28.5), the mean leadership subscale score for the interns did increase. At the 31 and over age range, ($\overline{X}$=34), the mean leadership subscale score for the dietetic interns also increased (Figure 8). As age increases among interns so does their Predictive Accuracy scores.

For the CUP students, the same age ranges were used and the mean ages were the same for the CUP students. When graphed, the 18-22 age range, ($\overline{X}$=20.5) for the CUP students indicated an almost identical mean

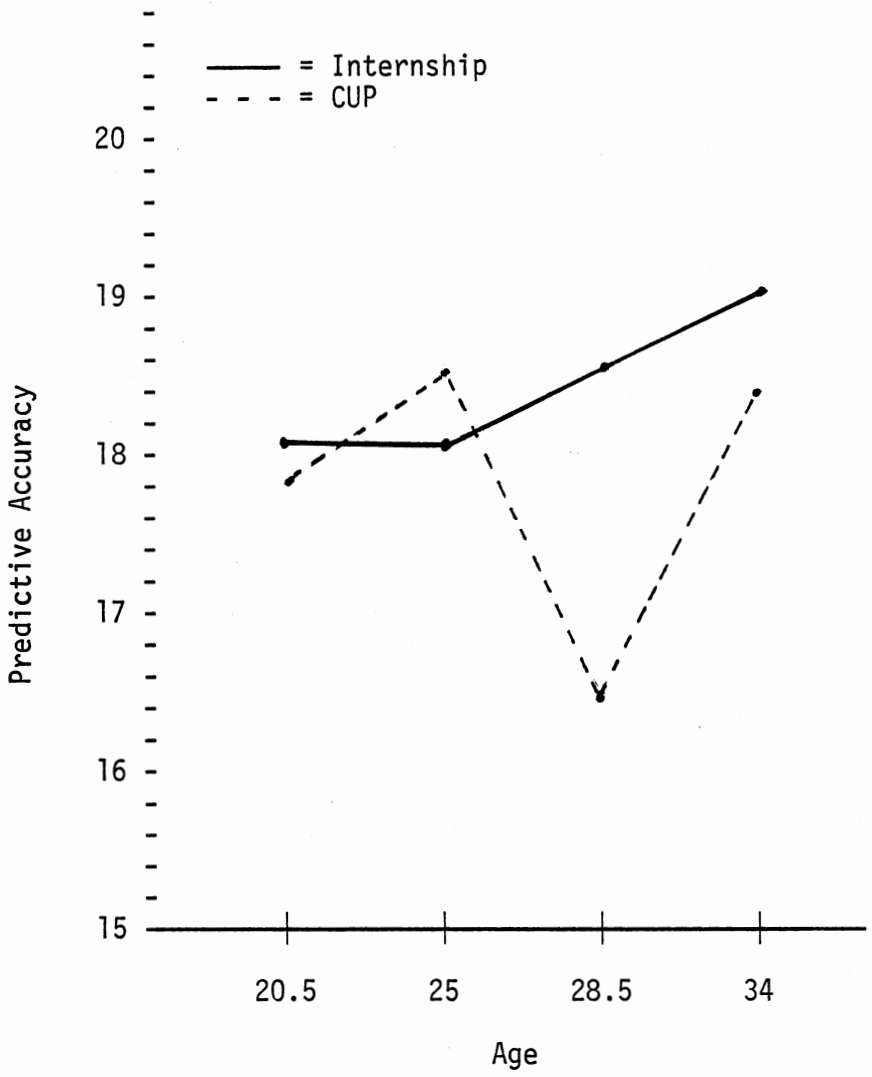

Figure 8. Comparison of Mean Subscale Score of Predictive Accuracy by Type (Internship vs. CUP) and Age

leadership subscale score as the dietetic intern for Predictive Accuracy but slightly lower. At the 23-26 age range, ($\overline{X}$=25), the CUP students indicated a steeper increase than the dietetic interns. At the 27-31 age range, ($\overline{X}$=28.5); however, the CUP students revealed a significant drop in their mean leadership subscale score. At the 31 and over age range, ($\overline{X}$=34), the CUP students revealed a steeper increase, up to slightly below what their mean leadership subscale score was at the 23-26 age range, ($\overline{X}$=25), (Figure 8). The CUP students' mean leadership subscale scores at the mean age groups was inconsistent as compared with those of interns in the study.

One explanation for the dip in the CUP students' leadership subscale scores for Predictive Accuracy may be attributed to individuals returning to the work force. Those returning students in this particular age group, (27-31), may feel overwhelmed, threatened, or unsure of their Predictive Accuracy, therefore, they rate themselves low on this dimension. One would expect that the older an individual becomes, the more confident they are in predicting the outcome of future events. That may not necessarily be true as shown in this study (Figure 8).

Testing of Hypotheses

H_o1: There will be no difference in response patterns to each of the 12 leadership subscale scores between interns and CUP students based on selected personal variables:

a. age
b. sex
c. marital status
d. race/ethnic class

e. area of personal interest

f. experience in management

When you consider age and race, (Tables II, IV and Figure 1), the researcher failed to reject Hypothesis 1a and 1d. When you consider sex, marital status, area of personal interest and experience in management, (Table II), the researcher rejected Hypothesis 1b, 1c, 1e and 1f.

H_o2: There will be no difference in response patterns to each of the 12 leadership subscales between interns and CUP students based on selected institutional variables:

a. type of program (internship vs. CUP)

b. type of emphasis in each program (internship vs. CUP)

c. location of internship or CUP (ADA area classification)

d. number of students in the program (internship vs. CUP)

When you consider location, (Tables II and III), the researcher failed to reject Hypothesis 2c. When you consider type of program, type of emphasis in each program and number of students in each program, (Table II), the researcher rejected Hypothesis 2a, 2b, and 2d.

CHAPTER V

SUMMARY, RECOMMENDATIONS AND IMPLICATIONS

This study was to determine the perceived leadership attitudes and perceptions of dietetic interns and CUP students as they are proceeding through a dietetic internship or CUP program. The review of literature focused on ADA Manpower revealing three scenarios, each outlining the employment possibilities and opportunities for dietitians up to the year 1990. Also included are specific leadership theories and their evolution. In addition, previous research studies using different populations utilizing the Leader Behavior Description Questionnaire (LBDQ) was examined. Results of this study may indicate whether dietetic internships and CUP programs should incorporate leaderships classes, practicums and/or leadership experiences into their respective programs.

The Leadership Behavior Description Questionnaire (LBDQ) was sent to 122 dietetic internship and CUP directors who were requested to distribute the LBDQ to their respective interns or CUP students. The names and addresses of the directors were obtained from the 1986 American Dietetics Association Directory of Dietetic Programs. Only dietetic internships and CUP programs that had a Generalist or Management emphasis were included in this study. Data was gathered and analyzed from 366 dietetic interns and 155 CUP students.

Six independent variables were examined including age, sex, race, marital status, area of interest in dietetics and location of CUP or internship. The 12 leadership subscales examined between the two groups included Representation, Demand Reconciliation, Tolerance of Uncertainty, Persuasiveness, Initiation of Structure, Tolerance of Freedom, Role Assumption, Consideration, Production Emphasis, Predictive Accuracy, Integration and Superior Orientation.

