A COMPARISON OF SELECTED HEALTH BEHAVIORS OF

KANSAS' STUDENTS ENROLLED IN

GRADES K-12

Ву

DARREL ALLEN LANG

Bachelor of Science Upper Iowa University Fayette, Iowa 1970

Master of Science University of Wisconsin-LaCrosse LaCrosse, Wisconsin 1980

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
DOCTOR OF EDUCATION
July, 1985

Thesis 1985D L269c Cop.2

,



A COMPARISON OF SELECTED HEALTH

BEHAVIORS OF KANSAS' STUDENTS

ENROLLED IN GRADES K-12

Thesis Approved:

Sty Abereran he
Thesis Advisor

Detty M. Edgley

Mornes Magers

Doman D. Wurham

Dean of the Graduate School

PREFACE

A study investigated and compared selected health behaviors of Kansas' students enrolled in grades K-12. Over 18,500 students enrolled in Kansas public schools were investigated for this study. The study examined six selected health behaviors: stress management, nutrition, alcohol, smoking, safety, and physical activity.

I wish to express my sincere gratitude to all the people who assisted me in this work and during my state at Oklahoma State University. In particular, I am especially indebted to my major adviser, Dr. Betty Abercrombie, for her intelligent guidance, concern, and invaluable help. I am also thankful to the other committee members, Dr. Betty Edgley, Dr. Jim Rogers, and Dr. Robert Kamm, for their advisement in the course of this work.

Special thanks are due to the school districts of Kansas that participated in the study. My wife, LaDell, deserves my deepest appreciation for her constant support, moral encouragement, and understanding. She is my DEAR HEART!

TABLE OF CONTENTS

Chapter			
I.	INTRODUCTION	1	
	Need for the Study	4 5 5 6 6	
II.	REVIEW OF RELATED LITERATURE	9	
	Introduction National Health Objectives Health Behavior Stress Management Nutrition Alcohol Safety Smoking. Physical Activity.	9 9 10 12 14 15 17 19 21	
III.	METHODOLOGY	24	
	Instrumentation. Selection of Subjects. Research Design. Validity Concerns. Selection of Tests. Summary.	24 25 26 27 27 27	
IV.	RESULTS AND DISCUSSION	29	
	Stress Management. Nutrition. Alcohol. Safety. Smoking. Physical Activity. Findings	31 34 35 39 42 47 50	
V.	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	57	
	Conclusions	58	

Chapter	Page
Recommendations	59
REFERENCES	61
APPENDIXES	69
APPENDIX A - KANSAS STATE BOARD OF EDUCATION DISTRICTS	70
APPENDIX B - LETTER TO SUPERINTENDENTS	72
APPENDIX C - RESULTS FOR COMPARISON OF HEALTH BEHAVIORS	75
APPENDIX D - INVENTORY RATING SCALE	122
APPENDIX E - INVENTORY EVALUATION RESULTS	124

LIST OF TABLES

Table		Page
I.	Stress Management Statements	30
II.	Grades K-3 and 4-6 Chi-Square Stress Management	32
III.	Analysis of Variance Table - Grades 7-8 and 9-12 Stress Management	33
IV.	Nutrition Statements	34
V.	Grades K-3 and 4-6 Chi-Square Nutrition	36
VI.	Analysis of Variance Table - Grades 7-8 and 9-12 Nutrition	37
VII.	Alcohol Statements	37
VIII.	Grades K-3 and 4-6 Chi-Square Alcohol	38
IX.	Analysis of Variance Table - Grades 7-8 and 9-12 Alcohol	39
Х.	Safety Statements	40
XI.	Grades K-3 and 4-6 Chi-Square Safety	42
XII.	Analysis of Variance Table - Grades 7-8 and 9-12 Safety.	43
XIII.	Smoking Statements	44
XIV.	Grades K-3 and 4-6 Chi-Square Smoking	45
XV.	Analysis of Variance Table - Grades 7-8 and 9-12 Smoking	46
XVI.	Physical Activity Statements	47
XVII.	Grades K-3 and 4-6 Chi-Square Physical Activity	49
XVIII.	Analysis of Variance Table - Grades 7-8 and 9-12 Physical Activity	50

CHAPTER I

INTRODUCTION

At the turn of the 20th Century, the leading causes of death in the United States were influenza, pneumonia, diptheria, tuberculosis, and gastrointestinal infections. In 1900, the death rate from these major acute diseases was 580 for every 100,000 people. Today, only 30 people per 100,000 die each year from these conditions (Healthy People, 1979). Lifestyle diseases have now replaced infectious diseases as the leading causes of death. Currently, the top killers of Americans are heart disease, cancer, and stroke (Healthy People, 1979).

These leading causes of death have been associated with negative habits, including inadequate nutrition, severe stress, accidents, sedentary lifestyles, and cigarette smoking. Lifestyles which people choose to lead have been positively correlated with the personal health problems leading to premature death (Prevention Medicine, 1976).

Data accumulated over the last 100 years have shown a shift in disease patterns from infectious to stress-related disease processes (Germeroth, 1978). Researchers have established a specific relationship between stress arousal and dysfunction of various body systems (Benswanger, 1977). In a 1979 presentation, Chen (1979) stated that further investigations have shown that a relationship exists between physiological reaction to stress arousal and dysfunction of various

organ systems. The increase in stress arousal causes changes in the organ systems, usually in the form of hyperactivity of the body's autonomic and endocrine system which could contribute to the development of cardiovascular disease and other degenerative diseases.

In addition to stress arousal, anxiety can be a contributing factor in one's physical and emotional deterioration. Individuals experience anxiety differently. Described as fear, discomfort, uneasiness, guilt, apprehension, or remorse, anxiety is produced by real or unreal situations. Anxiety can lead to physical discomfort caused by muscular tension, gastrointestinal distress, headache, or excessive perspiration.

Stress and anxiety are potential difficulties for children (Curtis and Detert, 1981). Some of the factors contributing to stress and anxiety are physical maturation, peer pressure, social acceptability and low self-esteem. In addition to these, there may be unusual pressures such as death of a parent, severed relation—ships, academic failure, and psychological or physiological abnormalities.

The relationship between poor nutrition and disease has become increasingly clear in recent years (Bronfen, 1980). The nutrition problem is a combination of overconsumption and undernutrition — or eating too much of the wrong kinds of food. Bronfen (1980) stated that Americans eat too much fat, sugar, and refined foods that deplete the potential for health. Furthermore, the Senate Select Committee on Nutrition and Human Needs identified poor nutrition as a predisposing risk factor in cardiovascular disease, hypertension,

atherosclerosis, gall bladder disease, and uterine and female kidney cancer (Bronfen, 1980).

The Surgeon General (Healthy People, 1979) has shown that cigarette smoking is recognized as one of the significant risk factors in the leading causes of death. Smokers present a risk of death from coronary artery disease which is 70% greater than for nonsmokers (Carrol, Miller and Nash, 1976; Healthy People, 1979; Knowles, 1977). The Surgeon General in Healthy People (1979) stated that cigarette smoking is clearly the single most preventable cause of illness and premature death in the United States.

Physical activity may be a positive influence in preventing specific health problems. Farquhar (1978) suggested that exercise lowers plasma cholesterol and blood pressure levels, producing potential benefits in cardiovascular disease prevention. Ardell, in his book, High Level Wellness: An Alternative to Doctors, Drugs, and Disease (1979) stated that those who take an active interest in keeping fit usually display an abundance of wellness characteristics including: an increased ability to manage stress, greater self-confidence, better eating habits, and fewer risk-behaviors.

Traditionally, the medical care system has been concerned primarily with detection and treatment of disease. As a nation, people have demonstrated the same disease-oriented philosophy. In the United States, close to \$300 billion is spent annually for health care (Ardell and Tager, 1981; Healthy People, 1979). Unfortunately, most of the dollars are spent on disease and disability. Priorities must be redirected from a disease orientation to one of prevention and health promotion (Mahler, 1983b; Healthy People, 1979; Promoting Health, 1980; Ford, 1981; Brennan, 1981; and Eckholm, 1981).

In order to meet these priorities, assessments of health behaviors and attitudes of children were needed. From these assessments, effective health promotion programs can be properly prepared. The Surgeon General's Goals of 1990 (Prospects For A Healthier America, 1984) for children and adolescents are to significantly reduce accidents and injuries; reduce alcohol and drug misuse; and be concerned about proper growth and development through proper nutrition, physical exercise, and management of stress.

Need For The Study

The failure of modern medicine is not to blame for the nation's health care problems, but rather the fact that most individuals either ignore preventive health measures or are unwilling to make the specific effort to change the long established habits of an unhealthy lifestyle. This attitude, coupled with negative health behaviors, begin early in life. The U.S. Government's Center For Disease Control reports that over half of the deaths of people between the ages of 1 and 65 are directly related to lifestyle considerations, such as; poor diet, lack of physical exercise, accidents, excessive smoking and drinking, and inability to manage stress (CDC, 1979). From the time a person enters school, instruction concerning prevention of damaging lifestyles is necessary in order to reduce lifestyle deaths. Little or no study of health behaviors or attitudes has been conducted in Kansas. Research of this age population is necessary to determine the extent of negative health behaviors and attitudes. Results of such a study will aid greatly in the development of effective prevention interventions.

Statement of the Problem

The purpose of this study was to investigate and compare the selected health behaviors of students enrolled in Kansas' public schools, grades K-12. Specifically, the study examined the health behavior of Kansas' students as it relates to six areas: stress management, nutrition, alcohol, smoking, safety and physical fitness.

Delimitations

- (1) This study is limited to subjects who were randomly selected from the K-12 grade population of students enrolled in Kansas' public schools.
- (2) The sample involved only public school students enrolled from September 1, 1983 through September 30, 1983 in Kansas' public schools.
 - (3) The method of data collection was by self-support.
- (4) This study focused only on the student's present behaviors as it relates to: stress management, nutrition, alcohol, smoking, safety and physical activity.

Limitations

(1) No account was made for academic and socio-economic backgrounds of the population.

Assumptions

- (1) The obtained data was dependent on a subject's willingness to give honest responses to the statements in the inventory.
- (2) It was assumed that their health behavior paralled their responses.

Hypotheses

The following statistical hypotheses were tested at the .05 level.

- (1) There are no significant differences in stress management behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.
- (2) There are no significant differences in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.
- (3) There are no significant differences in alcohol behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.
- (4) There are no significant differences in smoking behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.
- (5) There are no significant differences in safety behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.
- (6) There are no significant differences in physical activity between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.

- (7) There are no significant differences in stress management behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.
- (8) There are no significant differences in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.
- (9) There are no significant differences in alcohol behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.
- (10) There are no significant differences in smoking behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.
- (11) There are no significant differences in safety behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.
- (12) There are no significant differences in physical activity behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.
- (13) There are no significant differences in stress management behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.
- (14) There are no significant differences in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.
- (15) There are no significant differences in alcohol behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.

- (16) There are no significant differences in smoking behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.
- (17) There are no significant differences in safety behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.
- (18) There are no significant differences in physical activity behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.
- (19) There are no significant differences in stress management behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.
- (20) There are no significant differences in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.
- (21) There are no significant differences in alcohol behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.
- (22) There are no significant differences in smoking behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.
- (23) There are no significant differences in safety behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.
- (24) There are no significant differences in physical activity between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.

Chapter II

REVIEW OF RELATED LITERATURE

Introduction

A review of the related literature revealed a lack of information pertaining to the prevalence of health behaviors of Kansas' students enrolled in public schools, grades K-12.

Review of the literature pertaining to this study is presented in the following sections:

- 1) National Health Objectives
- 2) Health Behavior
- 3) Stress Management
- 4) Nutrition
- 5) Alcohol
- 6) Safety
- 7) Smoking
- 8) Physical Activity

National Health Objectives

The Surgeon General in <u>Healthy People</u> (1979) set forth a set of major goals for improving the health of Americans. The goals were categorized for five various populations, including children and adolescents. <u>Prospects For A Healthier America</u> (1984) identified the health goals of children and adolescents to be achieved by 1990. Kolbe and Gilbert (1984) stated that the 1990 goal of reducing deaths of children and adolescents by 20% could be achieved through identifying growth and development problems, reducing accidents and

injuries, reducing fatal motor vehicle accidents, and reducing alcohol and drug misuse.

