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A COMPARISON OF STRESS RESPONSES AND PERSONALITY  
CHARACTERISTICS OF PRACTICING AND PROSPECTIVE SCHOOL  
ADMINISTRATORS

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A COMPARISON OF STRESS RESPONSES AND PERSONALITY CHARACTERISTICS  
OF PRACTICING AND PROSPECTIVE SCHOOL ADMINISTRATORS

by

Lawrence F. Ramaekers

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Under the Supervision of Professor Edgar A. Kelley

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**TITLE**

A COMPARISON OF STRESS RESPONSES AND PERSONALITY CHARACTERISTICS  
OF PRACTICING AND PROSPECTIVE SCHOOL ADMINISTRATORS

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L.F.R.

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## CHAPTER I

### INTRODUCTION

#### Background and Need for the Study

Training programs for school administrators, as well as recruitment and selection of candidates into these programs, may be less effective than what is desirable given the patterns of leadership needed. One description of this concern was given in 1978:

Training programs for the preparation of secondary school administrators often lack an understood and coherent conceptual framework for the design of instruction or for the subsequent evaluation of learner and program effectiveness; instead training programs are often a potpourri of courses, requirements expressed as time demands, and learning experiences which are idiosyncratic to--and traditional within--particular institutions. Indeed, it is all too common to discover that training programs are idiosyncratic to the personal preferences or whims of individual instructors.<sup>1</sup>

During the 1970's a number of reports indicated that training institutions lacked the proper format for instruction and were lacking in effectiveness; thus, school administrators were described as lacking the skills needed to be learners and mentors in schools.

Demands are often placed on administrators which require decisions to be made, priorities to be set, and plans of action to

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<sup>1</sup>Performance Based Systems for the Preparation and Continuing Education of Secondary School Administrators (Reston, Virginia: National Association of Secondary School Principals, January, 1978), p. 1.

be implemented. If such plans are to be effective in the total framework of the school, administrators must have adequate knowledge. Such knowledge can be gained through either prior learned experiences or information gained in preparation programs for school administrators. Goldhammer has described the needs of school administrators:

Before administrators can be effective they must have adequate preparation for their positions. Administration today, as numerous studies show, involves the application of knowledge and the employment of skills. But both the knowledge base and the technology change, and administrators can become readily obsolescent. A key to the retardation of obsolescence is the degree to which preparatory programs forecast and project developments within both the field and society and become oriented both to the present and future rather than remain static and traditional in their approach. Few institutions today are engaged in forecasting the future needs of the field and adjusting their programs accordingly.<sup>2</sup>

Although it is difficult to project trends in education, institutions preparing school administrators must be cognizant of the needs of the practitioner as well as the needs of those in administrator preparation programs. Being cognizant of these needs is not a simple task; instead, it is a multifaceted task with several problems and explanations. One probable explanation is that substantial progress will require the presence of both resource links and

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<sup>2</sup>Keith Goldhammer, Issues and Problems in Contemporary Educational Administration (Eugene, Oregon: Center for the Advancement and Study of Educational Administration, University of Oregon, 1967), p. 156.

process links in the change efforts which are made.<sup>3</sup> Another explanation is the lack of available resources--human, technical, and fiscal--for any single agency or individual to undertake the entire task.<sup>4</sup>

The problem of adequate knowledge and training for administrators or those entering the profession is not new, nor is the realization of the problem new to those involved in delivering preparation programs. For example, the National Association of Secondary School Principals' (NASSP) Committee of Professors of Secondary School Administration and Supervision (PSASS) has addressed the problem, set goals and prioritized needs in the preparation of school administrators.<sup>5</sup>

How important is the need for an adequately prepared school administrator who is cognizant of human relations skills and instructional leadership skills? To be effective, administrators must define job functions and establish priorities. An assumption with wide acceptance is that administrative skills can be developed or refined.<sup>6</sup>

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<sup>3</sup>Philip K. Piele, Review and Analysis of the Role, Activities, and Training of Educational Linking Agents (Eugene, Oregon: ERIC Clearinghouse on Educational Management, 1975).

<sup>4</sup>Performance Based Systems for the Preparation and Continuing Education of Secondary School Administrators, op. cit., p. 4.

<sup>5</sup>Charles L. Wood, "The Challenge of Developing a Model for Principal Evaluation," Where Will They Find It? (Reston, Virginia: National Association of Secondary School Principals, 1972), p. 2.

<sup>6</sup>Everett W. Nicholson and Norbert J. Nelson, "A Skill-Strategy Approach to the Principal's Development," Where Will They Find It? (Reston, Virginia: National Association of Secondary School Principals, 1972), p. 82.

Thus, there is generalized agreement that the functioning of the school is dependent, to a certain extent, upon the preparation of the school administrator.

Practicing school administrators should be aware of and should possess the skills needed to administer schools. Such skills, once acquired, should increase the effectiveness of both school administrators and the schools they serve. Institutions should prepare administrators by use of a variety of instructional techniques to help students attain both knowledge and skills required for administrative roles. "Reality-oriented" instructional situations, involving cases, simulations, management games, and related materials constitute one technique that can and should be used to direct learning and teaching toward consistency and performance criteria.<sup>7</sup>

In the 1970's, many efforts were made to describe various aspects of programs preparing educational administrators. Much of this literature was oriented toward description or prescription of ideal components of preparation programs.<sup>8</sup> Preparation programs cannot replace experience; however, such programs are a valuable part of the total preparation of a school administrator.

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<sup>7</sup>The Preparation and Certification of Educational Administrators: A UCEA Commission Report (Columbus, Ohio: University Council for Educational Administration, 1973), p. 8.

<sup>8</sup>Robin Farquhar and Philip Piele, Preparing Educational Leaders: A Review of Literature (Columbus, Ohio: University Council for Educational Administration, 1972), p. 53.

To train school administrators, institutions should consider such areas as: knowledge, behaviors, attitudes, competence, and the ability to cope with stress. The ability to cope with stress is important in the functioning of school administrators because it is present in all aspects of the role of school administrators. School administrators should not avoid situations which may cause stress but they need to learn that consistency, honesty, and the desire to do what is best for students, staff, and community are some determiners in how they should handle stressful situations which arise.

Attitudinal traits of individuals are difficult to alter or change. The prospective candidate, a fledgling administrator, and the seasoned practitioner should be aware of the success of others. Training institutions, through the use of preservice and inservice training of school administrators, can help prepare all administrators for the task of serving schools and school communities. Institutions should give attention to the impact of simulated experiences in the training of school administrators. Rather than making an attempt to simulate all problems a school administrator may encounter, general categories should be devised. When the knowledge base is satisfactory, emphasis should be placed on non-cognitive traits such as stress tolerance.

Training in stress tolerance should be included in training programs for school administrators. The lack of this skill can be a weakness in the processes needed for management of a school. As



a part of preparation programs for school administrators, training materials should be used which provide prospective administrators with an understanding of what to expect in situations where stress may be encountered. The focus of efforts aimed at recruitment and selection of individuals into school leadership programs should be directed to identification of those who are talented in numerous skills, including stress tolerance.

Several methods have been addressed in the professional literature relative to stress responses. Various stress responses are utilized by school administrators to cope with stressful situations encountered in their professional positions. Each school administrator, through the use of his or her cognitive structure, responds to stressful events. As administrators fulfill their responsibilities, an increased awareness of responses to stress can be developed. Responses proven to be successful in the management of a stressful event may be included in patterns of behavior used to respond to future events.

#### Purpose of the Study

The purpose of this study was to investigate whether or not either stress responses selected from a set of 15 critical incidents or personality characteristics, as determined by the Sixteen Personality Factor Questionnaire (16 PF), were different both with and between groups of prospective and practicing school administrators.

### Design of the Study

Procedures followed in the completion of this study included the following steps:

1. A group of prospective administrators and a group of practicing school administrators were used as the subjects of this study.
2. The group of prospective school administrators (trainees) was comprised of individuals enrolled in a preservice graduate course in educational administration offered at the University of Nebraska-Lincoln, Nebraska.
3. The group of practicing school administrators (practitioners) included individuals enrolled in an inservice course in educational administration offered by the University of Nebraska, Lincoln, Nebraska.
4. From the review of literature, five categories of stress responses were identified: dominance, negotiation, co-existence, avoidance, or diversion and integration.
5. Two hundred and five critical incidents, based on actual events experienced by practitioners, were reviewed. From this set of 205 critical incidents, 15 were selected as examples of stressful situations. The set of 15 critical incidents was rewritten in a common format. For each critical incident, three possible solutions were prepared. These solutions represented differing stress responses based on the five categories of stress. Thus, for the 15 critical incidents, 45 responses were formulated.

6. Three professors of educational administration served as an expert jury to review and critique the set of 15 critical incidents. Fourteen of the critical incidents were accepted with modification and one was rewritten. The revised set of critical incidents was used for data collection.

7. The set of 15 critical incidents and the 16 PF were administered to 19 trainees and mailed to 27 practitioners. Usable data were obtained for 17 trainees and 20 practitioners.

8. The responses for the 15 critical incidents and the 16 PF were handscored.

9. Data about the two groups were compared by discriminant analysis, chi square, and t-tests.

### Research Questions

On primary research question and two secondary research questions were investigated in this study. The primary research question was: "Do responses to stressful situations (critical incidents), or measures of personality, as measured by the Sixteen Personality Factor Questionnaire (16 PF), for prospective and practicing school administrators differ at statistically significant levels when these two groups are compared with one another?"

The secondary research questions were: "Do prospective school administrators differ from what would be expected in their selection of five categories of response to stress?" and "Do practicing school administrators differ from what would be expected in their selection of

five categories of response to stress?"

### Definition of Terms

For the purpose of this study, the following definitions were used:

Trainees. Individuals who aspired to be school administrators (prospective school administrators), both elementary and secondary, who were enrolled in a graduate course in building administration as part of a preservice administrator preparation program.

Practitioners. Individuals who were practicing school administrators, both elementary and secondary, who were enrolled in a graduate course in school administration designed as an inservice course.

Stress. A state or condition of strain, either covert or overt, created by situations experienced by an individual.

Stress tolerance. The ability to cope with a stressful event and respond in an appropriate manner.

Stress response. A reaction to a stressful situation.

School administrator. An individual who serves in an administrative capacity in a school.

### Assumptions

Basic assumptions underlying this study are:

1. Stress tolerance is a human behavior which is present to differing degrees in different human beings.

2. Stress tolerance is an important characteristic for persons who aspire to be school administrators and who are school administrators.

3. Stress responses can be grouped into specific categories; however, equal distribution of stress response choices may or may not be true.

4. Procedures can be developed or identified, and tools can be selected or constructed, for use in assessing personality traits and stress responses which an individual possesses or demonstrates.

5. The 16 PF provides a reasonable and useful description of personality traits.

6. Prospective school administrators and practicing school administrators enrolled in educational administration courses at the University of Nebraska-Lincoln, and selected as subjects of this study, responded honestly to the set of critical incidents and the 16 PF.

7. The practicing and prospective school administrators chosen as subjects do not differ substantially and systematically from the total sample of practicing and prospective school administrators in the state of Nebraska.

#### Limitations of the Study

The conclusions and implications of this study are limited by the following conditions:

1. This study was limited to the investigation of stress responses and the differences in personality traits of prospective and practicing school administrators. No attempt was made to assess other traits or non-cognitive characteristics of prospective or practicing

school administrators.

2. The sample of this study was limited to those individuals who aspired to be school administrators who were enrolled in pre-service graduate courses in educational administration at the University of Nebraska-Lincoln, and to practicing school administrators enrolled in inservice courses in educational administration at the University of Nebraska-Lincoln, during the 1981-1982 academic year.

#### Implications of the Study

The findings of this study might stimulate researchers to investigate further non-cognitive characteristics which contribute to the success or non-success of the school administrator. Such areas as vision, drive, assertiveness, courage, and demonstrated leadership should be investigated to provide institutions with possible tools and procedures for use in the selection and recruitment of individuals into school administration preparation programs.

#### Organization of the Study

In this chapter, the purpose of the study has been stated and an overview of the study has been presented. In Chapter II, a review of literature is presented; topics included are: (1) the meaning of stress for executive personnel, (2) stress in the field of administration, (3) the physiological impact of stress on the administrator, (4) the psychological impact of stress on the administrator,

and (5) various means for coping with or responding to stress. Chapter III includes a complete description of the procedures which were used in the completion of this study. In the fourth chapter, the findings of the study are presented. A summary of the study, a discussion of major findings, and a discussion of the implications of the study are included in Chapter V.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

#### Introduction

The school as an educational social system is a part of, not apart from, modern society. What happens to and within school settings has an impact upon society, and vice versa. The individual who assumes a high degree of responsibility for the outcome of the school is the school administrator. It is the school administrator who must align the goals of the society and the goals of the educational system. Stress occurs when the school and the society are not in agreement with one another.

Stress, for most people, is synonymous with distress. Distress, however, is only one type of stress. Other forms of stress are eustress (positive stress), which is beneficial in nature, and neustress, an internal steady state which occurs as a result of an individual's day-to-day adaptation to his or her surroundings.

School administrators can either manage stress in a positive manner or, instead, be prone to numerous physiological and psychological diseases associated with negative stress. By positive management of stress, one can achieve health, happiness, and longevity.<sup>1</sup> Stress can enable individuals to reach their fullest

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<sup>1</sup>Donald R. Morse and M. Lawrence Furst, Stress for Success (New York: Van Nostrand Reinhold Company, 1979), p. xii.



potential in both their personal lives and their job situations.

In this chapter, positive and negative aspects of stress for school executives are examined. An extensive body of literature has addressed the subject of stress; however, few references relate specifically to school administrators. Most sources discuss stress experienced by business executives. Stress has been examined from both physiological and psychological aspects, with emphasis given to means of coping with and managing stress for disease prevention.

This chapter is divided into five topic areas: (1) the meaning of stress, (2) stress in the field of administration, (3) the physiological impact of stress, (4) the psychological impact of stress, and (5) stress coping and stress response.

### The Meaning of Stress

Stress is a peculiar term, understood by everyone when used in a general context but understood by few when an operational definition is desired which is sufficiently specific to enable precise testing of certain relationships.<sup>2</sup> Like other scientific terms, stress has a number of informal connotations. The word is used in so many different ways that, often, clarity of meaning is lost.

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<sup>2</sup>Sanford I. Cohen, "Central Nervous System Functioning in Altered Sensory Environments," Psychological Stress (New York: Appleton-Century-Crofts, 1967), p. 78.

Stress is a specific biological concept that relates to disease prevention.<sup>3</sup> It is the normal reaction to any perceived danger. Stress is some taxation of the body's resources in order to respond to some environmental circumstance.<sup>4</sup> In essence, stress responses are mobilization of the body's defenses, an ancient biochemical survival mechanism that was perfected during the evolutionary states of human beings, allowing them to adapt to hostile or threatening events. One adaptation for hostile or threatening events is the alarm reaction of fight-or-flight. Because the fight-or-flight response is a reaction of the individual to a situation its intended purpose becomes self-defeating and actually can be a form of stress. Under conditions where a threat is present, that response of fight-or-flight is desirable; however, when used too often or for too long the individual may remain in a permanent state of reaction. The result is, at best, chronic tension. Worse, the hormones secreted in such abundance can ultimately lead to damage in vital organs or to the nervous system itself, resulting in physical and psychological disorders.<sup>5</sup>

Seyle lists several notions about stress:

- (1) . . . stress is not nervous tension;
- (2) stress is not the discharge of hormones from the adrenal glands;
- (3) stress is not simply the influence of some negative

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<sup>4</sup>Philip Goldberg, Executive Health (New York: McGraw-Hill Book Company, 1978), p. 24.

<sup>5</sup>Ibid., p. 25.

<sup>6</sup>Ibid., p. 27.

occurrence; (4) stress is not entirely a bad event; and (5) stress does not cause the body's alarm reaction.<sup>6</sup>

If taken literally these non-definitions of stress eliminate almost everything concerned with one's life or lifestyle. One key to a definition of stress is the presence of stress responses as results of stimuli.

Stress is a physiological state and not all stress is unpleasant. "Stress is the spice of life, and the absence of stress is death. To be alive means to respond to stimulation from the environment."<sup>7</sup> One individual's response to an event may be challenging while the same event may be stressful to another. "There is ample evidence to support the notion that we need, indeed thrive on, a certain amount of stimulation."<sup>8</sup> Findings of a study on coronary disease among a corporation's executives showed lower levels with each step up the occupational ladder. A possible explanation for this phenomenon was given by Goldberg: ". . . it could be that the middle rungs, where one is caught between policy making and execution, are inherently more stressful because of ambiguity and relative powerlessness."<sup>9</sup> These findings contradict what is often assumed

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<sup>6</sup>Hans Seyle, The Stress of Life (New York: McGraw-Hill Book Company, 1956), pp. 53-54.