Summary

The study revealed different attitudes and perceptions toward 12 leadership dimensions between dietetic interns and CUP students. The majority of respondents were white, female, 23-26 years of age, single, dietetic interns who selected clinical dietetics as their primary area of interest. A major portion of the respondents indicated they were members of groups and organizations (honor societies; professional organizations on a national, state and local level; social and service organizations; and volunteer organizations).

The variables, race and location, were significantly associated with the leadership subscales between the interns and CUP students. For race, white CUP students (N=144) scored higher mean leadership scores than the non-white CUP students (N=11) on all 12 of the subscales. Non-white dietetic interns (N=23) scored higher mean leadership scores than the white dietetic interns (N=283) on 11 of the 12 subscales. Since there is such a wide gap between the numbers of whites and non-whites, this inequality of numbers may have contributed to the fluctuation in the mean leadership subscale scores. For location, certain CUP students scored significantly lower subscale scores, in the

same region, than dietetic interns. In other regions CUP students scored significantly higher than dietetic interns.

For age, there was a significant association between the CUP students and dietetic interns on the leadership dimension, Predictive Accuracy. Dietetic interns scored higher leadership subscale scores as they grew older; whereas, CUP students scored inconsistently on Predictive Ability as they grew older.

Recommendations

It is recommended that a further study of this type should necessitate two mailings. The researcher could send the first mailing at the beginning of the internship and/or CUP and the second mailing close to the end of the internship and/or CUP. The second mailing could consist of sending the nonresponding CUPs and internships a reminder letter or postcard to inform the directors of both programs that the researcher is still requesting questionnaires from their interns or CUP students. This second mailing may also help increase the overall response rate. In addition, the study could have been expanded to include all CUP students and dietetic interns in a clinical and/or community emphasis of an internship and/or CUP. In a different study, the researcher could send the CUP students a LBDQ to complete in the beginning of their junior year of their program and another questionnaire at the end of their senior year in the CUP program.

Another recommendation may include locating an internship and/or CUP that offers a leadership class or seminar and administer the LBDQ to the interns or CUP students before they take the class, then administer the LBDQ at the end of the internship or CUP program.

Concurrently, administer the LBDQ to an internship and/or CUP that does not have any leadership classes, seminars, workshops or leadership experiences and compare/contrast the differences with a program that does have leadership classes, seminars, etc.

Another study could include using a different LBDQ. This would consist of using a 40-item questionnaire version of the LBDQ or the researcher could take the original LBDQ and eliminate certain leadership subscales thereby making the length of the questionnaire any number of items desired. An entirely different questionnaire could be used by either devising one from the beginning or locating another leadership questionnaire.

Implications

The researcher believes that dietetic interns and/or CUP students should be exposed to leadership seminars, classes, workshops and experiences to heighten their awareness to this behavior. Perhaps a leadership class or seminar could be incorporated into the CUPs and internships as an integral part of each program where appropriate. In addition, leadership experiences and practicums should be emphasized and made available to dietetic interns and CUP students.

In order for leadership to grow or be acquired by an individual, it should be remembered that leadership is a skill that must be learned. Leadership must be nurtured and practiced if this skill is to be acquired and used by an individual. There must be enough time allowed for the individual to practice leadership and find the leadership style that best suits that individual. Role models may also be important for leadership to grow and expand in an individual. Role models may assist

an individual to acquire leadership skill in that an individual may desire to emulate a role model by copying certain aspects of the role model's leadership style.

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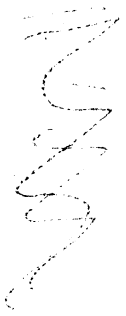
APPENDIXES



APPENDIX A

DEVELOPMENT OF THE LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE

Development of the Leader Behavior Description Questionnaire

The Leader Behavior Description Questionnaire (LBDQ) originated out of the research done by J. K. Hemphill (77). An important motivation for the development of a technique to explain how a leader behaves was the need felt by the staff of the Personnel Research Board (Ohio State University, Columbus) for the organization of individual research activities. In group discussions, it became apparent that a significant core of interest common to all individual research activities of the staff members lay in how a leader carried out his duties. It was decided to make the development of a leader description instrument oriented toward "how he does it" a common task of the research staff (78). C. L. Shartle noted that "when the Ohio State Leadership Studies were initiated in 1945, no satisfactory theory or definition of leadership was available" (6).

Development of the research tool was undertaken by group discussions, and decision-making in a staff comprised of psychologists, sociologists and economists. After in-depth discussions, a list of subscales was tentatively agreed upon. Initially the designated subscales of leader behavior included:

1. Integration
2. Communication
3. Production Emphasis
4. Representation
5. Fraternization
6. Organization
7. Evaluation
8. Initiation
9. Domination

These nine subscales furnished a framework for the accumulation of specific items of leader behavior which were later reviewed and evaluated (78).

Item Construction

Each member of the Personnel Research Board wrote items which appeared to apply to the above subscales. Suggestions for items were drawn from familiarity with leadership literature and from personal experiences. To broaden the scope of behavior comprehended by the items, beyond that recommended by the homogenous experience of the staff members, a process of obtaining items from a larger population was implemented. Students of two advanced university classes wrote 48 items each (12 items in each of 4 separate areas) as an assignment in item construction. The directions to these classes stressed the following points:

1. Items must explain specific behavior, not general traits or characteristics.
2. Items must apply to different types of organizational structures, groups or situations. Items must not be so specific as to apply to only a few groups or situations.

3. Items must be worded in terms meaningful to the respondents.
4. An item must specifically apply to the subscale for which it is written. It may also overlap other subscales of behavior.
5. The items must be worded in the present tense.
6. The items must begin with the pronoun "He."
7. The item must be limited to one unit of behavior (should not be "double barreled").
8. The items must not contain adverbs implying the frequency with which the behavior occurs (always, never, etc.).
9. The items must not be emotionally or evaluatively toned except as that tone is an inseparable part of the behavior it describes.

Following minor editing, 1,790 items remained from all sources. From these items, 150 were chosen and arranged in the form of a preliminary questionnaire (78).

Item Selection for a Preliminary Questionnaire

The first step in the selection of specific items from the collection of 1,790 was to classify them into the 9 subscales mentioned above. Each of the 9 subscales was assigned to each research staff member who examined each of the 1,790 items to ascertain whether or not it belonged to his assigned subscale. By collecting the results of this examination, it was possible to list items which appeared to belong to one, two, three, or even four subscales (78).

These lists were given to each staff member and served as the topic for group discussion of each item. In these group discussions, items were considered for overlap of content, relative freedom with items in other subscales, range of content and general evaluation tone, and minor editing of some items in addition to the writing of a few additional items believed to cover omissions. Any gaps in content were also accomplished during these group discussions (78).

Approximately 200 items survived this selection process. The staff decided to decrease the number to 150 items in order to be used with IBM Test Answer Sheets. It was decided to subclassify items within the subscales in order to review more systematically the content emphasized. During this second screening, the subscales were redefined to match up more closely with the actual content of items in the category. The redefined subscales are listed below along with the number of items retained:

1. Initiation - 15 items
2. Membership - 15 items
3. Representation - 16 items
4. Integration - 17 items
5. Organization - 18 items
6. Domination - 19 items
7. Communication - 22 items
8. Recognition - 14 items
9. Production - 12 items

The Communication subscale was divided into Communication Up and Communication Down in the construction of the instrument, making a total of 10 subscales (78).