In order to achieve these goals, <u>Healthy People</u> (1979) delineated 15 health problem areas of the Nation. The fifteen priority areas were:

Preventative Health Services

- 1) High Blood Pressure Control
- 2) Family Planning
- 3) Pregnancy and Infant Health
- 4) Immunization
- 5) Sexually Transmitted Diseases

Health Protection

- 6) Toxic Agent Control
- 7) Occupational Safety and Health
- 8) Accident Prevention and Injury Control
- 9) Flouridation and Dental Health
- 10) Surveillance and Control of Infectious Diseases Health Promotion
 - 11) Smoking and Health
 - 12) Misuse of Alcohol and Drugs
 - 13) Nutrition
 - 14) Physical Fitness and Exercise
 - 15) Control of Stress and Violent Behavior (p. 59)

The significance of behavioral risks to the health of our population is evident (Iverson and Kolbe, 1983). In order to achieve these objectives, prevalence studies need to be conducted in all states to determine the extent of the specific health problems in each state.

Health Behavior

Today's health problems are related, in part, to personal choices of the individual. Such choices as smoking, drinking, eating, exercising, reducing stress and appropriate use of prescribed medications are major factors in determining health outcome (Healthy People, 1979).

The health of children and adolescents has made dramatic changes since the 18th century. In the 18th century, the major causes of death for children and adolescents was infectious diseases. Since the early 1900's, there has been a change in deaths from infectious diseases to lifestyle diseases (McKeown, 1978).

Knowles (1977) stated that the health of human beings is determined by their behavior, their food, and the nature of their environment. Health behaviors begin from childbirth. Children often adopt similar health behaviors from their parents or significant others (Nolte, 1983). The behaviors developed at an early age carry over into adult life. Papenfuss (1984) stated that 56.3% of all deaths in the United States are related to lifestyle. Knowles (1977) stated that major health problems could be positively altered with modification of an individual's behavior and lifestyle.

Breslow and Beloc (1972) in a five and one-half year study showed that life expectancy and health could be significantly improved through following the seven basic health habits:

- 1) Three meals a day at regular times and no snacking
- 2) Breakfast every day
- 3) Moderate exercise two or three times a week
- 4) Adequate sleep (7 or 8 hours a night)
- 5) No smoking
- 6) Moderate weight
- 7) No alcohol or only in moderation (p. 411)

Studies by Williamson (1978) and Beier (1984) have shown that students who make selected health behavior changes show decreased risk factors concerning death and disability. Blair, (1984)

further showed that students who adopt healthy behaviors showed a strong movement toward a more positive well-being.

Many complex factors affect a person's health and health awareness, but it is widely recognized that attitudes toward health and behavior patterns affecting health are established early in life. Evaluation of specific health attitudes and behaviors early in life allows the education system the opportunity to be a significant and positive influence in the development of positive health attitudes and behaviors.

Stress Management

Epidemiological data for western countries show that disease patterns have shifted remarkably over the past century and a half; in essence a change from communicable diseases to stress related and degenerative diseases (Germeroth, p. 36).

Many of today's school children are experiencing all forms of stress. Young people today are faced with a greater variety of perceived pressures and anxiety-producing problems than previous generations. According to Matthews (1983), peer pressure, school pressure, changes in traditional nuclear family, even the changing economic structure and the overwhelming technology of our society all combine to induce stress situations in young people.

Society has changed at an alarming rate in the past twenty years, which has brought about a variety of problems for children. The traditional nuclear family is no longer the norm since the number of working mothers has risen. No longer is there a parent or supervisor at home when the child leaves for school. Children today lack support.

Families are more mobile and spread out. Often children must adjust to a divorce, possibly second or third marriage, as the divorce rate rises

to 50 percent. Reed (1984) stated that sixty percent of all children will live in a single-parent home before they reach the age of 18. Children, like adults, internalize stressors and have difficulty managing stress (Curtis and Detert, 1983). The failure of management of this stress often results in ulcers, hypertension, nervous twitches, headaches, insomnia, cardiac problems, fatigue, and premature aging (Engelhardt, 1975). If these conditions are not dealt with, they can and often lead to early death (Germeroth, 1978).

Due to the lack of knowledge and skill in stress management, approximately two million school age children in the United States are taking amphetamines to counteract the effects of stress and tension in their lives (Engelhardt, 1975). The stressful student is observed biting nails, stuttering, 'clutching' on exams, having poor concentration and short attention span, frequent illness, and abusing substances that are not conducive to personal health. The lifestyle of the student has a definite effect on their ability to cope in the world. The physical abuses extended upon their bodies often leads to stress and its implications. The uptight student abuses everything from aspirin to alcohol. The eating of highly sugared "junk" food leads to hyperactivity, only compounding the stress (Gaudry and Spielberger, 1971). This inability to manage stress causes the student to revert to behaviors learned earlier that seemed to help them deal with the stress.

The stress response brings about the "fight or flight" mechanism. This condition brings about tension and/or anxiety. If a child is faced with this problem, the various systems of the body react, causing high internal activity and usually accompanied by generalized muscle tension (Thoresen and Eagleston, 1983). Benson

(1975) described this muscular tension—anxiety relationship quite clearly by saying, that if a child lets this tension further develop into a fear of failure, this fear can become psycho—physiologically stressful. Constant tension and stress contribute to anxiety in individuals. Students who experience these stressors have great difficulty in the educational process, because they are unmindful of details, unsure of themselves and tend to be less satisfied with life (Englehardt, 1975).

Nutrition

Five of the ten leading causes of death are diet-related (Ardell, 1979). The relationship between poor nutrition and disease has become increasingly clear in recent years. The major nutrition problem in the United States is a combination of overconsumption and undernutrition (Bronfen, 1980).

Young children do not have the knowledge to choose the proper foods everyday. Parents serve as role models and instructors of nutrition. The child is at risk from birth through adulthood if the parents do not understand nutritional requirements.

Fast food dining has become a part of our culture and eating patterns. Many people consider the items served at fast food restaurants 'junk food', empty of all nutritional value. However, this may not be the case. Hot dogs and hamburgers are not only the favorite of millions of children, but they also serve as good sources of protein and other necessary nutrients. Behrstick (1981) stated that the major problem with fast foods are caloric intake, salt, and saturated fat content. Moderation is the key. Children who select lower-fat hamburgers, reduce the frequency of french fries, and add a

salad won't be harmed by occasional visits to fast food restaurants (Behrstick, 1981).

Children learn about nutrition from many sources. Parents and teachers supply many of the nutrition behaviors which students copy. Effective educational programs on nutrition have been shown to be successful in aiding students in making lifelong nutritional advances (Beier, 1984).

Winick (1980) stated that the early environment, including early nutritional practices, can cause changes in normal growth and development which persists throughout life. For example, the caloric intake during the early growing period, while cells in various organs are still dividing, can alter the rate of cell division. This can result in an organ with fewer or greater than the expected number of cells. Severe undernutrition may result in retarded cell division in the brain, and subsequently, in a brain with a reduced number of cells.

Overnutrition, especially excess caloric intake, may result in accelerated cell division in adipose tissue and in a permanently hypercellular adipose depot (Larson-Brown, 1983). Recent studies of obesity have suggested that it is an extremely complex symptom with a number of causes (Robin, 1979). Brownell and Stunkard (1980) stated that obesity in childhood is frequently associated with adulthood obesity. A study by Hartz and Rimm (1980) found that the more overweight a woman was in her fifties, the earlier her obesity had developed.

Alcohol

Alcohol is a drug. Like a sedative, it is a central nervous system depressant. Although it has a tranquilizing effect on most

people, alcohol appears to stimlulate others. In large doses, alcohol can dull sensations and impair muscular coordination, memory, and judgement. In a study by the National Institute on Drug Abuse and Alcoholism (1982), over half of the children at the fifth and sixth grade levels had tried alcoholic beverages.

Many factors are involved with youth using and abusing alcohol. A study by Samuels (1974) stated the 91.1 percent of all alcohol or substance abusers attribtued boredom and curiosity as the major reasons for getting started. Another major factor was low self- esteem. 75.5 percent of the students listed poor self-esteem as a reason for using alcohol. Other factors that lead to the use and abuse of alcohol are: inability to handle stressful situations; lack of meaningful experiences; and lack of significant others (Garfoot, 1980).

The National Institute on Drug Abuse and Alcoholism (1983) found alcohol use among children to be related to:

- -Perception that their friends drink and expect them to drink too;
- -Involvement in delinquent acts; such as, lying, cheating, stealing;
- -Accessibility to alcohol in social settings where unsupervised drinking can take place;
 - -Low levels of self-esteem;
 - -Belief that drinking is a sign of adulthood;
- -Perception that experimental involvement with alcohol is a normal part of development;
- -Parents' drinking practices and perception that parents approve of youthful drinking;
 - -Lower expectation of academic achievement;
 - -Rebellion

The leading cause of death and injuries for young Americans is alcohol-related automobile accidents (CDC, 1982). Healthy People (1979) stated that young people, inexperienced at both drinking and driving, all too often combine the two activities with fatal results. DeLuca (1981) has shown that 45% to 60% of all fatal automobile accidents involving a young driver are alcohol-related.

In a study by Wechsler, et al. (1984), 82% of teenagers in the 16+ age group had used alcohol at some time in their lives. However, Wechsler (1984) also found that 42% of the respondents reported drinking alcohol infrequently, less than once per month. In the same study, 35% of the boys and 19% of the girls reported drinking once or more a week.

Most studies have shown that approximately 40% of the student alcohol users only have one or two drinks during any given drinking episode. However, a significant number of males (26%) and females (12%) generally consumed five or more drinks at a time (Wechsler, et al. 1984).

Alcohol usage is at an all-time high. The numbers of youth using and abusing alcohol is rising. The use of alcohol, coupled with driving, is leaving numbers of students dead or seriously injured. The majority of these deaths, injuries and health problems could easily be prevented through the development of positive alcohol behaviors.

Safety

Children are victims in many types of accidents. A report by the Center for Disease Control (1982) showed that the leading cause of death for children was motor vehicle accidents. The death rate for children aged 10 was 784 per 100,000. Motor vehicle accident death rate increases to 1350 per 100,000 as children become 15 years old (CDC, 1982). The other leading causes of death are accident- related. Drowning accidents are the second leading type of accident which causes death. Following drowning are firearm accidents, non- motor vehicle accidents, poisoning, falling, fire, water transport, and electrical accidents (CDC, 1982).

Auto accidents are the number one killer of children in the United States today. The National Highway Traffic Safety Administration has estimated that 172 lives are saved for every one percent increase in seat belt usage (Righi, 1983).

Canaro stated that in 1981 auto accidents killed 50,700 people and injured 1,900,000. Total costs for these accidents exceeded \$40.5 billion. Of the deaths, 1,300 victims were four years old or under and 2,400 were between the ages of 5 and 14. The numbers were much higher for children permanently maimed and disfigured.

Righi (1983) has stated that 60% of the deaths and disfigurement could have been prevented with the use of seat belts and crash-tested child seat belts. Safety experts have said that children in safety seats or wearing seat belts are safer not only because they are protected from impact against the car, but because it reduced activity in the car. Reduced activity reduces distraction of the driver.

The major safety hazards for the K-6 students are: bicycles, playground equipment, poisons, fires, and household hazards. For the 7-12 population; motor vehicle accidents, drowning, poisons, and fires are the leading causes of deaths (CDC, 1982).

Bicycle accidents account for over 400,000 emergency room admittants. Cycling can cause serious health injury through riding on the improper side of road, loss of control, mechanical failure, improper fit, or collision with a car or another bicycle.

