Stress management among corporate managers: a study of the relationship among management styles, management levels, and coping behaviors

Harold Snyder Kahler Jr.
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Stress management among corporate managers: A study of the relationship among management styles, management levels and coping behaviors

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Stress management among corporate managers:
A study of the relationship among
management styles, management levels and coping behaviors

by

Harold Snyder Kahler, Jr.

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
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CHAPTER ONE - INTRODUCTION

Stress as a health and social problem has become a popular topic for conversation, lectures and research. When illness and aches or pains occur, stress is usually thought to contribute to the malady. Consequently, the field of stress research has experienced growing popularity. The post-World War II years with its emphasis on greatly expanding technology, overly convenient lifestyles, and the concept of never-ending human energy have stimulated the necessity to research and attempt to understand this issue.

In no other segment of society has the interest in stress become more pronounced than in the business community. Corporate managers at all levels and of varied management styles are attempting to cope with problems resulting from stress at the workplace. Business and industry recognize stress as a reason for low productivity and high rates of absenteeism (Buzzard, 1973) as well as high health care costs (Pelletier, 1984). Medical and other studies have
linked job-related stress to causes of coronary heart disease and stroke (Mai, 1968; Rosenman & Friedman, 1974). Executives, young and old, have been dropping out, switching professions, becoming ill, or dying (Winter, 1983).

Statement of the Problem

The interest in stress research has been aided by productivity research, health care cost studies, and estimates of the cost of replacing management personnel who have been forced to leave the job market because of illness (Pelletier, 1984). Although stress researchers have a good understanding of the relationship between stress and business, the field of stress research lacks studies focusing on the relationship among a corporate manager's management style, management level, and the various techniques utilized to counter stress on the job.

According to Jaffe, Scott, and Orioli (1986), stress and business interact in two ways. First, the pressure of work contributes to the stress of the employee. Work relationships, the environment, and work tasks can all cause undue stress for the employee.
Second, business ends up paying many of the costs related to stress problems. Stress-induced cardiovascular disease accounts for 12 percent of lost time in the U.S. work force which adds up to a total loss of $4 billion per year (Cooper, 1984). Whether in the form of health care costs, lower productivity, or increased absenteeism, the profit margin is eventually affected.

Stress also raises legal and medical issues (Jaffe et al., 1986). Recently the courts have broadened the definition of work stress. A heart attack or other disabling illnesses can be attributed to the cumulative effects of stressful events. In 1985 the Colorado Supreme Court ruled that job stress led to a heart attack for a firefighter. The court's decision further broadened the legal implications of stress to include emotional strain (Business Insurance, October 28, 1985). Work-related accidents can also be attributed to stress on the job.

Stress is defined by Selye (1974) as "the nonspecific response of the body to any demand made upon it," and the body's nonspecific response to stress is called the "General Adaptation Syndrome" (GAS). There are three phases to adaptation: the initial
alarm reaction, a resistance stage, and the final stage of exhaustion. During the alarm stage the brain recognizes the intrusion of the stressor and sends out alert signals to other parts of the body. Through various physiological changes of the body such as increased heart rate and blood pressure, increased sugar levels in the bloodstream, and sweating, the body prepares to meet the stressor (Selye, 1974).

The next phase—resistance—calls into action the "fight or flight" response. The fight or flight response gets its name from the actions of ancient man. When confronted with a stressful situation such as a chance meeting with a large animal, man had two options: to fight or to run. Today, stressors are not prehistoric monsters. Stressors are everyday life, rush-hour traffic, and family and work problems. However, the same two options for action are available: to avoid or delay dealing with the stressor or to fight it (Selye, 1974).

If the individual chooses to deal with the stressor in a proactive manner through a stress management technique, the body and mind will return to normal and the individual will be prepared to face the next stressor. But if the individual chooses to avoid or
delay dealing with the stressor, the third phase of the General Adaptation Syndrome will begin (Selye, 1974).

Exhaustion develops when the same threat or stressor continues for a prolonged period or other stressors accumulate coincidentally or both happen at the same time. The body's energy to adapt is limited. When that limitation is reached, illness or death is possible (Selye, 1974).

Because of its negative effects, the concept of stress has been misunderstood for many years. The term itself conjures up negative feelings and thoughts. However, the fact remains that stress is a necessary part of an individual's daily routine. Stress helps people respond to the positive and negative demands of their lives. Stress also provides them with the capacity to meet new challenges that help them learn and make advancements (Benson, 1976).

The same stimulus may elicit a different response from different people (Selye, 1974). For example, a reprimand from a superior may cause one individual to become angry and disruptive while the same reprimand may cause another person to become angry yet stimulate that person to further achievement. Also, depending on circumstances, an individual may respond differently to
a single stimulus (Jaffe et al., 1986). For example, an assignment that involves extensive travel may excite and challenge an individual early in his or her career but be thought of as a burden later on.

The manner in which a person chooses to deal with stressful situations is called coping (Sethi & Schuler, 1984). Coping behaviors can be positive or negative, effective or ineffective. Effective and ineffective behaviors are a matter of individual personality and choice. What works for one individual may not work for another (Benson, 1976).

Positive and negative coping behaviors are also a matter of individual personality and choice and reinforced through research. Some coping behaviors such as crying can be classified as either positive or negative depending on circumstances and use. The principle that makes a behavior positive or negative is governed by its long-term effectiveness to deal with a stressor (Dobson, 1982). The use of alcohol (negative) to deal with a stressor is an ineffective coping behavior. However, for the same individual listening to music (positive) may also be ineffective.

Coping behaviors can be activated through two channels. The first is through the auspices of the
organization. The employing agency can establish new policies or change existing policies to help reduce or remove stress-inducing situations. This can be accomplished by revising personnel policies, schedules, or benefit packages (Pelletier, 1984). For example, the creation of a smoking policy can alleviate various stressors (animosity) that are present without a defined policy for both the smoker as well as the nonsmoker. The agency can also alter the physical environment to accomplish the same goals by doing such things as reducing noise, providing proper ventilation and improving lighting.

The second and most important channel that can be activated is individual coping behaviors. As Austin (1966) so aptly concluded, "The responsibility for improvement is on the executive" (p.310). If the individual does not assume the responsibility or take the initiative to establish coping behaviors to deal with the corporate stress, all actions by the company--short of termination of the employee--will be ineffective.

Individual coping behaviors can be divided into two activities: preventive and situational. Preventive activities are measures that can be accomplished in
advance of receiving the stressor and are used to deal with specific events (Pelletier, 1984). Moving a desk away from noise or choosing not to attend a meeting are preventive coping behaviors. Situational coping behaviors are activities used at the very instance the stressor is putting demand on the body and are versatile (they can be used for many different stressful events) (Benson, 1976). Meditation, deep breathing, and muscle relaxation are situational examples.

Individual coping behaviors are not secrets, they are not difficult to perform, and most do not require machines or human assistance. They are individualized activities used to cope with demands put on the body. They can be as simple as deep breathing or as complicated as practicing on a biofeedback machine.

Their use, however, or lack of use can have a significant impact on an organization as well as on an individual (Sethi & Schuler, 1984). Furthermore, the differences in uses of coping behaviors among individuals may affect their management styles and, ultimately, their position in the organization.
Purpose of the Study

The purpose of this study is to determine the relationship among coping behaviors, management styles, and management levels among corporate managers. A discussion of each follows.

Management levels are distinct categories of responsibilities within a company. Although the titles and responsibilities may differ from one organization to another, each level has its specified place within the organizational hierarchy. Determining at what level a specific position is located is usually the responsibility of upper management and established organizational charts (Fallon, 1983).

Management styles, on the other hand, are highly individualized and not found on any organizational chart. The manner in which an individual chooses to manage is based on personality traits, previous education, and the culture/environment (Rees, 1984). Since every person's personality is unique, no two management styles are exactly the same. However, concepts such as practical, analytical, and sociable can be universally used to describe management styles (Keirsey & Bates, 1984). These concepts enable
researchers to categorize styles for the purpose of study and to promote group effectiveness.

Coping behaviors combine characteristics of management levels and management styles. Coping behaviors are classifiable (positive and negative, effective and ineffective), and they are also individualized. Listening to music, exercising, and progressive muscle relaxation are classified as effective coping behaviors; whereas, the use of alcohol, tobacco, and violence are classified as ineffective. Each one of these behaviors is utilized based on personality and individual choice (Sethi & Schuler, 1984).

There is no evidence to suggest that any one predetermined management style is better suited for a specific management level than another. On the contrary, an appropriate mix of all styles can greatly enhance the effectiveness of a specified level or organization (Hellriegel & Slocum, 1975). There is also no evidence to suggest that any one or a group of coping behaviors are better suited for an individual's management style or management level or vice versa. Therefore, the researcher suggests that there are differences among management styles, management levels,
and the use/nonuse of coping behaviors. To better understand this contention, this study will seek to answer the following questions:

1. Will any one management style clearly indicate an orientation toward one or more coping behaviors?

2. Will any one management level clearly indicate an orientation toward one or more coping behaviors?

3. Can knowledge of an individual's management level or style help predict an individual's coping behaviors?

4. Can knowledge of an individual's coping behaviors help predict an individual's management level or style?

Objectives of the Study

This study has four objectives, the first being to provide exploratory research in the area of management levels, management styles, and coping behaviors. In the process of showing relationships among these variables, new channels and directions for further
research will be made available. Research advancement in the field of stress management will be made possible only through further studies of new and exciting arenas of knowledge. Pioneering research will continue to promote understanding of a complicated concept.

The second objective will be to contribute to the existing body of knowledge. Whether by addition or through the process of deduction, a significant contribution will be shared with the research community.

The third objective will be to provide information to the business community about coping behaviors among corporate managers. The results of the study used in a practical nonresearch environment will help promote a better understanding of stress management among corporate personnel. Depending on the outcome of the data, hiring, training, promoting, and other programming activities may be affected.

The fourth objective is to provide information to noncorporate and educational organizations. To assume that it is safe to infer the results of the study to noncorporate structures or even to different corporate structures is dubious at this point. However, the results may provide valuable information for personnel
of like structures who are conscious of the data's limitations.

Hypotheses

The hypotheses of this study will be reported in the null form and are listed below.

1. There is no difference in use/nonuse of coping behaviors among management styles.

2. There is no difference in use/nonuse of coping behaviors among management levels.

3. There is no interaction in use/nonuse of coping behaviors among management styles and management levels.

4. There is no difference in use/nonuse of coping behaviors and the socio-demographic variables of sex, age, income level, education level, and seniority.
Definitions

STRESS: nonspecific response of the body to any demand made upon it

STRESSOR: a stimulus that causes stress

COPING BEHAVIOR: the response or action of an individual to overcome a stressful situation

MANAGEMENT LEVEL: a distinct category of corporate responsibilities within a company

MANAGEMENT STYLE: a manner or method by which an individual directs or carries on business

Delimitations

Management styles will be classified according to the Myers-Briggs Type Indicator (MBTI) categories making the results and conclusions limited by the nature of the instrument.