The Preliminary Questionnaire

When the 150 items of leader behavior had been chosen and classified by subscale, they were organized to form the Leader Behavior Description Questionnaire (LBDQ). Items were randomized and the 10 subscales dropped out of the picture so far as the respondent was concerned (78).

The purpose of the LBDQ was to obtain from respondents objective descriptions of leader behavior. In the use of items chosen, the staff expected that the value tone combined with leader behavior would contribute to an intermingling of the quality of leadership with objective observation of the leader's actual behavior (78).

A "forced choice" format was contemplated as one way of meeting the problem of evaluation tone in the items. Two objections were raised to the "forced choice" format, which led to its rejection in the preliminary questionnaire (78).

First, in order to assemble a "forced choice" instrument, it would be essential to know the relative value tone of each item as perceived by a representative respondent. The second objection stemmed from a desire to obtain quantitatively comparable statements of the frequency with which a "leader" engages in an item of behavior. This would be impossible with a "forced choice" format, where frequency of occurrence of an item of behavior would have to be omitted along with the omission of value tone (78).

The research staff decided to employ a multiple choice format for the questionnaire. Five choices were presented in association with each item. These choices were adverbs implying frequency of the behavior stated by the item. By employing these adverbs it was hoped that two things could be accomplished:

1. To divide the scope of frequency of behavior into equal psychological steps by the five choices.
2. To organize the adverbs with the item in such a manner that there would be no reason to select one response rather than the other (78).

A list of 42 adverbs implying frequency and/or extent of engaging in behavior described by an item was obtained by collecting recommendations from staff members. This list was then distributed to each staff member who served as a judge in a paired-comparison evaluation of each adverb against every other adverb on the list, using as a criterion the extent to which it revealed frequency or extent of occurrence (78).

Three combinations of five frequency adverbs were chosen from the list to be employed as multiple choice responses to the items of leader behavior. The three combinations and their modal values are listed below:

Combination A		Combination B		Combination C	
Response Alternative	Mode	Response Alternative	Mode	Response Alternative	Mode
Always	41	Often	32	A great deal	38
Often	32	Fairly often	27	Fairly much	26
Occasionally	21	Occasionally	21	To some degree	21
Seldom	11	Once in awhile	13	Comparatively	13
Never	0	Very seldom	8	Not at all	1

Combinations A and B are comprised of adverbs implying frequency; combination C contains adverbs implying extent. A differs from B in that extreme frequencies have been eliminated and the resulting range of frequency is spread among the five steps (78).

The staff members considered each item to be included in the questionnaire to ascertain which one of the three response combinations would most likely comply with the two criteria mentioned above for the choice of adverbs to follow an item (78).

Testing the Questionnaire

A point was reached in the development of the questionnaire when it became obvious that a number of questions could only be answered by administering the instrument to a large sample of respondents. These questions entailed both the dimensional classification of the items and the performance of each individual item (78).

To secure information from which answers to these questions could be obtained, the Leader Behavior Description Questionnaire (LBDQ) was given to 357 individuals. Two hundred five respondents described a leader of a group in which they were members or had recently been members, while 152 respondents described themselves as leaders (78).

The Development of Form XII

A new theory of role differentiation and group achievement by Stogdill and the survey of research material that supported that theory, indicated that a number of variables operate in the differentiation of roles in social groups. Potential variables suggested by the theory included: tolerance of uncertainty, persuasiveness, tolerance of member freedom of action, predictive accuracy, integration of the group and reconciliation of conflicting demands. Potential new variables recommended by empirical research results included: representation of group interests, role assumption, production emphasis, and orientation toward superiors. Instruments who added the new variables were given to successive groups. After the variables were analyzed, the instruments were revised, administered again, reanalyzed and revised (74).

E. Marder utilized the new variables or subscales for the first time in the study of an army airbourne division and a state highway patrol organization (90). Other revisions of the questionnaire were brought about by R. M. Stogdill, O. S. Goode and D. R. Day. They used the revised versions of the LBDQ in the study of ministers, leaders in a community development, United States Senators and Presidents of corporations (91, 92, 93). Form XII of the LBDQ represents the fourth revision of this instrument (74).

Definition of the Subscales

Each subscale is made up of five or ten items. A subscale is explained or described by its component items and signifies a complex pattern of behaviors. A brief explanation of the subscales are listed below:

1. Representation - speaks and behaves as the representative or leader of the group. (5 items)
2. Demand Reconciliation - reconciles conflicting demands and reduces disorder to order in the system. (5 items)
3. Tolerance of Uncertainty - tolerates uncertainty and postponement without becoming anxious or upset. (10 items)
4. Persuasiveness - argues effectively and utilizes persuasion, shows strong convictions. (10 items)
5. Initiation of Structure - clearly specifies or defines own role and lets followers/subordinates know what is expected of them. (10 items)
6. Tolerance of Freedom - permits followers/subordinates scope for initiative, decision and action. (10 items)
7. Role Assumption - actively exhibits the leadership role rather than giving up the leadership role to others. (10 items)
8. Consideration - takes into consideration the comfort, welfare, well-being, status and contributions of followers/subordinates. (10 items)
9. Production Emphasis - applies pressure for productive output. (10 items)
10. Predictive Accuracy - reveals foresight and ability to accurately predict outcomes. (5 items)
11. Integration - maintains a closely knit group or organization and resolves intermember conflicts. (5 items)
12. Superior Orientation - maintains friendly relations with superiors and has influence with them; is striving for higher position and status. (10 items) (74).

The Instrument

The instrument used in this study was the Leader Behavior Description Questionnaire-Form XII. This instrument was originated by the staff members of the Ohio State Leadership Studies and revised by the Bureau of Business Research. It is published by the College of

Administrative Science, the Ohio State University, Columbus; copyright 1962. Permission to use the questionnaire was obtained from The Ohio State University (74).

The Leader Behavior Description Questionnaire, LBDQ, was devised for use in obtaining descriptions of a supervisor by the individuals of the group he supervises. The questionnaire may be employed to describe the behavior of the leader, or leaders, in any kind of group or organization where the followers or subordinates have an opportunity to observe the leader in action as the leader of their group (74).

Subscale Means

There are no norms or standards for this instrument. The LBDQ was devised to be used as a research device. It is not recommended to be used in selection, assignment or assessment purposes (74).

Reliability of the Subscales

The reliability of the subscales was ascertained by a modified Kuder-Richardson formula. The modification inherent in the fact that every item was associated with the remainder of the items in its subscale rather than with the subscale score including the item. This method produces a conservative estimate of subscale reliability (74).

APPENDIX B

RESEARCH INSTRUMENT

OSU

Oklahoma State University

DEPARTMENT OF FOOD, NUTRITION AND INSTITUTION ADMINISTRATION
COLLEGE OF HOME ECONOMICS

STILLWATER, OKLAHOMA 74078
HOME ECONOMICS WEST 425
(405) 624-5039

March 3, 1986

Dear Colleagues:

We would like to ask your assistance in conducting a "Leadership and Managerial Behavior" assessment of Dietetic Interns and CUP students. Your participation in this undertaking will assist us to answer some questions pertaining to leadership abilities of future dietitians, such as (1) Is there a need for leadership and managerial assertiveness classes for future dietitians? (2) How do today's dietetic interns and CUP students perceive their leadership abilities?