Playground equipment pose another threat to the safety of children. According to the Consumer Product Safety Commission (1979), more than 100,000 children under 15 years of age receive serious injuries each year as the result of playground accidents. Many of these accidents can be avoided if playground equipment is carefully selected and children are taught to play safely on it.

The home is full of safety hazards. Every year more than four million people are injured in home accidents (U.S. Consumer, 1983). Uncovered electrical outlets, overloaded circuits, running up and down stairs, playing with matches, and ingesting toxic substances injure approximately 21 million people each year and kill over 25,000 (Olson, 1980). The majority of these injuries and deaths could have easily been prevented through the development of positive safety behaviors.

Smoking

There are 50 million smokers in the United States today (U.S. Department of Health, 1981). Many adults have stopped smoking over the past few years, which reflects a general decline among adults smokers. The only major increase in smoking has been in pre-teen and teenager girls. This has only recently leveled off with the same male age group.

Smoking is a real health problem. In a study by Nolte, O'Rourke, and Smith (1983), students clearly indicated that smoking is a real health problem at the 7th and 8th grade level. Nolte, et al., (1983) found that with increased grade level the percent of students agreeing that smoking is a real health problem decreases.

Evans, et.al., (1979) found that students are not in strong agreement that smoking helps people to relax. Students who believe that smoking helps people to relax increase with each grade level. Nolte, O'Rourke, and Smith (1983) found that 22% of students at the 7th grade level either strongly agree or agree that smoking helps people to relax and that proportion increases to 46% at the 12th grade.

It is commonly accepted that students are influenced by their peers and parents (McCaul, et al., 1982). McCaul (1982) has shown that at the seventh grade level 76% of the students reported that all or most of their close friends do not smoke cigarettes. The percentage continued to decline with each increasing grade until by the 12th grade, only 39% of students reported that all or most of their close friends do not smoke.

Nolte, Smith and O'Rourke (1983) reported that at each grade level from the 7th to 12th grade, approximately 1/3 of the mothers smoke and 43% of the fathers smoke. Along with the study results, Nolte and others (1983) found that approximately 10% of the mothers and 16% of the fathers used to smoke, but had stopped smoking.

Green (1979) found that the prevalence of smoking increases at each grade level. Students also showed widespread experimentation. Further analysis also revealed that for most grades there was no difference between urban and rural environments.

Smoking increases with each grade level and along with that the amount smoked increases. Students who are smokers tend to increase

the amount over time. The amount smoked increases dramatically between the seventh and eighth grade. Between the tenth and twelfth grade half of the smokers indicate that they consumed four or more packs per week. Nolte, Smith, and O'Rourke (1983) also showed that much of the initial smoking is experimental, and often smoking is done out of view of parents and other significant others. Economics also played a part in study results. Younger smokers do not have the economic ability to support an intensive habit.

The results of various studies by Nolte, et al. (1983); Green (1979); Evans, et. al.; and McCaul (1982) have demonstrated that increased smoking occurs throughout the educational process. Based upon these studies, the importance of interventions at lower grades is evident.

Physical Activity

Studies have shown that there have been tremendous increases in longevity of babies born today, as compared to babies born in 1900. Infant mortality has been reduced mainly by conquering infectious diseases. In reality, a person 45 years of age today can expect to live only 2 or 3 years longer than ones counterpart in 1900 (Breslow and Belloc, 1972).

The longevity rate of the United States is 18th in the world.

This is probably due to degenerative diseases (Elrick, Crakes, and Clarke, 1978).

Research studies have pointed out that at the time of World War I, one-third of the men drafted were physically unfit to serve. By the time of World War II, the situation was even worse, as one-half of the men were unfit. In 1953, tests were given to American and

European children, and it showed similar negative results. Of the American children, 57% failed, while only 8% of the European children failed.

The activity patterns of America's students are of a national concern. A study conducted by the Office of Disease Prevention and Health Promotion (1984) has shown that young children and adolescents are not developing the activity and fitness behaviors necessary to maintain a healthy lifestyle. At least 50 percent of the youth are not getting enough exercise to develop healthy cardiovascular systems.

The National Children and Youth Fitness Study, (NCYFS) (1980) investigated the activity patterns of students enrolled in 5th through 12th grades. The study (NCYFS, 1980) showed that males participated in activity more than females. Ross; et.al. (1985) stated that weekly physical activity time falls off for both males and females after early adolescence. The lowest physical activity time is for students enrolled in grades 10, 11, 12.

Physical activities change throughout a child's growth pattern. Ross; et al. (1985) has shown that the five leading activities for students enrolled in grades five through twelve were; bicycle riding, swimming, basketball, baseball/softball, and tackle football. Other popular physical activities included dancing, roller skating, weightlifting, exercising, soccer, and touch football.

As a child develops and ages, drastic changes occur in physical activity levels. Activities such as relays, tag, jumping rope and kickball are replaced by competitive athletics. Children become less active, following a behavior modeled by their parents or significant adults.

The lack of physical activity has led to physical discomforts which carry over into adult life. Inactivity has led to lower back pain, lack of flexibility in lower back, and weakened abdominal muscles. Cardiorespiratory endurance has decreased leading to a greater predisposal towards diseases of the heart, blood vessels, lungs, and kidneys (Promoting Health, 1980). Coupled with lack of activity is obesity. Obesity may lead to diabetes, heart disease, hypertension, and psychological problems (Ross, Dotson, and Gilbert, 1985).

CHAPTER III

METHODOLOGY

The purpose of this descriptive study was to investigate the selected health behaviors of students enrolled in Kansas' public schools, grades K-12. In this chapter are presented the development of instrumentation, the selection of subjects, the research design, and the analysis of data. Each segment will be discussed as it contributed to the overall investigation.

Instrumentation

Health Behavior Inventory. Through the review of literature, it was discovered that no inventory for selected health behaviors of students existed that was appropriate for students enrolled in grades, K-12. The goals of the research demanded an instrument to measure: stress management, nutrition, alcohol, safety, smoking and physical activity. Four inventories had to be developed, one each for the following four grade classifications: K-3, 4-6, 7-8, and 9-12 (Appendix E).

To assure the readability of the statements as well as the content validity, a thirty-six member jury was selected to evaluate and revise the inventory. Six jurors were selected in each of the six subject areas, based upon the juror's expertise.

Initial contact requesting each juror's assistance in evaluation of the inventory was made by mail. A cover letter included an expla-

nation of the study and a copy of the proposed inventory statements with an evaluation form (Appendix B). The evaluation form, developed by Gilmore (1974), enabled jurors to respond to each of the statements indicating a subject's behavior (behavior or negative) in regards to each of the six health behaviors. A numerical rating system from 1 (not acceptable) to 5 (indispensable) was utilized to evaluate each statement. Evaluation consisted of calculation of the mean score for each statement. Inventory evaluation results are found in Appendix E. Statements with a mean score of 3.0 or above were accepted for inclusion in the inventory. The completed Health Behavior Inventory for all four grade classifications can be found in Appendix D.

Reliability of the inventory was determined by testing/retesting a group of students enrolled in grades K-12 from U.S.D. #253, Emporia, Kansas. Product-Moment correlation was used to determine reliability coefficient. Calculations resulted in a reliability coefficient of .9735 for the K-3 inventory; .9681 for the 4-6 inventory; .9895 for the 7-8 inventory, and .9680 for the 9-12 inventory.

Selection of Subjects

The setting for this study was three randomly selected public school districts from each of the 10 School Board Districts in the State of Kansas (Appendix A). Students enrolled in Kansas public schools, grades K-12, comprised the population for this study.

In June, 1983, all superintendents in the 315 public school districts in the State of Kansas were contacted for possible inclusion in the study (Appendix B). 106 school districts responded affirmatively for inclusion in the study. This response represented

34 percent of the total public school districts in Kansas. All School Board Districts were represented, except for District 4 (Appendix A). None of the school districts in District 4 chose to participate. Of the 106 school districts wishing to participate in the study, 3 school districts in each of the 10 School Board Districts of Kansas were randomly selected to represent the population of that district. A total of 18,500 students were represented in the study.

In August, 1983 the instrument (Appendix D) was disseminated to the participating school districts. The study director personally met with each of the superintendents of the participating school districts and clarified any questions for dissemination of the survey instrument (Appendix D). The study commenced on September 1, 1983 and terminated on September 30, 1983.

A random selection of students was chosen from each of the 9 participating School Board Districts to represent that particular District in comparison to the other districts. Fifty males and fifty females were randomly selected through the use of a table of random numbers. These students were representative of the students in each of the 9 School Board Districts, for a total of 900 students.

Research Design

Simple descriptive computations were utilized in this study.

Total student responses were tabulated for each item on the inventory. Results were shown in numerical and percentage responses.

The research design was utilized to measure the percentage of students possessing positive or negative health behaviors.

Validity Concerns

Internal Validity. Students were randomly selected by the school district to participate in the study. Randomization allows for equivalence of groups. All subjects were assessed during the timeline of September 1, 1983 through September 30, 1983. The definitive timetable provides for maturation, which supports internal validity.

External Validity. The study results represent a total of over 18,000 student responses. The ability to generalize from the results of this study is supported by the number and randomization of the participants.

Selection of Tests

Students enrolled in grades K-3 and 4-6 responded to the <u>Health</u> <u>Behavior Inventory</u> in a yes/no format. A yes/no format represents dicotomous ordinal data, so the statistical method used to draw inferences between Kansas School Board of Education Districts is the nonparametric statistical device, Chi-square, with Test of Independence.

Students enrolled in grades 7-8 and 9-12 responded to the <u>Health</u>

<u>Behavior Inventory</u> in a three-point Lickert scale; usually, occasionally, rarely/never. One-way multi-group analysis of variance with
the Scheffe' test was utilized to determine if there was any significant difference in selected health behaviors between Kansas School

Board of Education Districts.

Summary

The <u>Health Behavior Inventory</u> was utilized to determine the prevalence of health behaviors of students enrolled in Kansas' public

schools, grades K-12.

Chi-square was utilized to determine any significant differences between Kansas' School Board Districts for students enrolled in grades K-6.

One-way multi-group analysis of variance with the Scheffe' test was utilized to determine any significant differences between Kansas School Board Districts for students enrolled in grades 7-12.

CHAPTER IV

RESULTS AND DISCUSSION

The research was conducted to study the prevalance of selected health behaviors of Kansas' students enrolled in grades K-12. Comparisons of health behavior between any of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-12 were analyzed using the Chi-square and Analysis of Variance. For the purpose of discussion, descriptive results of negative health behaviors above 30 percent represented a significant amount for the K-3 and 4-6 grade level. The level of significance for 7-8 and 9-12 students was 15 percent. Levels of significance were determined through calculation of stadard deviations. The results and discussion are presented in this chapter.

Stress Management

In the study of selected health behaviors, certain stress management behaviors were shown to be significant through descriptive results. Table I represents the stress management statements in which the student responses were above the level of significance.

Students enrolled in grades K-3 and 4-6 responded in a yes/no format. Analysis of the dicotomous data was through the use of Chisquare with the Test of Independence. A four by nine analysis was utilized, comparing male and female responses versus each of the nine

participating Kansas School Board of Education Districts. Table II presents the variable versus region analysis for K-3 and 4-6 stress management variables. These data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

TABLE I

STRESS MANAGEMENT STATEMENTS

K-3

- 1. Does it take you a long time to fall asleep at night?
- 2. Do you often bite your fingernails?
- 3. Do you worry about doing badly in school?
- 4. Do you often get angry and yell?

4-6

- 1. Do you bite your fingernails, chew on a pencil, or eat when nervous or upset?
- 3. At bedtime, do you fall asleep easily?
- 4. If you wake up in the middle of the night, it is easy for you to fall asleep again?
- 5. Do you often feel tired (except after hard physical activity)?
- 6. Do you frequently hit or yell at someone when you get mad?