The Coping Behavior Inventory (CBI) is designed to ascertain an individual's preference to the use of ten
coping behaviors. It was not designed to discriminate among different sources of stress or to explain the reasons why one or more coping behaviors are chosen over others.

If in question, the decision to determine what management level a position fits into will be made by the company's personnel officer in cooperation with the researcher.

The sample population of this study will be taken from the membership of the Wellness Council of the Midlands (WELCOM) in Omaha, Nebraska. Since the mission of WELCOM is to promote wellness at the worksite, the results may not be representative of the general business population.

The origins and effects of work stress as opposed to family stress are difficult to separate. The areas that the stressors are originating from can be identified, but it is often difficult to determine which one or ones are causing the most problems. Further, it is often difficult to determine if the stress at work is causing stress at home or vice versa. This study was not designed to determine where the stress originates or its effects but rather how a person copes with those stressors.
Most research has focused on causes of stress and the results of stress-related illnesses, and there has been little research on the relationship among management styles, management levels, and the use of coping behaviors. For the purpose of this study the researcher will provide information about relevant literature focusing on the relationship of stress in business.

After examining some basic literature on stress in business, this investigation then looks at causes of stress, stress and management level differences, stress and personality, and coping behaviors. The final portion of the review of literature will concentrate on the two inventories used in this study.

High stress levels are a way of life in business. A 1980 study conducted by the National Institute for Occupational Safety and Health (NIOSH) estimated that the cost of executive stress alone was between $10 billion and $20 billion, and this figure was based only on measurable items as such as hospitalization,
workdays lost, out-patient care, and mortality (McLean, 1978). In a similar report released by NIOSH, 130 occupations were rated as stressful, and of the top ten that were rank ordered as the most stressful, office managers and managers/administrators were ranked fifth and seventh respectively (U.S. News & World Report, 1978). Laborers, secretaries, inspectors, and clinical laboratory technicians were ranked one through four with foremen ranking sixth.

Phillips (1982), Burger (1972), and Austin (1966) suggest that the chief executive officer (CEO) in large organizations is under very intense and prolonged stress. Obtaining data from 276 senior officers and 1,204 junior officers of a large financial institution, Weiman (1977) found support for the hypothesis that the incidence or risk of disease is related to stress in the workplace. Cooper (1984) reported that managers are experiencing physiological symptoms from job-related stress such as ulcers and coronary heart disease. These problems are forcing them to retire before they can reach their full managerial potential. Looking more at a specific area, Margetts (1969) addressed the stress problem related to business mergers and acquisitions. Many executives either are a
part of this process or have the threat constantly present. The individual most affected is the highly paid, secure executive who has been with the company twenty years or more climbing the corporate ladder.

Executives of large corporations are not the only individuals having high levels of stress in the business community. Executives of mid-size and small businesses are also experiencing job-related stress problems. Boyd and Gumpert (1983) conducted a study with 450 entrepreneurs whose companies ranged from fewer than ten to more than 500 employees. They concluded that because of keen competition and vast amounts of responsibility that accompany middle- and small-sized operations, high levels of stress are inevitable. Kets de Vries (Cooper & Payne, 1980) also concluded that entrepreneurs live under a considerable degree of stress and are major stress inducers in their organizational environment. The study made a detailed explanation of the entrepreneurial personality and concluded that since entrepreneurs self-induce stress, their adaptive behaviors are limited, thereby causing perpetuation of stressful events.
Causes of Stress

Literature stating the reasons for stress among managerial personnel is abundant in popular as well as research material. The number of reasons is also abundant and, therefore, adds to the complexity of the problem.

A study was conducted by Marshall and Cooper (Corlett & Richardson, 1981) of approximately 200 managers from a large company to determine the cause of managerial stress. The findings revealed that almost everything in the work situation is at some time, or by someone, identified as a cause of stress. The authors also found that frequently both a situation and its direct opposite can cause stress, for example, overwork/underwork or too many decisions/too few decisions. In the same study the results indicated job satisfaction to be a major source of stress among managers since many factors quoted as stressors in the survey were identified in other studies as direct or indirect sources of satisfaction. Jenkins (1971) in a study of the psychological and social precursors of coronary disease also found that job satisfaction was a major link in coronary heart disease patients.
Decision making is viewed as a source of job-related stress. Burr (Gottlieb, 1967) suggested that top management is a major cause of organizational stress because of their inept use of power to make decisions and create policies. Dornstein (1977) supports this view. She found that role stress among CEOs is associated with role conflicts within the board resulting from disagreements on organizational means and ends and between allocation of central decision making power.

In a cross-cultural analysis between Canadian and American managers, Rogers (Selye, 1983) reported that high stress was precipitated by anxiety related to decision making. Fear of making sub-optimum decisions resulted in ambiguous behavior and a high degree of insecurity. High stress levels precipitated by insecurity were also reported by Cooper and Melhuish (1980). In a study using 196 senior managers, it was concluded that if a company has a less-than-adequate organizational psychological climate, insecurity and, as a result, stress among management personnel become prevalent.

The same study found that conflict between a manager's personal values and those of the company
produce stressful situations. Dornstein (1977) and Holdorf (1975) also view role conflict as a major source of stress among managers. Dornstein, as reported earlier, found role conflicts within the board to cause stressful situations. Holdorf, studying 100 first line managers in a large industrial organization, found role conflict to cause stressful deterioration of the quality of interpersonal relationships. Rizzo, House, and Lutzman (1970) found role conflict and role ambiguity to be sources of stress among salaried management and technical employees. Student (1977) determined that "inner conflict" brought ambiguity to managers who were trying to act on "What I should do," "What I can do," and "What I must do."

Stress and Management Level Differences

Two studies separated their populations into management levels and sought to determine the leading stressors for each level. Weiman (1977) compiled data on officers in a financial institution. The common cause for stress between the two levels (lower and middle managers) was found to be responsibility for people. Lower managers also reported role ambiguity,
quantitative and qualitative work overload, and role conflict. Middle managers reported quantitative work overload and role conflict as other sources of stress.

Davidson and Cooper (1983) expanded upon this approach by providing more in depth analysis and separating management levels into four units: senior, junior, middle managers, and supervisors. All four levels reported time pressures/deadlines as a source of high stress. Senior, junior, and middle managers also reported work overload as a source of stress with middle managers and supervisors reporting lack of consultation/communication.

Evidence suggests that the forms and intensity of stress are different depending on an individual's position within the organization. Jennings (1967) contended that there are three stages at which stress will play a greater role in an executive's work environment. The first is in the beginning when the individual enters the corporation. The anxiety and eagerness to do a good job will create an abnormal amount of stress. The second occurs when the individual assumes the first managerial duties. At this point the individual is forced to accept responsibility for others in the daily working routine.
The third occurs when conflict arises between previous and upcoming role responsibilities and may reoccur as the individual continues to move up the corporate ladder.

Supervisory and middle managers who have fewer opportunities to delegate often manifest more symptoms of stress than top executives (Perham, 1972). Karaser (U.S. News & World Report, 1983) and Howard (National Underwriter, 1983) seem to concur with this principle although they disagree on the reasons. Karaser felt that top executives have a high amount of control and, therefore, only have moderate stress levels. Howard, on the other hand, contended that top executives have a higher amount of job satisfaction resulting in less stress.

Pelletier (1984) suggested that there are different stress sources at different levels of the organization for different people which can lead to awkward or difficult communications. These communication problems have the potential of becoming major sources of stress for all levels of the organization. Top executives apparently suffer less cardiovascular disease and fewer stress-related complaints than middle management employees (Weiss, 1981). In one study among presidents
and vice presidents of 500 large industrial companies there were 40 percent fewer fatal heart attacks than among middle managers of those same companies. In another study by NIOSH, top executives had fewer heart and circulatory problems than individuals in the secretarial to middle management range (McLean, 1978).

Stress and Personality

There is little research in the area of stress and management styles. However, since management styles are generally based on personality traits, a brief review of stress and the personality factor is appropriate. The most well-known research in this area has been done by Ray Rosenman and Meyer Friedman (1974). Their book entitled *Type A Behavior and Your Heart* details how stress is inextricably associated with personality traits. The Type A pattern can be summarized as follows:

Type A Behavior Pattern is an action-emotion complex that can be observed in any person who is aggressively involved in a chronic, incessant struggle to achieve more and more in less and less time, and if required
to do so, against the opposing efforts of other things or other persons. (p. 67)

The Type B behavior pattern, on the other hand, is characterized by the person who "is rarely harried by desires to obtain a wildly increasing number of things or participate in an endlessly growing series of events in an ever decreasing amount of time" (p. 68). This highly acclaimed and sometimes controversial study postulated that

In the absence of Type A Behavior Pattern, coronary heart disease almost never occurs before seventy years of age, regardless of the fatty foods eaten, the cigarettes smoked, or the lack of exercise. But when this behavior pattern is present, coronary heart disease can easily erupt in one's thirties or forties. (p. ix)

The model put forward by Rosenman and Friedman was researched by Howard, Cunningham, and Rechnitzer (1976) in a managerial setting. They studied 236 managers over a period of three years finding 61 percent classified as Type A. The stress-related tendencies of
these Type A personalities were described as struggling chronically and excessively, highly competitive, highly ambitious, and impatient.

Cathcart (1977) narrowed the population and studied twenty-two high-level executives over a period of four years. The findings indicated that most of them were classified as Type A—had intense ambition, competitive drive, a sense of urgency, a tendency to face deadlines (real or imagined), fourteen were overweight, and hypertension and smoking were the greatest health hazards.

Type A coronary prone behavior was studied by Daniels (1982) in a middle/upper management population. The findings further reinforced Rosenman and Friedman's research regarding Type A and Type B personalities. Type A's had more indigestion, more migraines or tension headaches, used more aspirin and valium, drank more coffee, engaged in more aerobic exercise, and were more optimistic. Type B's had a lower incidence of pain, were more likely to jog, play tennis, engage in yoga, and less likely to use valium.

Following up on his contention that top management is a major source of stress, Burr (Gottlieb, 1967), complemented the Rosenman and Friedman (1974) position
by stating that executives are often attracted by or seek out tension-laden situations. The "struggle to achieve more and more in less and less time" syndrome appears to be a widely accepted managerial trait. Humphrey (1978) went as far as to conclude that managers may be carriers of stress producing styles, thereby adversely affecting subordinates and the organization in general.