The information conveyed to us will be held in strict confidence. At no time will you, your program, your students or your facility be identified in the research report. Results of this study will be provided to participating Dietetic Internships and CUP programs.

We would appreciate your help in distributing the questionnaires to your dietetic interns or CUP students who indicate an interest in administrative or management dietetics. The questionnaires will take approximately 20-30 minutes to complete. Please inform your students to refold, staple and return their completed questionnaire by March 28, 1986. Postage is furnished for their convenience. Thank you for your time and professional assistance.

Sincerely,

Barry Hermann

Barry R. Hermann, R.D.
Graduate Assistant

Lea L. Ebro

Lea L. Ebro, Ph.D., R.D.
Professor and Interim Head
Department of Food, Nutrition
and Institution Administration

bcl

CENTENNIAL DECADE
1980 • 1990

OKLAHOMA STATE UNIVERSITY

Department of Food, Nutrition and Institution Administration

LEADERSHIP AND MANAGERIAL BEHAVIOR QUESTIONNAIRE

General Information:

Directions: Please check (✓) or fill in the appropriate answers.

1. Age Range: _____18-22 _____23-26 _____27-31 _____ 31 + over

2. Sex: _____Female _____Male

3. Marital Status: _____Single _____Married _____Divorced

4. Race/Ethnic Group Classification:
   _____Non-Resident Alien International
   _____Black, Non-Hispanic
   _____American Indian or Alaskan
   _____Asian or Pacific Islander
   _____Hispanic
   _____White,Non-Hispanic

5. Type of program you are currently enrolled in:
   _____Coordinated Undergraduate Program
   _____Dietetic Internship

6. Type of Dietetic Internship you are currently enrolled in:
   _____Generalist
   _____Management

   OR

   Type of Coordinated Undergraduate Program you are currently enrolled in:
   _____Generalist
   _____Management

7. What is your primary area of interest:
   _____Generalist
   _____Management
   _____Clinical
   _____Community

8. What state is your internship or CUP located? _____

9. Experience in Personnel Human Resource Management (to direct and channel human effort for the accomplishment of objectives or accomplishing objectives through other people):
   _____Undergraduate course(s)
   _____Graduate course(s)
   _____Work Experience
   _____Other, please specify:

10. List membership in organizations (dietetic club, honor society, civic, etc.) and appointed or elected offices:

Turn Over

LEADERSHIP MEASURES

DIRECTIONS:

a. **READ** each of the following 100 items carefully.

b. **THINK** about how frequently you engage in the behavior described by each of the items in a group situation.

c. **DECIDE** whether you (5) always, (4) often, (3) occasionally, (2) seldom, or (1) never act as described by each of the items.

d. **DRAW A CIRCLE** around one of the five numbers following each item to show the answer you have selected.

SCENARIO:

Assume you are a manager or supervisor in a leadership position in charge of a work group. Determine or assess how you would react or respond to each situation listed in the questionnaire. Indicate best response that accurately describes you.

		Always	Often	Occasionally	Seldom	Never
1.	I act as the spokesperson of my group	5	4	3	2	1
2.	I wait patiently for the results of a decision	5	4	3	2	1
3.	I make pep talks to stimulate my group	5	4	3	2	1
4.	I let my group members know what is expected of them	5	4	3	2	1
5.	I allow my group members complete freedom in their work	5	4	3	2	1
6.	Am hesitant about taking initiative in my group	5	4	3	2	1
7.	Am friendly and approachable	5	4	3	2	1
8.	I encourage overtime work	5	4	3	2	1
9.	I make accurate decisions	5	4	3	2	1
10.	I get along with the people above me	5	4	3	2	1
11.	I publicize the activities of my group	5	4	3	2	1
12.	I become anxious when I cannot find out what is coming next	5	4	3	2	1
13.	My arguments are convincing	5	4	3	2	1
14.	I encourage the use of uniform procedures	5	4	3	2	1
15.	I permit my group members to use their own judgments in solving problems	5	4	3	2	1
16.	I fail to take necessary action	5	4	3	2	1
17.	I do little things to make it pleasant to be a member of my group	5	4	3	2	1
18.	I stress being ahead of competing groups	5	4	3	2	1

		Always	Often	Occasionally	Seldom	Never
19.	I keep my group working together as a team	5	4	3	2	1
20.	I keep my group in good standing with high authority	5	4	3	2	1
21.	I speak as the representative of my group	5	4	3	2	1
22.	I accept defeat in stride	5	4	3	2	1
23.	I argue persuasively for my point of view	5	4	3	2	1
24.	I try out my ideas in my group	5	4	3	2	1
25.	I encourage initiative among my group members	5	4	3	2	1
26.	I let other people take away my leadership in the group	5	4	3	2	1
27.	I put suggestions made by my group into operation	5	4	3	2	1
28.	I needle members for greater effort	5	4	3	2	1
29.	I seem able to predict what is coming next	5	4	3	2	1
30.	Am willing to work hard for a promotion	5	4	3	2	1
31.	I speak for my group when visitors are present	5	4	3	2	1
32.	I accept delays without becoming upset	5	4	3	2	1
33.	Am a very persuasive talker	5	4	3	2	1
34.	I make my attitudes clear to the group	5	4	3	2	1
35.	I let my members do their work they think best	5	4	3	2	1
36.	I allow some of my members to take advantage of me	5	4	3	2	1
37.	I treat all all my group members as my equals	5	4	3	2	1
38.	I keep the work moving at a rapid pace	5	4	3	2	1
39.	I settle conflicts when they occur in my group	5	4	3	2	1
40.	My superiors act favorably on most of my suggestions	5	4	3	2	1
41.	I represent my group at outside meetings	5	4	3	2	1
42.	I become anxious when waiting for new developments	5	4	3	2	1
43.	Am very skillful in argument	5	4	3	2	1
44.	I decide what shall be done and how it shall be done	5	4	3	2	1
45.	I assign a task, then let my members handle it	5	4	3	2	1
46.	Am the leader of my group in name only	5	4	3	2	1

Turn Over

		Always	Often	Occasionally	Seldom	Never
47.	I give advance notice of changes	5	4	3	2	1
48.	I push for increased production	5	4	3	2	1
49.	Things usually turn out as I predict	5	4	3	2	1
50.	I enjoy the privileges of my position	5	4	3	2	1
51.	I handle complex problems efficiently	5	4	3	2	1
52.	Am able to tolerate postponement and uncertainty	5	4	3	2	1
53.	Am not a very convincing talker	5	4	3	2	1
54.	I assign my group members to particular tasks	5	4	3	2	1
55.	I turn my group members loose on a job and let them go to it	5	4	3	2	1
56.	I back down when I ought to stand firm	5	4	3	2	1
57.	I keep to myself	5	4	3	2	1
58.	I ask my group members to work harder	5	4	3	2	1
59.	Am accurate in predicting the trend of events	5	4	3	2	1
60.	I get my superiors to act for the welfare of my group members	5	4	3	2	1
61.	I get swamped by details	5	4	3	2	1
62.	I can wait just so long, then blow up	5	4	3	2	1
63.	I can speak from a strong inner conviction	5	4	3	2	1
64.	I make sure my part in the group is understood by the group members	5	4	3	2	1
65.	Am reluctant to allow my group members any freedom of action	5	4	3	2	1
66.	I let some of my group members have authority that I should keep	5	4	3	2	1
67.	I look out for the personal welfare of my group members	5	4	3	2	1
68.	I permit my group members to take it easy in their work	5	4	3	2	1
69.	I see to it that the work of my group is coordinated	5	4	3	2	1
70.	My word carries weight with superiors	5	4	3	2	1
71.	I get things all tangled up	5	4	3	2	1
72.	I remain calm when uncertain about coming events	5	4	3	2	1
73.	Am an inspiring talker	5	4	3	2	1
74.	I schedule the work to be done	5	4	3	2	1