7–8

- 4. When I feel under pressure, I bite my fingernails, tap my feet, start to perspire, or have some other nervous habit.
- 6. I worry about exams if I am not well prepared.
- 8. I know that extreme pressure or tension plays a role in causing health problems, and I am learning some specific relaxation skills to prevent and control my problems.

9-12

- 4. I have a habit of biting my fingernails, tapping my foot, starting to perspire, or some other nervous habit.
- 6. I worry about exams if I am not well prepared.
- 7. I consciously take time each day to relax.
- 8. I know that extreme pressure or tension plays a role in causing health problems, and I am learning some specific relaxation skills to prevent and control my problems.

Students enrolled in grades 7-8 and 9-12 responded in a usually, occasionally, rarely/never format. Analysis of the data was through Analysis of Variance. Table III presents the variable versus region analysis for 7-8 and 9-12 stress management variables. These data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

Stress Management

The descriptive results for K-12 stress management showed significant results. Students enrolled in grades K-3 had difficulty sleeping, often bit their fingernails, showed anxiety over school work, and reacted to pressure by yelling and becoming angry. The students enrolled in grades 4-6 also showed similar characteristics to students in K-3; however, they also showed signs of physical exhaustion from tension and anxiety. Students in grades 7-8 and 9-12 continued with the same characteristics, including finding it difficult to relax on their own. The comparisons between any 2 of the 9 School Board of Education Districts did show 2 of the 10 stress management behaviors for grade 4-6 to be significant. In grades 7-8, 3 of the 10 stress management behaviors showed significance. In grades 9-12, 4 of the 10 stress management behaviors showed significance. There were no significant differences in stress management behavior between any 2 of the 9 School Board of Education Districts in grades K-3.

Students enrolled in grades K-3 and 4-6 responded in a yes/no format. Analysis of the dicotomous data was through the use of Chi-square with the Test of Independence. A four by nine analysis was utilized, comparing male and female responses versus each of the nine participating Kansas School Board of Education Districts. Table V

TABLE II GRADES K-3 and 4-6 CHI-SQUARE STRESS

MANAGEMENT

<u>K-3</u>	
Item No.	
1. 2. 3. 4.	CHISQ = 23.9199 CHISQ = 20.2969 CHISQ = 21.9269 CHISQ = 25.5006
	CRITICAL VALUE = 28.869
<u>4-6</u>	
Item No.	
1. 2. 3. 4. 5. 6. 7. 8. 9.	CHISQ = 30.7641 CHISQ = 7.4013 CHISQ = 14.6832 CHISQ = 23.0837 CHISQ = 9.0394 CHISQ = 46.4994 CHISQ = 29.8254 CHISQ = 18.7928 CHISQ = 17.0031 CHISQ = 22.5398
	CRITICAL VALUE = 28.869

presents the variable versus region analysis for K-3 and 4-6 nutrition variables. Theses data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

TABLE III

ANALYSIS OF VARIANCE TABLE - GRADES

7-8 and 9-12 STRESS

MANAGEMENT

7–8		
Item No.	F Value	Critical Value
1. 2. 3. 4. 5. 6. 7. 8. 9.	1.94 1.65 1.13 2.74 1.14 1.29 1.22 2.95 1.83 1.27	41.6692 43.9814 49.0904 43.0959 42.8839 45.6368 42.2890 31.9933 42.0518 44.8499
9-12		
Item No.	<u>F Value</u>	<u>Critical Value</u>
1. 2. 3. 4. 5. 6. 7. 8. 9.	2.93 2.47 2.44 2.41 1.76 1.13 1.66 1.32 1.30 1.08	40.3660 44.8113 45.5543 41.7877 41.3372 46.2452 40.2337 39.8164 39.6677 37.3178

Nutrition

In the study of selected health behaviors, certain nutrition behaviors were shown to be significant through descriptive results. Table IV represents the nutrition statements in which the student responses were above the level of significance.

TABLE IV

NUTRITION STATEMENTS

K-3

- 3. Do you usually put salt on your food?
- 4. Do you eat cake, cookies, pie, candy, or other sweets every day?

4-6

- 1. Do you eat two or more servings of fruit or vegetables most days?
- 4. Do you usually put salt on your food?
- 6. Do you eat fried foods like french fries, fried chicken, fried eggs, or hash browns daily?
- 7. Do you drink at least 3 glasses of milk a day?

7-8

- 4. I put salt on my food.
- 7. I drink three or more glasses of milk most days.

9-12

- 4. I read the labels on food packages
- 6. I add salt to my food.
- 8. I eat snacks, such as candies, donuts, potato chips, or other sweets between meals.

Students enrolled in grades 7-8 and 9-12 responded in a usually, occasionally, rarely/never format. Analysis of the data was through

Analysis of Variance. Table VI presents the variable versus region analysis for 7-8 and 9-12 nutrition variables. These data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

Nutrition

The descriptive results for K-12 nutrition showed significant results. A significant percentage of students enrolled in grades K-3 did not eat two or more servings of fruit or vegetables most days, put salt on their food, ate fried foods daily, did not drink 3 glasses of milk a day, and ate snacks higher in sugar. Students in grades 4-6, 7-8, and 9-12 also showed similar characteristics to students in K-3; however, only enrolled students in K-3 and 9-12 showed significant percentage of students eating snacks high in sugar. The comparisons between any 2 of the 9 SChool Board of Education Districts did show 2 of the 4 nutrition behaviors for grade K-3 to be significant. In grades 4-6, 1 of the 8 nutrition behaviors showed significance. In grades 9-12, 7 of the 12 nutrition behaviors showed significance. There were no significant differences in nutrition behavior between any 2 of the 9 School Board of Education Districts in grades 7-8.

Alcohol

In the study of selected health behaviors, certain alcohol behaviors were shown to be significant through descriptive results. Table VII represents the alcohol statements in which the student responses were above the level of significance.

Students enrolled in grades K-3 and 4-6 responded in a yes/no format. Analysis of the dicotomous data was through the use of

Chi-square with the Test of Independence. A four by nine analysis was utilized, comparing male and female responses versus each of the nine participating Kansas School Board of Education Districts. Table VIII presents the variable versus region analysis for K-3 and 4-6 alcohol variables. Theses data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

TABLE V

GRADES K-3 and 4-6 CHI-SQUARE

NUTRITION

<u>K-3</u>		
Item No.		
1. 2. 3. 4.	CHI CHI	SQ = 22.8712 SQ = 24.6933 SQ = 58.8782 * SQ = 57.0015 *
	CRITICAL VAL	UE = 28.869
4-6		
Item No.		
1. 2. 3. 4. 5. 6. 7.	CHI CHI CHI CHI CHI	SQ = 16.2096 SQ = 17.5532 SQ = 7.5004 SQ = 17.2207 SQ = 19.7274 SQ = 33.3484 * SQ = 16.9954 SQ = 20.0745
	CRITICAL VAL	UE = 28.869

TABLE VI

ANALYSIS OF VARIANCE TABLE - GRADES

7-8 and 9-12 NUTRITION

<u>7–8</u>		
Item No.	F Value	Critical Value
1. 2. 3. 4. 5. 6. 7. 8. 9.	1.81 0.99 1.22 1.31 1.14 0.89 0.94 1.22 1.65 1.24	1.94 1.94 1.94 1.94 1.94 1.94 1.94 1.94
9-12		
Item No.	<u>F Value</u>	Critical Value
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.	1.96 1.11 2.51 1.58 0.79 1.57 0.86 2.08 3.41 3.19 2.79 4.01	1.94 * 1.94 * 1.94 * 1.94 1.94 1.94 1.94 * 1.94 * 1.94 * 1.94 * 1.94 * 1.94 *

Students enrolled in grades 7-8 and 9-12 responded in a usually, occasionally, rarely/never format. Analysis of the data was through Analysis of Variance. Table IX presents the variable versus region

analysis for 7-8 and 9-12 alcohol variables. These data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

TABLE VII

ALCOHOL STATEMENTS

K-3

None

4-6

None

7-8

None

9-12

- 1. When I see other people drink beer, wine, or alcohol, I also want to drink.
- 2. I drink 1-2 alcoholic beverages a week.
- 5. I get drunk when I go to a party that serves alcoholic beverages.
- 6. I like to hang around with my friends who drink alcoholic beverages.
- 9. I enjoy the "feeling" alcohol gives me.
- 12. Drinking alcoholic beverages makes me feel relaxed.

Alcohol

The descriptive results for K-8 alcohol showed no significant results. The students enrolled in grades 9-12 showed 6 of the 12 negative alcohol behaviors. Students often drank when they saw their peers drink, drank 1-2 drinks a week, went to parties that served alcoholic beverages, associated with peers who drank and felt that

alcohol relaxed them. The comparisons between any 2 of the 9 School Board of Education Districts did show 4 of the 5 alcohol behaviors for grade K-3 to be significant. In grades 4-6, 2 of the 7 alcohol behaviors showed significance. In grades 7-8, 7 of the 11 alcohol behaviors showed significance. In grades 9-12, 3 of the 12 alcohol behaviors showed significance.

Students in grades K-3 drank alcoholic beverages if offered by someone other than a parent. There also was a significant difference between districts when drinking 1-2 alcoholic beverages a week.

TABLE VIII

GRADES K-3 and 4-6 CHI-SQUARE

ALCOHOL

<u>K-3</u>						
Item No.						
1. 2. 3. 4. 5.		CHISQ CHISQ CHISQ	= = =	47.46 23.75 33.98 32.20 27.46	70 46 32	* *
	CRITICAL	VALUE	=	28.869		
4-6						
Item No.						
1. 2. 3. 4. 5. 6. 7.		CHISQ CHISQ CHISQ CHISQ CHISQ	= =] = = = =	14.344 3.726 171.694 2.160 29.149 9.223 23.443	4 1 7 3 9	*
	CRITICAL	VALUE	=	28.869		

TABLE IX

ANALYSIS OF VARIANCE TABLE - GRADES

7-8 and 9-12 ALCOHOL

<u>7–8</u>		
Item No.	F Value	Critical Value
1.	1.58	7.4756
2. 3.	2.39 1.02	14.2807 10.2752
4.	1.43	9.7230
5.	2.26	9.6256
6.	1.17	7.2854
7.	6.74	20.4915
8.	2.72	15.0020
9.	2.26	14.1971
10. 11.	2.20	15.6655
11.	0.73	12,1724
9-12		
Item No.	F Value	Critical Value
1.	2.79	28.3431
2.	1.57	40.9984
3.	1.22	42.2890
4. 5.	1.27 1.93	44.8499 46.1692
6 .	2.39	43.0660
7 .	0.79	15.9742
8.	1.85	30.5886
9.	1.36	38.4316
10.	1.78	39.1154
11.	2.08	27.5045
12.	1.39	40.1116

Safety

In the study of selected health behaviors, certain safety behaviors were shown to be significant through descriptive results. Table ${\tt X}$

represents the safety statements in which the student responses were above the level of significance.

TABLE X

SAFETY STATEMENTS

K-3

1. Do you usually wear a seat belt when you ride in a car?

4-6

- 1. Do you usually wear a seat belt when you ride in a car?
- 2. Do you always wear a life jacket while riding in a boat or canoe?
- 4. Do you usually laugh or talk with food in your mouth?
- 5. Do you usually cross the street at crosswalks?

7–8

- 1. I check my home to protect it from fire and safety hazards.
- 2. I wear a seat belt when I ride in a car or truck.
- 3. I turn off or unplug appliances when they are not in use.
- 4. I wear a life jacket while riding in a boat or canoe and in water sports.
- 6. I cross the street only at crosswalks.
- 8. I ride my bike on the correct side of the street and stop at red lights or stop signs.
- 9. I run up or down stairs, or in the hallways.

9-12

- 1. I check my home to protect it from fire and safety hazards.
- 2. I turn off or unplug appliances when they are not in use.
- 3. I wear a seat belt when I ride in a car or truck.
- 4. I wear a life jacket while riding in a boat or canoe; and in water sports.
- 7. I run up or down stairs, or in the hallways.
- 9. I drive within 5 m.p.h. of the legal speed limit.