<sup>7</sup>Ibid., p. 285.

<sup>8</sup>Goldberg, op. cit., p. 28.

<sup>9</sup>Ibid.

to be one major cause of stress, more pressure related to promotion.

The response to a stimulus has four major steps: (1) the event itself, (2) the perception of the event, (3) the interpretation of the event, and (4) the response to the event (see Figure 1).<sup>10</sup>

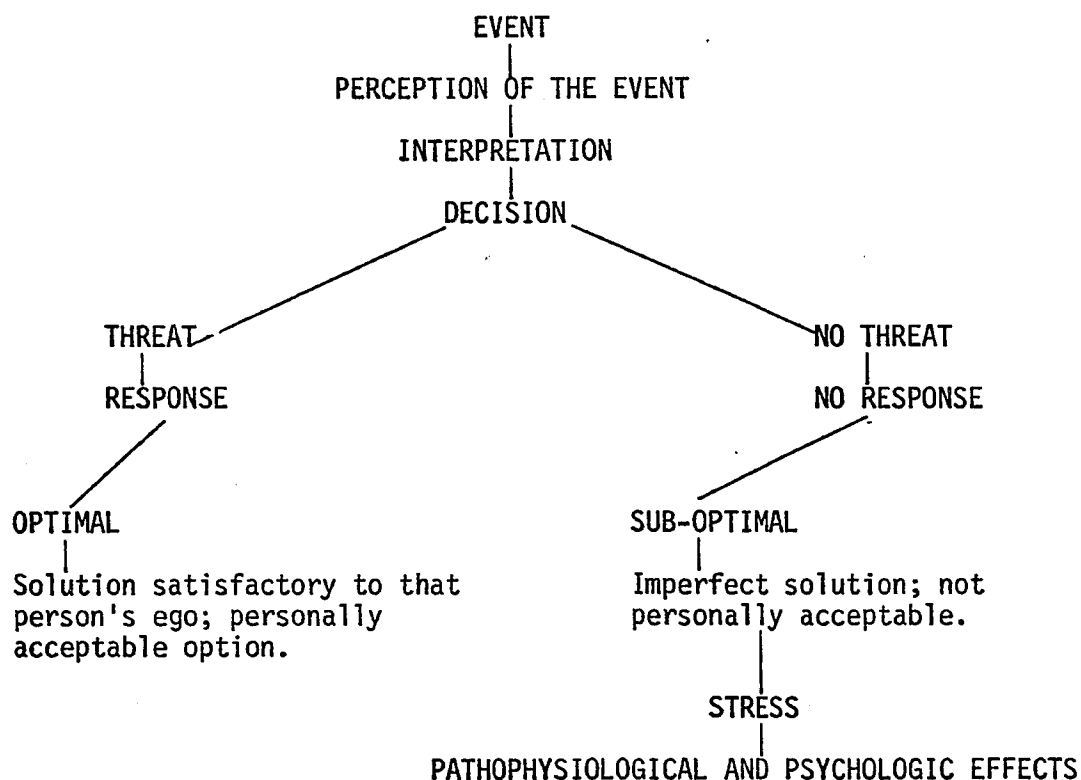


Figure 1

Diagram Depicting the Manner in Which Stress Is Handled from the Event Itself, Perception of the Event, and Interpretation Leading to a Decision

<sup>10</sup>Robert S. Eliot, Stress and the Major Cardiovascular Diseases (New York: Futura Publishing Company, 1979), p. 6.

Individuals interpret situations and utilize past experience to determine whether or not a threat is present. If the stimulus is non-threatening, the individual, through the discriminating process, will reject the stimulus and no response is required. However, if the stimulus is perceived as threatening, a response will be required. "If the decision is that the event is a threat, the response may be either optimal (a personally acceptable option) or sub-optimal (not personally acceptable), which will be stressful and can lead to pathophysiological and psychological effects."<sup>11</sup>

Four categories of stress may be present: the physical threat, the ego threat, the social interpersonal threat, and the environmental threat. These have levels of measurement which McGrath has identified as: (1) physiological, concerning the bodily processes; (2) psychological, concerning cognitive, emotional, and motivational functions; (3) behavioral, the overt response of the organism to interpersonal and task behaviors; and (4) organizational, responses peculiar to a work setting.<sup>12</sup>

The meaning of stress is elusive. Such elusiveness is created from the confusion of the incorrect adaptation of the discipline of physics. One such definition of stress in physics is ". . . the ratio of the internal force brought into being when

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<sup>11</sup>Ibid.

<sup>12</sup>Joseph E. McGrath, Social and Psychological Factors in Stress (New York: Holt, Rinehart, and Winston, Inc., 1970), p. 63.

a substance is deformed in any way, to the area over which the force acts."<sup>13</sup> Such a connotation suggests and agrees with most people's concept, that stress is negative or in some form causes disruption of the individual's life or health. Yet, as Seyle has pointed out, there are positive as well as negative aspects to stress.

There are three types of stress: neustress, distress, and eustress.<sup>14</sup> If stress is necessary for day-to-day adaptation of man to his surroundings and results in an internal steady state it is designated as neustress. If the response to stress is not favorable and the ultimate end is a stimulus for disease, it is labeled distress. If the response is favorable and the results are an improvement in physical and mental functioning, it is called eustress (see Figure 2).<sup>15</sup>

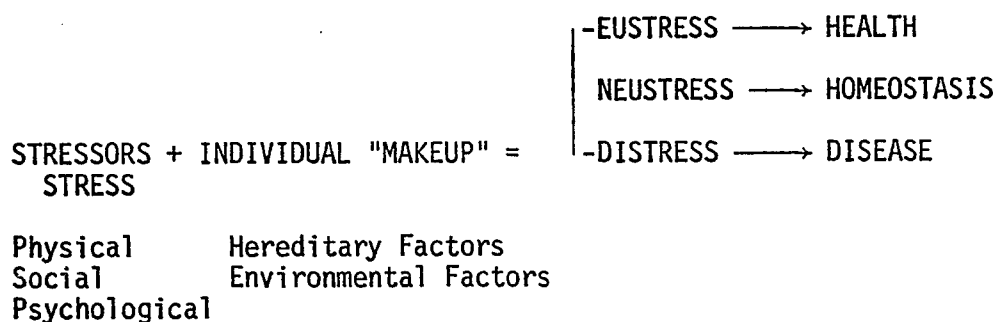


Figure 2

Stress Equation--Indicating Stressors, Individual  
Makeup and the Types of Stress

<sup>13</sup>John E. Williams and others, Modern Physics (New York: Holt, Rinehart and Winston, Inc., 1972), p. 155.

<sup>14</sup>Morse and Furst, op. cit., p. 9.

<sup>15</sup>Ibid.

The description of stress given by Morse and Furst (Figure 2) is similar to the description provided by Eliot (Figure 1). Eliot's first step, "the event itself," is Morse and Furst's stressors," i.e., the social and psychological category. The individual's "makeup," as defined by Morse and Furst, is determined by hereditary and environmental factors and is similar to Eliot's "perception of the event." Eliot's "response to the event" is, in its character, the three categories of stress described by Morse and Furth, i.e., "eustress, neustress and distress."

Stress is an ever-present stimulus for all individuals. An individual should not and, indeed, cannot avoid stress, but can meet it efficiently and enjoy it by learning more about its mechanism and adjusting one's philosophies of life accordingly.<sup>16</sup>

#### Stress in the Field of Administration

Conflicts are ubiquitous in all organizations, including schools. Conflicts occur continually, arise for a variety of reasons, appear in a variety of forms, and affect the educational process both favorably and unfavorably. The presence of conflict is, in itself, neither good nor bad--it simply exists and should be expected.<sup>17</sup> All institutional roles, particularly those in public institutions, are

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<sup>16</sup>Hans Seyle, Stress without Distress (New York: J. B. Lippincott Company, 1974), p. 33.

<sup>17</sup>Richard A. Schmuck and others, The Second Handbook of Organization Development in Schools (Palo Alto: Mayfield Publishing Company, 1977), p. 1.

subject to numerous sources and types of disagreement or conflict.<sup>18</sup>

Persons who become school administrators are bombarded with a number of role expectations which they may or may not be able to fulfill; stress is a result of differences in the expectations of school administrators as stated in the professional literature, by institutions of higher education involved in the preparation of administrators, and by teachers, students and parents in the community. Major types of role conflict include: (1) interrole conflict, or disagreement between two or more roles held simultaneously; (2) interference-group conflict, or disagreement in two or more reference groups in their expectations for the role; (3) intra-reference-group conflict, or disagreement within a reference group in member expectations for the role; and (4) role-personality conflict or disagreement between the expectations for the role and the individual's personality need dispositions.<sup>19</sup>

How poorly or how well one responds to role conflict is related to the stress perceived by the individual. Because of the complexity of school administration, several role conflicts can occur simultaneously. The ability to cope with conflict can be indicative of or predictive of the school administrator's longevity, tolerance to physiological disorders, and ability to assist others

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<sup>18</sup>James M. Lipham and James A. Hoeh, Jr., The Principalship: Foundations and Functions (New York: Harper and Row, 1974), p. 132.

<sup>19</sup>*Ibid.*, p. 133.



in fulfilling their roles.

Interpersonal conflict experienced by school administrators in fulfilling their various roles is a role characteristic shared with executives in corporations. A major source of stress in corporation environments is interpersonal conflict. Any executive should identify trends and problems and initiate possible preventive measures to avert crisis.<sup>20</sup>

Individuals, including school administrators, typically have a number of self-concepts as to how they are to perform in given situations. The ability of the individual to meet these self-concepts about expectations has an effect on job performance. If one has idealized notions of what a role is to be and self-perceived images of how the role is performed are positive, any assault on role interpretation will cause stress.<sup>21</sup> As an example, ideals perpetuated by professional literature and in administrator preparation programs may create stress when a situation occurs and ideals conflict with realities evidenced by the individual.

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<sup>20</sup>Ari Kiev, A Strategy for Handling Executive Stress (Chicago: Nelson-Hall Company, 1974), p. 158.

<sup>21</sup>Michael C. Giammatteo and Delores M. Giammatteo, Executive Well Being (Reston, Virginia: National Association of Secondary School Principals, 1980), p. vii.

### The Physiological Impact of Stress

No two people react the same to a stressful situation. One individual may have physiological repercussions while another may experience psychological difficulties; one may be depressed, the other hyperactive; one may react by eating, the other by loss of appetite. Responses to stress are highly individualized; as McGrath has noted, "One man's stress is another man's challenge."<sup>22</sup>

Anywhere from 50 percent to 80 percent of all diseases are psychomatic or from stress-related origins.<sup>23</sup> Pelletier has listed the illnesses that are considered psychomatic:

. . . peptic ulcer, mucous colitis, ulcer active colitis, bronchial asthma, aptopic dermatitis, edema, hay fever, arthritis, hypertension, hyperthroidism, amenorrhea, migraine headache, impotence, sleep-onset insomnia, alcoholism, and the whole range of neurotic and psychotic disorders.<sup>24</sup>

The individual who is under a certain amount of stress continually will suffer from certain diseases endemic to modern society which are in some way linked to stress. Cardiovascular diseases are the greatest threat to executives. While various heart diseases can be associated with stress, there are so many causes that no one cause can be identified.

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<sup>22</sup>McGrath, op. cit., p. 49.

<sup>23</sup>Kenneth Pelletier, Mind As Healer, Mind As Slayer (New York: Dell Publishing Company, 1977), p. 7.

<sup>24</sup>Ibid.

In 1956, Seyle defined three stages of biological stress:

"The alarm reaction, the resistance stage and the exhaustion stage all of which are referred to as the general adaptation syndrome."<sup>25</sup>

In the alarm reaction, the individual's brain, after recognizing the stressor, sends a biochemical message to the pituitary gland, which secretes adrenocorticotrophic hormones. These hormones result in the body's system preparing itself for some form of danger. In the resistance stage, vital resources are applied which allow the body to resist and adapt to the causes of a stress. In the final stage, exhaustion, adaptation is lost if the stressor continues. If the stress is prolonged, the body's reaction will cause continual wear and tear and may result in death.

When an individual encounters a stressful situation, an entire series of physiological events occurs. Goldberg has described what happens physiologically when there is an alarm reaction:

Stored sugar and fats pour into the blood stream to provide fuel for quick energy. The breath rate shoots up, providing more oxygen. Red blood cells flood the bloodstream, carrying more oxygen to the limbs and the brain. The heart speeds up and blood pressure soars, insuring sufficient blood supply to needed areas. Blood clotting mechanisms are activated to protect against injury. Muscles tense. Digestion ceases so blood may be diverted to muscles and brain. Perspiration and saliva increase. Triggered by the pituitary gland, the endocrine system steps up hormone production. The bowel and bladder muscles loosen. Adrenalin pours into the system, as do the hormones epinephrin and norepinephrin. The pupils

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<sup>25</sup>Seyle, The Stress of Life, op. cit., p. 32.

dilate, allowing more light to enter. The end result of which all senses are heightened.<sup>26</sup>

The entire process, although a very elegant display of innate intelligence, requires a mere flash in time. The continual state of stress may be so unremitting that an individual does not even recognize the signs. Such a state is extremely dangerous for, if an individual continues to ignore stress, the individual is training himself or herself to take on a greater load of stress rather than seeking means to combat or alleviate it. Stress may be viewed as a vicious cycle since the person afflicted does not function properly; thus, the person is susceptible to future stress. Excessive stress can and will lead to physical and psychological disorders or weaknesses.

### The Psychological Impact of Stress

The origins of scientific medicine did not include the psychological aspects of human beings. Concentrated scientific research began when the microscope was used for the identification and realization of the origins of diseases. These discoveries were accompanied by a concentration of interest on physical processes in the human body, when, literally, the patient's body was placed under the microscope and studied in detail. The individual's mental status or psychological and social aspects were largely ignored,

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<sup>26</sup>Goldberg, op. cit., pp. 26-27.

since these could not be studied with the help of the microscope or other biological methods. Modern thought rejects the concept of physical attributes of man constituting processes apart and entirely different from cognitive and emotional functions.<sup>27</sup>

The individual is looked upon as one who thinks, feels, has emotions, and can control physiological diseases. When analyzing the effects that stress has on the body, both psychological and physiological effects must be studied in unison. That physical malfunctions can drastically interfere with mental performance is a truism, but the realization that mental and emotional states can materially contribute to physical diseases is new to Western medicine.<sup>28</sup>

The most important aspect of looking upon the individual holistically is to understand that the mind and body work cooperatively; what affects the one will affect the other. "There is nothing nonsensical in the fact that a mental disease may have predominantly somatic causes. In the same way it is quite possible that certain somatic diseases are caused predominantly by pathological mental processes."<sup>29</sup>

Stress is made up of two episodes, the individual and the

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<sup>27</sup>Roy R. Grinker, The Physiology of Emotions (Springfield: Charles C. Thomas Publishing Company, 1961), p. 4.

<sup>28</sup>Goldberg, op. cit., p. 97.

<sup>29</sup>Lennart Levi, Stress: Sources, Management, and Prevention (New York: Liveright Publishing Corporation, 1967, p. 23.

threatening environment. How stress is perceived is by a set of cognitive structures; the cognitive structures are characteristics of an individual's cognitive organization. The prior experiences making up the cognitive structure are based upon the individual's beliefs, morals, values, skills, and various commitments related to themselves and the environment. To be a point of stress, the event experienced must be considered potentially harmful. Through the cognitive processes the potentially harmful situation is interpreted, the degree of harm analyzed, and specific meaning is attached to the event. The individual learns to anticipate stress as an anticipatory emotion:

The strength of an anticipatory emotion--and its rise and fall--depends not on actual suffering at the present moment but on the course of the individual's thinking about the suffering that might be in store for him. Thus, the strength of an anticipatory emotion--whether it be fear, shame, or guilt--depends on the person's cognitive appraisals of threats to his future well being.<sup>30</sup>

The individual is called upon in a particular situation to respond to a stressful occurrence where emotions may dictate the end result of the situation. "The most frequent source of stress in everyday life is not danger itself but words that refer to threats or potential danger."<sup>31</sup> Emotions are dictated by fear, shame, and guilt; thus, the individual responds emotionally by identifying the

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<sup>30</sup>Irving L. Janis, Stress and Frustration (New York: Harcourt, Brace, and Jovanovich, Inc., 1971), p. 109.