		Always	Often	Occasionally	Seldom	Never
75.	I allow my group a high degree of initiative	5	4	3	2	1
76.	I take full charge when emergencies arise	5	4	3	2	1
77.	Am willing to make changes	5	4	3	2	1
78.	I drive hard when there is a job to be done	5	4	3	2	1
79.	I help my group members settle their differences	5	4	3	2	1
80.	I get what I ask for from my superiors	5	4	3	2	1
81.	I can reduce a madhouse to system and order	5	4	3	2	1
82.	Am able to delay action until the proper time occurs	5	4	3	2	1
83.	I persuade others that my ideas are to their advantage	5	4	3	2	1
84.	I maintain definite standards of performance	5	4	3	2	1
85.	I trust my group members to exercise good judgment	5	4	3	2	1
86.	I overcome attempts to challenge my leadership	5	4	3	2	1
87.	I refuse to explain my actions	5	4	3	2	1
88.	I urge my group to beat its previous record	5	4	3	2	1
89.	I anticipate problems and plan for them	5	4	3	2	1
90.	Am working my way to the top	5	4	3	2	1
91.	I get confused when too many demands are made of me	5	4	3	2	1
92.	I worry about the outcome of any new procedure	5	4	3	2	1
93.	I can inspire enthusiasm for a project	5	4	3	2	1
94.	I ask that my group members follow standard rules & regulations	5	4	3	2	1
95.	I permit my group to set its own pace	5	4	3	2	1
96.	Am easily recognized as the leader of my group	5	4	3	2	1
97.	I act without consulting my group	5	4	3	2	1
98.	I keep my group working up to capacity	5	4	3	2	1
99.	I maintain a closely knit group	5	4	3	2	1
100.	I maintain cordial relations with superiors	5	4	3	2	1

After completing the questionnaire, kindly refold, staple and return completed questionnaire by March 28, 1986. Postage is furnished for your convenience. Thank you for your time and assistance.

APPENDIX C

GEOGRAPHICAL LOCATION OF DIETETIC INTERNSHIPS AND CUPS

Geographical Location of Dietetic Internships and CUPs

	States	Frequency Response	Percent
1.	Illinois	57	12.4
2.	Ohio	29	6.3
3.	California	27	5.9
4.	Texas	26	5.6
5.	Iowa	25	5.4
6.	Minnesota	24	5.2
7.	Alabama	23	5.0
8.	Kansas	18	3.9
9.	Massachusetts	18	3.9
10.	Maryland	18	3.9
11.	Louisiana	15	3.3
12.	Oklahoma	15	3.3
13.	Connecticut	14	3.0
14.	Pennsylvania	14	3.0
15.	Wisconsin	14	3.0
16.	Puerto Rico	13	2.8
17.	Michigan	12	2.6
18.	Indiana	10	2.2
19.	South Carolina	9	2.0
20.	Georgia	8	1.7
21.	Florida	7	1.5
22.	Tennessee	7	1.5
23.	North Carolina	6	1.3
24.	Utah	6	1.3
25.	Virginia	6	1.3
26.	Missouri	5	1.1
27.	Mississippi	5	1.1
28.	North Dakota	5	1.1
29.	Nebraska	5	1.1
30.	Colorado	4	0.9
31.	West Virginia	4	0.9
32.	Delaware	3	0.7
33.	New Jersey	3	0.7
34.	New York	2	0.4
35.	Oregon	2	0.4
36.	Washington	2	0.4

APPENDIX D

RESPONDENTS MEMBERSHIP IN ORGANIZATIONS

Respondents Membership in Organizations

	Interns	CUP Students
Honor Organizations		
Phi Kappa Phi	14	16
Home Economics Honor Societies (Phi U, Kappa Omicron Nu, and Omicron NU)	58	49
Other Honor Societies (CUPs-Mortar Board, Golden Key, Phi Upsilon Omicron, etc.; Interns-Phi Upsilon Omicron Nu, Golden Key, Dean's List, etc.)	97	46
Professional Organizations		
National		
American Dietetic Association (Affiliate)	139	54
American Home Economics Association	31	9
State Dietetic Associations (TX, MS, FL, SC, TN, NC, AL, LA, IL, CA, PA, CN, WV, MN, IN, KT, OR, OH, MS, NE and CO)	36	21
Local/District Dietetic Associations	64	13
Student Dietetics Organizations	107	101
Student Home Economics Associations	11	--
Social Organizations (CUPs-Alpha Lamba Delta, Alpha Pi, Delta Zeta, etc.; Interns-Gamma Sigma Delta, Delta Zeta, Phi Beta Chi, Kappa Kappa Gamma, etc.)	33	27
Service Organizations (CUPs-Jaycees, Job's Daughters, Order of Eastern Star, etc.; Interns-PTA, National Council Against Health Fraud, Association of Fitness in Business)	36	20
Volunteer Organizations (CUPs-Big Brothers/Big Sisters, Black Student Union, etc.; Interns-Volunteers for the Disabled, Hospital Volunteer, Red Cross, Daughters of the American Revolution, etc.)	47	16