Students enrolled in grades K-3 and 4-6 responded in a yes/no format. Analysis of the dicotomous data was through the use of

Chi-square with the Test of Independence. A four by nine analysis was utilized, comparing male and female responses versus each of the nine participating Kansas School Board of Education Districts. Table XI presents the variable versus region analysis for K-3 and 4-6 safety variables. Theses data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

Students enrolled in grades 7-8 and 9-12 responded in a usually, occasionally, rarely/never format. Analysis of the data was through Analysis of Variance. Table XII presents the variable versus region analysis for 7-8 and 9-12 safety variables. These data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

Safety

The descriptive results for K-12 safety behaviors showed significant results. Students in all four grade perameters: K-3, 4-6, 7-8, and 9-12, did not wear their seat belts while riding in a vehicle. As students progressed from K-3 to 9-12, they exhibited negative safety behaviors; such as, talking with food in their mouth; not wearing a life jacket while in a boat or a canoe; not crossing the street at appropriate places; handling electrical applicances while wet; and running up or down stairs. The comparisons between any 2 of the 9 School Board of Education Districts did show 2 of the 4 safety behaviors for grades K-3 to be significant. In grades 4-6, 2 of the 8 safety behaviors showed significance. In grades 9-12, 8 of the 10 safety behaviors showed significance. In grades 9-12, 8 of the 10 safety

TABLE XI

GRADES K-3 and 4-6

CHI-SQUARE SAFETY

<u>K-3</u>	
Item No.	
1. 2. 3. 4.	CHISQ = 65.7812 * CHISQ = 30.9561 CHISQ = 46.2837 CHISQ = 34.4270
	CRITICAL VALUE = 28.869
4-6 Item No.	
1. 2. 3. 4. 5. 6. 7.	CHISQ = 31.7833 CHISQ = 14.1770 CHISQ = 14.9350 CHISQ =173.8863 * CHISQ = 13.7015 CHISQ = 19.9311 CHISQ = 19.8368 CHISQ = 23.6891 CRITICAL VALUE = 28.869

Smoking

In the study of selected health behaviors, certain smoking behaviors were shown to be significant through descriptive results. Table XIII represents the smoking statements in which the student responses were above the level of significance.

TABLE XII

ANALYSIS OF VARIANCE TABLE - GRADES

7-8 and 9-12 SAFETY

<u>7–8</u>		
Item No.	<u>F Value</u>	Critical Value
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	2.50 2.26 1.02 0.94 1.39 2.91 1.02 1.22 0.99 1.28 1.02	1.94 * 1.94 * 1.94 1.94 1.94 * 1.94 1.94 1.94 1.94 1.94 1.94
9-12		
Item No.	F Value	Critical Value
1. 2. 3. 4. 5. 6. 7. 8. 9.	2.27 2.51 7.56 1.08 6.69 2.79 3.42 0.50 2.79 6.43	1.94 * 1.94 * 1.94 * 1.94 * 1.94 * 1.94 * 1.94 * 1.94 * 1.94 * 1.94 *

Students enrolled in grades K-3 and 4-6 responded in a yes/no format. Analysis of the dicotomous data was through the use of Chi-square with the Test of Independence. A four by nine analysis was

utilized, comparing male and female responses versus each of the nine participating Kansas School Board of Education Districts. Table XIV presents the variable versus region analysis for K-3 and 4-6 smoking variables. Theses data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

TABLE XIII SMOKING STATEMENTS

 K-3

 None

 4-6

 None

 7-8

 None

 9-12

 None

Students enrolled in grades 7-8 and 9-12 responded in a usually, occasionally, rarely/never format. Analysis of the data was through Analysis of Variance. Table XV presents the variable versus region analysis for 7-8 and 9-12 smoking variables. These data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

TABLE XIV

GRADES K-3 and 4-6 CHI-SQUARE

SMOKING

<u>K-3</u>	
Item No.	
1. 2. 3. 4.	CHISQ = 34.3837 * CHISQ = 30.8954 * CHISQ = 24.4756 CHISQ = 28.3407
	CRITICAL VALUE = 28.869
4-6	
Item No.	
1. 2. 3. 4. 5. 6. 7. 8.	CHISQ = 15.7909 CHISQ = 40.2488 * CHISQ = 8.6325 CHISQ = 14.5942 CHISQ = 5.1216 CHISQ = 17.8030 CHISQ = 9.3160 CHISQ = 55.7822 *
	CRITICAL VALUE = 28.869

Smoking

The descriptive results for K-12 smoking behavior showed no significant result. Research has shown that smoking frequency increases with age; however, the Kansas' results showed no significant results of smoking behavior. The comparisons between any 2 of the 9 School Board of Education Districts did show 2 of the 4 smoking behaviors for grades

K-3 to be significant. In grades 4-6, 2 of the 8 smoking behaviors showed significance. In grades 7-8, 2 of the 10 smoking behaviors showed significance. There were no significant differences in smoking behavior between any 2 of the 9 School Board of Education Districts in grades 9-12.

TABLE XV

ANALYSIS OF VARIANCE TABLE - GRADES

7-8 and 9-12 SMOKING

<u>7–8</u>		
Item No.	<u>F Value</u>	Critical Value
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	1.53 2.51 1.39 1.13 2.60 1.28 1.13 1.11 1.85 1.59	1.94 1.94 * 1.94 1.94 * 1.94 1.94 1.94 1.94
9-12		
Item No.	<u>F Value</u>	Critical Value
1. 2. 3. 4. 5. 6. 7. 8. 9.	1.85 1.70 1.13 1.45 1.60 1.84 1.07 1.53 0.54	1.94 1.94 1.94 1.94 1.94 1.94 1.94 1.94

Physical Activity

In the study of selected health behaviors, certain physical activity behaviors were shown to be significant through descriptive results. Table XVI represents the physical activity statements in which the student responses were above the level of significance.

TABLE XVI

PHYSICAL ACTIVITY STATEMENTS

K-3

- 3. Do you often feel tired?
- 4. Does your body hurt when you run?
- 5. Does your body hurt when you play or exercise?

4-6

- 3. Would you rather get a ride to school than to walk or ride your bike?
- 4. Do you often feel tired?
- 6. Does your body hurt when you run?
- 7. Is playing hard something you do most days?

7-8

None

9-12

- 1. I climb stairs rather than using escalators or elevators.
- 3. I participate in a strenuous physical activity at least twice a week.
- 4. I do some warm-up exercises before doing strenuous exercise.
- 5. I encourage my family to participate in physical activities.
- 7. I avoid riding in a car when my destination is within walking distance.

Students enrolled in grades K-3 and 4-6 responded in a yes/no format. Analysis of the dicotomous data was through the use of Chi-square with the Test of Independence. A four by nine analysis was utilized, comparing male and female responses versus each of the nine participating Kansas School Board of Education Districts. Table XVII presents the variable versus region analysis for K-3 and 4-6 physical activity varia- bles. Theses data were analyzed in an attempt to identify any significant differences between responses and School Board of Education Districts.

Students enrolled in grades 7-8 and 9-12 responded in a usually, occasionally, rarely/never format. Analysis of the data was through Analysis of Variance. Table XVIII presents the variable versus region analysis for 7-8 and 9-12 physical activity variables. These data were responses and School Board of Education Districts.

Physical Activity

The descriptive results for K-12 physical activity showed certain significant results. In grades K-3 and 4-6, students showed that their bodies hurt when they ran or played hard. They also often felt tired. These characteristics are often found in students who are not physically active. The students in grades 7-8 showed no significant results for negative physical activity. Studies show that students demonstrate a great amount of activity at this age group. Students in grades 9-12 showed the largest number of negative physical activity characteristics. These students showed characteristics that demonstrated lack of interest and behavior for physical activity. They preferred to use escalators or elevators instead of stairs, did not encourage family members to exercise, failed to participate in physical activity twice a week, and preferred to ride than walk. The comparisons between any 2 of the 9 School Board of EducatION Districts did show 4 of the 6 physical

activity behaviors for grades K-3 to be significant. In grades 4-6, 2 of the 8 physical activity behaviors showed significance. In grades 7-8, 2 of the 7 physical activity behaviors showed significance. In grades 9-12, 6 of the 7 physical activity behaviors showed significance.

TABLE XVII GRADES K-3 and 4-6 CHI-SQUARE PHYSICAL ACTIVITY

<u>K-3</u>				
Item No.				
1. 2. 3. 4. 5. 6.		CHISQ = CHISQ = CHISQ = CHISQ =	14.2781 7.7095 6.1192 12.6077 9.6200 27.2946	* * * * *
	CRITICAL	VALUE =	5.99	
4-6				
Item No.				
1. 2. 3. 4. 5. 6. 7. 8.		CHISQ = CHISQ = CHISQ = CHISQ = CHISQ = CHISQ =	7.0326 4.4530 34.0243 12.5278 16.9875 26.7278 8.2978 15.0626	*
Westername & Control of the Control	CRITICAL	VALUE =	= 26.3	

TABLE XVIII

ANALYSIS OF VARIANCE TABLE - GRADES

7-8 and 9-12 PHYSICAL ACTIVITY

7-8		
Item No.	F Value	Critical Value
1. 2. 3. 4. 5. 6. 7.	2.35 1.54 1.88 1.11 0.95 1.50 2.57	1.94 * 1.94 1.94 1.94 1.94 1.94 1.94 *
9-12		
Item No.	F Value	Critical Value
1. 2. 3. 4. 5. 6. 7.	2.01 2.22 2.37 3.85 4.35 1.46 3.81	1.94 * 1.94 * 1.94 * 1.94 * 1.94 * 1.94 *

Findings

Twenty-four null hypotheses were proposed for the research.

Null Hypothesis #1 There is no significant difference in stress
management behavior between any two of the 9 School Board Districts
of Kansas' students enrolled in grades K-3.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in stress management

between any two of the 9 School Board of Education District of Kansas' students enrolled in grades K-3.

Null Hypothesis #2 There is no significant difference in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in nutrition behavior between any two of the 9 School Board Districts of Kansas' students enrolled in grades K-3.

Null Hypothesis #3 There is no significant difference in alcohol behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in alcohol behavior between any two of the 9 School Board Districts of Kansas' students enrolled in grades K-3.

Null Hypothesis #4 There is no significant difference in smoking behavior between any two of the 9 School Board of Education District of Kansas' students enrolled in grades K-3.

The null hypothesis was not rejected because the results of the study indicated there was not significant difference in smoking behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.

Null Hypothesis #5 There is no significant difference in safety behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in safety

behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grade K-3.

Null Hypothesis #6 There is no significant difference in physical activity between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in physical activity between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-3.

<u>Null Hypothesis #7</u> There is no significant difference in stress management behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in stress management behavior between any two of the 9 School Board of Education

Districts of Kansas' students enrolled in grades 4-6.

Null Hypothesis #8 There is no significant difference in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grade 4-6.

Null Hypothesis #9 There is no significant difference in alcohol behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in alcohol

behavior between any two of the 9 School Board of Education District of Kansas' students enrolled in grades 4-6.

Null Hypothesis #10 There is no significant difference in smoking behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in smoking behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.

Null Hypothesis #11 There is no significant difference in safety behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grade 4-6.

The null hypothesis was not rejected because the result of the study indicated there was no significant difference in safety behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grade 4-6.

<u>Null Hypothesis #12</u> There is no significant difference in physical activity behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 4-6.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in physical activity behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grade 3-6.

Null Hypothesis #13 There is no significant difference in stress management behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in stress

management behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.

Null Hypothesis #14 There is no significant difference in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grade 7-8.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.

Null Hypothesis #15 There is no significant difference in alcohol behavior between any two of the 9 School Board of Education District of Kansas' students enrolled in grade 7-8.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in alcohol behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.

<u>Null Hypothesis #16</u> There is no significant difference in smoking behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in smoking behavior between any two of the 9 School Board of Education districts of Kansas' students enrolled in grade 7-8.