<sup>31</sup>Ibid., p. 107.

processes that produce different stress reactions. "It is the cognitive processes leading to emotion that organize behavior, not the emotions themselves."<sup>32</sup> For this reason, no two people react the same to a stressful situation; one may realize fear or shame while the other may feel guilt. In Lazarus' description of "cognitive processes leading to emotions," it is also apparent that cognitive processes aid in the coping process; processes which trigger emotions depend on appraisal of the stressful situation and can be used to reduce or increase stress.

Anxiety is the emotion most related to health and disease.

Anxiety is a feeling state which is so unendurable to man that it evokes defensive maneuvers which in themselves are symptomatic; their clusters or syndromes comprise the spectrum of psychiatric and psychomatic disorders.<sup>33</sup>

Anxiety is closely related to fear; however, there is a distinct difference: ". . . anxiety is an internal state of foreboding; whereas fear is a response to an actual danger to the organism."<sup>34</sup> Nonetheless, anxiety is a reaction which signifies a meaningfulness to the person experiencing it--a meaningfulness which calls upon the cognitive structure.

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<sup>32</sup>Richard S. Lazarus, "Cognitive and Personality Factors Underlying Threat and Coping," Social Stress, eds. Sol Levine and Norman A. Scotch (Chicago: Aldine Publishing Company, 1970), p. 145.

<sup>33</sup>Grinker, op. cit., p. 3.

<sup>34</sup>Ibid., p. 5.

Many executives tend to waste too much time and energy worrying about things that simply do not warrant concern. Perceiving problems as challenges and opportunities will foster action and build cognitions needed to correctly appraise a new threatful situation when encountered. As Giammatteo and Giammatteo have said:

Part of our response to stress is to know when to develop new coping skills; when to collaborate with others for support; when to ignore the stressful event; when to acknowledge that the problem is not one we can manage at the time. The fact is, we must perceive the event that might cause stress as one that allows us the choice of what reaction we will initiate.<sup>35</sup>

### Stress Coping and Stress Response

For school administrators at all levels of educational management, stress is not a new phenomenon.

It is part of their professional lives and, one might say, an occupational hazard. This does not mean, however, that they must accept stress, no matter how severe, and suffer the resulting mental anguish and even physical consequences.<sup>36</sup>

Distress can debilitate one, motivate one, or cause one to be isolated by using unpredictable behavior. "It is important to understand the concept of stress awareness because it can teach us the

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<sup>35</sup>Giammatteo and Giammatteo, op. cit., p. 3.

<sup>36</sup>Owen B. Kiernan, Executive Well-Being: Stress and Administrators, eds. Michael C. Giammatteo and Delores M. Giammatteo (Reston, Virginia: National Association of Secondary School Principals, 1980), p. v.



negative and positive consequences of stress. Often, when we become aware of those things that cause stress, stress can be eliminated."<sup>37</sup> When the executive is confronted with a decision, the cognitive structures of the individual aid in the appraisal of the situation. The individual evaluates the complexity of the situation, utilizing past experiences and professional competence. It is upon these methods that the coping process is established. Different individuals respond to the same conditions in differing ways; it is doubtful that there is such a thing as complete stress-tolerance for any individual. Stress-tolerance is a balancing act, a mind set, and the ability to know the bottom line for the individual experiencing stress and for the work which may create stress.<sup>38</sup> Appley and Trumbull have discussed the ability of certain individuals to cope with a stressful situation and others to perceive the same situation as stressful:

There is more likely to be a greater or lesser insulation from the effects of certain kinds of stress producers. It seems likely that there are differing thresholds, depending on the kinds of threats that are encountered and that individuals would be differently vulnerable to different types of stressors.<sup>39</sup>

Distress can occur not only from one's perception of a situation but also from the influence of others, the culture, and the

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<sup>37</sup>Giammatteo and Giamatteo, op. cit., p. 3.

<sup>38</sup>Ibid., p. 5.

<sup>39</sup>Mortimer H. Appley and Richard Trumbull, "On the Concept of Psychological Stress," Psychological Stress, (New York: Appleton-Century Crofts, 1967), p. 10.

social surroundings of the individual. The companions of an individual and the cultural and social norms may influence the amount of tolerance one has for a stressful situation. If the person perceives acceptance for his or her role by peers and social surroundings, situations encountered may not be as stressful.

As a means of preventing stress, the individual should be aware of situations which can cause stress. If one knows in advance the situations which are stressful, one can better prepare himself or herself both physically and mentally for the potentially stressful situation. An approach that will increase resistance of the forms of stress which are known to cause adverse affects is self-analysis. "A self-analysis of stress would include the ability to identify specific stressors and types of contexts which constitute stress and the determination of the physical and psychological strengths and weaknesses to identify specific vulnerabilities."<sup>40</sup>

A person's coping skills may not be effective for each stressful situation that occurs, nor is the same coping strategy always effective for the same stressful event. Executives and managers must learn how to avert the accumulation of tensions by developing habits of self-reliance, self-control, good direction, avoidance of argument or overreaction to the behavior of others, avoidance of accepting responsibility for others and acceptance of responsibility

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<sup>40</sup>James W. Greenwood, III and James W. Greenwood, Jr., Managing Stress: A Systems Approach (New York: John Wiley and Sons, Inc., 1979), p. 215.

for self.<sup>41</sup> To reach these goals, executives should realize the results of modeling behaviors, e.g., subordinates react to stress shown by role superordinates and, in turn, their reactions often heighten the distress of executives. Thus, the executive should act to manage this cycle.

Many executives have their greatest difficulties in coping with strong emotions such as fear, anger, greed, envy, hostility, uncertainty, and depression.<sup>42</sup> If an executive does not have control of these emotions, less control will be exhibited in management of others. A common tendency of executives is to gauge personal success by the success of the organization served; thus, a fear of delegating and not having the job done correctly can arise. Much of the stress experienced by executives comes from a fear of loss of control through delegation of duties. Ideally, the executive or manager should establish priorities within the framework of the job. Executive responsibility should mean greater freedom to determine what is to be done, how much to do, and how to implement the work of others.<sup>43</sup>

Because of an infinite variety of personalities, stressors will affect individuals differently, as do the methods by which people handle stress. Stress responses include: (1) avoidance or

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<sup>41</sup>Kiev, op. cit., p. 69.

<sup>42</sup>Ibid., p. 14.

<sup>43</sup>Ibid., p. 21.

diversion, (2) co-existence, (3) dominance, (4) negotiation, and (5) integration.

Individuals who avoid stress or stressors are not willing to cope with stress. In other words, the best way to manage stressors is to avoid or prevent stress.<sup>44</sup> Avoidance is a means of flight from the situation which may cause stress.

Successful flight--escape from the stress stimulus--will probably produce relief from stress, but may be followed by feelings of anger, guilt, worry, anxiety or some combination of these depending on one's subsequent state and one's review and assessment of the original situation and one's reaction to it.<sup>45</sup>

Division occurs when a situation encountered is not handled immediately and is avoided or deferred to a time when the individual is rested or fortified. In some instances, it is possible to divert known stressors. "An individual may seek to divert an attack to a common but indefinite enemy, to a situation, or to an inanimate object; or some may seek to divert the antagonistic behavior itself by humor, or agreement, or other pacific gestures."<sup>46</sup> Diversion can be helpful when one finds it impossible to complete a project.

Substitute activity--whether utilizing a different set of muscles or a different type of mental activity--not only provides a certain degree of satisfaction in itself, but, by refocusing conscious attention, obviates the tendency to worry about

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<sup>44</sup>Seyle, Stress without Distress, op. cit., p. 154.

<sup>45</sup>Greenwood and Greenwood, op. cit., p. 95.

<sup>46</sup>Ibid., p. 218.

the frustrating obstacles to completion of the original task.<sup>47</sup>

Diversion can be important in combating mental stress. "By highlighting some other problem, through diversion, or by activating the whole body, by general stress, the source of worry automatically becomes less important in proportion."<sup>48</sup>

Dominance, a fight reaction, is a form of stress response occurring when the status or position of an individual is threatened. Any attack on or threat to one's beliefs, values, or knowledge is perceived as an attack on oneself and arouses a defensive behavior. The fight reaction initially came about through the evolutionary process where man utilized this adaptive response to injury or the threat of injury. "In modern humans, the fight reaction may manifest itself in varying degrees of aggression ranging from simple self-assertiveness, through gentle verbal criticism and competitiveness, to active hostility and physical assault."<sup>49</sup>

Integration, a form of synthesis, is a stress response which arises from a stressful situation where the administrator must make decisions from information received from two or more parties. The administrator, in order to use the stress response integration, must be cognizant of how the interpretation of information from others may

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<sup>47</sup>Ibid., p. 218.

<sup>48</sup>Ibid., p. 219.

<sup>49</sup>Seyle, The Stress of Life, op. cit., p. 268.

affect the stressful situation. "Psychologists generally divide cognitive behavior into two broad stages; how information gets inside our heads and subsequent manipulation of this information."<sup>50</sup>

"Given the impact of the individual on the perceptual process, individual difference factors account for some of the variation in how people attend to encode, and interpret information."<sup>51</sup> Integration requires the administrator to be open to the differences of individuals and understand that the input from others may be beneficial or detrimental in the final outcome.

Negotiation, a compromise or give and take, is similar to integration in that both take into consideration the difference in individuals in the making of a decision. Negotiation and integration differ, however, in that ". . . to negotiate is to deal or bargain with one another or others which will allow the discussion to move through, around, or over in a satisfactory manner."<sup>52</sup> Integration, however, utilizes the ideas or differences in view together to form one idea.

School principals, because of the middle management position of the role, are subject to stressful situations on a regular basis.

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<sup>50</sup> Ilene R. Gouchman, "Arousal, Attribution, and Environmental Stress," Stress and Anxiety, eds. Irwin G. Sarason and Charles D. Spielberger, Vol. 6 (Washington: Hemisphere Publishing Company, 1979), p. 71.

<sup>51</sup> Ibid.

<sup>52</sup> Jess Stern, The Random House Dictionary of the English Language (New York: Random House, 1966), p. 738.

The middle manager must develop many special skills and personal maturity for the effective management of people and their problems. A response useful for the management of stressful situations is co-existence. In utilizing the stress response of co-existence, the individual recognizes the abilities and performance of subordinates. The middle manager must learn to depend on and expect the capabilities of subordinates. The individual in a middle management position should ideally learn to function as an advocate of the staff as well as a spokesman for top management.<sup>53</sup> With clear identification of expectations, the idea of "my turf, your turf" will allow the administrator to link individual efforts to the school's efforts. Co-existence will allow the administrator and subordinates participation in decision making pertaining to their areas of responsibility as well as to an increase in performance.

#### Summary

This review of literature has been focused on five topics: (1) the meaning of stress as related to the executive, (2) stress in the field of administration, (3) the physiological impact of stress on the administrator, (4) the psychological impact of stress on the administrator, and (5) the various means through which one copes with or responds to stress.

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<sup>53</sup>Kiev, op. cit., p. 74.

Simply living in a modern society is stressful. Few events experienced are without stress in one form or another. Complete freedom from stress is death. Each individual may react differently to identical situations; what may be stressful for one individual may be challenging to another. Stress is categorized into three major areas: neustress, distress, and eustress. Neustress is necessary for day-to-day adaptability of man which results in the maintenance of an internal steady state; distress is associated with non-favorable events which can cause strain and increase disease; and eustress is a positive condition where the individual is placed in a state of physical and mental well-being.

Role expectations can be a major factor in the amount of stress experienced by the school executive. Role conflict versus self-concept can bombard the administrator to the point where the ability to cope effectively with conflicts may affect longevity, the ability to ward off physiological and psychological disorders, and the ability to manage effectively.

Physiological and psychological disorders can be attributed to distress. The literature has provided a lengthy litany of diseases, both somatic and psychosomatic in nature, related to stress and one's ability to cope with it. The individual, when a stressful situation is encountered, will display a very elaborate innate series of events which can lead to a vicious cycle that can cause a person to malfunction, thus leaving the individual susceptible to future



stress. A continued state of stress can lead to both physical and mental disorders or weaknesses.

The stress response is a nonspecific physiological and psychological chain of events triggered by any form of disruption of one's equilibrium. It is through the use of an individual's cognitive domain that an individual perceives an event as being stressful. Since there is such a wide variance in personalities, there is a multitude of stress coping techniques. Five major categories have been addressed in the literature: (1) avoidance or diversion (flight); (2) co-existence (my turf, your turf); (3) dominance (fight); (4) negotiation (compromise); and (5) integration (synthesis).

If an individual does not cope with stress or puts the stressful event out of mind for a period of time, avoidance or diversion occurs. Co-existence occurs when an individual makes use of subordinates in the work setting. The individual who utilizes co-existence realizes that the task of being an administrator is too awesome for one person to handle all situations satisfactorily. Dominance is a stress response which occurs when an individual's values or knowledge is challenged. Negotiation occurs when the executive strives to achieve a compromise with the parties involved. Integration utilizes the abilities of others through the realization that each individual may perceive circumstances differently than others.

Each response to stress can result in either the strengthening or weakening of either or both the individual and the organization.

## CHAPTER III

### DESIGN OF THE STUDY

#### Introduction

One primary research question and two secondary research questions were investigated in this study. The primary research question was: "Do responses to stressful situations (critical incidents) or measures of personality, as measured by the Sixteen Personality Factor Questionnaire (16 PF), for prospective and practicing school administrators differ at statistically significant levels when these two groups are compared with one another?" The secondary research questions were: (1) "Do prospective school administrators differ from what would be expected in their selection of five categories of response to stress?" (2) "Do practicing school administrators differ from what would be expected in their selection of five categories of response to stress?"

#### Subjects

Two groups of students were included in this study. One group of prospective school administrators, hereafter referred to as trainees, were persons enrolled in a graduate course in building administration as part of a preservice administrator preparation program. The second group of subjects consisted of practicing school administrators, hereafter referred to as

practitioners, who were persons enrolled in a field seminar with enrollment limited to practicing school administrators.

### Instrumentation

Two instruments were used to collect the data for this study. The instruments used to measure responses between trainees and practitioners were: (1) a set of fifteen critical incidents, and (2) the 16 PF.

#### Critical Incidents

A set of 205 critical incidents of actual events which practitioners have written describing real incidents was reviewed. From this set of 205, 15 critical incidents were selected as examples of stressful situations. The set of 15 critical incidents was rewritten in a common format. For each of the 15 critical incidents, three possible responses were prepared. Thus, for the initial set of 15 critical incidents, 45 possible responses were formulated. This initial set of critical incidents and responses was reviewed and evaluated by an expert jury.

The 205 critical incidents which were reviewed for possible use in this study were categorized into four categories: student relations, curriculum, public relations, and personnel. In the student relations category, 60 critical incidents were reviewed, with four critical incidents selected for use in this study; in the curriculum category, 30 critical incidents were reviewed with

one critical incident selected; in the public relations category, 40 critical incidents were reviewed with three critical incidents selected; and in the personnel category 75 critical incidents were reviewed with seven critical incidents selected for use in this study (see Table 1).

TABLE 1  
Categories and Critical Incidents Reviewed  
and Selected for Use in This Study

Category	Number of Critical Incidents Reviewed	Number of Critical Incidents Selected For Use in This Study
Student relations	60	4
Curriculum	30	1
Public relations	40	3
Personnel	75	7
Total	205	15

Three professors of school administration served as an expert jury to review and critique the initial set of 15 critical incidents. Each jury member: (1) was an experienced school administrator, (2) had conducted preservice and inservice sessions for school administrators, (3) had experience in the design, development and use of simulated instructional materials and experience in personnel management, and (4) was trained in the use of assessment technology

for selection of school administrators (e.g., The National Association of Secondary School Principals Assessment Center). All of the jury members had conducted research and had designed, delivered, and evaluated preservice and inservice training materials for the preparation of school administrators.

After the critical incidents had been reviewed by the jury, 14 of the critical incidents were accepted with modification and one was rewritten. Each member of the jury also was asked to code each of the three responses as examples of the five categories of stress response. Two members of the jury completed the task. The five categories of stress response are: (1) dominance, (2) avoidance or diversion, (3) co-existence, (4) negotiation, and (5) integration. The revised set of 15 critical incidents, with the 45 responses, was used for data collection (see Table 2 and Appendix A).