APPENDIX E

GEOGRAPHICAL MAP OF ADA AREA CLASSIFICATIONS

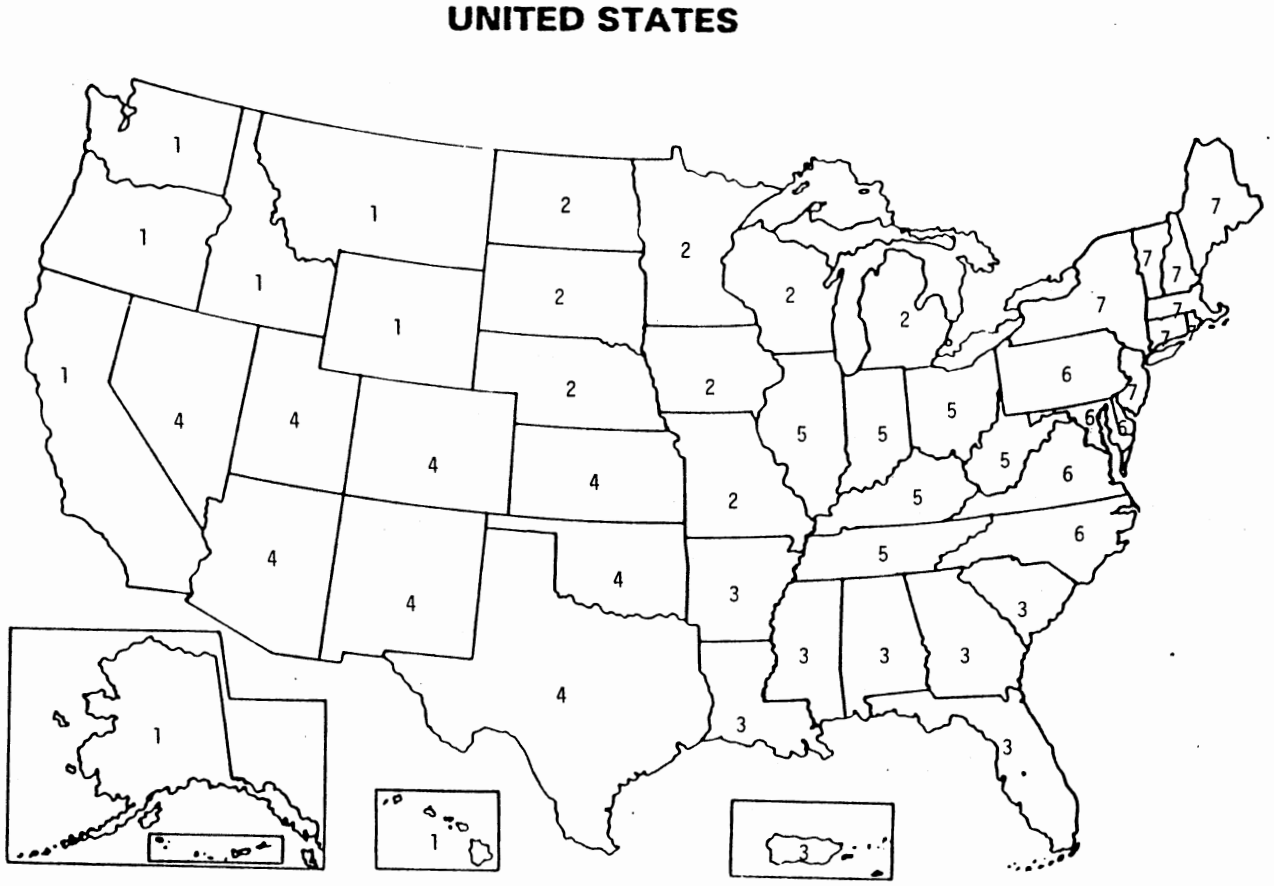


Figure 9. Geographical Map of ADA Area Classifications

APPENDIX F

FREQUENCY TABLES FOR EACH ITEM ON THE LBDQ

FREQUENCIES FOR EACH ITEM ON LAMBQ1

LM1	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	1	0.2	1	0.2
2	20	4.4	21	4.6
3	126	27.5	147	32.0
4	263	57.3	410	89.3
5	49	10.7	459	100.0

LM2	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
2	38	8.3	38	8.3
3	158	34.6	196	42.9
4	228	49.9	424	92.8
5	33	7.2	457	100.0

LM3	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	2	0.4	2	0.4
2	29	6.3	31	6.8
3	151	32.9	182	39.7
4	215	46.8	397	86.5
5	62	13.5	459	100.0

LM4	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
1	2	0.4	2	0.4
2	8	1.7	10	2.2
3	68	14.8	78	17.0
4	211	46.1	289	63.1
5	169	36.9	458	100.0

LM5	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	1	0.2	1	0.2
2	35	7.7	36	7.9
3	181	39.6	217	47.5
4	209	45.7	426	93.2
5	31	6.8	457	100.0

LM6	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	56	12.2	56	12.2
2	253	55.1	309	67.3
3	129	28.1	438	95.4
4	16	3.5	454	98.9
5	5	1.1	459	100.0

LM7	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	2	.	.	.
2	2	0.4	2	0.4
3	12	2.6	14	3.0
4	182	39.6	196	42.6
5	264	57.4	460	100.0

LM8	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	9	.	.	.
1	23	5.1	23	5.1
2	152	33.6	175	38.6
3	222	49.0	397	87.6
4	41	9.1	438	96.7
5	15	3.3	453	100.0

LM9	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
1	1	0.2	1	0.2
3	63	13.8	64	14.0
4	367	80.5	431	94.5
5	25	5.5	456	100.0

LM10	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	2	.	.	.
1	1	0.2	1	0.2
2	1	0.2	2	0.4
3	11	2.4	13	2.8
4	269	58.5	282	61.3
5	178	38.7	460	100.0

FREQUENCIES FOR EACH ITEM ON LAMBQ1

LM11	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	8	.	.	.
1	4	0.9	4	0.9
2	28	6.2	32	7.0
3	129	28.4	161	35.5
4	222	48.9	383	84.4
5	71	15.6	454	100.0

LM12	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
1	4	0.9	4	0.9
2	67	14.6	71	15.5
3	221	48.3	292	63.8
4	133	29.0	425	92.8
5	33	7.2	458	100.0

LM13	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
2	7	1.5	7	1.5
3	118	25.7	125	27.2
4	304	66.2	429	93.5
5	30	6.5	459	100.0

LM14	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	2	.	.	.
2	15	3.3	15	3.3
3	90	19.6	105	22.8
4	264	57.4	369	80.2
5	91	19.8	460	100.0

LM15	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	2	0.4	2	0.4
2	1	0.2	3	0.7
3	89	19.4	92	20.0
4	322	70.2	414	90.2
5	45	9.8	459	100.0

LM16	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	56	12.2	56	12.2
2	283	61.7	339	73.9
3	115	25.1	454	98.9
4	3	0.7	457	99.6
5	2	0.4	459	100.0

LM17	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	6	1.3	6	1.3
2	21	4.6	27	5.9
3	91	19.8	118	25.7
4	266	58.0	384	83.7
5	75	16.3	459	100.0

LM18	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
1	9	2.0	9	2.0
2	72	15.8	81	17.8
3	205	45.0	286	62.7
4	143	31.4	429	94.1
5	27	5.9	456	100.0

LM19	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
3	36	7.9	36	7.9
4	294	64.2	330	72.1
5	128	27.9	458	100.0

LM20	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	1	0.2	1	0.2
2	5	1.1	6	1.3
3	49	10.7	55	12.0
4	288	63.0	343	75.1
5	114	24.9	457	100.0

FREQUENCIES FOR EACH ITEM ON LAMBQ1

LM21	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
2	12	2.6	12	2.6
3	99	21.6	111	24.2
4	259	56.4	370	80.6
5	89	19.4	459	100.0

LM22	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	5	1.1	5	1.1
2	37	8.1	42	9.2
3	165	36.1	207	45.3
4	218	47.7	425	93.0
5	32	7.0	457	100.0

LM23	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	2	0.4	2	0.4
2	16	3.5	18	3.9
3	141	30.7	159	34.6
4	244	53.2	403	87.8
5	56	12.2	459	100.0

LM24	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	2	.	.	.
2	2	0.4	2	0.4
3	80	17.4	82	17.8
4	294	63.9	376	81.7
5	84	18.3	460	100.0

LM25	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
2	4	0.9	4	0.9
3	34	7.4	38	8.3
4	255	55.8	293	64.1
5	164	35.9	457	100.0

LM26	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
1	41	9.0	41	9.0
2	206	45.0	247	53.9
3	176	38.4	423	92.4
4	31	6.8	454	99.1
5	4	0.9	458	100.0

LM27	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
2	2	0.4	2	0.4
3	98	21.4	100	21.9
4	326	71.3	426	93.2
5	31	6.8	457	100.0

LM28	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	16	3.5	16	3.5
2	146	31.8	162	35.3
3	212	46.2	374	81.5
4	75	16.3	449	97.8
5	10	2.2	459	100.0