Null Hypothesis #17 There is no significant difference in safety behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in safety

behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grade 7-8.

Null Hypothesis #18 There is no significant difference in physical activity behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grade 7-8.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in physical activity behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 7-8.

<u>Null Hypothesis #19</u> There is no significant difference in nutrition behavior between any two of the 9 School Board of Education District of Kansas' students enrolled in grade 9-12.

The null hypothesis was not rejected because the results of the study indicated there was not significant difference in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.

Null Hypothesis #20 There is no significant difference in alcohol behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in alcohol behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.

Null Hypothesis #21 There is no significant difference in smoking behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in smoking

behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.

Null Hypothesis #22 There is no significant difference in safety behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in safety behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.

Null Hypothesis #23 There is no significant difference in physical activity between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.

The null hypothesis was not rejected because the results of the study indicated there was no significant difference in physical activity between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades 9-12.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

It was the purpose of this research to assess selected health behaviors of students enrolled in Kansas public schools, grades K-12. Specifically the study examined the health behaviors of Kansas' students as it related to six areas: stress management, nutrition, alcohol, smoking, safety, and physical activity. An inventory, the Health Behavior Inventory, was developed for the study. Twenty-four null hypotheses were proposed for investigated of the research.

The <u>Health Behavior Inventory</u> was developed by the researcher and juried by thirty-six professionals knowledgeable in the six selective health behaviors. A total of 18,576 subjects were used in the study. A random selection of fifty males and fifty females was used as a representative sample of students from each of the Kansas School Board Districts. Nine of the ten Kansas School Board Districts participated in the study. The <u>Health Behavior Inventory</u> was used as an instrument to measure the six selective health behaviors in the research. The experimental design consisted of the administration of the <u>Health Behavior Inventory</u>. Students enrolled in grades K-3 and 4-6 were read the questions, and they responded in a yes/no format. Students enrolled in grades 7-8 and 9-12 read the question and responded on a three-point Lickert scale; usually, occasionally, rarely/never.

Two statistical procedures were used: Chi-Square and Analysis of Variance. The level of statistical significance established for rejection of the null hypotheses was p 4.05.

Conclusions

Based upon the findings of the research, the following conclusions were drawn:

- 1. The descriptive results showed that students enrolled in grades K-12 showed certain selective negative stress management behaviors.
- 2. The descriptive results showed that students enrolled in grades K-12 showed certain selective negative nutrition behaviors.
- 3. The descriptive results showed that students enrolled in grades K-12 showed certain selective negative alcohol behaviors.
- 4. The descriptive results showed that students enrolled in grades K-12 showed certain selective negative smoking behaviors.
- 5. The descriptive results showed that students enrolled in grades K-12 showed certain selective negative safety behaviors.
- 6. The descriptive results showed that students enrolled in grades K-12 showed certain selective negative physical activity behaviors.
- 7. The analysis of data showed no significant differences in stress management behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-12.
- 8. The analysis of data showed no significant difference in nutrition behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-12.

- 9. The analysis of data showed no significant difference in alcohol behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-12.
- 10. The analysis of data showed no significant difference in smoking behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-12.
- 11. The analysis of data showed no significant difference in safety behavior between any two of the 9 School Board of Education Districts of Kansas' student enrolled in grades K-12.
- 12. The analysis of data showed no significant difference in physical activity behavior between any two of the 9 School Board of Education Districts of Kansas' students enrolled in grades K-12.

Recommendations

Based upon the findings and conclusions of this research, the following recommendations have been made:

- 1. The Kansas Department of Education could investigate the results of this study and make recommendations to public school districts to enhance the health behaviors of students enrolled in grades K-12.
- 2. The school districts participating in the study could interpret the data for their own particular district and develop health promotion programs to enhance the health behaviors of their students enrolled in grades K-12.
- 3. Further research could investigate the effects of health promotion programs upon the selected health behaviors addressed the study.

- 4. Further research could investigate other health behaviors; i.e., drugs and smokeless tobacco.
- 5. Data from this study could be utilized to compare against health behaviors in other states.

REFERENCES

- Antonovsky, A. (1979). <u>Health, Stress, and Coping.</u> San Francisco: Jossey-Bass, Inc.
- Ardell, D. (1982). Fourteen Days To A Wellness Lifestyle. Mill Valley, CA: Whatever Publishing, Inc.
- Ardell, D. (1979). <u>High Level Wellness:</u> An Alternative To Doctors, Drugs, and Disease. (2nd ed.) New York: Bantam Books.
- Ardell, D. (1979). "The Nature and Implications of High Level Wellness Or Why 'Normal Health' Is A Rather Sorry State of Existence." Health Values: Achieving High Level Wellness, 3, 17-24.
- Ardell, D. (personal communication, October 9, 1979).
- Ardell, D. & Tager M. (1981). Planning for Wellness: A Guidebook For Achieving Optimal Health. Dubuque, Iowa: Kendall/Hunt Publishing Company.
- Beane, J. (1983, May). "Self-concept and Esteem In The Middle Level School." NASSP Bulletin, 64, 63-71.
- Beier, B. (1979). "An Assessment of the Effectiveness of An Educational Program On Wellness Attitudes and Behaviors of Tenth Grade Students." Unpublished master's thesis, University of Wisconsin La Crosse, La Crosse.
- Beier, Barbara (1984). "A Study of the Effects of an 8-week Health Promotion Program Upon Middle School Faculty and Students." (Doctoral dissertation, University of New Mexico.)
- Benson, H. (1976). The Relaxation Response. New York: Avon.
- Benson, H. (1975). The Relaxation Response. New York: William Morrow and Company, Inc.
- Benswanger, E.G. (1977). Stressful Events In Early Childhood: An Ecological Approach. (ERIC Document Reproduction Service No. ED 166 614).
- Better Health For Our Children: A National Strategy, Vol. III and IV. (1980). Report of the Select Panel for the Promotion of Child Health.

- Black, J. & Newton, J. (1981, March). "Should Health Behavior Change Be An Objective of School Health Personnel?" <u>Journal of School</u> Health, 189-190.
- Blair, N., Collingwood, T., Reynolds, R., Smith, M., Hagan, D., & Sterling, C. (1984). "Health Promotion For Educators: Impact on Health Behaviors, Satisfaction, and General Well-being." American Journal of Public Health, 74, 147-149.
- Blair, S., Wilbur, C., Piserchia, P., & Crowder, J. (1984, April).
 "The Johnson and Johnson Live For Life Employee Health Program:
 Two Year Evaluation of Exercise and Physical Fitness Changes."
 Medicine and Science in Sports and Exercise, 16, 170.
- Brennan, A. (1981, January). "Health Promotion At The Worksite." Journal of School Health, 65-66.
- Breslow, L. & Belloc, N. (1972, August). "The Relation of Physical Health Status and Health Practices." Preventive Medicine, 409-412.
- Breslow, L. & Belloc, N. (1973). "Relationship of Health Practices and Mortality." Preventive Medicine, 2, 67-81.
- Bortner, R. (1969). "A Sort Rating Scale As A Potential Measure of Pattern A Behavior." Journal of Chronic Diseases, 22, 87-91.
- Bronfen, N. (1980). <u>Nutrition for a Better life: A Source Book For</u>
 The Eighties. Santa Barbara: Capra Press.
- Brookover, W., Erikson, E., & Joiner, L. (1967). <u>Self-Concept of</u>
 Ability and School Achievement. East Lansing, Michigan.
- Brown, B. (1981). <u>Stress and The Art of Biofeedback</u>. New York: Bantam Books.
- Brownell, K.D. and Stunkard, A.J. (1978). "Behavioral Treatment of Obesity in Children." American Journal of Disabled Child. 403-412.
- Califano, J. (1978, November). " A New Commitment To Wellness." American Lung Association Bulletin, 5-10.
- Campbell, D. & Stanley, J. (1963). <u>Experimental and Quasi-Experimental Designs For Research</u>. Boston: Houghton Mifflin Company.
- Carrol, C., Miller, D., & Nash, J. (1976). Health: The Science of Human Adaptation. Iowa: Wm. C. Brown Company Publishers.
- Centers For Disease Control (CDC) (April, 1982). <u>Probability of Dying</u> Within The Next 10 Years At Selected Ages For 40 Major Causes.

- Chapin, H. (1978). <u>Living Room Suite</u> (Cassette Recording No. TC-5142.) New York, NY: Elektra Records.
- Chen, W. (1979). <u>Instructions For Muscle Relaxation</u>. Paper presented at Biofeedback Workshop, La Crosse, Wisconsin.
- Chilton, W. (1984, April). <u>Gresham Schools' Wellness Program</u>. Paper presented at the American Alliance for Health, Physical Education, Recreation, and Dance, Anaheim, CA.
- Coddington, R. (1972). "The Significance of Life Events As Etiologic Factors In The Diseases of Children." <u>Journal of Psychosomatic</u> Research, 16, 7-13.
- Cohen, L. (1976). Educational Research In Classrooms and Schools: A Manual of Materials and Methods. London: Harper and Row.
- Collingwood, T. (1983, May). Institute for Aerobics Research, correspondence from Dallas, TX.
- Combes, A., Soper, D., Gooding, C., Benton, J., Dickman, J., & Usher, R. (1969). Florida studies in the helping professions. University of Florida Social Science Monographs, No. 37.
- Combs, A. & Soper, D. (1963). The Relationship of Child Perception To
 Achievement and Behavior In The Early School Years. Cooperative
 Research Project No. 814, Washington: Government Printing
 Office.
- Consumer Product Safety Commision. (1983, November). Home Fire Safety What You Should Know.
- Cook, T. & Campbell, D. (1979). Quasi-Experimentation: Design and Analysis Issues For Field Settings. Boston: Houghton Mifflin Company.
- Cooper, K. (1968). Aerobics. New York: Bantam Books.
- Coopersmith, S. (1967). The Antecedents of Self-Esteem. San Francisco: W. H. Freeman.
- Cox, M., Shepard, R., & Corey, P. (1981). "The Influence of An Employee Fitness Program Upon Fitness, Productivity, and Absenteeism." Ergonomics, 24, 795-806.
- Cundiff, D. & Brynteson, P. (1979). Health Fitness: Guide To A lifestyle. Dubuque, Iowa: Kendall/Hunt Publishing Company.
- Curtis, J. & Detert, R. (1981). How To Relax: A Holistic Approach
 To Stress Management. Palo Alto, CA: Mayfield Publishing
 Company.

- Curtis, J. & Detert, R. (1983). <u>Learn To Relax: A Fourteen Day Program</u>. La Crosse, WI: Coulee Press.
- Dallas Independent School District (DISD) and Institute for Aerobics Research, "The Aerobics and Well-Being Program", 1983.
- Dedmon, R. (1980, April). "Employees As Health Educators: A Reality at Kimberly-Clark. Occupational Health and Safety, 49, 18-24.
- DeLuca, J.R. (1980). Alcohol and Health: Fourth Special Report To

 The U.S. Congress. Rockville, MD: National Institute on Alcohol

 Abuse and Alcoholism.
- Deutsch, M. (1965). <u>Institute for Developmental Studies: Annual</u> Report. New York Medical College, New York.
- Dietary Guidelines For Americans. (1980, March-April). <u>Nutrition</u> <u>Today</u>, 14-18.
- Dunn, H. (1961). High Level Wellness, Virginia: R.W. Beatty, Ltd.
- Eckholm, E. (1981). Creating A Better Health in The Nation's Health.