#### Sixteen Personality Factor Questionnaire (16 PF)

The Sixteen Personality Factor Questionnaire (16 PF) was first published by the Institute for Personality and Ability Testing, Inc. (IPAT), Champaign, Illinois, in 1949. Since its development:

. . . the reliabilities and validities of the 16 PF have steadily advanced, and the test has expanded into no fewer than five parallel forms; but, also like the growing human, it has retained the essential shape of the original. The reason for this constancy is that, unlike many test scales developed in the same period, the 16 PF was, from the beginning,

TABLE 2  
Critical Incidents and Frequency of Stress Response

Critical Incident Number	Incident Descriptor	Stress Response				
		Dominance	Negotiation	Co-Existence	Avoidance	Integration
1	Incorrigible parent	X	X	X		
2	Weekend dance	X	X		X	
3	Training rules	X		X		X
4	P.E. class	X	X		X	
5	Lockers raided	X	X	X		
6	Closed campus	X	X			X
7	Ski trip	X			X	X
8	Negotiations	X			X	X
9	P.T.O. meeting			X	X	X
10	Tournament	X	X	X		
11	Controversial film	X		X		X
12	Personal hygiene	X			X	X
13	Custodian's workroom	X	X		X	
14	Science curriculum		X	X		X
15	Reduction-in-force	X		X	X	
	Total	13	8	8	8	8

tailored to evidence of the inherent structure of personality, not artificially created to fit a priori concepts.<sup>1</sup>

"The 16 PF is an objectively scorable test devised by basic research in psychology to give the most complete coverage of personality in a brief time."<sup>2</sup> The 16 PF is an inventory consisting of 15 personality scales and one general intelligence scale. The personality scales are nonhomogeneous in content and are constructed to assess a variety of traits for diverse psychological uses. Three features are inherent in the 16 PF: (1) the comprehensiveness of personality dimensions, (2) the orientation of the scales to functional measurement, and (3) the measurements that relate to an organized and integrated body of knowledge in the clinical, educational, industrial and basic research fields.<sup>3</sup>

The 16 PF is not a questionnaire comprised of arbitrary scales, but is made of scales carefully oriented to basic concepts in human personality structure research.<sup>4</sup> The 16 PF was constructed and refined through a series of factor analytic studies. "Its publication was undertaken to meet the demand of research psychologists for

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<sup>1</sup>Raymond B. Cattell, Herbert W. Eber, and Maurice M. Tatsuoka, Handbook for the Sixteen Personality Factor Questionnaire (16 PF) (Champaign, Illinois: Institute for Personality and Ability Testing, Inc., 1970), p. xix.

<sup>2</sup>Administrators' Manual for the 16 PF (Champaign, Illinois: Institute for Personality and Ability Testing, Inc., 1979), p. 5.

<sup>3</sup>Cattell, op. cit., pp. 5-8.

<sup>4</sup>Ibid., p. 13.

a personality measuring instrument duly validated with respect to the primary personality factors, and rooted in basic concepts in general psychology."<sup>5</sup>

The 16 PF has five forms (Forms A through E) measuring the same 16 personality factors. Form B was chosen for this study because of the highest reading grade level as compared to Form E, since this study used university graduate students for subjects. Also, the time resources were not a factor in the administration of the questionnaire as compared to the shorter time of Forms C and D (see Table 3).

TABLE 3  
Five Parallel Forms of the 16 PF<sup>6</sup>

Form	Number of Items	Reading Grade Level	Approximate Time
A	187	7.46	45-60 minutes
B	187	7.60	45-60 minutes
C	105	6.48	25-35 minutes
D	105	7.70	25-35 minutes
E	128	3.25	45-60 minutes

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<sup>5</sup>Ibid.

<sup>6</sup>Ibid., p. 3.



The reliability of Form B of the 16 PF ranges from a low of .54 (Factor B, Intelligence) to a high of .89 (Factor H, Shy vs. Venturesome). The reliability score of .54 for Trait B, Intelligence, ". . . is not unusual and seems due to subjects solving intelligence items by reminiscence between testings."<sup>7</sup> The validity of Form B ranges from a low of .44 (Factor B, Intelligence) to a high of .87 (Factor H, Shy vs. Venturesome) (Table 4).<sup>8</sup>

The administration and scoring of the 16 PF provide for each subject a source trait score or standard ten score for each of the 16 factors. A description and definition for each of the 16 factors of the 16 PF are provided in Appendix B.

#### Data Collection

The set of 15 critical incidents and the 16 PF were administered to 19 subjects enrolled in a preservice graduate course in educational administration at the University of Nebraska-Lincoln during the 1982 spring semester. The instructions for completing the 15 critical incidents were given orally and also were included on the cover page of the 15 critical incidents. Instructions for the 16 PF were explained orally and also were included on the cover page of the 16 PF test booklet. Of the 19 individuals to

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<sup>7</sup>Ibid., p. 30.

<sup>8</sup>Ibid., pp. 30 and 36. Taken from the Handbook for the Sixteen Personality Factor Questionnaire (16 PF). Copyright, 1970, by the Institute for Personality and Ability Testing, Inc. Reprinted by permission of the copyright owner.

TABLE 4  
Validities and Reliabilities for Form B of the 16 PF

Trait	Personality Factor	Validity	Reliability
A	Reserved vs. Outgoing	78	75
B	Intelligence	44	54
C	Affected by Feelings vs. Emotionally Stable	66	74
E	Humble vs. Assertive	64	80
F	Sober vs. Happy-Go-Lucky	79	81
G	Expedient vs. Conscientious	69	77
H	Shy vs. Venturesome	87	89
I	Tough-Minded vs. Tender-Minded	75	79
L	Trusting vs. Suspicious	63	77
M	Practical vs. Imaginative	73	70
N	Forthright vs. Astute	60	60
O	Self-Assured vs. Apprehensive	81	81
Q <sub>1</sub>	Conservative vs. Experimenting	51	70
Q <sub>2</sub>	Group Dependent vs. Self-Sufficient	70	75
Q <sub>3</sub>	Undisciplined Self-Conflict vs. Controlled	69	62
Q <sub>4</sub>	Relaxed vs. Tense	59	87

whom the instrument was administered, 17 were classified as trainees. The data for two persons were not used; one was a foreign student and one was a practitioner. The foreign student was excluded since this study was designed to identify personality characteristics and responses to stress of prospective and practicing administrators. The practitioner was excluded since data collected from this classroom group were intended solely for subjects classified as trainees in educational administration.

The set of 15 critical incidents and the 16 PF were mailed to 27 individuals enrolled in inservice graduate courses in educational administration at the University of Nebraska-Lincoln during the 1982 spring semester. Of the 27 mailed, 21 were returned; of the 21 returned, 20 were usable for the purpose of this study. One person's results were excluded from the group of practitioners because the subject was a trainee in a course designed for practitioners.

### Data Analysis

#### Analyzing and Scoring of the Critical Incidents

Three possible responses were available for each of the 15 critical incidents; subjects were instructed to check the single response for each critical incident that would be the response they would choose if they encountered such a situation in an on-the-job setting. Responses selected by the trainees and practitioners for the 15 critical incidents were recorded within

the five stress categories. Responses for each critical incident were handscored, categorized and then placed on computer cards for analysis.

#### Analyzing and Scoring of the Sixteen Personality Factor Questionnaire

The responses selected by the trainees and practitioners for the 16 PF were handscored utilizing three handscoring keys. The raw score for each subject was converted to standard ten scores using the conversion chart of Norms for General Population, Male + Female: Form B (based on age 30 years; N = 2154).<sup>9</sup>

#### Organization of Data for Analysis

The data for the 15 critical incidents and the 16 PF were keypunched onto computer cards. The computer cards were used for the analysis of data through use of the services of the Computer Center of the University of Nebraska-Lincoln.

#### Testing of the Primary Research Question

The testing of the primary research question, "Do responses to stressful situations (critical incidents) or measures of personality, as measured by the 16 PF, for prospective and practicing school administrators differ at statistically significant levels when these two groups are compared to one another? was completed by computations

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<sup>9</sup>Norms for the 16 PF Forms A and B (1967-68 Edition), Tabular Supplement No. 1 to the 16 PF Handbook (Champaign, Illinois: Institute for Personality Testing, Inc., 1970), p. 28.

of a discriminant analysis, a chi square and a t-test. Discriminant analysis was used for the 16 PF data to determine which traits of the 16 PF best discriminated between trainees and practitioners. Chi square was used as a method of statistical analysis to examine individual responses for the 15 critical incidents and to determine whether and how the responses differed between trainee and practitioner groups. A t-test was used to test differences between the two groups of subjects for each of the five response categories within which critical incidents had been grouped.

#### Testing of the Secondary Research Questions

The two secondary research questions were: "Do prospective school administrators differ from what would be expected in their selection of five categories of response to stress?" and "Do practicing school administrators differ from what would be expected in their selection of five categories of response to stress?" For both research questions, a chi square was computed for each of the critical incidents to identify whether or not differences in responses were present within the groups of subjects.

## CHAPTER IV

### REVIEW OF FINDINGS

Because the position of the school administrator is regarded as highly stressful, and stress can be either helpful or detrimental to human organisms, this study was designed to investigate whether or not stress responses, on a set of critical incidents and personality, as measured by the Sixteen Personality Factor Questionnaire (16 PF), were different both within and between groups of prospective and practicing school administrators. Subjects for this study were 17 trainees, individuals who aspired to be school administrators, and 20 practitioners, practicing school administrators.

#### Primary Questions

One primary question was investigated in this study: "Do responses to stressful situations (critical incidents) or measures of personality, as measured by the Sixteen Personality Factor Questionnaire (16 PF), for prospective and practicing school administrators differ at statistically significant levels when these two groups are compared to one another?" In Table 5, the means and standard deviations for each of the traits of the 16 PF for the two groups of subjects are presented.

Data for the two groups were compared by discriminant analysis for each trait of the 16 PF. The higher the computed F statistic, the greater the differences between trainees and practitioners;

TABLE 5  
Means and Standard Deviations of the 16 PF  
for Trainees and Practitioners

Trait	Factors	Trainees		Practitioners	
		$\bar{X}$	SD	$\bar{X}$	SD
A	Reserved vs. Outgoing	5.06	1.60	5.60	1.85
B	Intelligence	6.94	2.01	5.90	1.45
C	Affected by Feelings vs. Emotionally Stable	6.12	1.41	6.00	1.59
E	Humble vs. Assertive	5.82	1.88	6.35	1.27
F	Sober vs. Happy-Go-Lucky	5.82	2.21	7.05	2.28
G	Expedient vs. Conscientious	5.88	1.36	6.70	1.87
H	Shy vs. Venturesome	7.00	2.40	7.25	1.74
I	Tough-Minded vs. Tender- minded	6.06	1.20	4.55	1.96
L	Trusting vs. Suspicious	5.88	2.15	5.40	1.85
M	Practical vs. Imaginative	5.76	1.39	5.60	1.67
N	Forthright vs. Astute	5.47	1.66	4.85	1.50
O	Self-Assured vs. Apprehensive	4.88	1.65	4.00	1.59
Q <sub>1</sub>	Conservative vs. Experi- menting	6.35	1.27	6.10	2.10
Q <sub>2</sub>	Group Dependent vs. Self- Sufficient	5.00	2.21	3.70	1.66
Q <sub>3</sub>	Undisciplined Self-Conflict vs. Controlled	7.18	1.51	6.65	1.14
Q <sub>4</sub>	Relaxed vs. Tense	5.35	2.09	4.40	1.39

when  $F$  values were four or greater than four ( $F \geq 4$ ), these differences were significant ( $p = .05$ ). For 14 of the 16 personality traits of the 16 PF, there were no statistically significant differences between the two groups of subjects. The two traits, Trait B, "Intelligence," and Trait I, "Tender-Minded vs. Tough-Minded," were statistically significant when the responses were compared by discriminant analysis. Trainees had higher mean scores on both of these personality traits as compared to the mean scores of the group of practitioners.

A chi square was computed for the response data for each of the 15 critical incidents to determine whether or not there were differences between the two groups of subjects in their responses. (A crosstabulation of the 15 critical incidents is shown in Appendix C.) Fifteen separate tests were not performed on the critical incidents since this would have caused the alpha level to be inflated. To compensate for this, the alpha level was reduced from .05 to .01; thus, critical incidents with a .01 level of significance or lower were used. For 13 of the critical incidents there were no significant differences; the data for these 13 are shown in Appendix C. The two critical incidents that were significant ( $p \leq .01$ ) were Critical Incident 10, "Tournament," and Critical Incident 13, "Custodian's Workroom." Critical Incident 10 had a chi square of 8.49 with two degrees of freedom at the .01 level of significance ( $\chi^2 = 8.49$ ,  $df = 2$ ,  $p \leq .01$ ); for Critical Incident 13, the chi square was 17.17 with two degrees of freedom at the .01 level of significance ( $\chi^2 = 17.17$ ,



df = 2,  $p \leq .01$ ).

In each of the five response categories--dominance, negotiation, co-existence, avoidance or diversion, and integration--a t-test was computed between the responses of trainees and the responses of practitioners. In Table 6, the means, standard deviations, and the t-values for the comparisons are shown. As an examination of the data in Table 6 indicates, there were no significant differences ( $p = .05$ ) in the selection of response categories between the two groups of subjects.

TABLE 6

Means, Standard Deviations, and t-Values for Comparison of Response Categories Selected by Trainees and Practitioners

Response Category	Trainees		Practitioners		<u>t</u> -Value
	$\bar{X}$	SD	$\bar{X}$	SD	
Dominance	2.35	0.97	3.00	1.30	1.700
Negotiation	4.47	0.97	4.65	1.36	0.397
Co-Existence	2.41	1.39	2.80	1.11	0.957
Avoidance	1.06	1.25	1.10	1.36	0.102
Integration	4.00	1.50	3.45	1.36	1.171

### Secondary Questions

Two secondary questions were investigated in this study. One of the hypotheses was: "Do prospective school administrators differ

from what would be expected in their selection of five categories of response to stress?

A chi square was computed to determine whether or not the responses of trainees differed for each of the 15 critical incidents. (A crosstabulation of the 15 critical incidents for trainees is shown in Appendix D). The larger the significance level, the less agreement occurred among the group of trainees in their response choices; the smaller the significance level, the more agreement in response choices.

Three categories of significance were established: (1) high agreement category, the critical incidents with a significance level of .01 or less ( $p < .01$ ); (2) moderate agreement category, the critical incidents with a significance level of less than .10 and greater than .01 ( $.10 > p > .01$ ); and (3) low agreement category, the critical incidents with a significance level of .10 or greater ( $p > .10$ ). Nine critical incidents were found to be in the high agreement category: Critical Incident 1, "Incorrigible Parent," Critical Incident 2, "Weekend Dance," Critical Incident 7, "Ski Trip," Critical Incident 9, "P.T.O. Meeting," Critical Incident 10, "Tournament," Critical Incident 11, "Controversial Film," Critical Incident 12, "Personal Hygiene," Critical Incident 13, "Custodian's Workroom," and Critical Incident 15, "Reduction-in-Force." Three critical incidents were found to be in the moderate agreement category: Critical Incident 5, "Lockers Raided," Critical Incident 8, "Negotiations," and Critical Incident 14, "Science Curriculum." Three critical

incidents were found to be in the low agreement category: Critical Incident 3, "Training Rules," Critical Incident 4, "P.E. Class," and Critical Incident 6, "Closed Campus"(see Table 7).

The second of the two secondary questions was: "Do practicing school administrators differ from what would be expected in their selection of five categories of response to stress?"

A chi square was computed to determine whether or not the practitioners differed for each of the 15 critical incidents. (A cross-tabulation of the 15 critical incidents for the practitioners is shown in Appendix E.) The same levels of agreement, i.e., high agreement, moderate agreement, and low agreement, were established for the trainees and practitioners. Eight critical incidents were found to be in the high agreement category: Critical Incident 1, "Incorrigible Parent," Critical Incident 2, "Weekend Dance," Critical Incident 5, "Lockers Raided," Critical Incident 9, "P.T.O. Meeting," Critical Incident 10, "Tournament," Critical Incident 11, "Controversial Film," Critical Incident 12, "Personal Hygiene," and Critical Incident 15, "Reduction-in-Force." Four critical incidents were found to be in the moderate agreement category: Critical Incident 4, "P.E. Class," Critical Incident 6, "Closed Campus," Critical Incident 8, "Negotiations," and Critical Incident 14, "Science Curriculum," Three critical incidents were found to be in the low agreement category: Critical Incident 3, "Training Rules," Critical Incident 7, "Ski Trip," and Critical Incident 13, "Custodian's Workroom" (see Table 7).

In Table 7, the agreement in the selection of responses for the 15 critical incidents for the two groups of subjects is presented. Between the two groups, Critical Incident 3, "Training Rules," was in the low agreement category for both groups of subjects.