Coping Behaviors

In developing a corporate policy for managing stress, Stoner and Fry (1983) suggested three stages that needed to be followed. The first was "monitoring." During this stage, management needs to detect problem areas within the organization. In the second stage, "analysis," the nature and scope of the problems need to be established. During the final stage, "action," corporate management needs to formulate and implement corrective policies.

Niehouse (1984) paid less attention to structural processes and concentrated on specific activities. He contended that managers need to provide leadership to control stress. Some of the suggestions include:
1. maintain realistic goals;
2. remove job ambiguities;
3. introduce major changes gradually;
4. alter stressful working conditions, physical and mental; and
5. initiate and promote stress management programs.

Zimmerman (Gottlieb, 1967) proposed these eight steps to reduce tension:

1. create a people-oriented management philosophy and practice;
2. engage professional help;
3. establish a counseling service;
4. train managers and supervisors in human relations;
5. reexamine personnel practices;
6. consider joint action with other companies;
7. support the larger cause of mental health;
8. open doors to research.

Rader and Gilsdorf (1981) specifically focused on the environment of the office area. They suggested
that management provide adequate space, reduce noise, minimize distractions, and provide comfortable temperatures and adequate lighting.

Burke (1976) found that more stress produced less job satisfaction, and stressors that produced more satisfaction were connected with enlarged job demands and challenges. He concluded that it would be productive if stress increased in small steps, was monitored, and was related to job enrichment. Managers can help combat stress by providing positive feedback, encouraging positive stress through productive creative involvement of employees, and reducing distress by recognizing that people respond as much from their state of mind as through reason or will (Ritzky, 1983). Meglino (1977) stated that managers can control stress within the organization. He maintained that low stress levels should be imposed on employees who have not had sufficient time to learn their jobs well and those with difficult tasks. Higher levels of stress can be imposed on those who learned their jobs well.

About 750 managers were surveyed to determine coping techniques used during stressful situations (Steel, 1968). The three most listed behaviors were taking care of physical health first, compare
perceptions with peers, and insulate stressful job situations. Fair (1976), using the same type of approach with a sample of supervisors who were asked how they hold down pressure at work, found that supervisors responded in much the same manner. The most mentioned suggestions were:

1. put everything into proper perspective;
2. solve work problems as soon as possible;
3. learn to cope automatically;
4. systematize activities;
5. seek assistance of colleagues;
6. develop a manageable workplace;
7. maintain physical and psychological health;
8. rotate work and relaxation; and
9. continue to learn how to deal with others.

Chase (1972) found the same results with a similar study. Burke (1971) and Burke and Belcourt (1974) compiled a list of effective coping behaviors based on a survey by Mann (1969) and their own open-ended questionnaire. Later, Howard, Rechnitzer, and Cunningham (1975) used the list to conduct their own research on effective coping behaviors. In a
three-year longitudinal study on manager's coping behaviors, the five best techniques used by the low stress group were:

1. build resistance with good habits;
2. separate work and nonwork life;
3. exercise;
4. talk through problems with peers at work; and
5. withdraw physically from a stressful situation.

The low stress group was found to be better at stress prevention, restoration of energies, and problem solving. The difference appeared to be that the low stress group worked smarter or were more efficient while the high stress group worked harder (change strategy of attack on work, change to different work activity).

Kobasa et al. (1979) set out to determine "who stays healthy under stress." The study included 259 executives who were tested three times over a period of two years. Executives who remained healthy under stress had certain characteristics in common that she termed "hardiness." The three prominent characteristics were a sense of commitment to rather
than alienation from the various aspects of their lives, an internal locus of control, and a search for novelty and challenge rather than familiarity and security. It was later suggested (Pelletier, 1984) that the presence of a strong social support system as a characteristic of "hardiness" should be added.

Inventories

**Coping Behavior Inventory (CBI)**

The coping behavior inventory utilized in this study was employed by Burke (1971) and Howard, Rechnitzer, and Cunningham (1975) in similar studies. The behaviors were first reported by Mann (1969) during exploratory studies to identify methods that executives found effective in handling stressful situations. Mann's data were taken from three groups of middle and upper management personnel: bank executives, professional engineers, and civil service personnel. Although the findings were nonquantitative and exploratory in nature, they did serve as a foundation for future research.
The original categories reported by Mann were as follows:

1. withdraw physically from the situation, temporarily;
2. change to a different task or job activity;
3. change to an engrossing nonwork or play activity;
4. modify one's own focus of attention;
5. analyze situation and change strategy of attack;
6. undertake quiet activity by oneself;
7. engage in physical exercise;
8. aggress and ventilate feelings;
9. use different types of sedation;
10. talk through with spouse;
11. talk through with others;
12. seek help of God;
13. help others;
14. take a nap or sleep;
15. build body resistance to frustrations (regular sleep, regular exercise);
16. compartmentalize work and home life;
17. extended weekends or vacations.
Burke (1971) repeated Mann's study using a group of forty-three supervisors and found that the coping behaviors could be condensed into ten categories.

1. change to an engrossing nonwork or play activity
2. analyze situation and change strategy of attack
3. withdraw physically from the situation, temporarily
4. engage in physical exercise
5. work harder (take work home)
6. talk through with others on the job
7. compartmentalization of work and home life
8. change to a different work task or job activity
9. talk through with spouse
10. build body resistance to frustration; regular sleep, regular exercise.

Later Burke and Belcourt (1974) used these ten categories to identify the most effective techniques. Sixty-five percent of the total coping responses fell into five categories: (1) talking to others; (2) working harder and longer; (3) changing to an engrossing nonwork or play activity; (4) analyzing the situation and changing the strategy of attack; (5) withdrawing physically from the situation. Howard,
Rechnitzer, and Cunningham (1975) used the same ten categories during a three-year longitudinal study. The five best techniques reported were: (1) build resistance by regular sleep, exercise; (2) compartmentalize work and nonwork life; (3) engage in physical exercise; (4) talk through with peers on the job; and (5) withdraw physically from the situation.

The ten categories refined by Burke and used by Howard will be used in this study with little modification. After reviewing the survey, the researcher determined that the wording of the categories emphasized masculine activities (Appendix A). The researcher sent the survey to five women colleagues with the request to gender neutralize the survey. The suggestions of the women were incorporated into the final wording of the survey as it appears in Appendix A.

Scoring

Scoring on the survey is based on a "yes" or "no" answer to each of the ten categories. The participant has the opportunity to answer all ten questions with a yes or no response.
Validity and reliability

The researcher found no validity or reliability ratings for the survey.

Myers-Briggs Type Indicator (MBTI)

The MBTI is a forced-choice, self-report questionnaire that attempts to classify individuals utilizing Carl Jung's theory of conscious psychological type. Jung (1923) suggested that behavior which seemed to be random was actually consistent and orderly. This consistency is caused by the manner in which individuals express perception and judgment. Jung also claimed that everyone uses four basic mental functions (sensing, intuition, thinking, and feeling), and everyone has a basic orientation to life (extraversion or introversion). Jung's theory made the terms "extravert" and "introvert" household terms by relating the inner world of understanding and ideas to the outer world of people and things.

Katherine Briggs, motivated by personal circumstances, made an extensive study of varying biographies and found her thinking paralleling that of
Jung. During World War II she and her daughter, Isabel Briggs Myers, began developing the original item pool for the MBTI which was based on type theory and observations. Later Isabel Myers added two more preferences (judging and perceiving) to fully develop a dimension of Jung's theory which had only been implied in his work (Myers & McCaulley, 1985). The six preferences of Jung and the two of Myers form the basis of the MBTI typology.

The MBTI typology consists of four scales: Extraversion-Introversion (E-I), Sensation-Intuition (S-N), Thinking-Feeling (T-F), and Judgement-Perception (J-P). The underlying assumption is that every person has a natural preference for one or the other pole on each of the four scales. Individuals differ in the degree of development of these functions and orientation and in the order in which they prefer to use these functions.

The E-I scale was developed to measure preferred orientation to life. Extraverted types (E) are oriented primarily to the outer world and have a tendency to get caught up in whatever is happening around them. They prefer action and social contacts and rely on the environment for stimulation and
guidance. Extraverts would prefer activities involving teamwork, quick action and communication. Introverted types (I) are more inward oriented and tend to divorce themselves from the outer world. They tend to be contemplatively detached, desire private time, and are, at times oblivious to the surrounding environment. Introverted activities would require sustained attention and may not involve others.

The S-N scale was developed to measure a preferred way of perceiving things. Sensing types (S) emphasize perceptions received through their sense organs. They also pay attention to details and practical aspects of situations. Sensors rely on experience, choose conventional ways of doing things, and are systematic in perceiving and learning. Intuitive types (N) view things more vaguely and deal with abstractions, inferred meanings, and hidden possibilities in a situation. They show great insight into complex situations, enjoy symbolism and theory, and often see novel future possibilities.

The T-F scale was developed to measure the preferred way of making decisions. Thinking types (T) put order into situations by using logical structures. They are adept at organizing material, weighing facts,
and objectively judging truths and nontruths. Thinkers are analytical, concerned with fairness, and find satisfaction with technical activities rather than interpersonal relations. Feeling types (F) are skilled at understanding people's feelings and base judgments on personal values. They have a strong need for affiliation, are warm and emphatic, and prefer activities involving interpersonal skills.

The J-P scale was developed to measure a preferred way of dealing with the outer world. Judging types (J) aim at regulating and controlling life, are systematic and organized. They appear to be dependable, decisive and responsible. Perceptive types (P) are more curious and open-minded. They go through life in a more spontaneous way aiming to understand life and adapt to it. Perceivers are curious, receptive and flexible.

Scoring

The questions are arranged in force-choice form to determine habitual choices between opposites. The indicator yields two types of scores for each person. It classifies people on four dichotomous type categories and also produces eight numerical scores
that can be transformed into four continuous scores. Therefore, MBTI scores can be considered as either dichotomous or continuous data.

Reliability

Various procedures have been used to measure the internal consistency of the MBTI. Although Myers (1962) recommends estimating split half reliabilities by calculating tetrachoric correlation coefficients and applying the Spearman-Brown prophesy formula, Carlyn (1977) feels this approach yields higher reliabilities than actually exist. Therefore, she contends that the actual type category reliabilities lie between estimates derived from phi coefficients and the tetrachoric correlation. The ranges for the two methods are listed below.

<table>
<thead>
<tr>
<th></th>
<th>Phi</th>
<th>Tetrachoric</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-I</td>
<td>.55-.65</td>
<td>.70-.81</td>
</tr>
<tr>
<td>S-N</td>
<td>.64-.73</td>
<td>.82-.92</td>
</tr>
<tr>
<td>T-F</td>
<td>.43-.75</td>
<td>.66-.90</td>
</tr>
<tr>
<td>J-P</td>
<td>.58-.84</td>
<td>.76-.84</td>
</tr>
</tbody>
</table>
Methods to estimate the reliability of continuous scores that include the split-half procedure involving the Pearson product-moment and Cronbach's Coefficient Alpha have produced similar results.