 San Francisco: Boyd and Fraser Publishing Company.
- Elrick, H., Crakes, J., & Clarke, S. (1978). Living Longer and

 Better: Guide To Optimal Health. Mountain View, CA: World

 Publications.
- Engelhardt, L., (1975). Awareness and Relaxation Through Biofeedback

 Programs. A manuscript prepared for Spearfish School District

 40-42, Spearfish, South Dakota, 1975.
- Evans, R.I., Henderson AH, Hill PC., Raines BE (1979). "Smoking In Children and Adolescents: Psychosocial Determinants and Prevention Strategies." Smoking and Health: A Report of the Surgeon General. U.S. Government Printing Office, Washington, D.C.
- Farquhar, J. (1978). The American Way of Life Need Not Be Hazardous
 To Your Health. New York: W. W. Norton and Company.
- Ferguson, J. (1975). <u>Learning To Eat</u>. Palo Alto, CA: Bull Publishing Company.
- Ford, A. & Ford, W. (1981). "The Need For Cooperative Health Education: Some Survey Findings." <u>International Journal of Health Education</u>, 83-94.
- Friedman, M. & Rosenman, R. (1974). <u>Type A Behavior and Your Heart</u>. Connecticut: Fawcett Crest Books.

- Garfoot, Dave. (1980, April). <u>Non-Drug Highs</u>. Paper presented at Drug Alternative Workshop, <u>LaCrosse</u>, Wisconsin.
- Gaudry, E. and Spielberger, C.D. (1971). Anxiety and Educational Achievement. New York: John Wiley and Sons..
- Gephart, J., Egan, M., & Hutchins, V. (1984, January). "Perspectives on Health of School-age Children: Expectations For The Future." Journal of School Health, 54, 11-17.
- Germeroth, S.R. (1978). Why Teach Stress Management and Tension Control? (ERIC Document Reproduction Service No. ED 150 145).
- Gilmore G.D. The Development, Implementation, and Evaluation of a Family Health Education Program Incorporating The Concept of Prevention. (Doctoral dissertation, University of Tennessee, 1974).
- Glasser, W. (1976). <u>Positive Addiction</u>. New York: Harper and Row Publishers.
- Green, D.E. (1979). <u>Teenage Smoking</u>: <u>Immediate and Long-Term</u>
 Patterns. National Institute of Education.
- Hall, C. and Lindzery, G. (1957). Theories of Personality. New York: John Wiley and Sons, Inc.
- Harris, L. and Associates, Inc. (1984). Health Lifestyles/Unhealthy
 Lifestyles: A National Research Report of Behavior Knowledge,
 Motivations, and Opinions Concerning Individual Health Practices.
 New York: Garland Publishing, Inc.
- Hartz, A.J. and Rimm, A.A. (180). "Natural History of Obesity in 6,946 Women Between 50 and 59 Years of Age." American Journal of Public Health, 70, 385-388.
- Healthy People: The Surgeon General's Report On Health Promotion and Disease Prevention. U.S. Department of Health, Education, and Welfare, Pub. No. 79-55071, (1979).
- Holmes, T. & Rahe, R. (1967). "The Social Readjustment Rating Scale." Journal of Psychomatic Research, 11, 213-218.
- Horowitz, R. (1939, January). "Racial Aspects of Self-Identification In Nursery School Children." Journal of Psychology.
- Iverson, D. and Kolbe, L. (1983, May). "Evolution of the National Disease Prevention and Health Promotion Strategy: Establishing a Role for the Schools." Journal of School Health, 284-302.
- Kaplan, H. (1977). "Self-Attitudes and Alcohol Use Among Adolescents."

 <u>Currents in Alcoholism</u>, 2, 285-298 New York: Grune and Stratton.

- Kaplan, H. (1980). "Self-Esteem and Self-Derogation Theory of Drug Abuse." Theories of Drug Abuse: Selected Contemporary

 Perspectives NIDA Research Monograph 30, National Institute on Drug Abuse, Department of Health, Education and Welfare, Washington D.C., Government Printing Office.
- Knowles, J. (Ed.), (1977). Doing Better and Feeling Worse: Health in the United States. New York: W. W. Norton and Company.
- Linden, V. (1969). "Absence From Work and Physical Fitness." British Journal International Medicine, 26, 47-54.
- Leonard, J., Hofer, J., & Pritikin, N. (1974). <u>Live Longer Now: The</u>

 First One Hundred Years Of Your Life: The 2100 Program. New

 York: Grosset and Dunlap Publisher.
- Mahler, H. (1983a). "Health For All By The Year 2000: The Count-down Has Begun." World Health Day, April 7, 3-4.
- Mahler, H. (1983b). "Health For All---Everyone's Concern." World Health Day, April 14, 9-12.
- Martin, J. (1978). "Corporate Health; A Result of Employee Fitness." Physician Sports Medicine, 6, 135-137.
- Mills, J. (1982). Coping With Stress: A Guide To Living. New York: John Wiley and Sons, Inc.
- Nash, J. & Ormiston, L. (1978). Taking Charge of Your Weight and Well-Being. Palo Alto, CA: Bull Publishing Company.
- National Children and Youth Fitness Study. (1980). U.S. Department of Health and Human Services.
- National Institute on Drug Abuse and Alcoholism. <u>Prevention Plus:</u>
 <u>Involving Schools, Parents, and the Community in Alcohol and Drug Education, 1983.</u>
- Nolte, A.E.; Smith, B.J.; and O'Rourke, T. (1983, April). "The Relative Importance of Parental Attitudes and Behavior Upon Youth Smoking Behavior." Journal of School Health, 53:264-270.
- Nolte, Ann; O'Routke, Thomas; and Smith, Becky. (1983, October).

 Health Risk Attitudes, Beliefs, and Behaviors of Students

 Grades 7-12. Paper presented at the National Convention,

 American School Health Association, Louisville, KY.
- Olson, Nancy J. (1980). Personal and Family Safety and Crime Prevention. Holt, Rinehart and Winston, New York.
- Pearson, E. (1980, February). "The Emerging Role of The Occupational Physician In Preventive Medicine, Health Promotion, and Health Education." Journal of Occupational Medicine, 22.

- Preventive Medicine USA. (1976). Task force reports sponsored by the John E. Fogarty International Center for Advanced Study in the Health Sciences, NIH, and the American College of Preventive Medicine, New York: Prodist.
- Pritikin, N. (1979). The Pritikin Program For Diet and Exercise. New York: Grosset and Dunlap.
- Promoting Health, Preventing Disease: Objectives For The Nation.

 Department of Health and Human Services, PHS, Fall, 1980.
- Prospects for a Healthier America. (1984). U.S. Department of Health and Human Services.
- Rahe, R. (1972). "Subjects' Recent Life Changes and Their Near-Future Illness Reports: A Review." <u>Annals of Clinical Research</u>. 4, 250-265.
- Righi, Francis C. (1983, October). "The Child in the Car--What Every Nurse Should Know About Safety." American Journal of Nursing.
- Robin, J. (1981). "Pathogenesis of Obesity: Energy Intake and Expenditure." Obesity In America, U.S. Government Printing Office.
- Roemer, R. (1984, March). "The Value of Medical Care For Health Promotion." The American Journal of Public Health. 74, 243-248.
- Ross, James; Dotson, Charles O.; Gilbert, Glen; and Katz, Susan. (1983, March), "After Physical Education... Physical Activity Outside of School Physical Education Programs." <u>JOHPERD</u>. 78. 193-198.
- Schwartz, M. & Tangri, S. (1965). "A Note On Self-Concept As An Insulator Against Delinquency." American Sociological Review, 30, 922-926.
- Selye, H. (1974). Stress Without Distress. New York: Lippincott.
- Sheehan, G. (1978). Running and Being: The Total Experience. Anderson, Indiana: Warner Books.
- Strasser, (1980, April). "Health Education In Industry: The Key To A Vigorous Workforce." Occupational Health and Safety. 49, 25-26.
- U.S. Department of Health, Education, and Welfare. (1979). Healthy
 People: The Surgeon General's Report On Health Promotion and
 Disease Prevention. Washington, D.C.: U.S. Government Printing
 Office.
- U. S. Senate Select Committee on Nutrition and Human Needs. (1977a).

 <u>Dietary Goals for the United States</u>. Washington, D.C.: U.S.

 <u>Government Printing Office</u>.
- U. S. Senate Select Committee on Nutrition and Human Needs. (1977b).

 Nutrition and Health: An Evaluation of Nutritional Surveillance
 in the United States. (2nd Ed.), Washington, D.C.: U.S. Government Printing Office.

- Wattenberg, W. & Clifford, C. (1962). Relationship of Self-Concept To
 Beginning Achievement In Reading. U.S. Office of Education,
 Cooperative Research Project No. 377. Detroit: Wayne State
 University.
- Wechsler, Henry; Rohman, Mary; Kotch, Jamie B.; and Idelson, Roberta K.

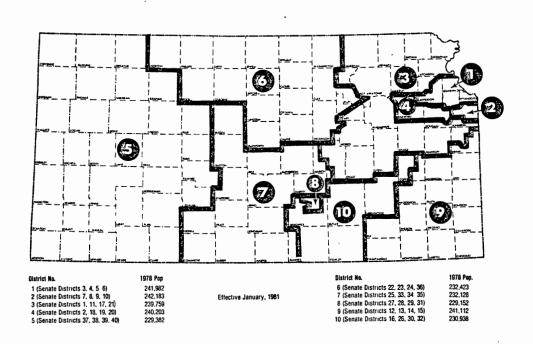
 "Alcohol and Other Drug Use and Automobile Safety: A Survey of
 Boston-Area Teen-agers." <u>Journal of School Health</u>, vol. 54,
 No. 5. May, 1984.
- Wells, L. (1978). "Theories of Deviance and the Self-Concept." <u>Social</u> <u>Psychology</u>, 41, 189-204.
- Williamson, M. (1978). "An Assessment of the Effectiveness of An Educational Program On Wellness Attitudes and Behaviors of Graduate Students." Master's thesis, University of Wisconsin La Crosse.
- Wilson, E., Fisher, K., & Garcia, P. (1979). <u>Principles of Nutrition</u> (4th ed.). New York: John Wiley and Sons.
- Winick, Myron. (1980). <u>Nutrition In Health and Disease</u>. New York: Wiley and Sons.
- Woolner, R. (1966). "Kindergarten Children's Self-Concepts In Relation To Their Kindergarten Experiences." Unpublished doctoral dissertation, Memphis State University.
- Working Group on Arteriosclerosis of the National Heart, Lung, and Blood Institute. Arteriosclerosis, 1981; Summary, Conclusions, and Recommendations. NIH Publication Nos. 81-2034 and 81-2035, 1, 2, 1981.
- World Health Organization, "Constitution of the World Health Organization." Chronicle of WHO, 1, (1947), 1.

APPENDIXES

APPENDIX A

KANSAS STATE BOARD OF EDUCATION DISTRICTS

Kansas State Board of Education Districts



APPENDIX B

LETTER TO SUPERINTENDENTS

Dear Superintendent:

I would like permission to survey the health behaviors of the K-12 students in your school district. The Kansas Association For Health, Physical Education, Recreation, and Dance; the Kansas Department of Health and Environment; Emporia State University (Division of H.P.E.R.&A.); and the American Cancer Society have granted me funds to conduct a state-wide survey of the general health risk factors or behaviors of Kansas' students, K-12. A search of the current literature has indicated that such a study has not been conducted to date.

In view of this, it is interesting to note that the U.S. Government's Center for Disease Control reports that over half of the deaths of people between the ages of 1 and 65 are related directly to lifestyle considerations and inability to manage stress. Also it is a fact that most of us either ignore preventative health measures of are unwilling to make the specific effort needed to change the long established habits of an unhealthy lifestyle. Health attitudes and behaviors do begin early in life.

All 315 unified school districts in Kansas are being contacted for inclusion in the study. Of the school districts responding affirmatively, three (3) school districts from each of the 10 Kansas Board of Education Districts will be randomly selected for study. A visitation will be made after August 1, 1983 by the project director to each of these 30 school districts. The purpose of this visit will be to provide procedures for survey dissemination, to answer questions concerning the study, and to provide survey questionnaires.

Dissemination of the survey instrument will begin on September 1, 1983. The K-3 and 4-6 grade inventory will be read to the students. The students will answer the questions in a yes/no format on a provided answer sheet. The 7-8 and 9-12 grade inventory will be read and answered by the student. The student will respond on an answer sheet incorporating a usually, occasionally, rarely/never format. In all cases, this survey procedure can be completed in approximately 10-15 minutes. Thus, it will interfere very little with normal school day procedures.