### Summary

The findings of the study have been presented in this chapter. These findings are based on analyses of data obtained from 17 trainees and 20 practitioners who responded to a set of 15 critical incidents and completed Form B of the 16 PF. There were no statistically significant findings for 14 of the 16 personality traits of the 16 PF ( $p = .05$ ). Two traits, Trait B, "Intelligence," and Trait I, "Tender-Minded vs. Tough-Minded," were statistically significant ( $p = .05$ ) when the responses for the two groups were compared by discriminant analysis. Thirteen of the 15 critical incidents had no statistically significant findings ( $p = .01$ ) when the responses of the trainees and the practitioners were compared by performing a chi square; two of the 15 critical incidents were found to be statistically significant ( $p = .01$ ). These two critical incidents were: Critical Incident 10, "Tournament," and Critical Incident 13, "Custodian's Workroom." There were no statistically significant differences ( $p = .05$ ) in the selection of response categories between the two groups of subjects when t-tests were performed.

A chi square was computed to determine whether or not the responses for the trainees and practitioners within their own group

TABLE 7

Agreement within Groups in Selection of Responses  
for the 15 Critical Incidents

<u>Critical Incident</u> Number    Descriptor		Trainees within Group Agreement in Selection of Response	Practitioner within Group Agreement in Selection of Response
1	Incorrigible Parent	High	High
2	Weekend Dance	High	High
3	Training Rules	Low	Low
4	P.E. Class	Low	Moderate
5	Lockers Raided	Moderate	High
6	Closed Campus	Low	Moderate
7	Ski Trip	High	Low
8	Negotiations	Moderate	Moderate
9	P.T.O. Meeting	High	High
10	Tournament	High	High
11	Controversial Film	High	High
12	Personal Hygiene	High	High
13	Custodian's Workroom	High	Low
14	Science Curriculum	Moderate	Moderate
15	Reduction-in-Force	High	High

differed for each of the 15 critical incidents. The higher the chi square value the more agreement occurred; the lower the chi square value the less agreement occurred. Three categories of agreement were established, high agreement category ( $p < .01$ ), moderate agreement category ( $.10 > p > .01$ ), and low agreement category ( $p > .10$ ). The trainees had nine of the critical incidents in the high agreement category, three in the moderate agreement category and three in the low agreement category. The practitioners had eight of the 15 critical incidents in the high agreement category, four in the moderate agreement category and three in the low agreement category. Critical Incident 3, "Training Rules," was in the low agreement category for both groups of subjects.

## CHAPTER V

### SUMMARY, FINDINGS OF THE STUDY, CONCLUSIONS AND RECOMMENDATIONS

This chapter is divided into four sections. A summary of the study is presented in the first section. The major findings of the study are reported in the second section. In the third section, the conclusions of the study are presented. Implications and recommendations of the study are given in the final section.

#### Summary

Individuals who aspire to be school administrators should be cognizant of both the cognitive and the non-cognitive skills demanded of these roles. Institutions preparing school administrators must be aware of the needs of the practitioner and the needs of those in administrator preparation programs. One non-cognitive characteristic, stress management, is an important characteristic for successful school administrators. As administrators fulfill their responsibilities, an increased awareness of responses to stress is developed. The response, if successful in the management of a stressful event, may become a pattern utilized in future events that are stressful. Prospective and practicing school administrators should gain training through preservice and inservice programs in stress tolerance techniques.

This study investigated whether or not stress responses, on a set of 15 critical incidents and personality characteristics, as

determined by the Sixteen Personality Factor Questionnaire (16 PF), were different both within and between groups of prospective and practicing school administrators.

### The Research Questions

One primary and two secondary research questions were investigated in this study. The primary research question was: "Do responses to stressful situations (critical incidents) or measures of personality, as measured by the Sixteen Personality Factor Questionnaire (16 PF), for prospective and practicing school administrators differ at statistically significant levels when these two groups are compared with one another?" The secondary research questions were: "Do prospective school administrators differ from what would be expected in their selection of five categories of response to stress?" and "Do practicing school administrators differ from what would be expected in their selection of five categories of response to stress?"

### The Review of Literature

The review of literature was focused upon five major topic areas: (1) the meaning of stress, (2) stress in the field of administration, (3) the physiological impact of stress on the administrator, and (5) the various means by which one copes with or responds to stress.

Each individual, simply by living in a modern society, encounters stress. The stress encountered may be challenging to one individual and a source of distress for another. Stress is categorized into



three major areas: (1) neustress, stress which is necessary for day-to-day adaptability which creates an internal steady state; (2) eustress, stress that is a positive condition where the individual is placed in a state of physical and mental well-being; and (3) distress, stress which is associated with non-favorable events which can cause strain and increase disease. Role expectations influence the degree of stress experienced by the school executive. The ability to discriminate between role-concept and self-concept can lead to the ability to ward off physiological and psychological disorders related to stress.

The physiological and psychological disorders related to distress are lengthy. The literature has provided information on numerous diseases, both somatic and psychosomatic in nature, related to stress and one's ability to cope with stress. The human organism undergoes a very elaborate innate series of events when encountered with a stressful event. Both physical and mental disorders can be created if the individual is under a continual state of distress.

Five categories of stress response are: (1) dominance, occurs when the individual's values, knowledge, or position is challenged; (2) negotiation, occurs, when there is a striving to compromise with the parties involved in the stressful event; (3) co-existence, occurs when subordinates are made use of in the work setting; (4) avoidance or diversion, occurs when there is an effort to not cope with the stressful situation or to avoid the situation until a later time; and (5) integration, occurs when efforts are made to utilize the

abilities of others through the realization that each individual may perceive circumstances differently. How one perceives the stressful event through his or her cognitive domain determines the effectiveness in warding off diseases related to distress and the ability to better utilize responses selected from the five stress response categories.

### The Procedures

Two groups of subjects were included in this study. One group of 17 trainees were persons enrolled in a graduate course in building administration as part of a preservice administrator program. The second group, 20 practitioners, was comprised of persons enrolled in a field seminar with enrollment limited to practicing school administrators.

Two instruments were used to collect data for the study. One instrument consisted of a set of 15 critical incidents assembled from a review of 205 critical incidents of actual events experienced by practitioners. The Sixteen Personality Factor Questionnaire (16 PF), an objectively scored test devised for comprehensive assessment of personality, was the second research instrument used in the study.

Data gathering procedures consisted of the administration of the 15 critical incidents and the 16 PF to 19 subjects enrolled in a preservice graduate course in educational administration at the University of Nebraska-Lincoln during the 1982 spring semester. The data for two persons were excluded from the trainee group because these individuals did not meet the criteria for trainees as defined

in this study. The 15 critical incidents and the 16 PF were mailed to 27 individuals enrolled in an inservice graduate course in educational administration at the University of Nebraska-Lincoln during the 1982 spring semester. Of the 27 mailed, 21 were returned, and of the 21 returned, 20 were usable for the purposes of this study.

The trainees' and practitioners' scores were computed using discriminate analysis, chi square, and t-tests to determine the differences between the two groups of subjects on the responses to the critical incidents and the traits of the 16 PF. The .01 level of significance was chosen as the criterion for statistical significance for the chi square in the analysis of the responses between the two groups. For all other analyses, the .05 level was used as the criterion level for statistical significance.

### Findings of the Study

An analysis of the data provided in Chapter IV of this study yielded findings about the research hypotheses of this study. There were no statistically significant findings for 14 of the 16 personality traits of the 16 PF at the .05 level of significance. Two traits of the 16 PF, Trait B, "Intelligence," and Trait I, "Tender-Minded versus Tough-Minded," were statistically significant at the .05 level of significance when the responses for the two groups were compared by discriminate analysis. Thirteen of the 15 critical incidents had no statistical significance at the .01 level when the responses of the trainees and the practitioners were compared using a chi square.

Two of the 15 critical incidents, Critical Incident 10, "Tournament," and Critical Incident 13, "Custodian's Workroom," were found to be statistically significant at the .01 level. There were no statistical differences at the .05 level in the selection of response categories between the two groups of subjects when t-tests were performed.

A chi square was computed to determine whether or not the responses for the trainees and practitioners with their own group differed for each of the 15 critical incidents. The higher the chi square the more agreement occurred; the lower the chi square value the less agreement occurred. Three categories of agreement were established--high agreement ( $p < .01$ ), moderate agreement ( $.10 > p > .01$ ), and low agreement ( $p > .10$ ). The trainees had nine of the 15 critical incidents in the high agreement category, three in the moderate agreement category and three in the low agreement category. The practitioners had eight of the critical incidents in the high agreement category, four in the moderate agreement category and three in the low agreement category. One critical incident, Critical Incident 3, "Training Rules," was in the low agreement category for both groups of subjects.

### Conclusions

This study was limited to the investigation of stress responses and the differences in personality traits of prospective and practicing school administrators. No attempt was made to assess other traits or non-cognitive characteristics of the two groups of subjects.

The population of this study was limited to those individuals who aspired to be school administrators currently enrolled in preservice graduate courses at the University of Nebraska-Lincoln and to practicing school administrators enrolled in inservice courses in educational administration at the University of Nebraska-Lincoln. Based on these limitations the following conclusions were made.

When the personality traits of prospective and practicing school administrators were measured, the differences between the two groups were few. Only two personality traits, as measured by the 16 PF, were significant, indicating that there was little difference between the personality traits of individuals who were practicing school administrators and those who aspired to hold that position.

Trainees and practitioners were in agreement on most of the response choices for situations that are stressful and encountered in the position of school administrator. The responses choices indicate that experience as a school administrator was not a factor in the selection of responses to stressful situations. This is contrary to the literature which has indicated that the individual, after experiencing a stressful event, can better prepare himself or herself, both mentally and physically, for similar and potentially stressful events.

There was no statistically significant difference between trainees and practitioners within the five stress response categories for responses selected for the critical incidents. This also is an indication that practitioners, through the experienced gained as

practicing school administrators, did not differ in responses to stressful situations when compared to trainees with no experience in the area of school administration.

The evidence in this study answers the primary hypothesis. Prospective and practicing school administrators in general did not differ at statistically significant levels in their responses to stressful situations or to measures of personality when these two groups were compared with one another.

Based on the evidence of the comparison of the responses to the stressful situations within the group of trainees and within the group of practitioners, there were some differences in the response choices made. A possible explanation for the lack of agreement in the response choices made by the two groups of subjects may be the result of varied past experiences of the two groups of subjects. Those subjects who have had a similar experience would agree on the response for the critical incident. The evidence in this study answers the secondary hypotheses. Prospective school administrators did differ in what would be expected in their selection of five categories of response to stress. The response differed significantly on three of the critical incidents. Practicing school administrators did differ in what would be expected in their selection of five categories of response to stress. Although the trainees differed significantly on three critical incidents, the differences did not occur, with the exception of one critical incident, on the same critical incidents as were indicated by the group of practicing

school administrators.

### Implications and Recommendations

Based on the review of literature and the findings of this study, a firm research base does exist for making suggestions to institutions that train school administrators and to practicing and prospective school administrators. The findings of this study should be viewed with caution due to the size of the sample and for any of the findings of the chi square or the assumption relating to equal distribution of the response choices. However, there are some possible strategies which need development.

Training institutions should give emphasis in the form of in-service and preservice graduate courses or seminars in the area of stress coping or stress reduction. This is to aid in the decision of how to cope with a stressful event. Possible strategies for coping techniques should be established for practicing and prospective school administrators in the handling of stressful events through the use of training institutions. Also, since the position of school administrator is highly stressful, as indicated in the literature, such institutions should include more emphasis on the coping techniques and stress awareness needed in the position of school administrator.

If the findings of this study are replicated, the following recommendations are made. The size of the group of subjects was small; only 37 subjects provided the data used. A larger population could be used for data collection. A random sample of all practicing school administrators in the state of Nebraska could be used with a random sample of all trainees in educational administration programs in all

training institutions in the state of Nebraska; this would possibly provide a better cross section of practicing and prospective school administrators. The subjects were limited to selection of a single choice in their response to the stressful events provided in the instrument. A possible rank order of choices for response to the stressful event of the three choices provided could give a better indication of the course of action the individual would use in the stress response. Another format could have been established whereby the subjects would give their own stress response to the stressful situation. A panel of experts would then read the responses and identify the response category used by the individuals.

Because this study was limited to only one response for each critical incident, there was no indication whether or not the response selected was the correct response or what the subject would do if the response chosen did not resolve the stressful event. An instrument could be established that would allow the trainees or practitioners to use one of the response choices or include their own stress coping technique that had proven successful for them in past experiences. Research could also be conducted to investigate the physical and psychological impact on the individual, and the impact the decision had on the stressful situation, depending on the response category used by the school administrator.

The above recommendations for research and strategies are intended to encourage training institutions to design and develop programs for practicing and prospective school administrators that



will assist in coping with and understanding the sources of stress in educational administration roles. Additional research data about these questions should be helpful to practicing school administrators and prospective school administrators and, ultimately, the educational systems these individuals serve.

## BIBLIOGRAPHY

## BIBLIOGRAPHY

### BOOKS

- Adams, John D. Understanding and Managing Stress. San Diego: University Associates, Inc., 1980.
- Administrators' Manual for the 16 PF. Champaign, Illinois: Institute for Personality and Ability Testing, Inc., 1979.
- Appleby, Mortimer H. and Richard Trumbell. Psychological Stress. New York: Appleton-Century-Crofts, 1967.
- Benton, Michael. Roles. New York: Basic Books, Inc., 1965.
- Cattell, Raymond B., Herbert W. Eber, and Maurice M. Tatsuoka. Handbook for the Sixteen Personality Factor Questionnaire (16 PF). Champaign, Illinois: Institute for Personality and Ability Testing, Inc., 1970.
- Coelho, George V., David A. Hamburg, and John E. Adams. Coping and Adaptations. New York: Basic Books, Inc., 1974.
- Cohen, Sanford I. "Central Nervous System Functioning in Altered Sensory Environments," Psychological Stress. New York: Appleton-Century-Crofts, 1967.
- Continuing the Search. Reston, Virginia: National Association of Secondary School Principals, 1978.
- Cooper, Cary L. and Roy Payne (eds.). Stress at Work. New York: John Wiley and Sons, Inc., 1978.
- Cox, Tom. Stress. New York: Macmillan Publishing Company, Inc., 1978.
- Culbertson, Jack, Robin H. Farquhar, Alan K. Gaynor, and Mark R. Shibles. Preparing Educational Leaders for the Seventies. Columbus, Ohio: University Council for Educational Administration, 1969.
- Culbertson, Jack. The Preparation and Certification of Educational Administrators: A UCEA Report and Summary. Columbus, Ohio: University Council for Educational Administration, 1973.
- Eliot, Robert S. Stress and the Major Cardiovascular Diseases. New York: Futura Publishing Company, 1979.

- Farquhar, Robin H. and Philip Piele. Preparing Educational Leaders: A Review of Literature. Columbus, Ohio: University Council for Educational Administration, 1972.
- Friss, Robert. Stress and Physical Health. Irvine, California: Human Behavior Research Group, 1978.
- Giammatteo, Michael C. and Delores M. Giammatteo. Executive Well Being. Reston, Virginia: National Association of Secondary School Principals, 1980.
- Goldberg, Philip. Executive Health. New York: McGraw-Hill Book Company, 1978.
- Goldhammer, Keith. Issues and Problems in Contemporary Educational Administration. Eugene, Oregon: Center for the Advancement and Study of Educational Administration, University of Oregon, 1967.
- Gouchman, Ilene R. "Arousal, Attribution, and Environmental Stress," Stress and Anxiety, eds. Irwin G. Sarason and Charles D. Spielberger, Vol. 6. Washington: Hemisphere Publishing Company, 1979.
- Greenwood, James W., III and James W. Greenwood, Jr. Managing Executive Stress: A Systems Approach. New York: John Wiley and Sons, Inc., 1979.
- Grinker, Roy A. The Physiology of Emotions. Springfield: Charles C. Thomas Publishing Company, 1961.
- Harris, Charles Overton. Introduction to Stress Analysis. New York: Macmillan Publishing Company, Inc., 1959.
- Ivnacevich, John M. and Michael I. Matteson. Stress and Work: A Management Prospective. Glenview, Illinois: Scott, Foresman and Company, Inc., 1980.
- Janis, Irving L. Psychological Stress. New York: John Wiley and Sons, Inc., 1958.
- Janis, Irving L. Stress and Frustration. New York: Harcourt, Brace Jovanovich, Inc., 1971.
- Kiernan, Owen B. Executive Well Being: Stress and Administrators, eds. Michael C. Giammatteo and Delores M. Giammatteo. Reston, Virginia: National Association of Secondary School Principals, 1980.
- Kiev, Ari. A Strategy for Handling Executive Stress. Chicago: Nelson-Hall, 1974.