E-I .76-.82
S-N .75-.87
T-F .69-.86
J-P .80-.84

The test-retest data show that a majority of respondents retain the same four preferences or change only one preference. Coefficients using continuous scores were reported ranging from .78 to .83.

Validity

Construct validity was demonstrated through the use of studies on faculty ratings, turnover in utility jobs, and factor analysis with scores on the Allport-Vernon-Lindzey Study of Values. Concurrent validity was established through correlations with the sixteen Personality Factor Test, the Omnibus Personality Inventory, the Strong Vocational Interest
Blank, the Edwards Personal Preference Schedule and other personality surveys.

Management classifications

For this study, four managerial styles are used (Keirsey & Bates, 1984). These styles are based on the personality types of the MBTI, and each style includes four of the personality types. The following figure shows the styles and the corresponding personality types.

Troubleshooter/Negotiator - ESTP, ESFP, ISTP, ISFP
Traditionalist/Judicial - ESTJ, ISTJ, ISFJ, ESFJ
Catalyst - ENFJ, INFJ, INFP, ENFP
Visionary - ENTJ, INTJ, INTP, ENTP

An explanation of the sixteen types and the four managerial styles can be found in Appendix B.

Each management style has its own temperament or "signature" that distinguishes it from the other three styles. A style's temperament is noted by preferences (for explanation of preferences, see the previous section entitled Myers-Briggs Type Indicator) that are
dominant within each management classification and are as follows:

Troubleshooter/Negotiator—sensing, perceiving (SP)
Traditionalist/Judicial—sensing, judging (SJ)
Catalyst—intuitive, feeling (NF)
Visionary—intuitive, thinking (NT)

Each one of these temperaments has its own characteristics, and different jobs/businesses attract employees with certain temperaments. The SPs are attracted to the arts, entertainment, adventure, and action-oriented jobs. SJs are oriented toward teaching, accounting, banking, medicating, rehabilitating, insuring, and selling. NFs favor writing, dramatics, and journalism. NTs are attracted to the sciences, mathematics, philosophy, architecture, engineering, and manufacturing. The influence of these preferences on the results of this study will be explained in the analysis section of Chapter 3.
Summary

There is little research establishing the relationship among management levels, management styles and the use/nonuse of coping behaviors. Since the intensity and form of stressors has been found to be different in both management levels and management styles, and since there have been studies relating to the use of coping behaviors, the logical progression is to hypothesize a relationship among management levels, management styles, and coping behaviors.
CHAPTER THREE - METHODOLOGY

In this chapter, the procedures for implementing the study are discussed in this following order: subjects, data collection, variables, and analysis.

Subjects

The subjects were selected from three management levels—lower, middle, upper—of corporations that belong to the Wellness Council of the Midlands (WELCOM) located in Omaha, Nebraska. WELCOM is a coalition of businesses founded in 1982 whose mission is to promote wellness at the worksite. WELCOM was selected because it has a good representation of Omaha businesses, and the researcher is Executive Director with established lines of communication to the members.

At the time of the survey, WELCOM had 99 member companies that were diverse in employee population as well as nature of business. The smallest company had two employees, and the largest had 17,000. The types of businesses included but were not confined to
banking, agribusiness, insurance, school districts, transportation, light manufacturing, universities, and hospitals.

Because the membership was so diverse, the researcher established methods to screen the participating companies. The objectives for screening were (1) to assure that all participating companies had three distinct levels of management—lower, middle, upper; (2) to assure accessibility to each management level; and (3) to determine the financial and organizational stability of each company. The sources for this information included business publications, other media, and inside sources available to the researcher. A discussion of each of these criteria follows below.

1. Three distinct levels of management (lower, middle, upper). This criterion was instituted to establish the management levels to be utilized in the study, and to provide consistency in communicating with companies. This criteria eliminated the following organizations: most small businesses (less than 200 employees); large businesses with multiple layers of management levels (more than 3,000 employees); businesses with
headquarters in other geographical locations that have only branch managers in Omaha; businesses, like accounting firms, that are controlled through partnerships; and trade organizations.

2. Good accessibility to managers. This criterion was established to assure that once the participating managers were selected they would be easy to contact and would be accessible during the implementation of the survey. This excluded most companies with multiple sites because of the constant exchange of personnel among sites, and those businesses whose managers spend a majority of their time on field assignments.

3. Financial and organizational stability. Based on the experience that financially unstable companies did not wish to participate in previous research projects, the researcher determined that those companies would not wish to participate in this study. Those companies experiencing organizational instability were excluded because of the shift in management personnel and responsibilities.
Based on these criteria, the original ninety-nine companies were reduced to thirty-two. The researcher contacted each of these companies to determine if they would agree to be a part of the study. The initial contact was made by telephone. The contact person in each company was that company's delegate to WELCOM. A delegate is an employee selected by top management of the organization to represent them with WELCOM. The researcher as Executive Director had an established rapport with each delegate. Fifteen of the organizations initially agreed to meet with the researcher to further discuss their companies' participation. The researcher then sent a packet of information to each of the fifteen contacts, which included a cover letter and description of the Coping Behavior Inventory and the Myers-Briggs Type Indicator (see Appendix C).

During the initial meetings, the researcher discussed the goals and objectives of the study along with the above-mentioned criteria for choosing their organizations. No details of the procedures for the study were discussed at these meetings. Thirteen agreed to participate. The other two declined, citing nonsupport of management personnel. The participating
companies included two hospitals, three insurance companies, a television station, two banks, an architectural firm, three light manufacturing businesses, and an educational institution.

Later, the researcher again met with each WELCOM delegate in the thirteen organizations. A sample of the packet (Appendix D) which included a demographic questionnaire, a Coping Behavior Inventory (CBI), a Myers-Briggs Type Indicator (MBTI) question booklet (Form F), an MBTI answer sheet, and a cover letter was explained. The following procedure for implementation was also explained.

Each participating company was asked to secure a sample from each level of management (lower, middle, upper). It was the responsibility of the delegate to choose each company's participating managers. The researcher also asked each delegate to attempt to insure equity among the management levels and between sexes.

Only two companies chose to survey equally among the three management levels, and none sought equity between the sexes. The reason cited for not surveying equally among management levels was because the delegate was uncomfortable with selecting who would and
who would not participate. Therefore, of the remaining eleven companies, nine solicited volunteers, and two selected those not busy. The reason for the lack of equity between the sexes was that most of the companies had few top female managers, which would have limited or disqualified the companies' participation.

The delegate was responsible for the distribution and collection of the packets. The researcher delivered the requested number of packets to each company and picked them up on the agreed upon date.

The cover letter (full text is in Appendix C) that accompanied the packet did not indicate whether the individual participant should or should not include his or her name on the Myers-Briggs Type Indicator answer sheet. The researcher explained to each of the thirteen delegates that if the participants wanted information about their personality types, it would be provided. The delegates then informed the participants of this option. Of the 155 participants, 93 requested information by providing their names. After the data were compiled and analyzed, the researcher prepared individual packets for the 93 participants which included a cover letter (see Appendix E) and information about their personality types.
Data Collection

A packet was prepared for each participant. Two hundred eleven packets were distributed with 161 packets being returned. Six of those packets were not completed. Therefore, 155 (73%) of the questionnaires were returned completed.

Variables

The variables are arranged and reported here in the order of the hypothesis to be tested.

Hypothesis 1

The first hypothesis tested the relationship between management styles and the use/nonuse of stress coping behaviors. The measurements used to determine if a relationship exists were the CBI with ten coping behaviors and the four management styles based on the MBTI.
Hypothesis 2

The second hypothesis tested the relationship between management levels and the use/nonuse of coping behaviors. The measurements used to determine if a relationship exists were the previously explained CBI and the reported management level as determined from the demographic information sheet.

Hypothesis 3

The third hypothesis tested the possible interaction in the use/nonuse of coping behaviors among management styles and management levels.

Hypothesis 4

The fourth hypothesis tested the relationship between the use/nonuse of the ten coping behaviors and the five socio-demographic variables of sex, age, income level, education level, and seniority. The measurements used to determine if a relationship exists were the CBI and the demographic information requested on the information sheet.
Background variables

All but two participants responded to the income level question with a 100 percent response rate to the other four questions.

Sex was reported in the traditional male-female style with age being reported as follows:

30 or below
31-40
41-50
51 or over

Income levels were reported as follows:

$12,000 or less
$12,000-$20,000
$21,000-$30,000
$31,000-$40,000
$41,000 or more
Education levels were:

high school
college
graduate
other

The other category was included for post-graduate level and professional degrees.

Seniority levels were reported as:
0-5 years
6-10 years
11-15 years
16 years or more

Analysis

Since all the data used were nominal data, chi-square tests were used to identify differences at the .05 level (Hinkle, Wiersma, & Jurs, 1979). The relationship between the five socio-demographic variables and management styles and levels were also examined in order to discuss any influence upon the
three hypotheses tested, and chi-square was also used to test these differences.

The 20-percent rule which states that the expected frequencies should have at least five cases in a cell in 80 percent of the cells was utilized in some cases and will be cited in the discussion where appropriate (Jacobson, 1976).

The socio demographic variables age, income level, and education level presented problems throughout the analysis because the data often could not qualify for the 20 percent rule (Jacobson, 1976). Therefore, the researcher altered the groups in the following manner to better accommodate the analysis:

**Age**

40 or below

41 or over
Income Level

$20,000 or less
$21,000 to $30,000
$31,000 to $40,000
$41,000 or more

Education Level

high school
college
graduate/other

The frequency of the ages in the original question were: 30 or below = 18, 31 to 40 = 70, 41 to 50 = 48, and 51 or over = 19. Based on this data, the researcher split the groups at 40 with 88 at 40 or below and 67 at 41 or over.

As for the income levels, since there were only three in the $12,000 or less category, the researcher collapsed that data into the next category ($13,000 to $20,000) and redefined the category as $20,000 or less.

Education levels were comparable to income levels in that there were only three cases in the "other"
category. Therefore, "other" was collapsed into the "graduate school" category and redefined as "graduate/other."

According to Keirsey and Bates (1984), the MBTI's management classifications are distributed among the general population as follows: troubleshooter/negotiators - 38 percent; traditionalist/judicials - 38 percent; catalysts - 12 percent; and visionaries - 12 percent. In this study, the distribution was troubleshooter/negotiators - 15 percent; traditionalist/judicials - 51 percent; catalysts - 9 percent; and visionaries - 25 percent.