LM29	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
2	21	4.6	21	4.6
3	240	52.3	261	56.9
4	179	39.0	440	95.9
5	19	4.1	459	100.0

LM30	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	1	0.2	1	0.2
2	4	0.9	5	1.1
3	49	10.7	54	11.8
4	197	42.9	251	54.7
5	208	45.3	459	100.0

FREQUENCIES FOR EACH ITEM ON LAMBQ1

LM31	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	2	0.4	2	0.4
2	17	3.7	19	4.2
3	135	29.7	154	33.8
4	244	53.6	398	87.5
5	57	12.5	455	100.0

LM32	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	3	0.7	3	0.7
2	52	11.3	55	12.0
3	218	47.5	273	59.5
4	166	36.2	439	95.6
5	20	4.4	459	100.0

LM33	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
1	2	0.4	2	0.4
2	40	8.7	42	9.2
3	196	42.7	238	51.9
4	189	41.2	427	93.0
5	32	7.0	459	100.0

LM34	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
2	3	0.7	3	0.7
3	92	20.1	95	20.7
4	269	58.7	364	79.5
5	94	20.5	458	100.0

LM35	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	16	.	.	.
1	2	0.4	2	0.4
2	17	3.8	19	4.3
3	179	40.1	198	44.4
4	221	49.6	419	93.9
5	27	6.1	446	100.0

LM36	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
1	68	14.8	68	14.8
2	244	53.3	312	68.1
3	129	28.2	441	96.3
4	15	3.3	456	99.6
5	2	0.4	458	100.0

LM37	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
1	2	0.4	2	0.4
2	15	3.3	17	3.7
3	78	17.0	95	20.7
4	221	48.3	316	69.0
5	142	31.0	458	100.0

LM38	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	3	.	.	.
2	7	1.5	7	1.5
3	118	25.7	125	27.2
4	279	60.8	404	88.0
5	55	12.0	459	100.0

LM39	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
2	10	2.2	10	2.2
3	127	27.7	137	29.9
4	235	51.3	372	81.2
5	86	18.8	458	100.0

LM40	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
2	1	0.2	1	0.2
3	91	19.9	92	20.1
4	328	71.8	420	91.9
5	37	8.1	457	100.0

FREQUENCIES FOR EACH ITEM ON LAMDQ1

LM41	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	3	0.7	3	0.7
2	29	6.4	32	7.0
3	121	26.6	153	33.6
4	224	49.2	377	82.9
5	78	17.1	455	100.0

LM42	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	2	0.4	2	0.4
2	88	19.3	90	19.7
3	228	49.9	318	69.6
4	113	24.7	431	94.3
5	26	5.7	457	100.0

LM43	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	2	0.4	2	0.4
2	49	10.7	51	11.2
3	202	44.2	253	55.4
4	179	39.2	432	94.5
5	25	5.5	457	100.0

LM44	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
2	40	8.8	40	8.8
3	201	44.0	241	52.7
4	194	42.5	435	95.2
5	22	4.8	457	100.0

LM45	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
1	3	0.7	3	0.7
2	45	9.8	48	10.5
3	159	34.7	207	45.2
4	218	47.6	425	92.8
5	33	7.2	458	100.0

LM46	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	107	23.5	107	23.5
2	236	51.9	343	75.4
3	91	20.0	434	95.4
4	17	3.7	451	99.1
5	4	0.9	455	100.0

LM47	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
2	2	0.4	2	0.4
3	47	10.3	49	10.7
4	287	62.8	336	73.5
5	121	26.5	457	100.0

LM48	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	1	0.2	1	0.2
2	8	1.8	9	2.0
3	147	32.2	156	34.1
4	248	54.3	404	88.4
5	53	11.6	457	100.0

LM49	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
2	4	0.9	4	0.9
3	176	38.4	180	39.3
4	270	59.0	450	98.3
5	8	1.7	458	100.0

LM50	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	8	.	.	.
2	13	2.9	13	2.9
3	102	22.5	115	25.3
4	262	57.7	377	83.0
5	77	17.0	454	100.0

FREQUENCIES FOR EACH ITEM ON LAMBQ1

LM51	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
2	5	1.1	5	1.1
3	95	20.8	100	21.9
4	311	68.2	411	90.1
5	45	9.9	456	100.0

LM52	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
1	3	0.7	3	0.7
2	54	11.8	57	12.5
3	213	46.7	270	59.2
4	158	34.6	428	93.9
5	28	6.1	456	100.0

LM53	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
1	35	7.7	35	7.7
2	247	54.2	282	61.8
3	153	33.6	435	95.4
4	19	4.2	454	99.6
5	2	0.4	456	100.0

LM54	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	8	.	.	.
1	1	0.2	1	0.2
2	7	1.5	8	1.8
3	113	24.9	121	26.7
4	279	61.5	400	88.1
5	54	11.9	454	100.0

LM55	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	13	.	.	.
1	21	4.7	21	4.7
2	104	23.2	125	27.8
3	182	40.5	307	68.4
4	129	28.7	436	97.1
5	13	2.9	449	100.0

LM56	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	46	10.1	46	10.1
2	225	49.2	271	59.3
3	168	36.8	439	96.1
4	17	3.7	456	99.8
5	1	0.2	457	100.0

LM57	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
1	46	10.1	46	10.1
2	173	37.9	219	48.0
3	188	41.2	407	89.3
4	46	10.1	453	99.3
5	3	0.7	456	100.0

LM58	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
1	1	0.2	1	0.2
2	40	8.8	41	9.0
3	263	57.7	304	66.7
4	137	30.0	441	96.7
5	15	3.3	456	100.0

LM59	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	8	.	.	.
2	16	3.5	16	3.5
3	207	45.6	223	49.1
4	221	48.7	444	97.8
5	10	2.2	454	100.0

LM60	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	4	0.9	4	0.9
2	18	4.0	22	4.8
3	125	27.5	147	32.3
4	273	60.0	420	92.3
5	35	7.7	455	100.0

FREQUENCIES FOR EACH ITEM ON LAMDQ1

LM61	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
1	12	2.6	12	2.6
2	159	34.9	171	37.5
3	217	47.6	388	85.1
4	54	11.8	442	96.9
5	14	3.1	456	100.0

LM62	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
1	78	17.1	78	17.1
2	235	51.5	313	68.6
3	103	22.6	416	91.2
4	35	7.7	451	98.9
5	5	1.1	456	100.0

LM63	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	9	.	.	.
1	1	0.2	1	0.2
2	14	3.1	15	3.3
3	144	31.8	159	35.1
4	229	50.6	388	85.7
5	65	14.3	453	100.0

LM64	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
2	7	1.5	7	1.5
3	81	17.8	88	19.3
4	255	55.9	343	75.2
5	113	24.8	456	100.0

LM65	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	69	15.2	69	15.2
2	288	63.3	357	78.5
3	85	18.7	442	97.1
4	12	2.6	454	99.8
5	1	0.2	455	100.0

LM66	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	11	.	.	.
1	34	7.5	34	7.5
2	208	46.1	242	53.7
3	192	42.6	434	96.2
4	15	3.3	449	99.6
5	2	0.4	451	100.0

LM67	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	1	0.2	1	0.2
2	4	0.9	5	1.1
3	60	13.2	65	14.3
4	260	57.1	325	71.4
5	130	28.6	455	100.0