- Lazarus, Richard A. "Cognitive and Personality Factors Underlying Threat and Coping," Social Stress, eds. Sol Levine and Norman A. Scotch. Chicago: Aldine Publishing Company, 1970.
- Lenz, Fredrick P. Total Relaxation. New York: The Bobbs Merrill Company, Inc., 1980.
- Levi, Lennart. Stress: Sources, Management and Prevention. New York: Liverright Publishing Company, 1967.
- Levine, Sol and Norman A. Scotch. Social Stress. Chicago: Aldine Publishing Company, 1970.
- Lipham, James M. and James A. Hoeh, Jr. The Principalship: Foundations and Functions. New York: Harper and Row Publishers, 1974.
- McGrath, Joseph E. Social and Psychological Factors in Stress. New York: Holt, Rinehart and Winston, Inc., 1970.
- McQuade, Walter and Ann Aikman. Stress: What It Is; What It Can Do to Your Health; How to Fight Back. New York: E. P. Dutton and Company, Inc., 1974.
- McQuigan, F. J., Wesley E. Sime and J. McDonald Wallace. Stress and Tension Control. New York: Plenum Press, 1980.
- Morse, Donald Roy and M. Lawrence Furst. Stress for Success. New York: Van Nostrand Reinhold Company, 1979.
- National Association of Secondary School Principals. Where Will They Find It? Reston, Virginia: National Association of Secondary School Principals, 1972.
- Nicholson, Everett W. and Norbert J. Nelson. "A Skill-Strategy Approach to the Principal's Development," Where Will They Find It? Reston, Virginia: National Association of Secondary School Principals, 1972.
- Norms for the 16 PF Forms A and B: Tabular Supplement No. 1 to the 16 PF Handbook. Champaign, Illinois: The Institute for Personality and Ability Testing, 1970.
- Page, Robert Collier. How to Lick Executive Stress. New York: Prentice-Hall, Inc., 1977.
- Piele, Philip K. Review and Analysis of the Role, Activities, and Training of Educational Linking Agents. Eugene, Oregon: ERIC Clearinghouse on Educational Management, 1975.

Pelletier, Kenneth. Mind as a Healer, Mind as a Slayer. New York: Dell Publishing Company, 1977.

Performance Based Systems for the Preparation and Continuing Education of Secondary School Administrators. Reston, Virginia: National Association of Secondary School Principals, 1978.

The Preparation and Certification of Educational Administrators: A UCEA Commission Report. Columbus, Ohio: University Council for Educational Administration, 1973.

Sarason, Irwin G. and Charles D. Spielberger (eds.). Stress and Anxiety. Vol. 2. Washington, D.C.: Hemisphere Publishing Company, 1975.

Sarason, Irwin G. and Charles D. Spielberger (eds.). Stress and Anxiety. Vol. 3. Washington, D.C.: Hemisphere Publishing Company, 1976.

Sarason, Irwin G. and Charles D. Spielberger (eds.). Stress and Anxiety. Vol. 6. Washington, D.C.: Hemisphere Publishing Company, 1979.

Schmuck, Richard A. and others. The Second Handbook of Organization Development in Schools. Palo Alto: Mayfield Publishing Company, 1977.

Seyle, Hans. Stress in Health and Disease. New York: Butterworths Publishing Company, 1976.

Seyle, Hans. The Stress of Life. New York: McGraw-Hill Book Company, 1956.

Seyle, Hans. Stress without Distress. New York: J. B. Lippencott, 1974.

Stern, Jess (ed.). The Random House Dictionary of the English Language. New York: Random House, 1966.

Tanner, Ogden and the editors of Time-Life Books. Stress. New York: Time-Life Books, 1976.

Tauraso, Nicola M. How to Benefit from Stress. Fredrick, Maryland: Hidden Valley Press, 1979.

Williams, John E. and others. Modern Physics. New York: Holt, Rinehart and Winston, Inc., 1972.

Wolff, Harold George. Stress and Disease. Springfield, Illinois: Charles C. Thomas Publishing Company, 1953.

Wood, Charles L. "The Challenge of Developing a Model for Principal Evaluation," Where Will They Find It? Reston, Virginia: National Association of Secondary School Principals, 1972.

Woodard, Samuel L. (ed.). Reducing Stress on Black Administrators. New York: Vantage Press, 1978.

#### PERIODICALS

Brown, G. R. and P. W. Carlton. "How to Conquer Stress When You Can and Cope with It When You Can't," National Elementary Principal, 130 (March, 1980), pp. 37-39.

Gilbert, L. A. and D. Mangelsdorff. "Influence of Perceptions of Personal Control on Reactions to Stressful Events," Journal of Counseling Psychology, 26 (November, 1979), pp. 473-480.

Gmelch, W. H. "Principal's Next Challenge: The Twentieth Century Art of Managing Stress," NASSP Bulletin, 62 (February, 1978), pp. 5-12.

Houston, R. R. and others. "Positive Evaluation of Stressful Experiences," Journal of Personality, 46 (June, 1978), pp. 205-214.

Jameson, S. A. "Distress Signals," School and Community, 66 (February, 1980), pp. 17-19.

Tung, R. L. "Comparative Analysis of the Occupational Stress: Profiles of Male versus Female Administrators," Journal of Vocational Behavior, 17 (December, 1980), pp. 344-345.

Vanderpool, M. "School Administrators under Stress," Principal, 60 (March, 1981), pp. 39-41.

Washington, Kenneth R. "Urban Principals and Job Stress," Phi Delta Kappan, 61 (May, 1980), p. 646.

#### UNPUBLISHED MATERIALS

Caldwell, William E. and Dale H. Spaulding. "The Effect of High School Principals' Rule Administration Behavior on Staff Militancy and Leadership Perception." Paper presented at the American Educational Research Association Annual Meeting, New Orleans, Louisiana, 1973.

Eckel, Howard. "Developing and Testing Research Instruments for Analysis of Educational Administrators Emphasizing Devices to Study Relationships between Variable Definitions of Educational Administrative Activities and Norms, and Role Conflict Ambiguity. Final Report." U.S. Educational Resources Information Center, Arlington, Virginia, December, 1969. ERIC Document ED 043 133.

Harris, Patricia Irene. "Emotional Stress in Secondary School Principals." Unpublished Doctoral dissertation, University of Michigan, 1978.



**APPENDIX A**  
**Critical Incidents**

The following statements are provided for your information in compliance with established research guidelines. The purpose is to inform you of your rights to consent to participate in this research project and to protect your rights as a human subject.

1. Your responses to this study are voluntary. You indicate that you consent to participate in this study by completion of this instrument.
2. No sanction will be applied by any member of the University if you do not choose to participate in this research effort.
3. Any subject injured as a result of participation in this study will have the use of facilities and professional care. However, no form of compensation will be provided or is available for your time spent in participating in this study.
4. Anonymity of respondents will be protected. The information you supply will be held as confidential information. The data obtained from individual respondents will be grouped and treated statistically. Data will be grouped only for groups.
5. If you desire information about the results of this study, you may obtain this information from the researcher.
6. You are entitled to an interpretation of your individual numerical score obtained on this instrument.

The purpose of this instrument is to identify stress responses for prospective school administrators and practicing school administrators. It is necessary that the following be done in the completion of this instrument:

1. Identify, in the space provided below, whether you are a practicing school administrator or a prospective school administrator.

2. This instrument is made up of two sections: a set of fifteen critical incidents and the 16 PF.

The following are specific instructions for completion of the fifteen critical incidents:

a. Each critical incident includes three responses. Choose the response that you would use if you encountered such a situation as a school principal.

b. Only one response is to be selected for each critical incident.

c. Each critical incident must be completed.

d. Upon completion of the fifteen critical incidents do not begin the 16 PF until told to do so.

3. Upon completion of both sections of the instrument place the set of critical incidents and the answer sheet for the 16 PF inside the 16 PF booklet and turn in the completed instrument.

4. Thank you very much for your time and effort in helping me complete this study.

\_\_\_\_ Prospective School Administrator

\_\_\_\_ Practicing School Administrator

Critical Incident 1  
"Incorrigible Parent"

The third grade teacher scheduled a conference with a recently divorced parent at 6:00 p.m. The young, single, and attractive teacher proceeded with the conference; before the conference concluded the parent suggested they continue the conference in a local drinking establishment. The teacher declined the offer but to no avail. The parent became insistent and asked her to go out with him that weekend, asked her for her phone number, and insisted that they meet at another time and place to further discuss his son's progress. The distraught teacher immediately contacted you, the principal, the next morning, related the incident and insisted that you, as principal, should stay in the building until all teachers have left for the day.

- \_\_\_ 1. Due to the number of additional hours that could be required of you remaining at school until all teachers have left, you plan to inform the staff that all conferences must be held and concluded by 5:00 p.m., thus insuring the non-reoccurrence of the situation.
- \_\_\_ 2. You plan to have a conference with the teacher to discuss alternatives to prevent a similar situation. During the conference you and the teacher will discuss alternatives to the administrator being present until all teachers have left the building for the day.
- \_\_\_ 3. You feel the teacher has the ability to handle the situation or any similar problem. Because of this you plan to tell her that the situation should be a challenge to her and that she can handle the problem herself.

Critical Incident 2  
"Weekend Dance"

The student council has requested to have a school dance to be held at the end of the winter sports season. The date chosen is the first weekend that you, as principal, have not had a scheduled school activity to attend.

- \_\_\_\_ 1. During the meeting with the student council you plan to inform them that there have been too many activities the past twelve weeks involving students and staff of the school. For this reason the student council will have to either find another sponsor or another date for the dance.
- \_\_\_\_ 2. You plan to inform the student council that you would be very willing to help sponsor the dance; however, you request the council and its moderator select a number of dates which you may choose from. If the council can find a suitable date, you will then assist in the sponsorship.
- \_\_\_\_ 3. Since you have anticipated a long relaxing weekend away from school activities for some time, the request was very disappointing. Because of this you plan to inform the student council that you will not be able to make a decision today but to come back tomorrow and you will give them an answer at that time. In the meantime you plan to schedule a "weekend away" preventing your attendance at the school dance.

Critical Incident 3  
"Training Rules"

All athletes receive a copy of the rules and regulations regarding athletic participation and training; each student must sign a sheet indicating knowledge of each regulation and the consequence of the violation. A student was suspended from the athletic team by a coach for violating training rules. The superintendent, athletic director, the head coach of the sport and the parents of the student indicate to you, the principal, that the normal penalty of removal from the team for the remainder of the season may not be in the best interest of the student.

- \_\_\_ 1. Allowing the rule to be broken and the student not removed from the team will lead to difficulties in the future in disciplining students in similar situations. You plan to enforce the penalty as outlined in the consequences of the violations regardless of whether or not the disciplinary action is in the best interest of the student.
- \_\_\_ 2. Since four different parties are not in agreement with the consequences of the violation, it is an indication to you that the rules for the sport are not written in a proper manner. You plan to allow the boy who broke training rules to remain on the team until the superintendent, the athletic director, the head coach of the sport and yourself are able to discuss the matter in greater detail.
- \_\_\_ 3. Since the rule was made by the coaches and athletic director and approved by the administration and the board of education with the enforcement of the rules to be made by the athletic director, you plan to have the athletic director make the decision on whether or not the boy will be allowed to remain on the team.

Critical Incident 4  
"P.E. Class"

The physical education teacher has been on the job two months and has enjoyed considerable success. To meet you, the principal, at the door one morning are two parents who are very angry and demand a conference with you. During the conference it was learned that the physical education teacher had told their boy's class that they were the worst class in the school.

- \_\_\_ 1. Upon realizing the reason for the parents' anger you call the physical education teacher into your office to discuss the matter with the irate parents. You propose that the parents, teacher, and yourself come to some form of agreement that the teacher will inform the class that the statement had been made in anger; however, he had failed to tell the class that they could improve.
- \_\_\_ 2. You calm the parents by stating that you will talk to the teacher and inform them at a later date of the results of the conference with the teacher. During the conference with the teacher you plan to discuss the comment in a humorous manner but do not pursue the issue in greater detail.
- \_\_\_ 3. In discussing the matter with the parents you plan to uphold the teacher's actions. You will inform the parents that the statement made, although poorly done by the teacher, was a way of releasing his tensions and frustrations.

Critical Incident 5  
"Lockers Raided"

On several occasions throughout the school year several students have come to you, the principal, complaining of articles stolen from their lockers. Yesterday, during an all school assembly, all the lockers on the lower floor of the school building were ransacked. A considerable amount of money was missing as well as many items of value. At 9:00 a.m. twelve irate parents accompanied by the police with warrants demand an immediate conference with you.

- \_\_\_ 1. You inform the parents and the police that there is no need for their assistance since the problem has been addressed by the school and has been brought to the attention of the assistant principal who is in charge of such matters.
- \_\_\_ 2. In the discussion with the parents and the police you plan to receive suggestions and come to agreement with them as to the possible ways of capturing the culprits.
- \_\_\_ 3. You inform the parents that the matter will be resolved by the school administration and that they will not be allowed to take over the search for the guilty parties since this was a part of your job as building principal.



Critical Incident 6  
"Closed Campus"

After a number of complaints from community businessmen, local residents and three city council members you, the principal, decide to close noon open-campus privileges for the student body. Each group of individuals complaining had specific grievances which ranged from shoplifting in the stores to students loitering on lawns and the city streets. During the third period today, at a prearranged signal, all students in the school left their classrooms and assembled on the gymnasium floor refusing to go back to classes until open-campus privileges were restored.

- \_\_\_ 1. In an effort to get the students back to the classroom you tell them that you will meet with the student council and discuss the issue of open-campus with them.
- \_\_\_ 2. You plan to remain as calm as possible when you inform the students that they have five minutes to report back to their classes. If they are not in their respective classrooms within the allotted time, each student will be subject to strict disciplinary action as well as each student's parents will be notified.
- \_\_\_ 3. Rather than be angry with the students protesting, you take the opportunity to hear their reasons for wanting open-campus. After listening to their reasons you plan to inform the student body that you will allow open-campus but a list of rules will be forthcoming which if broken can result in permanent closed-campus.

Critical Incident 7  
"Ski Trip"

A second year teacher requested to attend a workshop scheduled in a nearby city. The request was granted, the necessary fees paid and the substitute call for Tuesday, the day of the workshop. The teacher called you, the principal, Tuesday evening complaining of flu symptoms and said that she would not be able to be in school the next day. When the teacher walked into your office Thursday morning it was quite obvious that the teacher had a suntan on her face. You did not comment on the sudden change in her appearance, but did ask about the workshop. The teacher appeared a bit flustered when she replied that it hadn't been too bad. Standard policy required the teacher to turn in a synopsis of any workshop attended which you instructed her to do as soon as possible. When you returned to your work you remembered that the teacher was an avid skier and the thought occurred to you that perhaps she had not gone to the workshop at all but had used Tuesday and Wednesday to go on a ski trip. The teacher's report was quite general and could have been copied from the brochure advertising the workshop. Because the report was less than complete and the fact that the suntan cast suspicions on the teacher, you called the agency which had sponsored the event and was told that the registration packet had been picked up by the teacher, but they had had a large crowd in attendance and had no way of finding out if she was actually there.

- \_\_\_1. You plan to confront the teacher with the suspicions you have and inform her that you want better proof of her attendance at the meeting. Unless she can supply you with three persons who attended the conference and can verify her presence at the conference you will document the situation and place a copy in her personnel file.
- \_\_\_2. You plan to discuss the matter with the superintendent in an effort to determine his interpretation of the chain of events relative to the workshop and subsequent suntan before discussing the matter with the teacher.
- \_\_\_3. You plan not to further investigate the matter and accept the teacher's attendance at the meeting and sickness the following day as truth.

Critical Incident 8  
"Negotiations"

This school year, as the previous year, has every indication of ending in a similar fashion; on a very negative note. Teacher negotiations had become very difficult and this year, at last, the board of education and teachers' organization were stalled and no indication was made on the part of each to move off their final offer. Since your salary is based on the percentage received by the teachers, you feel the teachers should receive a needed raise; however, you have been instructed by the superintendent to remain out of teacher negotiations. The high school music teacher is the chief teacher negotiator and has quoted you in a meeting with the board of education in reference to a comment you made that was to be held in the strictest confidence with that teacher. The comment made was, "John, I feel the teachers should not move off their last offer; in fact I feel the board will eventually meet you demands and give the teachers what they deserve." The superintendent has asked you to see him in his office at 8:00 in the morning to discuss the comment you made.