The difference in distribution between the general population and this study is a consequence of the types of businesses surveyed and the attracted temperaments as explained in Chapter 2. The troubleshooter/negotiators (15%) whose temperament is suited for the arts, entertainment, and adventure were scattered throughout the surveyed companies. Traditionalist/judicials (51%), on the other hand, were well represented in the study. Businesses that attract this style included the three insurance companies, the two hospitals, two banks, and the educational institution. The catalysts (9%) were represented by the television
station, and the visionaries (25%) by the architectural/engineering firm and the three manufacturing businesses.
CHAPTER FOUR - FINDINGS

In this study, eight variables were tested. Coping behavior is the dependent variable with management style, management level, sex, age, income level, education level, and seniority as the independent variables.

The report of the findings are arranged in order of the hypotheses tested. Each includes a description of each group and the results of the comparisons among the groups. To test for significant differences, comparisons were made to the chi-square distribution at the .05 significance level. The standard error of difference and degrees of freedom used in the formula were dependent upon whether or not the variances of each group were equal. The acceptable level of significance throughout the analysis was .05 rather than .01 an accepted level in social science research, because it was believed that avoiding a Type II error—that is, failing to reject the hypothesis when it was indeed false—would be slightly more important than making the mistake of rejecting a true hypothesis.
Therefore, if there is a difference in coping behaviors among management styles and management levels, the differences may be detected.

Findings

Hypothesis 1: There is no difference in use/nonuse of coping behaviors among management styles based on the MBTI and the CBI.

A significant difference (p<.05) did exist between management styles and the coping behavior "work harder (take work home)" (.0026) (see Table 1).

TABLE 1. Chi-Square Test of the Relationship between Management Styles and the Use of the Coping Behavior "Work Harder (Take Work Home)" (Significance = 0.0026)

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Use</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Catalyst</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td>38</td>
<td>41</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Visionary</td>
<td>8</td>
<td>31</td>
</tr>
</tbody>
</table>
As shown in Table 2, there was also a significant difference between management styles and the coping behavior "talk through with others on the job" (.0479).

TABLE 2. Chi-Square Test of the Relationship between Management Styles and the Use of the Coping Behavior "Talk Through with Others on the Job"

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Use</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catalyst</td>
<td>1</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td>17</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>1</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>12</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

Significance = 0.0479
Cells with E.F. < 5 = 2 of 8 (25%)

However, as Jacobson (1976) points out, the expected frequencies should have at least five cases in a cell in 80 percent of the cells. Since cells with an estimated frequency of less than five is 25 percent, and since the data cannot be collapsed without significantly altering the results, the researcher reports this difference as marginal.
Hypothesis 2: There is no difference in use/nonuse of coping behaviors among management levels based on the CBI and the reported management level.

Significant differences (p<.05) did exist between management levels and the coping behavior "engage in physical exercise" (.0376) (see Table 3) and "work harder" (take work home) (.0001) (see Table 4).

TABLE 3. Chi-Square Test of the Relationship between Management Levels and the Use of the Coping Behavior "Engage in Physical Exercise" (Significance = 0.0376)

<table>
<thead>
<tr>
<th>Management Levels</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Lower</td>
<td>26</td>
</tr>
<tr>
<td>Middle</td>
<td>46</td>
</tr>
<tr>
<td>Upper</td>
<td>20</td>
</tr>
</tbody>
</table>
TABLE 4. Chi-Square Test of the Relationship between Management Levels and the Use of the Coping Behavior "Work Harder (Take Work Home)"
(Significance = 0.0001)

<table>
<thead>
<tr>
<th>Management Levels</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Lower</td>
<td>21</td>
</tr>
<tr>
<td>Middle</td>
<td>42</td>
</tr>
<tr>
<td>Upper</td>
<td>6</td>
</tr>
</tbody>
</table>

Hypothesis 3: There is no interaction in use/nonuse of coping behaviors among management styles and management levels.

Since each of the ten coping behaviors was tested for both a "yes" (use) and "no" (nonuse) answer, twenty studies were completed. Because the N was dispersed among twelve cells in each of the twenty cases, none of the studies met the 20 percent rule as previously discussed. In fact only seven of the twenty cases were below 50 percent.

Significant differences (p .05), however, did exist among management styles and management levels with
seven of the coping behaviors, and one can be reported as marginal (build body resistance to frustration).
Table 5 lists only those seven studies in which significant values were reported.

TABLE 5. Chi-Square Test for the Interaction among Management Styles, Management Levels, and Seven Coping Behaviors

Change to an Engrossing Nonwork Activity

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Management Levels</th>
<th>Lower</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalyst</td>
<td></td>
<td>8</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td></td>
<td>14</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td></td>
<td>9</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Visionary</td>
<td></td>
<td>1</td>
<td>16</td>
<td>7</td>
</tr>
</tbody>
</table>

Value = yes
Significance = 0.0155
Cells with E.F. < 5 = 4 of 12 (33.3%)
Table 5 (Continued)

Analyze Situation and Change Strategy of Attack

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Management Levels</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
<td>Middle</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>Catalyst</td>
<td>8</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td>12</td>
<td>36</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>8</td>
<td>10</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>4</td>
<td>19</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Value = yes
Significance = 0.0446
Cells with E.F. < 5 = 4 of 12 (33.3%)

Withdraw Physically from the Situation, Temporarily

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Management Levels</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
<td>Middle</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>Catalyst</td>
<td>9</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td>15</td>
<td>30</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>9</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>1</td>
<td>14</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Value = yes
Significance = 0.0009
Cells with E.F. < 5 = 4 of 12 (33.3%)
Table 5 (Continued)

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Lower</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalyst</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td>11</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>11</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Visionary</td>
<td>4</td>
<td>11</td>
<td>6</td>
</tr>
</tbody>
</table>

Value = no
Significance = 0.0100
Cells with E.F. < 5 = 5 of 12 (41.7%)

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Lower</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalyst</td>
<td>10</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td>13</td>
<td>33</td>
<td>16</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>10</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Visionary</td>
<td>3</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

Value = yes
Significance = 0.0155
Cells with E.F. < 5 = 4 of 12 (33.3%)
Table 5 (Continued)

Compartmentalization of Work and Home Life

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Lower</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalyst</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td>2</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>2</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

Value = no
Significance = 0.0064
Cells with E.F. < 5 = 8 of 12 (66.7%)

Build Body Resistance to Frustration

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Lower</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalyst</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td>12</td>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>7</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>2</td>
<td>13</td>
<td>8</td>
</tr>
</tbody>
</table>

Value = yes
Significance = 0.0552
Cells with E.F. < 5 = 5 of 12 (41.7%)
The researcher reviewed these findings and determined that at least two of the deficient cells in each study were associated with the "catalyst" classification. Since each of the MBTI's management classifications are distinctly separate and cannot be collapsed into one another, the study was retested with "catalyst" removed. If the same seven studies again showed significant differences (p<.05) and fulfilled the 20 percent rule, a strong case may be made to reject this hypothesis.

Significant differences (p .05) again did exist among the same coping behaviors with two differences. The coping behavior "build body resistance to frustration" changed from marginal (.0552) to a firm difference (.0356), and "analyze situation and change strategy of attack" changed from a firm difference (.0446) to a marginal difference (.0551). Table 6 lists the same studies and in the same order as they are listed in Table 5 with "catalyst" removed.
TABLE 6. Chi-Square Test for the Interaction among Management Styles with the Catalyst Classification Removed, Management Levels, and Seven Coping Behaviors

<table>
<thead>
<tr>
<th>Change to an Engrossing Nonwork Activity</th>
<th>Management Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Styles</td>
<td>Lower</td>
</tr>
<tr>
<td>Tradition-Judgemental</td>
<td>14</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>9</td>
</tr>
<tr>
<td>Visionary</td>
<td>1</td>
</tr>
</tbody>
</table>

Value = yes
Significance = 0.0230
Cells with E.F. < 5 = 2 of 9 (22.2%)

<table>
<thead>
<tr>
<th>Analyze Situation and Change Strategy of Attack</th>
<th>Management Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Styles</td>
<td>Lower</td>
</tr>
<tr>
<td>Tradition-Judgemental</td>
<td>12</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>8</td>
</tr>
<tr>
<td>Visionary</td>
<td>4</td>
</tr>
</tbody>
</table>

Value = yes
Significance = 0.0551
Cells with E.F. < 5 = 2 of 9 (22.2%)
Table 6 (Continued)

Withdraw Physically from the Situation, Temporarily

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Lower</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trad-Judgemental</td>
<td>15</td>
<td>30</td>
<td>16</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>9</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>1</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

Value = yes
Significance = 0.0022
Cells with E.F. < 5 = 2 of 9 (22.2%)

Engage in Physical Exercise

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Lower</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trad-Judgemental</td>
<td>11</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>11</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Visionary</td>
<td>4</td>
<td>11</td>
<td>6</td>
</tr>
</tbody>
</table>

Value = no
Significance = 0.0441
Cells with E.F. < 5 = 2 of 9 (22.2%)
Table 6 (Continued)

**Talk through with Others on the Job**

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Lower</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trad-Judgemental</td>
<td>13</td>
<td>33</td>
<td>16</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>10</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Visionary</td>
<td>3</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

Value = yes  
Significance = 0.0338  
Cells with E.F. < 5 = 2 of 9 (22.2%)

**Compartmentalization of Work and Home Life**

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Lower</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trad-Judgemental</td>
<td>2</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>2</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

Value = no  
Significance = 0.0133  
Cells with E.F. < 5 = 5 of 9 (55.6%)
Table 6 (Continued)

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Management Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td>12</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>7</td>
</tr>
<tr>
<td>Visionary</td>
<td>2</td>
</tr>
</tbody>
</table>

Value = yes
Significance = 0.0356
Cells with E.F. < 5 = 2 of 9 (22.2%)

However, none of the retested studies met the 20 percent rule. Because the cells cannot be collapsed or variables removed again without disturbing the results, the researcher concluded that this hypothesis is unable to be tested based on insufficient cases.

**Hypothesis 4:** There is no difference in use/nonuse of coping behaviors and the socio-demographic variables of sex, age, income level, education level, and seniority.
Significant differences (p<.05) did exist between sex and the coping behavior "engage in physical exercise" (see Table 7), age and the coping behavior "talk through with spouse/significant other" (see Table 8), income levels and the coping behavior "compartmentalization of work and home life" (see Table 9), and education levels and the coping behavior "withdraw physically from the situation temporarily" (see Table 10).