LM68	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	8	.	.	.
1	13	2.9	13	2.9
2	206	45.4	219	48.2
3	211	46.5	430	94.7
4	23	5.1	453	99.8
5	1	0.2	454	100.0

LM69	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
2	3	0.7	3	0.7
3	32	7.0	35	7.7
4	290	63.7	325	71.4
5	130	28.6	455	100.0

LM70	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	8	.	.	.
1	1	0.2	1	0.2
2	7	1.5	8	1.8
3	108	23.8	116	25.6
4	274	60.4	390	85.9
5	64	14.1	454	100.0

FREQUENCIES FOR EACH ITEM ON LAMBQ1

LM71	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	77	16.8	77	16.8
2	294	64.3	371	81.2
3	80	17.5	451	98.7
4	6	1.3	457	100.0

LM72	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	5	1.1	5	1.1
2	41	9.0	46	10.1
3	146	32.1	192	42.2
4	230	50.5	422	92.7
5	33	7.3	455	100.0

LM73	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	1	0.2	1	0.2
2	35	7.7	36	7.9
3	212	46.6	248	54.5
4	176	38.7	424	93.2
5	31	6.8	455	100.0

LM74	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
2	13	2.9	13	2.9
3	95	20.9	108	23.7
4	240	52.7	348	76.5
5	107	23.5	455	100.0

LM75	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
2	6	1.3	6	1.3
3	82	18.0	88	19.3
4	292	64.0	380	83.3
5	76	16.7	456	100.0

LM76	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
2	10	2.2	10	2.2
3	103	22.5	113	24.7
4	238	52.1	351	76.8
5	106	23.2	457	100.0

LM77	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
2	4	0.9	4	0.9
3	37	8.1	41	9.0
4	264	57.8	305	66.7
5	152	33.3	457	100.0

LM78	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
2	1	0.2	1	0.2
3	54	11.8	55	12.0
4	242	52.8	297	64.8
5	161	35.2	458	100.0

LM79	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
2	8	1.8	8	1.8
3	124	27.2	132	28.9
4	253	55.5	385	84.4
5	71	15.6	456	100.0

LM80	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
2	4	0.9	4	0.9
3	154	33.7	158	34.6
4	282	61.7	440	96.3
5	17	3.7	457	100.0

FREQUENCIES FOR EACH ITEM ON LAMBQ1

LM81	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	1	0.2	1	0.2
2	14	3.1	15	3.3
3	165	36.1	180	39.4
4	246	53.8	426	93.2
5	31	6.8	457	100.0

LM82	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	8	.	.	.
2	7	1.5	7	1.5
3	173	38.1	180	39.6
4	250	55.1	430	94.7
5	24	5.3	454	100.0

LM83	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	1	0.2	1	0.2
2	8	1.8	9	2.0
3	168	36.8	177	38.7
4	247	54.0	424	92.8
5	33	7.2	457	100.0

LM84	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
3	48	10.5	48	10.5
4	250	54.7	298	65.2
5	159	34.8	457	100.0

LM85	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	4	.	.	.
1	1	0.2	1	0.2
2	1	0.2	2	0.4
3	58	12.7	60	13.1
4	326	71.2	386	84.3
5	72	15.7	458	100.0

LM86	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	10	.	.	.
1	4	0.9	4	0.9
2	35	7.7	39	8.6
3	162	35.8	201	44.5
4	213	47.1	414	91.6
5	38	8.4	452	100.0

LM87	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	140	30.8	140	30.8
2	259	56.9	399	87.7
3	50	11.0	449	98.7
4	4	0.9	453	99.6
5	2	0.4	455	100.0

LM88	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	8	.	.	.
1	3	0.7	3	0.7
2	16	3.5	19	4.2
3	176	38.8	195	43.0
4	214	47.1	409	90.1
5	45	9.9	454	100.0

LM89	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	1	0.2	1	0.2
2	13	2.8	14	3.1
3	116	25.4	130	28.4
4	274	60.0	404	88.4
5	53	11.6	457	100.0

LM90	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	9	.	.	.
1	1	0.2	1	0.2
2	13	2.9	14	3.1
3	99	21.9	113	24.9
4	205	45.3	318	70.2
5	135	29.8	453	100.0

FREQUENCIES FOR EACH ITEM ON LAMBO1

LM91	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	8	.	.	.
1	18	4.0	18	4.0
2	194	42.7	212	46.7
3	194	42.7	406	89.4
4	43	9.5	449	98.9
5	5	1.1	454	100.0

LM92	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	5	1..	5	1.1
2	78	17.1	83	18.2
3	246	53.8	329	72.0
4	109	23.9	438	95.8
5	19	4.2	457	100.0

LM93	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
2	5	1.1	5	1.1
3	93	20.4	98	21.4
4	276	60.4	374	81.8
5	83	18.2	457	100.0

LM94	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	1	0.2	1	0.2
2	8	1.8	9	2.0
3	69	15.1	78	17.1
4	219	47.9	297	65.0
5	160	35.0	457	100.0

LM95	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	5	.	.	.
1	1	0.2	1	0.2
2	46	10.1	47	10.3
3	238	52.1	285	62.4
4	163	35.7	448	98.0
5	9	2.0	457	100.0

LM96	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
1	1	0.2	1	0.2
2	17	3.7	18	3.9
3	91	20.0	109	23.8
4	265	58.1	374	82.0
5	82	18.0	456	100.0

LM97	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	46	10.1	46	10.1
2	206	45.3	252	55.4
3	170	37.4	422	92.7
4	31	6.8	453	99.6
5	2	0.4	455	100.0

LM98	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	10	.	.	.
3	91	20.1	91	20.1
4	307	67.9	398	88.1
5	54	11.9	452	100.0

LM99	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	7	.	.	.
1	1	0.2	1	0.2
2	4	0.9	5	1.1
3	89	19.6	94	20.7
4	296	65.1	390	85.7
5	65	14.3	455	100.0

LM100	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	6	.	.	.
2	1	0.2	1	0.2
3	29	6.4	30	6.6
4	227	49.8	257	56.4
5	199	43.6	456	100.0

VITA

Barry Roy Hermann

Candidate for the Degree of

Master of Science

Thesis: PERCEPTIONS OF LEADERSHIP AMONG PREPROFESSIONALS IN DIETETIC PROGRAMS

Major Field: Food, Nutrition and Institution Administration

Biographical:

Personal Data: Born in Sioux City, Iowa, October 27, 1955, the son of Allen M. and Alice F. Hermann.

Education: Received Associate of Arts degree in Travel Industries from Black Hills State College, in May, 1977; received Bachelor of Science degree in Food and Nutrition Services from New Mexico State University in May, 1984; completed requirements for the Master of Science degree in Food, Nutrition and Institution Administration from Oklahoma State University in May, 1987.

Professional Experience: Dietetic assistant at Memorial General Hospital, Las Cruces, New Mexico, May, 1982; completed dietetic internship at Oklahoma State University, Stillwater, Oklahoma, in May, 1985; successful completion of the American Dietetic Association registration examination, Fall, 1985; graduate teaching assistant in the Food, Nutrition and Institution Administration Department, Oklahoma State University, 1985-86; clinical dietitian at Stillwater Medical Center, Stillwater, Oklahoma, December, 1986 to present.

Professional Organizations: The American Dietetic Association, Omicron Nu, Oklahoma Dietetic Association.