- \_\_\_ 1. Realizing the superintendent was very emphatic in his request for building principals to remain out of teacher negotiations, you know the superintendent will be very upset with the comment you made. Since you are certain the superintendent will believe you before the chief negotiator about the statement made, you plan to tell the superintendent that the statement made was misinterpreted and that you were not going against his request to remain out of teacher negotiations.
- \_\_\_ 2. During the conference with the superintendent neither change your views on the role administrators should play relative to teacher negotiations. You in fact agree to disagree.
- \_\_\_ 3. You plan to contact the music teacher for a conference. During the conference you will vent your anger, frustrations, and disappointment of how he handled the statement made to him in confidence.

Critical Incident 9  
"P.T.O. Meeting"

During a P.T.O. meeting a parent asked the president of the organization why discipline in the school has steadily deteriorated. Within the next five minutes all parents present were expressing similar sentiments. The president of the organization asks you, the principal, to respond to the comments made, since each parent present was expecting an answer to the handling of discipline in the school.

- \_\_\_\_ 1. Since it obvious that the parents are not in agreement with the discipline in the school you suggest the P.T.O. form a committee to study alternatives to the present methods of discipline. Their suggestions will be carefully analyzed and may result in a change in the rules and regulations relative to student discipline in the school.
- \_\_\_\_ 2. You feel that discipline is very good in the classroom and that a change in the rules to make them more strict is not necessary. You defend and support the teachers and their handling of discipline matters in their respective classrooms.
- \_\_\_\_ 3. You plan to make comments to the organization that are very general with a majority of the blame placed on laws prohibiting more stict discipline in the schools. You plan to lead the discussion to the high achievement on recent academic achievement tests taken by the students.

Critical Incident 10  
"Tournament"

In addition to the rules and regulations of the state activities association, the board of education has approved a more strict eligibility requirement for students who participate in extra-curricular activities. The week prior to the state basketball tournament, Jim, the best player on the team, failed to meet the eligibility requirements set by the school which will prevent him from playing in the state tournament. Realizing that this is the first time in the history of the school that there is a chance of winning the state title and that without Jim playing there is little hope of winning, you, the principal, uphold the eligibility requirement and have declared Jim ineligible. The superintendent, after discussing the matter with several board of education members and a number of alumni of the school, has stated that Jim will be allowed to play and that you must rescind Jim's ineligibility status.

- \_\_\_ 1. You plan to discuss the matter with the superintendent where both of you will agree that hasty decisions were made and that if Jim makes up the work necessary to make him eligible he will be allowed to play in the tournament.
- \_\_\_ 2. Since it is your duty as principal to handle all eligibility matters, you plan to thank the superintendent for his input but you will not change your decision on Jim's eligibility. You base your decision on the dissension which could be created among faculty members as well as community members if the eligibility rule is not enforced.
- \_\_\_ 3. You plan to inform the superintendent that to allow Jim to be eligible will have dire consequences. Furthermore, if he usurps your authority to declare Jim eligible you will make it known to the public that you are opposed to the decision to allow Jim to play.

Critical Incident 11  
"Controversial Film"

Debbie, the home economics teacher, as a part of her class on parenting, wants to show a film in class on human sexuality. Because the film could be somewhat controversial in its content, Debbie has asked you to view the film so you, as principal, would know and understand what the students had viewed in class. After viewing the film you understand why it may be controversial since both the language and the scenes were quite explicit. In Debbie's parenting class are three students whose parents are members of a very fundamental church and are against sex education and will probably protest the showing of the film. Debbie insists the film is necessary for the class. However, you explain to Debbie that in view of board policy and parental views the film should not be used. Two days later a parent calls wanting to arrangement a conference with you--the film was shown by Debbie.

- \_\_\_ 1. Since you are certain not everyone perceives the film as controversial you ask the superintendent to view the film and receive his reaction to the questionable language and scenes. His reaction to the film will determine your response to the parent.
- \_\_\_ 2. You plan to have Debbie discuss and defend the usage of the film since she is better able to discuss the advantages of such a film.
- \_\_\_ 3. You invite the parent into your office and listen to her complaint. You plan to reprimand Debbie for her insubordinate actions.

Critical Incident 12  
"Personal Hygiene"

John, forty-five years old, unmarried, and a member of the teaching staff for twenty-two years is once again the topic of discussion at the weekly administrators' meeting held yesterday. During the meeting the superintendent has suggested that you, the principal, should talk to John about his personal hygiene and appearance at school and school activities. It is not uncommon to know John is present without actually seeing him because of his tobacco breath and his body odor and to recognize him from afar because of his lack of color coordination in the clothes he wears. John has just entered your office for a conference you have arranged to discuss his problems.

- \_\_\_ 1. You plan to inform John that the superintendent has told you to tell him that he must take care of his appearance and personal hygiene.
- \_\_\_ 2. In the conference with John you plan to come to agreement with John that there are problems relative to his personal hygiene and appearance and will spend the remainder of the conference discussing ways of solving the problem.
- \_\_\_ 3. You plan to inform John that his personal hygiene and appearance will improve.

Critical Incident 13  
"Custodian's Workroom"

Although the girls in your office have no proof they still are certain that the custodian has been watching them shower through a small hole in the wall between the girls' lockerroom and the custodian's workroom. Upon your inspection of the wall it is obvious that there had been repair on each wall in the area that would provide an individual to have a view of the lockerroom area. The custodian is a happily married man with three children in school and would never be suspected of doing such a perverted act. The girls have told their parents of the accusations and that they were going to talk to you, the principal, about the matter.

- \_\_\_ 1. Since the parents know of the matter you request a conference with them. During the conference you plan to come to agreement that there is not sufficient evidence to pursue the issue in greater detail and thus the issue will be dropped.
- \_\_\_ 2. You inform the girls that the custodian would not do such a thing and that there is a logical explanation for the repaired walls. The custodian's performance is beyond reproach; for this reason you do not pursue the issue any further and dismiss the girls.
- \_\_\_ 3. You plan to call the custodian into your office and find out from him why the walls in the lockerroom and workroom were as the girls stated. Since you feel the evidence is sufficient to incriminate the custodian you plan to place a note in his personnel file relative to your suspicions.



Critical Incident 14  
"Science Curriculum"

The science courses offered at the high school are less than adequate for the size student body of the school. A number of requests have been made by parents and students for an additional advanced science course to be added to the science curriculum. By adding another science course it will create a problem with the scheduling and the budget since a spending lid has been imposed upon the schools in the state.

- \_\_\_ 1. You plan to contact the parents requesting the course addition, the guidance counselor, and a number of students who have graduated from the high school and are attending college for a meeting to discuss the need for such a course.
- \_\_\_ 2. Instead of adding a course to the science curriculum you plan to discuss the possibility of expanding the course objectives of the classes taught in science with the science teachers and the science department chairman.
- \_\_\_ 3. You plan to inform the science department chairman, since he is chairman, that he should review the issue and submit his findings to you as soon as possible.

Critical Incident 15  
"Reduction-in-Force"

As a principal in your third year in a school district, you, the members of the board of education, and the superintendent are discussing a number of court cases and hearings which have been held with regard to the reduction-in-force of teachers or the dismissal (for cause) of teachers. The superintendent then focuses the discussion on a particular teacher and mentions that the school's lawyer has noted that board minutes contain discussion of this teacher's behaviors and concerns which board members have stated about this teacher, including comments by identified board members that perhaps this teacher should be asked to resign. The superintendent suggests to the board members that perhaps the minutes of board meetings should be rewritten and turns to you and says, "Well, if we're ever in a hearing and you're asked about it, you'll just have to lie."

- \_\_\_ 1. Because the situation has not yet occurred, you decide to wait to "cross that bridge" until you come to it.
- \_\_\_ 2. You respond to the superintendent by indicating that he is asking you to perjure yourself and that you'll be damned--and he is--if you do so.
- \_\_\_ 3. You state: "I don't see the situation as one which would require a lie as long as we don't make after the fact changes in official records. You will need to do what you have to do and I will need to do what I have to do, if it comes to a hearing."

## APPENDIX B

### Sixteen Personality Factor Questionnaire

**INSTITUTE FOR PERSONALITY AND ABILITY TESTING, INC.****PERMISSION**

Permission is hereby granted to Larry F. Ramaekers

to include pages 20-27, capsule descriptions of the 16 primary factors;  
and Tables 5.1 and 5.5 (validity and reliability information for 16 traits)  
adapted from Administrator's Manual for the 16 PF; and the Handbook  
for the 16 PF

in the ~~book~~ dissertation - text and appendix -

are

provided that the following credit lines ~~is~~ also included; on the same page:  
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Date: February 22, 1982

By: David H. Maekers

Title: Associate Director

\*for the validity and reliability information: Taken from the Handbook for the 16 PF.  
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## Capsule Descriptions of the 16 Primary Personality Factors

*Low Score Direction*

### FACTOR A

*High Score Direction*

***Reserved***, Detached, Critical, Cool,  
Impersonal  
(Sizothymia)

vs.

***Warmhearted***, Outgoing, Participating,  
Interested in People, Easy-going  
(Affectothymia)

People who score low (sten of 1 to 3) on Factor A tend to be stiff, cool, skeptical, and aloof. They like things rather than people, working alone, and avoiding compromises of viewpoints. They are likely to be precise and "rigid" in their way of doing things and in their personal standards. In many occupations these are desirable traits. They may tend, at times, to be critical, obstructive, or hard.

People who score high (sten of 8 to 10) on Factor A tend to be goodnatured, easy-going, emotionally expressive, ready to cooperate, attentive to people, softhearted, kindly, adaptable. They like occupations dealing with people and socially impressive situations, and they readily form active groups. They are generous in personal relations, less afraid of criticism, better able to remember names of people.

### FACTOR B

***Less Intelligent***, Concrete-thinking  
(Lower scholastic mental capacity)

vs. ***More Intelligent***, Abstract-thinking, Bright  
(Higher scholastic mental capacity)

The person scoring low on Factor B tends to be slow to learn and grasp, dull, given to concrete and literal interpretation. This dullness may be simply a reflection of low intelligence, or it may represent poor functioning due to psychopathology.

The person who scores high on Factor B tends to be quick to grasp ideas, a fast learner, intelligent. There is some correlation with level of culture, and some with alertness. High scores contraindicate deterioration of mental functions in pathological conditions.

## FACTOR C

*Affected by Feelings, Emotionally Less  
Stable, Easily Upset, Changeable*  
(Lower ego strength)

The person who scores low on Factor C tends to be low in frustration tolerance for unsatisfactory conditions, changeable and plastic, evading necessary reality demands, neurotically fatigued, fretful, easily annoyed and emotional, active in dissatisfaction, having neurotic symptoms (phobias, sleep disturbances, psychosomatic complaints, etc.). Low Factor C score is common to almost all forms of neurotic and some psychotic disorders.

*Emotionally Stable, Mature, Faces Reality,  
Calm, Patient*  
(Higher ego strength)

The person who scores high on Factor C tends to be emotionally mature, stable, realistic about life, unruffled, possessing ego strength, better able to maintain solid group morale. This person may be making a resigned adjustment\* to unsolved emotional problems.

\*Shrewd clinical observers have pointed out that a good C level sometimes enables a person to achieve effective adjustment despite an underlying psychotic potential.

## FACTOR E

*Humble, Mild, Accommodating,  
Easily Led, Conforming*  
(Submissiveness)

Individuals scoring low on Factor E tend to give way to others, to be docile, and to conform. They are often dependent, confessing, anxious for obsessional correctness. This passivity is part of many neurotic syndromes.

*Assertive, Aggressive, Authoritative,  
Competitive, Stubborn*  
(Dominance)

Individuals scoring high on Factor E are assertive, self-assured, and independent-minded. They tend to be austere, a law to themselves, hostile or extrapunitive, authoritarian (managing others), and disregarding of authority.

## FACTOR F

*Sober, Prudent, Serious, Taciturn*  
(Desurgency)

Low scorers on Factor F tend to be restrained, reticent, and introspective. They are sometimes dour, pessimistic, unduly deliberate, and considered smug and primly correct by observers. They tend to be sober, dependable people.

*Happy-go-lucky, Impulsively Lively,  
Enthusiastic, Heedless*  
(Surgency)

High scorers on this trait tend to be cheerful, active, talkative, frank, expressive, effervescent, and carefree. They are frequently chosen as elected leaders. They may be impulsive and mercurial.

## FACTOR G

*Expedient*, Disregards Rules, Feels  
Few Obligations

(Weaker superego strength)

People who score low on Factor G tend to be unsteady in purpose. They are often casual and lacking in effort for group undertakings and cultural demands. Their freedom from group influence may lead to anti-social acts, but at times makes them more effective, while their refusal to be bound by rules causes them to have less somatic upset from stress.

vs.

*Conscientious*, Persevering, Proper,  
Moralistic, Rule-bound

(Stronger superego strength)

People who score high on Factor G tend to be exacting in character, dominated by sense of duty, persevering, responsible, planful, "fill the unforgiving minute." They are usually conscientious and moralistic, and they prefer hard-working people to witty companions. The inner "categorical imperative" of this essential superego (in the psychoanalytic sense) should be distinguished from the superficially similar "social ideal self" of Q<sub>3</sub>+

## FACTOR H

*Shy*, Restrained, Threat-sensitive,  
Timid  
(Threctia)

Individuals who score low on this trait tend to be shy, withdrawing, cautious, retiring, "wallflowers." They usually have inferiority feelings and tend to be slow and impeded in speech and in expressing themselves. They dislike occupations with personal contacts, prefer one or two close friends to large groups, and are not given to keeping in contact with all that is going on around them.

vs. *Venturesome*, Socially bold, Uninhibited,  
Spontaneous  
(Parmia)

Individuals who score high on Factor H are sociable, bold, ready to try new things, spontaneous, and abundant in emotional response. Their "thick-skinnedness" enables them to face wear and tear in dealing with people and grueling emotional situations, without fatigue. However, they can be careless of detail, ignore danger signals, and consume much time talking. They tend to be "pushy" and actively interested in the opposite sex.

## FACTOR I

*Tough-minded*, Self-reliant, Realistic,  
No-nonsense  
(Harria)

vs.

*Tender-minded*, Intuitive, Unrealistic,  
Sensitive  
(Premsia)

People who score low on Factor I tend to be tough, realistic, "down-to-earth," independent, responsible, but skeptical of subjective, cultural elaborations. They are sometimes unmoved, hard, cynical, smug. They tend to keep a group operating on a practical and realistic "no-nonsense" basis.

People who score high on Factor I tend to be emotionally sensitive, day-dreaming, artistically fastidious, and fanciful. They are sometimes demanding of attention and help, impatient, dependent, temperamental, and not very realistic. They dislike crude people and rough occupations. In a group, they often tend to slow up group performance and to upset group morale by undue fussiness.

## FACTOR L

*Trusting*, Adaptable, Free of Jealousy,  
Easy to Get on With  
(Alaxia)

vs.

*Suspicious*, Self-opinionated, Hard to Fool,  
Skeptical, Questioning  
(Protension)

The person who scores low on Factor L tends to be free of jealous tendencies, adaptable, cheerful, uncompetitive, concerned about others, a good team worker. They are open and tolerant and usually willing to take a chance with people.

People who score high on Factor L tend to be mistrusting and doubtful. They are often involved in their own egos and are self-opinionated and interested in internal mental life. Usually they are deliberate in their actions, unconcerned about other people, and poor team members.

N.B. This factor is *not* necessarily paranoia. In fact, the data on paranoid schizophrenics are not clear as to typical Factor L value to be expected for them.



## FACTOR M

*Practical*, Careful, Conventional,  
Regulated by External Realities  
(Praxernia)

Low scorers on Factor M tend to be anxious to do the right things, attentive to practical matters, and subject to the dictation of what is obviously possible. They are concerned over detail, able to keep their heads in emergencies, but are sometimes unimaginative. In short, they are responsive to the outer, rather than the inner, world.

vs. *Imaginative*, Careless of Practical Matters,  
Unconventional, Absent-minded  
(Autia)

High scorers on Factor M tend to be unconventional, unconcerned over everyday matters, self-motivated, imaginatively creative, concerned with "essentials," often absorbed in thought, and oblivious of particular people and physical realities. Their inner-directed interests sometimes lead to unrealistic situations accompanied by expressive outbursts. Their individuality tends to cause them to be rejected in group activities.