<table>
<thead>
<tr>
<th>Sex</th>
<th>Use</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>No</td>
<td>50</td>
<td>22</td>
</tr>
<tr>
<td>Female</td>
<td>Yes</td>
<td>42</td>
<td>41</td>
</tr>
</tbody>
</table>
### TABLE 8. Chi-Square Test of the Relationship between Age and the Use of the Coping Behavior "Talk through with Spouse/Significant Other" (Significance = 0.0275)

<table>
<thead>
<tr>
<th>Age</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 or below</td>
<td>21</td>
<td>67</td>
</tr>
<tr>
<td>41 or over</td>
<td>28</td>
<td>39</td>
</tr>
</tbody>
</table>

### TABLE 9. Chi-Square Test of the Relationship between Income Levels and the Use of the Coping Behavior "Compartmentalization of Work and Home Life" (Significance = 0.0036)

<table>
<thead>
<tr>
<th>Income</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20,000 or less</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>21,000 to 30,000</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>31,000 to 40,000</td>
<td>7</td>
<td>41</td>
</tr>
<tr>
<td>41,000 or more</td>
<td>23</td>
<td>26</td>
</tr>
</tbody>
</table>
TABLE 10. Chi-Square Test of the Relationship between Education Levels and the Use of the Coping Behavior "Withdraw Physically from the Situation, Temporarily" (Significance = 0.0440)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>College</td>
<td>22</td>
<td>57</td>
</tr>
<tr>
<td>Graduate or other</td>
<td>17</td>
<td>33</td>
</tr>
</tbody>
</table>

Background variables

There was a significant difference (p<.05) between management styles and the socio-demographic variable sex (.0010) (see Table 11).
There was also a significant difference (p<.05) between management levels and the socio-demographic variable sex (.0017) as illustrated in Table 12.

**TABLE 11. Chi-Square Test of the Relationship between Sex and Management Styles (Significance = 0.0010)**

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalyst</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Trad-Judgemental</td>
<td>37</td>
<td>42</td>
</tr>
<tr>
<td>Trouble Shooter</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>Visionary</td>
<td>10</td>
<td>29</td>
</tr>
</tbody>
</table>

**TABLE 12. Chi-Square Test of the Relationship between Sex and Management Levels (Significance = 0.0017)**

<table>
<thead>
<tr>
<th>Management Levels</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Middle</td>
<td>41</td>
<td>44</td>
</tr>
<tr>
<td>Upper</td>
<td>9</td>
<td>28</td>
</tr>
</tbody>
</table>
A significant difference (p<.05) did exist between management levels and the socio-demographic variable educational levels (.0011) (see Table 13).

**TABLE 13.** Chi-Square Test of the Relationship between Education Levels and Management Levels (Significance = 0.0011)

<table>
<thead>
<tr>
<th>Education Levels</th>
<th>High School</th>
<th>College</th>
<th>Graduate or Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Levels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>13</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Middle</td>
<td>10</td>
<td>48</td>
<td>27</td>
</tr>
<tr>
<td>Upper</td>
<td>3</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

A significant difference (p<.05) also existed between management styles as based on the MBTI and the socio-demographic variable income levels (.0179) (see Table 14), but the study did not meet the 20 percent rule. Because the data cannot be collapsed without significantly altering the results, the author reports this difference as marginal.
TABLE 14. Chi-Square Test of the Relationship between Income Levels and Management Styles

<table>
<thead>
<tr>
<th>Management Styles</th>
<th>Income Levels</th>
<th>20 or Less</th>
<th>21 to 30</th>
<th>31 to 40</th>
<th>41 &amp; Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalyst</td>
<td></td>
<td>6</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Trad-Judg</td>
<td>10</td>
<td>17</td>
<td>29</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Trouble Shoot</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

Significance = 0.0179
Cells with E.F. < 5 = 5 of 16 (31.3%)

Summary

Based on the results of this study, the researcher rejected Hypothesis 1 which tested the relationship between management styles and use/nonuse of coping behaviors; Hypothesis 2 which tested the relationship between management levels and use/nonuse of coping behaviors; failed to reject Hypothesis 3 which tested the interaction among management styles, management levels, and use/nonuse of coping behaviors; and rejected Hypothesis 4 which tested use/nonuse of coping behaviors with the socio-demographic variables.
These findings support the belief that coping behaviors that corporate managers use may be influenced both by their management styles and their management levels.
CHAPTER FIVE - SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study has attempted to determine if a relationship exists among management styles, management levels, and use/nonuse of stress coping behaviors among corporate managers. The three traditional levels of management—lower, middle, upper—were utilized to assure simplicity and consistency. The management styles traditionalist/judicial, troubleshooter/negotiator, catalyst and visionary, which are based on the Myers-Briggs typologies, provided the necessary style classifications. The ten coping behaviors established by Mann (1969) and later refined by Burke and Belcourt (1974) formed the basis of the Coping Behavior Inventory. The socio-demographic variables of sex, age, income level, education level, and seniority were obtained during the survey to determine if they had any affect on the outcome of the results.
The null hypotheses for this study were: 1. There is no difference in use/nonuse of coping behaviors among management styles. 2. There is no difference in use/nonuse of coping behaviors among management levels. 3. There is no interaction in use/nonuse of coping behaviors among management styles and management levels. 4. There is no difference in use/nonuse of coping behaviors and the socio-demographic variables of sex, age, income level, education level, and seniority. A discussion of the results of each hypothesis in the order they were tested follows.

**Hypothesis 1**

Hypothesis 1 was rejected based on the results of the chi-square test between management styles and two of the ten coping behaviors. A relationship was established between the four management styles of the MBTI and the coping behavior "work harder (take work home)" (see Table 1). The traditionalist/judicials are split on the use of this behavior (no = 38, yes = 41), and although the catalysts report favoring nonuse (no = 9, yes = 5), this style works toward perfection and has
difficulty placing limits on the amount of time spent on a project.

The troubleshooter/negotiators report opposite their damn-the-torpedoes, full steam ahead characteristics with fourteen reporting that they do not work harder and nine reporting the opposite. The reason for this deviation may be their interpretation of what it means to work harder. To the troubleshooter/negotiator, whatever needs to be done to obtain an established objective will be done. The troubleshooter/negotiator is excited and enthusiastic about work. Work is play. Fifty to sixty hours a week and taking work home may be a normal part of the process leading to task completion.

The visionaries show the most decisive division with a majority reporting use of the work-harder behavior (no = 8, yes = 31). By nature the visionary is driven and persistent. During the creative process, the visionary has enormous drive and spends much time on the process and principles. To individuals with this style, work is work, and play is work.

A relationship was also established between the four management styles of the MBTI and the coping behavior "talk through with others on the job." All
styles reported a strong orientation to using this as a coping behavior (see Table 2).

The catalysts (no = 1, yes = 13) and the troubleshooter/negotiators (no = 1, yes = 22) report the most use of this behavior. The catalysts relate well with colleagues and go out of their way to seek personal contact. They are sociable and find their work as a source of social satisfaction.

The troubleshooter/negotiators are flexible, open-minded, and patient in working with colleagues. They are not threatened by the possibility of failure in themselves or others. They pride themselves in responding well to crisis situations. Whatever needs to be done to solve a problem including talking it through with colleagues is given high priority.

Traditionalist/judicials report sixty-two talk through with others on the job, while seventeen report nonuse. This management style focuses on organizational matters and has a very factual and orderly working relationship with colleagues. They establish a formal, impersonal style of relating to colleagues but not until they become well-acquainted with them. Those with this style also have a "need to belong" and readily join social organizations.
Compared with the other types, the visionary is least likely to talk through with others on the job (no = 12, yes = 27). They tend to communicate very little and prefer to assume understanding. They are reluctant to state the obvious for fear of embarrassment, fear of appearing to be naive, or sounding insulting. When they do communicate they tend to become technical and ideas are very involved and complex. Moreover, the visionary is the architect of the organization being happy to leave when implementation is completed. This characteristic does not help them establish solid, long-lasting relationships.

**Hypothesis 2**

Hypothesis 2 was rejected based on chi-square tests between management levels and two of the ten coping behaviors. A relationship was established between management levels and the coping behavior "engage in physical exercise" (see Table 3). All management levels report higher incidences of no physical exercise. The lower level reported the sharpest contrast with twenty-six "no's" and seven "yeses."
This may support the belief that exercise is not seen as a means of coping with stress, and more importantly, is more popular among higher levels of management. Middle managers report forty-six to thirty-nine in favor of nonuse while upper managers report twenty to seventeen in favor of nonuse (see Table 3). Health promotion professionals realize that health promotion programs including physical exercise are a white-collar phenomenon (Pechter, 1986; Jensen & Heitbrink, 1986).

With the coping behavior "work harder (take work home)" (see Table 4), a majority of the lower managers (no = 21, yes = 12) report they do not work harder to manage their stress while middle managers (no = 42, yes = 43) are split and upper managers (no = 6, yes = 31) overwhelmingly report they work harder to cope. These results may less describe a coping behavior than an indication that executives work harder to stay at the top than to get there (Ginsberg, 1974; Phillips, 1982). It may also indicate that upper managers perceive they have more stress to contend with, or that middle and especially lower managers do not need to work harder to handle their stress.
Hypothesis 3

The researcher failed to reject hypothesis 3 as discussed in Chapter four because of insufficient cases.

Hypothesis 4

Hypothesis 4 was rejected based on the chi-square test between four of the socio-demographic variables—sex, age, income level, education level—and four of the ten coping behaviors. As can be seen from Table 7, a majority of males and females do not choose to use exercise as a coping behavior (male: no = 50, yes = 22; female: no = 42, yes = 41). This result further supports the data as discussed in Hypothesis 2 where a majority of each management level favored nonuse of physical exercise as a coping behavior (see Table 3).

Both age categories as shown in Table 8 report a majority "talk through with spouse/significant other" as a coping behavior. Those in the younger category, 40 years old or younger, report a 76 percent positive
response while those 41 years old or older report a 58 percent positive response.

Table 15, a chi-square test for the difference between the socio-demographic variable age and the coping behavior "talk through with others on the job," may provide a better understanding of the difference in the response rates in Table 8.

**TABLE 15. Chi-Square Test of the Relationship between Age and the Use of the Coping Behavior "Talk through with Others on the Job"**

<table>
<thead>
<tr>
<th>Age</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 or below</td>
<td>18</td>
<td>70</td>
</tr>
<tr>
<td>40 or over</td>
<td>13</td>
<td>54</td>
</tr>
</tbody>
</table>

While the younger group reports an 80 percent positive response to "talk through with others on the job," the older group reports an equally high 81 percent positive response rate. The older age group appears to be more comfortable discussing stressful issues with colleagues than they are with their spouses. These data may indicate that the post-World War II generation has a different attitude about a
spouse's role in work-related issues. The discrepancy in the response rates may also be related to the expanding role of women in the work force among the younger generation.