## FACTOR N

*Forthright*, Natural, Genuine,  
Unpretentious  
(Artlessness)

Individuals who score low on Factor N have a lot of natural warmth and a genuine liking for people, are uncomplicated and sentimental, and are unvarnished in their approach to people.

vs. *Shrewd*, Calculating, Socially Alert,  
Insightful  
(Shrewdness)

Individuals who score high on Factor N tend to be polished, experienced, and shrewd. Their approach to people and problems is usually perceptive, hardheaded, and efficient, an unsentimental approach to situations, an approach akin to cynicism.

## FACTOR O

*Unperturbed*, Self-assured, Confident,  
Secure, Self-satisfied  
(Untroubled adequacy)

vs. *Apprehensive*, Self-reproaching, Worrying,  
Troubled  
(Guilt proneness)

Persons with low scores on Factor O tend to be unruffled, with unshakable nerve. They have a mature, unanxious confidence in themselves and their capacity to deal with things. They are resilient and secure, but to the point of being insensitive of when a group is not going along with them, so that they may evoke antipathies and distrust.

Persons with high scores on Factor O have a strong sense of obligation and high expectations of themselves. They tend to worry and feel anxious and guilt-stricken over difficulties. Often they do not feel accepted in groups or free to participate. High Factor O score is very common in clinical groups of all types (see *Handbook*).

## FACTOR Q<sub>1</sub>

*Conservative*, Respecting Established  
Ideas, Tolerant of Traditional Difficulties  
(Conservatism)

vs. *Experimenting*, Liberal, Analytical,  
Likes Innovation  
(Radicalism)

Low scorers on Factor Q<sub>1</sub> are confident in what they have been taught to believe, and accept the "tried and true," despite inconsistencies, when something else might be better. They are cautious and compromising in regard to new ideas. Thus, they tend to oppose and postpone change, are inclined to go along with tradition, are more conservative in religion and politics, and tend not to be interested in analytical "intellectual" thought.

High scorers on Factor Q<sub>1</sub> tend to be interested in intellectual matters and to have doubts on fundamental issues. They are skeptical and inquiring regarding ideas, either old or new. Usually they are more well informed, less inclined to moralize, more inclined to experiment in life generally, and more tolerant of inconvenience and change.

## FACTOR Q2

*Group Oriented, A "Joiner" and  
Sound Follower  
(Group adherence)*

Individuals who score low on Factor Q2 prefer to work and make decisions with other people and like and depend on social approval and admiration. They tend to go along with the group and may be lacking in individual resolution. They are not necessarily gregarious by choice; rather they might need group support.

vs. *Self-sufficient, Prefers Own Decisions,  
Resourceful  
(Self-sufficiency)*

Individuals who score high on Factor Q2 are temperamentally independent, accustomed to going their own way, making decisions and taking action on their own. They discount public opinion, but are not necessarily dominant in their relations with others (see Factor E); in fact, they could be hesitant to ask others for help. They do not dislike people, but simply do not need their agreement or support.

## FACTOR Q3

*Undisciplined Self-conflict, Careless of  
Protocol, Follows Own Urges  
(Low integration)*

People who score low on Factor Q3 will not be bothered with will control and have little regard for social demands. They are impetuous and not overly considerate, careful, or painstaking. They may feel maladjusted, and many maladjustments (especially the affective, but not the paranoid) show Q3—.

vs. *Controlled, Socially Precise, Following  
Self-image, Compulsive  
(High self-concept control)*

People who score high on Factor Q3 tend to have strong control of their emotions and general behavior, are inclined to be socially aware and careful, and evidence what is commonly termed "self-respect" and high regard for social reputation. They sometimes tend, however, to be perfectionistic and obstinate. Effective leaders, and some paranoids, are high on Q3.

## FACTOR Q4

*Relaxed, Tranquil, Torpid,  
Unfrustrated  
(Low ergic tension)*

Individuals who score low on Factor Q4 tend to be sedate, relaxed, composed, and satisfied (not frustrated). In some situations, their oversatisfaction can lead to laziness and low performance, in the sense that low motivation produces little trial and error. Conversely, high tension level may disrupt school and work performance.

vs. *Tense, Frustrated, Driven, Restless,  
Overwrought  
(High ergic tension)*

Individuals who score high on Factor Q4 tend to be tense, restless, fretful, impatient, and hard driving. They are often fatigued, but unable to remain inactive. In groups they take a poor view of the degree of unity, orderliness, and leadership. Their frustration represents an excess of stimulated, but undischarged, drive.

## **APPENDIX C**

### **Crosstabulations for Critical Incidents**

## Crosstabulations for Critical Incidents

	Trainees	Practitioners	Row Total
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## Critical Incident 1 "Incorrigible Parent"

## Negotiation

Count	15	20	35
Row PCT	42.9	57.1	94.6
Col PCT	88.2	100.0	

## Co-Existence

Count	2	0	2
Row PCT	100.0	0.0	5.4
Col PCT	11.8	0.0	

$$\chi^2 = 0.718; df = 1; p = 0.40$$

## Critical Incident 2 "Weekend Dance"

## Dominance

Count	2	1	3
Row PCT	66.7	33.3	8.1
Col PCT	11.8	5.0	

## Negotiation

Count	15	19	34
Row PCT	44.1	55.9	91.9
Col PCT	88.2	95.0	

$$\chi^2 = 0.022; df = 1; p = 0.88$$

## Critical Incident 3 "Training Rules"

## Dominance

Count	4	8	12
Row PCT	33.3	66.7	32.4
Col PCT	23.5	40.0	

	Trainees	Practitioners	Row Total
Critical Incident 3 "Training Rules" (continued)			
Co-Existence			
Count	5	3	8
Row PCT	62.5	37.5	21.6
Col PCT	29.4	15.0	
Integration			
Count	8	9	17
Row PCT	47.1	52.9	45.9
Col PCT	47.1	45.0	
$\chi^2 = 1.66$ ; df = 2; p = .436			
Critical Incident 4 "P.E. Class"			
Dominance			
Count	3	2	5
Row PCT	60.0	40.0	13.5
Col PCT	17.6	10.0	
Negotiation			
Count	8	11	19
Row PCT	42.1	57.9	51.4
Col PCT	47.1	55.0	
Diversion			
Count	6	7	13
Row PCT	46.2	53.8	51.4
Col PCT	35.3	35.0	
$\chi^2 = 0.51$ ; df = 2; p = .775			

	Trainees	Practitioners	Row Total
<b>Critical Incident 5 "Lockers Raided"</b>			
<b>Dominance</b>			
Count	8	5	13
Row PCT	61.5	38.5	35.1
Col PCT	47.1	25.0	
<b>Negotiation</b>			
Count	9	14	23
Row PCT	39.1	70.0	62.2
Col PCT	52.9		
<b>Co-Existence</b>			
Count	0	1	1
Row PCT	0.0	100.0	2.7
Col PCT	0.0	5.0	
$\chi^2 = 2.55; df = 2; p = .279$			
<b>Critical Incident 6 "Closed Campus"</b>			
<b>Dominance</b>			
Count	4	4	8
Row PCT	50.0	50.0	21.6
Col PCT	23.5	20.0	
<b>Negotiation</b>			
Count	5	13	18
Row PCT	27.8	72.2	48.6
Col PCT	29.4	65.0	
<b>Integration</b>			
Count	8	3	11
Row PCT	72.7	27.3	29.7
Col PCT	47.1	15.0	
$\chi^2 = 5.62; df = 2; p = .060$			

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	Trainees	Practitioners	Row Total
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## Critical Incident 7 "Ski Trip"

## Dominance

Count	0	6	6
Row PCT	0.0	100.0	16.2
Col PCT	0.0	30.0	

## Negotiation

Count	5	5	10
Row PCT	50.0	25.0	27.0
Col PCT	29.4	25.0	

## Integration

Count	12	9	21
Row PCT	57.1	42.9	56.8
Col PCT	70.6	45.0	

$$\chi^2 = 6.23; df = 2; p = .045$$


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## Critical Incident 8 "Negotiations"

## Dominance

Count	4	3	7
Row PCT	57.1	42.9	18.9
Col PCT	23.5	15.0	

## Diversion

Count	3	4	7
Row PCT	57.1	42.9	18.9
Col PCT	17.6	20.0	

## Integration

Count	10	13	23
Row PCT	43.5	56.5	62.2
Col PCT	58.8	65.0	

$$\chi^2 = 0.44; df = 2; p = 0.804$$


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	Trainees	Practitioners	Row Total
Critical Incident 9 "P.T.O. Meeting"			
Dominance			
Count	13	16	29
Row PCT	44.8	55.2	78.4
Col PCT	76.5	80.0	
Co-Existence			
Count	4	2	6
Row PCT	66.7	33.3	16.2
Col PCT	23.5	10.0	
Integration			
Count	0	2	2
Row PCT	0.0	100.0	5.4
Col PCT	0.0	10.0	

$$\chi^2 = 3.09; df = 2; p = 0.213$$

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Critical Incident 10 "Tournament"

Dominance			
Count	0	2	2
Row PCT	0.0	100.0	5.4
Col PCT	0.0	10.0	
Negotiation			
Count	10	3	13
Row PCT	76.9	23.1	35.1
Col PCT	58.8	15.0	35.1
Co-Existence			
Count	7	15	22
Row PCT	31.8	68.2	59.5
Col PCT	41.2	75.0	

$$\chi^2 = 8.49; df = 2; p = .01$$


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	Trainees	Practitioners	Row Total
Critical Incident 11 "Controversial Film"			
Dominance			
Count	13	16	29
Row PCT	44.8	55.2	78.4
Col PCT	76.5	80.0	
Co-Existence			
Count	4	2	6
Row PCT	66.7	33.3	16.2
Col PCT	23.5	10.0	
Integration			
Count	0	2	2
Row PCT	0.0	100.0	5.4
Col PCT	0.0	10.0	
$\chi^2 = 2.76$ ; df = 2; p = 0.253			
Critical Incident 12 "Personal Hygiene"			
Dominance			
Count	1	1	2
Row PCT	50.0	5.4	5.4
Col PCT	5.9	5.0	
Negotiation			
Count	1	0	1
Row PCT	100.0	0.0	2.7
Col PCT	5.9	0.0	
Integration			
Count	15	19	34
Row PCT	44.1	55.9	91.9
Col PCT	88.2	95.0	
$\chi^2 = 1.24$ ; df = 2; p = 0.539			

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	Trainees	Practitioners	Row Total
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## Critical Incident 13 "Custodian's Workroom"

## Dominance

Count	1	10	11
Row PCT	9.1	90.9	29.7
Col PCT	5.9	50.0	

## Negotiation

Count	15	4	19
Row PCT	78.9	21.1	51.4
Col PCT	88.2	20.0	

## Diversion

Count	1	6	7
Row PCT	14.3	85.7	18.9
Col PCT	5.9	30.0	

$$\chi^2 = 17.17; df = 2; p = .008$$


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## Critical Incident 14 "Science Curriculum"

## Negotiation

Count	10	9	19
Row PCT	52.6	47.4	51.4
Col PCT	58.8	45.0	

## Co-Existence

Count	5	9	14
Row PCT	35.7	64.3	37.8
Col PCT	29.4	45.0	

## Integration

Count	2	2	4
Row PCT	50.0	50.0	10.8
Col PCT	11.8	10.0	

$$\chi^2 = 0.96; df = 2; p = 0.619$$


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	Trainees	Practitioners	Row Total
Critical Incident 15 "Reduction-in-Force"			
Dominance			
Count	0	2	2
Row PCT	0.0	100.0	5.4
Col PCT	0.0	10.0	
Co-Existence			
Count	15	18	33
Row PCT	45.5	54.5	89.2
Col PCT	88.2	90.0	
Diversion			
Count	2	0	2
Row PCT	100.0	0.0	5.4
Col PCT	11.8	0.0	
$\chi^2 = 1.86; df = 2; p = 0.349$			

## APPENDIX D

### Crosstabulations for Critical Incidents within the Group of Trainees

Crosstabulations for Critical Incidents  
within the Group of Trainees

Response Category	Count	$\chi^2$	df	p
High Agreement Category				
Critical Incident 1 "Incorrigible Parent"				
Dominance	0	23.399	2	p < .01
Negotiation	15			
Co-Existence	2			
Critical Incident 2 "Weekend Dance"				
Dominance	2	23.399	2	p < .01
Negotiation	15			
Avoidance	0			
Critical Incident 7 "Ski Trip"				
Dominance	0	12.817	2	p < .01
Avoidance	5			
Integration	12			
Critical Incident 9 "P.T.O. Meeting"				
Co-Existence	3	14.588	2	p < .01
Avoidance	1			
Integration	13			
Critical Incident 10 "Tournament"				
Dominance	0	15.638	2	p < .01
Negotiation	13			
Co-Existence	4			
Critical Incident 11 "Controversial Film"				
Dominance	13	15.638	2	p < .01
Co-Existence	4			
Integration	0			

Response Category	Count	$\chi^2$	df	p
Critical Incident 12 "Personal Hygiene"				
Dominance	1	23.059	2	p < .01
Negotiation	1			
Integration	15			
Critical Incident 13 "Custodian's Workroom"				
Dominance	1	23.059	2	p < .01
Negotiation	15			
Avoidance	1			
Critical Incident 15 "Reduction-in-Force"				
Dominance	0	23.399	2	p < .01
Co-Existence	15			
Avoidance	2			
Moderate Agreement Category				
Critical Incident 5 "Lockers Raided"				
Dominance	8	8.583	2	.10 > p > .01
Negotiation	9			
Co-Existence	0			
Critical Incident 8 "Negotiations"				
Dominance	4	5.509	2	.10 > p > .01
Avoidance	3			
Integration	10			
Critical Incident 14 "Science Curriculum"				
Negotiation	10	5.765	2	.10 > p > .01
Co-Existence	5			
Integration	2			

Response Category	Count	$\chi^2$	df	p
Low Agreement Category				
Critical Incident 3 "Training Rules"				
Dominance	4	1.529	2	p > .10
Co-Existence	5			
Integration	8			
Critical Incident 4 "P.E. Class"				
Dominance	3	2.235	2	p > .10
Negotiation	8			
Avoidance	6			
Critical Incident 6 "Closed Campus"				
Dominance	4	1.529	2	p > .10
Negotiation	5			
Integration	8			



## APPENDIX E

### Crosstabulations for Critical Incidents within the Group of Practitioners

Crosstabulations for Critical Incidents  
within the Group of Practitioners

Response Category	Count	$\chi^2$	df	p
High Agreement Category				
Critical Incident 1 "Incorrigible Parent"				
Dominance	0	39.981	2	p < .01
Negotiation	20			
Co-Existence	0			
Critical Incident 2 "Weekend Dance"				
Dominance	1	34.283	2	p < .01
Negotiation	19			
Avoidance	0			
Critical Incident 5 "Lockers Raided"				
Dominance	5	13.300	2	p < .01
Negotiation	14			
Co-Existence	1			
Critical Incident 9 "P.T.O. Meeting"				
Co-Existence	8	11.200	2	p < .01
Avoidance	0			
Integration	12			
Critical Incident 10 "Tournament"				
Dominance	2	15.700	2	p < .01
Negotiation	3			
Co-Existence	15			
Critical Incident 11 "Controversial Film"				
Dominance	16	19.600	2	p < .01
Co-Existence	2			
Integration	2			

Response Category	Count	$\chi^2$	df	p
Critical Incident 12 "Personal Hygiene"				
Dominance	1	34.283	2	p < .01
Avoidance	0			
Integration	19			
Critical Incident 15 "Reduction-in-Force"				
Dominance	2	28.911	2	p < .01
Co-Existence	18			
Avoidance	0			
Moderate Agreement Category				
Critical Incident 4 "P.E. Class"				
Dominance	2	6.100	2	.10 < p < .01
Negotiation	11			
Avoidance	7			
Critical Incident 6 "Closed Campus"				
Dominance	4	9.100	2	.10 < p < .01
Negotiation	13			
Integration	3			
Critical Incident 8 "Negotiations"				
Dominance	3	9.100	2	.10 < p < .01
Avoidance	4			
Integration	13			
Critical Incident 14 "Science Curriculum"				
Negotiation	9	4.900	2	.10 < p < .01
Co-Existence	9			
Integration	2			

Response Category	Count	$\chi^2$	df	p
Low Agreement Category				
Critical Incident 3 "Training Rules"				
Dominance	8	3.100	2	p > .10
Co-Existence	3			
Integration	9			
Critical Incident 7 "Ski Trip"				
Dominance	6	1.300	2	p > .10
Avoidance	5			
Integration	9			
Critical Incident 13 "Custodian's Workroom"				
Dominance	10	2.800	2	p > .10
Negotiation	4			
Avoidance	6			