All income levels report a majority use "compartmentalization of work and home life" (see Table 9) as a coping behavior with those earning $20,000 or less and those earning $31,000 to $40,000 reporting 75 percent and 85 percent positive response rates, respectively. These results are further reinforced in an examination of income levels and the coping behavior "work harder (take work home)" (see Table 16).

**TABLE 16. Chi-Square Test of the Relationship between Income Levels and the Use of the Coping Behavior "Work Harder (Take Work Home)"

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>$20,000 or less</td>
<td>11</td>
</tr>
<tr>
<td>$21,000 to $30,000</td>
<td>17</td>
</tr>
<tr>
<td>$31,000 to $40,000</td>
<td>26</td>
</tr>
<tr>
<td>$41,000 or more</td>
<td>15</td>
</tr>
</tbody>
</table>
In both the $20,000 or less and the $31,000 to $40,000 levels, a majority report they do not take work home as a coping behavior, which further supports their compartmentalization of work and home life.

For those in the $20,000 or less category, the mix of male and female further supports the use of compartmentalization of work and home life (see Table 17).

**TABLE 17. Chi-Square Test of the Relationship between Income Levels and Sex**

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Sex</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>$20,000 or less</td>
<td>16</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>$21,000 to $30,000</td>
<td>28</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>$31,000 to $40,000</td>
<td>18</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>$41,000 or more</td>
<td>9</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Eighty percent of those in the $20,000 or less income level are female. Over 50 percent of mothers with children under age six are working (Robey & Russell, 1984), and most working women continue to fulfill the traditional role of taking care of the
children and house after work (Nelson-Horchley, 1986; Price, 1984). Females are thereby forced to compartmentalize work and home life.

All education levels report a majority withdraw from the situation, temporarily as a coping behavior (see Table 10). An examination of related data such as the comparisons of education levels to sex, age, and other coping behaviors does not help reinforce nor does it reveal any significant information that would explain why this coping behavior is extensively used among the three education levels. These data may simply indicate that this coping behavior is popular among all levels.

Background variables

A relationship was established between the socio-demographic variable sex and the four management styles based on the MBTI (see Table 11). The traditionalist/judicials and the catalysts were evenly divided among the sexes with the traditionalist/judicials having forty-two females and thirty-seven males and the catalysts splitting seven apiece. The troubleshooter/negotiators had eighteen females and
five males, and the visionaries had ten females and twenty-nine males.

A relationship was also established between sex and management levels (see Table 12). The division was anticipated. Females are in the majority in lower management levels and in the minority among upper levels. At the lower management level, there are twenty-two females and eleven males; middle management has forty-one females and forty-four males; and upper management has nine females and twenty-eight males.

Table 13 reports the results of a chi-square test between the socio-demographic variable education level and management level. Again, the results were anticipated. Lower management is weighted toward high school and college educated personnel (high school = 13, college = 14). The high number of college graduates at this level may reflect a career starting position for many. Middle management has a large number of college educated personnel (48), an established criteria for many businesses in order to reach this level of management. And, as expected, upper management is weighted toward college and graduate/other levels (college = 17, graduate/other = 17).
As recorded in Table 14, a relationship was established between the socio-demographic variable income level and the four management styles based on the MBTI. The catalysts, traditionalist/judicials and the troubleshooter/negotiators all had the majority of their salaries in the mid-range, $20,000-$40,000. However, the visionaries had a clear majority in the $41,000 and above category (21 of 39 respondents).

Much of this imbalance was due to an expected large number of visionaries (9 of 21) in an engineering/architectural firm. Since individuals in this profession have high salary norms, it is expected that all levels of management have higher-than-normal salary ranges. Of the nine visionaries, eight reported salaries in excess of $41,000.

Conclusion

The goals of this study are to address the stated hypotheses, attempt to answer research questions, and accomplish the established objectives. The hypotheses were addressed in Chapter 4 with an explanation of those results detailed in the summary section of this
chapter. Below is an examination of the questions that were asked in Chapter 1.

1. Will any one management style clearly indicate an orientation toward one or more coping behaviors?

Based on the results of this study, the answer is no. It is clear that all four styles use a variety of coping behaviors. The average number of coping behaviors reported per individual is 6.47 with as few as three and as many as ten reported used by any single individual.

2. Will any one management level clearly indicate an orientation toward one or more coping behaviors?

Again, based on the results of this study the answer is no. All four levels use a variety of coping behaviors. Lower managers average 6.15 coping behaviors, middle managers average 6.58 and upper managers average 6.49.

3. Can knowledge of an individual's management style and/or level help predict an individual's coping
behaviors? 4. Can knowledge of an individual's coping behaviors help predict an individual's management style and/or level?

The answer to both of these questions based on this study is no. The statistical evidence is not strong enough in any of the relationships to suggest either of these contentions.

To further support these conclusions, analyses of variance were completed between the ten coping behaviors and the four management styles, and between the ten coping behaviors and the three management levels (see Tables 18 and 19).

**TABLE 18. An Analysis of Variance between the Ten Coping Behaviors and the Four Management Styles**

<table>
<thead>
<tr>
<th>Source</th>
<th>D.F.</th>
<th>Mean squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>3</td>
<td>1.807</td>
<td>.530</td>
<td>.663</td>
</tr>
<tr>
<td>Within</td>
<td>151</td>
<td>3.412</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


TABLE 19. An Analysis of Variance between the Ten Coping Behaviors and the Three Management Levels

<table>
<thead>
<tr>
<th>Source</th>
<th>D.F.</th>
<th>Mean squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>2</td>
<td>2.943</td>
<td>.869</td>
<td>.421</td>
</tr>
<tr>
<td>Within</td>
<td>152</td>
<td>3.390</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Although neither analysis shows a significant difference (p<.05), the means of each of the groups as shown in Tables 20 and 21 provide further support that neither one management style nor one management level indicates an orientation toward one or more coping behaviors.

TABLE 20. Means and Standard Deviations for an Analysis of Variance between Coping Behaviors and Management Styles

<table>
<thead>
<tr>
<th>Group</th>
<th>Count</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalyst</td>
<td>14</td>
<td>5.929</td>
<td>2.093</td>
</tr>
<tr>
<td>Traditional</td>
<td>79</td>
<td>6.506</td>
<td>1.686</td>
</tr>
<tr>
<td>Troubleshooter</td>
<td>23</td>
<td>6.696</td>
<td>1.608</td>
</tr>
<tr>
<td>Visionary</td>
<td>39</td>
<td>6.436</td>
<td>2.174</td>
</tr>
<tr>
<td>Total</td>
<td>155</td>
<td>6.465</td>
<td>1.839</td>
</tr>
</tbody>
</table>
TABLE 21. Means and Standard Deviations for an Analysis of Variance between Coping Behaviors and Management Levels

<table>
<thead>
<tr>
<th>Group</th>
<th>Count</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower</td>
<td>33</td>
<td>6.091</td>
<td>1.757</td>
</tr>
<tr>
<td>Middle</td>
<td>85</td>
<td>6.577</td>
<td>1.841</td>
</tr>
<tr>
<td>Upper</td>
<td>37</td>
<td>6.541</td>
<td>1.910</td>
</tr>
<tr>
<td>Total</td>
<td>155</td>
<td>6.465</td>
<td>1.839</td>
</tr>
</tbody>
</table>

The means of each of the groups and the total means of both analyses indicate an average use of approximately six coping behaviors per participant.

The final task is to determine whether or not the stated objectives were accomplished. The researcher will restate and discuss the objectives in the order they appeared in Chapter 1.

Provide exploratory research in the area of management levels, management styles, and coping behaviors. Since it has been established that there is little known research pertaining to the relationship among management styles, management levels and coping behaviors, this study is not only a part of exploratory research but also provides a basis for further studies.
Some questions have been answered through the interpretation of the results, but others have been raised that need to be addressed. For example, what would be the results if other instruments were used? Would the same patterns emerge? Are there coping behaviors that are viewed as more for managers than for other employees? Are those coping behaviors used by top executives? If so, why are they used? Do the use of certain coping behaviors indicate a certain level of career success? These questions and more have been raised through this study. An attempt to answer them will take researchers in new directions.

Contribute to the existing body of knowledge. There are numerous ways that this study contributed to the existing body of knowledge. By statistically testing the established hypotheses, new information about coping behaviors was revealed. For example, relationships were shown to exist between management styles and the coping behaviors "work harder (take work home)" and "talk through with others on the job." A relationship was also shown to exist between management levels and the coping behaviors "engage in physical exercise" and "work harder (take work home)." Others
include relationships between sex and "engage in physical exercise," and between income level and "compartmentalization of work and home life."

The use of the instruments (MBTI, CBI) to determine the hypothesized relationships helped establish their utilization for similar studies. The questions that were raised as a result of testing the hypotheses will form foundations for future research.

Provide information to the business community about coping behaviors among corporate managers. The idea of providing the business community with guidelines or patterns of coping behaviors that would aid in hiring, training, and promoting of personnel did not materialize. However, other valuable information was reported that was not expected. For example, it is valuable to know that a wide variety of coping behaviors are used by managers to manage stress. These results help to suggest content for corporate stress management programs. The relationship shown between management levels and the coping behaviors "work harder (take work home)" and "engage in physical exercise" may also be of value in suggesting content for a stress management program.
The results of studies that pertain to communications would aid in the understanding of and programming for interpersonal communications in the office. For example, the studies previously discussed that included the coping behaviors-"talk through with others on the job" and "talk through with spouse/significant other" could help the training department set program content and foster a better understanding of the intimate relationships established at the worksite.

The results also showed that top managers are more likely to work harder and longer. They are therefore more likely to experience more self-induced stress. Finally, the study showed that exercise is not utilized as a coping behavior.

Provide information to noncorporate structures and educational organizations. Some of the information in the study may be inferred to noncorporate structures but only in a very general sense. For example, the fact that a variety of techniques were used by each person surveyed can be applied to the general population. The information pertaining to exercise can universally be accepted. Also, the socio-demographic
recommendations

Based on the review of literature, it appears this study initiates research in the use of coping behaviors among corporate managers when examining their management styles and management levels. Although the sample size may compromise the strength of the results, the study begins to satisfy the need for research in the area of coping behaviors. Research into the nature and cause of stress is important, but studies on coping behaviors is disproportionately lacking.

The researcher would like to see this study replicated or have future research to amplify and support this study. Further studies into the relationships of coping behaviors and management styles, and coping behaviors and management levels using different approaches could prove valuable. Future research could alter the approach by increasing the sample size, using or developing other surveys, and/or changing the emphasis of the study by focusing on either management styles or management levels.
Research to establish a profile of a successful executive's coping behaviors is another area for future study. Businesses could use the profile to help select and promote executives. It would also be useful for programming stress management seminars. Naturally, this type of study would present its own set of problems such as how to define or determine the characteristics of a successful executive.

More research can be directed toward the use of effective and ineffective coping behaviors. A better functional definition of the terms can be sought through more research. A distinction could also be established between what is perceived as effective or ineffective and what can be shown statistically to be effective or ineffective. In addition, the studies could establish the relationship between effective and ineffective coping behaviors and positive and negative coping behaviors.

In future research, the demographic information could be expanded. For example, in the examination of the use/nonuse of compartmentalization of work and home life, and work harder (take work home), demographic information pertaining to children may have been
helpful. Other helpful information may be average number of hours worked in a week and marital status.

This study has provided a better understanding of coping behaviors among corporate managers and how the variables of management styles and management levels relate to the use of coping behaviors. It has also begun to define the limitations of a study of this nature and the possibilities for future studies. This research, although exploratory, has added to the existing body of knowledge and provides corporations with information about their management personnel. The challenge remains to utilize the results of this study to better understand the hypothesized relationships and to establish a basis for further questioning and research.
REFERENCES


ACKNOWLEDGMENTS

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Very special thank yous go to William M. Kizer, Chairman of the Board of Central States Health & Life Co. of Omaha, and to Fred Schott, Vice President of Human Resources, whose moral as well as material support made this manuscript possible.

Dr. Richard D. Warren deserves special recognition for his guidance, support, and patience throughout the years of my program. His expertise has been invaluable to me.

Through the six years of my program, Dr. Larry Ebbers has been a constant supporter, a friend, and a
trusted colleague. His dedication and commitment have been an inspiration and motivation in my achievements.

I would also like to thank Sandy Wendel for her fingers, her mind, and her encouragement. Without her assistance, I would still be inputting this manuscript into the computer.

I want to thank my parents who told me I could achieve anything I set my mind to do—especially after my high school guidance counselor said I was not college material.

Finally, I would like to thank my wife, Sheryl, who encouraged and supported me during the past years. Her love and devotion are unequaled, and her dedication unquestioned.
APPENDIX A -- COPING BEHAVIOR INVENTORY
PLEASE NOTE:

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

These consist of pages:

P. 112-115
P. 117-135
P. 142-143 Coping Behavior Inventory (CPI)
P. 148-151 Coping Behavior Inventory (CPI)

University Microfilms International
300 N Zeeb Rd., Ann Arbor, MI 48106 (313) 761-4700
APPENDIX B -- MYERS-BRIGGS TYPOLOGY
I am presently in the dissertation phase of earning my Ph.D. at Iowa State University. I expect to bring this five year effort to a conclusion this Fall. I am writing to request your organization's help in this process.

I would like some of your management personnel to participate in the study. The study will seek to show if there is a relationship between management styles and stress coping behaviors. Participation will require each individual to complete two questionnaires which will take approximately 30 minutes. A description of each instrument (Myers-Briggs Type Indicator and Coping Behavior Inventory) along with the studies' objectives are enclosed for your convenience.

My intention is to have the survey completed by September 1. After a period of scoring and analysis, I will share the results with each participating company.

Both my distinguished doctoral committee and I feel this exploratory research is necessary for a better understanding of corporate stress and individual coping techniques. I trust you will feel the same and join in this effort.

I will be in contact with you within the next few weeks. I look forward to visiting with you about this endeavor.

Best regards in health.

Harold S. Kahler, Jr.
The author identified four significant objectives to this study, the first being to provide exploratory research in the area of management levels, management styles, and effective coping behaviors. In the process of showing relationships among these variables new channels and directions for further research will be made available. Research advancement in the field of stress management will be made possible only through further studies of new and exciting arenas of knowledge. Pioneering research will continue to promote understanding of a very complicated concept.

Another objective will be to contribute to the existing body of knowledge. Whether by addition or through the process of deduction, a significant contribution will be shared with the research community.

A third objective will be to provide information to the business community. The results of the study used in a practical non-research environment will help promote a better understanding of stress management among corporate personnel. Depending on the outcome of the data, hiring, training, promoting and other programming activities may be affected.

The final objective is to provide information to other non-corporate and educational organizations that possess a similar bureaucratic structure. To assume that it is safe to infer the results of the study to non-corporate structures or even to different corporate structures is dubious at this point. However, the results can certainly provide valuable information for personnel of like structures who are conscious of the data's limitations.
Myers-Briggs Type Indicator (MBTI) 139

Development

The MBTI is a self-report questionnaire developed by Isabel Myers during the 1940's to measure the variables in Carl Jung's theory of psychological types. Jung, theorizing that human behavior consists of orderly and consistent patterns based on differences in mental functioning, claimed that everyone uses four basic mental functions (sensing, intuition, thinking, and feeling), and everyone has a basic orientation to life (extraversion or introversion). Isabel Myers added two more preferences (judging and perceiving) to fully develop a dimension of Jung's theory which had only been implied in his work.

The typology consists of four scales: Extraversion-Introversion (E-I), Sensation-Intuition (S-N), Thinking-Feeling (T-F), and Judgement-Perception (J-P). The underlying assumption is that every person has a natural preference for one or the other pole on each of the four scales. Individuals differ in the degree of development of these functions and orientation, and in the order in which they prefer to use these functions.

The E-I scale was developed to measure preferred orientation to life. Extraverted types (E) are oriented primarily to the outer world and have a tendency to get caught up in whatever is happening around them. They prefer action and social contacts and rely on the environment for stimulation and guidance. Extraverts would prefer activities involving teamwork, quick action and communication. Introverted types (I) are more inward oriented and tend to divorce themselves from the outer world. They tend to be contemplatively detached, desire private time, and are, at times oblivious to the surrounding
environment. Introverted activities would require sustained attention and may not involve others.

The S-N scale was developed to measure a preferred way of perceiving things. Sensing types (S) emphasize perceptions received through their sense organs. They also pay attention to details and practical aspects of situations. Sensors rely on experience, choose conventional ways of doing things and are systematic in perceiving and learning. Intuitive types (N) view things more vaguely and deal with abstractions, inferred meanings, and hidden possibilities in a situation. They show great insight into complex situations, enjoy symbolism and theory, and often see novel future possibilities.

The T-F scale was developed to measure the preferred way of making decisions. Thinking types (T) put order into situations by using logical structures. They are adept at organizing material, weighing facts, and objectively judging truths and non-truths. Thinkers are analytical, concerned with fairness and find satisfaction with technical activities rather than interpersonal relations. Feeling types (F) are skilled at understanding people's feelings and base judgements on personal values. They have a strong need for affiliation, are warm and empathetic, and prefer activities involving interpersonal skills.

The J-P scale was developed to measure a preferred way of dealing with the outer world. Judging types (J) aim at regulating and controlling life, are systematic and organized. They appear to be dependable, decisive and responsible. Perceptive types (P) are more curious and open-minded. They go through
life in a more spontaneous way aiming to understand life and adapt to it. Perceivers are curious, receptive and flexible.

Scoring

The questions are arranged in force-choice form to determine habitual choices between opposites. The indicator yields two types of scores for each person. It classifies people on four dichotomous type categories, and also produces eight numerical scores that can be transformed into four continuous scores. Therefore, MBTI scores can be considered as either dichotomous or continuous data.

Reliability

Various procedures have been used to measure the internal consistency of the MBTI. Although Myers (1962) recommends estimating split half reliabilities by calculating tetrachoric correlation coefficients and applying the Spearman-Brown prophecy formula, Carlyn (1977) feels this approach yields higher reliabilities than actually exist. Therefore, she contends that the actual type category reliabilities lie between estimates derived from phi coefficients and the tetrachoric correlation. The ranges for the two methods are listed below.

<table>
<thead>
<tr>
<th></th>
<th>Phi</th>
<th>Tetrachoric</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-I</td>
<td>.55-.65</td>
<td>.70-.81</td>
</tr>
<tr>
<td>S-N</td>
<td>.64-.73</td>
<td>.82-.92</td>
</tr>
<tr>
<td>T-F</td>
<td>.43-.75</td>
<td>.66-.90</td>
</tr>
<tr>
<td>J-P</td>
<td>.58-.84</td>
<td>.76-.84</td>
</tr>
</tbody>
</table>

Methods to estimate the reliability of continuous scores include the split-half procedure involving the Pearson product-moment and Cronbach's Coefficient Alpha.
DIRECTIONS:

There are no “right” or “wrong” answers to these questions. Your answers will help show how you like to look at things and how you like to go about deciding things. Knowing your own preferences and learning about other people’s can help you understand where your special strengths are, what kinds of work you might enjoy and be successful doing, and how people with different preferences can relate to each other and be valuable to society.

Read each question carefully and mark your answer on the separate answer sheet. Make no marks on the question booklet. Do not think too long about any question. If you cannot decide on a question, skip it but be careful that the next space you mark on the answer sheet has the same number as the question you are then answering.

Read the directions on your answer sheet, fill in your name and any other facts asked for, and work through until you have answered all the questions.
I would like to take this opportunity to thank you for participating in this study. Your input will be valuable to the advancement of the study of stress management.

The three instruments to be completed are:

1. General Information
2. Coping Behavior Inventory (CBI)
3. Myers-Briggs Type Indicator (MBTI)

The answers for the General Information and the Coping Behaviors Inventory are to be written directly on the question sheets. The answers for the Myers-Briggs Type Indicator are to be filled-in on the computerized answer form. (Please fill out all information on this form.) When you are finished, please put all forms inside the Myers-Briggs question booklet and return the booklet to Jim Reinhardt.

I ask that all questions be answered as honestly as possible. All information from this study will remain confidential.

Thank you for your cooperation.

Sincerely,

Harold S. Kahler, Jr.
1. Sex: Female ___ Male ___

2. Age: 30 or below ___ 31-40 ___ 41-50 ___ 51 or over ___

3. Number of years with the company: 0-5 ___ 6-10 ___ 11-15 ___ 16 or more ___

4. Education: (highest achieved) high school ___ college ___
   graduate school ___ other ___

5. Income level: $12,000 or less ___ $13,000 to $20,000 ___
   $21,000 to $30,000 ___ $31,000 to $40,000 ___
   $41,000 or more ___

6. Management level: lower ___ middle ___ upper ___
APPENDIX E -- FINAL CORRESPONDENCE
February, 1986

Dear Participant:

I want to take this opportunity to thank you for participating in my doctoral study. I also want to apologize for taking so long to get your results returned. I trust this did not cause you any great inconvenience.

Your Myers-Briggs personality type appears below. Enclosed you will find an explanation of that type. If you have any questions, please feel free to contact me.

Best regards in health,

Harold S. Kahler, Jr.
Executive Director

encl.

Score ________