Four hundred randomly selected responses from each of the K-3, 4-6, 7-8, and 9-12 grade classifications from each of the 10 Kansas Board of Education Districts will be used for statistical analysis. Statistical analysis of the data will report percentage responses to each question.

The surveying of students will be completed by December 23, 1983, with all questionnaires being mailed to the project director. Tabulation of survey results will begin on January 1, 1984 through April 30, 1984. The study will culminate on May 31, 1984, with the release of survey results to the participating school districts, all funding agencies, and interested parties.

All costs for this study are funded by the previously mentioned agencies. Participating school districts <u>will not</u> have to incur any costs.

A pilot study was conducted in April, 1982 in U.S.D. #253, Emporia. If you have any concerns about the validity and importance of this study or my professional credibility, feel free to contact Mr. Dan Lumley, Director of Secondary Learning, U.S.D. #253, Emporia, Kansas.

All results of this study will be kept in strict confidence. The results of this study should aid school districts in discovering positive and negative health behaviors of K-12 students. These results should further aid school districts in evaluating their health/physical education curriculums.

I hope you will evaluate the importance of such a study and consent to have your school district participate. Please return the enclosed post card by <u>July 25, 1983</u> to indicate your affirmative or negative participation.

I wish to thank you for your time and consideration in reviewing this proposed study. I look forward to working with you and your school district. Please feel free to contact the Division of Health, Physical Education, Recreation, and Athletics at Emporia State University if we can ever assist your school district with their health/physical education needs.

Sincerely,

Darrel Lang
Project Director
Coordinator of Health Education
Division of Health, Physical
Education, Recreation and Athletics

DL:dy

APPENDIX C

RESULTS FOR COMPARISON OF HEALTH BEHAVIORS

STRESS MANAGEMENT

K-3

1. Does it take you a long time to fall asleep at night?

	#	용		#	용		
Males							
Yes	1775	64	No	966	35	NR	12
Females							
Yes	1450	61	No	926	38	NR	13
Total							
Yes	3225	63	No	1892	36	NR	25

2. Do you often bite your fingernails?

	# 8	5		#	용		
Males							
Yes	852 3	31	No	1886	_69	NR	15
Females							
Yes	818 3	34	No	1553	65	NR	18
Total		_					
Yes	1670 3	32	No	3439	67	NR	33

3. Do you often worry about doing badly in school?

	# %	#	용	
Males				
Yes	1308 47	No 1437	52	NR 8
Females				
Yes	1182 49	No 1192	50	NR 15
Total				
Yes	2490 48	No 2629	51	NR 23

4. Do you often get angry and yell?

	# %		#	8		
Males						
Yes	1156 42	No	1582	57	NR	15
Females						
Yes	914 38	No	1458	61	NR	17
Total						_
Yes	2070 40	No	3040	59	NR	32

NUTRITION

K-3

1. Do you eat a meal or breakfast every morning?

,	# %		# %		
Males					
Yes	2318 84	No	426 15	NR	9
Females					
Yes	2027 85	No	348 14	NR	14
Total					
Yes	4345 84	No	774 15	NR	23

2. Do you eat fruits or vegetables most days?

	#	ક			#	용		
Males								
Yes	1900	69	N	1 0	838	30	NR	15
Females								
Yes	1797	75	N	1 0	576	24	NR	16
Total								
Yes	3697	72	N	NO.	1414	27	NR	31

3. Do you usually put salt on your food?

	# %		# %		
Males Yes Females	930 34	No	1810 65	NR	<u>13</u>
Yes Total	626 26	No	<u>1752 _ 73</u>	NR	11
Yes	1556 30	No	3562 69	NR	24

4. Do you eat cake, cookies, pie, candy, or other sweets every day?

	# %		# %		
Males					
Yes	878 32	No	<u>1859</u> 67	NR	<u>16</u>
Females Yes Total	661 28	No	<u>1711 _71</u>	NR	<u>17</u>
Yes	1539 30	No	3570 69	NR	33

ALCOHOL

K-3

1. Would you use someone else's medicine without asking your parents first?

	#	용		#	용		
Males		_					_
Yes Females	<u>165</u>	<u>-6</u>	No	2579	93	NR	_9
Yes Total	105	_4	No	2279	<u>95</u>	NR	_5
Yes	270	_5	No	4858	94	NR	14

2. Would you take candy from a stranger without your parent's permission?

	#	%			#	8		
Males Yes Females	_59	_2	No)	2688	<u>97</u>	NR	_6
Yes Total	_30	1	No)	2351	98	NR	_8
Yes	89	2	No)	5039	97	NR	14

3. When you see other people drink beer, wine, or alcohol, do you also want to take a drink of that beer, wine or alcohol?

	#	ક		#	8 8		
Males Yes	281	<u>10</u>	No	2464	<u>89</u>	NR	_8
Females Yes Total	140	_6	No	2239	<u>93</u>	NR	10
Yes	421	_8	No	4703	91	NR	18

4. Does drinking beer, wire or alcohol make you look grown-up?

	#	8			#	કૃ		
5		t						
Yes	243	9		No	2505	90	NR	_5
les								
	264	11		No	2115	88	NR	10
tal								
Yes	507	10		No	4620	89	NR	<u>15</u>
֡	s Yes les Yes tal Yes	Yes <u>243</u> les Yes <u>264</u> tal	Yes 243 9 les Yes 264 11 tal	Yes <u>243</u> <u>9</u> les Yes <u>264</u> <u>11</u> tal	Yes 243 9 No les Yes 264 11 No tal	S Yes 243 9 No 2505 les Yes 264 11 No 2115 tal	Yes 243 9 No 2505 90 les Yes 264 11 No 2115 88 tal	S Yes 243 9 No 2505 90 NR les Yes 264 11 No 2115 88 NR tal

5. Do you sometimes take medicine without asking a grown-up?

Males	#	clo		#	90		
Yes Females	185	_7	No	2562	92	NR	_6
Yes Total	123	_5	No	2257	94	NR	_9
Yes	308	6	No	4819	93	NR	15

SMOKING

K-3

1. Does someone you care very much about smoke?

#	8			#	ક			
1810	66	N	Ю	928	33		NR	15
1636	68	N	lo	742	31		NR	11
3446	67	N	Ю	1670	32		NR	26
	1636	# % 1810 66 1636 68 3446 67	1810 66 N 1636 68 N	1810 66 No 1636 68 No	1810 66 No 928 1636 68 No 742	1810 66 No 928 33 1636 68 No 742 31	1810 66 No 928 33 1636 68 No 742 31	1810 66 No 928 33 NR 1636 68 No 742 31 NR

2. Does smoking make you look grown-up?

	# %			# %		
Males						
Yes	199 7		No	2537 92	NR	17
Females						
Yes	216 9		No	2162 90	NR	11
Total						
Yes	<u>415</u> 8	*	No	4699 91	NR	28
		•				

3. Would it be easy for you to get a cigarette, cigar or pipe?

# %		# %	
		•	
519 19	No	2223 80	NR 11
322 13	No	2050 86	NR 17
841 16	No	4273 83	NR 28
	519 19 322 13		

4. Can smoking hurt you?

	# %		# %	
Males				
Yes	2418 88	No	314 11	NR 21
Females				
Yes	2109 88	No	263 11	NR 17
Total				
Yes	4527 88	No	577 11	NR 38

SAFETY

K-3

1. Do you usually wear a seat belt when you ride in a car?

	# %		# %		
Males					
Yes	1491 54	No	1248 45	NR :	14
Females				_	
Yes	1412 59	No	961 40	NR .	16
Total				-	
Yes	2903 56	No	2209 43	NR :	30

2. Do you usually stop, look both ways, and listen before you cross the street?

	# %	# %	
Males			
Yes	<u>2577 94</u>	No <u>165</u> 5	NR <u>11</u>
Females			
Yes	<u>2293 96</u>	No <u>83 3</u>	NR <u>13</u>
Total			
Yes	<u>4870 95</u>	No <u>248 4</u>	NR <u>24</u>

3. Do you sometimes light matches when grown-ups are not around?

	# %	# %	
Males Yes Females	202 _ 7	No <u>2538</u> <u>92</u>	NR <u>13</u>
Yes	92 4	No <u>2282</u> <u>95</u>	NR <u>15</u>
Yes	294 6	No 4820 93	NR 28

4. Do you sometimes try things even when grown-ups say you might get hurt?

	# %	#	Q ₀	
Males Yes	566 21	No 2176	5 78 NI	. 11
Females	366 21	NO <u>2176</u>	70 INI	`
Yes Total	363 15	No <u>2011</u>	. <u>84</u> NI	R <u>15</u>
Yes	929 18	No <u>4187</u>	81 NI	R <u>26</u>

PHYSICAL ACTIVITY

K**-**3

1. Do you play outdoors a lot?

	# %		# %	
Males				
Yes	2437 89	No	300 10	NR 16
Females				
Yes	1990 83	No	385 16	NR 14
Total				
Yes	4427 86	No	685 13	NR 30

2. Does your body move a lot when you play?

	# %		# %		
Males					
Yes	2547 93	No	192 6	NR	14
Females					
Yes	2170 91	No	207 9	NR	12
Total					
Yes	2717 92	No	399 7	NR	26

3. Do you often feel tired?

Males	
Yes 1465 53 No 1273 46 NR 1	15
Females	
Yes 1567 66 No 808 33 NR 1	14
Total	
Yes 3032 59 No 2081 40 NR 2	29

4. Does your body hurt when you run?

	# %		# %		
Males					
Yes	853 31	No	1883 68	NR .	17
Females				-	
Yes	840 35	No	1539 64	NR .	10
Total				•	_
Yes	1693 33	No	3422 66	NR :	27

5. Does your body hurt when you play or exercise?

Males	# %		# %	
Yes Females	786 29	No	<u>1953</u> <u>70</u>	NR <u>14</u>
Yes Total	908 38	No	<u>1472</u> <u>61</u>	NR <u>9</u>
Yes	1694 33	No	3425 66	NR 23

PHYSICAL ACTIVITY, Continued

6. Do you like to climb things?

	# %		# %		
Males					
Yes	2360 86	No	376 13	NR	17
Females					
Yes	<u>1736 73</u>	No	636 26	NR	17
Total					_
Yes	<u>4096</u> <u>80</u>	No	1012 19	NR	<u>34</u>

STRESS MANAGEMENT

4 - 6

1. Do you bite your fingernails, chew on a pencil, or eat when nervous or upset?

# %		# %	
1093 47.85	No	1190 52.10	NR 1
			_
1307 59.57	No	887 40.43	NR 0
2400 53.60	No	2077 46.38	NR l
	1093 47.85 1307 59.57	1093 47.85 No 1307 59.57 No	1093 47.85 No 1190 52.10 1307 59.57 No 887 40.43

2. Do you take time to relax everyday?

	# %	# %	
Males			
Yes	1675 73.34	No 608 26.62 NR	1
Females			_
Yes	1719 78.35	No 475 21.65 NR	0
Total			
Yes	3394 75.79	No 1083 24.18 NR	1

3. At bedtime, do you fall asleep easily?

	# %		# %		
Males					
Yes	745 32.62	No	1538 67.34	NR	1
Females					_
Yes	751 34.23	No	1443 65.77	NR	0
Total					_
Yes	1496 33.41	No	2981 66.57	NR	1

4. If you awake up in the middle of the night, is it easy for you to fall asleep again?

	# %		# %		
Males					
Yes	1306 57.18	No	977 42.76	NR	1
Females		_			
Yes	1191 54.28	No]	L003 45.72	NR	0
Total		_			
Yes	2497 55.76	No]	L980 44.22	NR	1
		-			_

5. Do you often feel tired (except after hard physical activity)?

	# %	# %	
Males Yes Females	918 40.19	No <u>1362</u> <u>59.63</u> NR	4
	1015 46.26	No <u>1179</u> <u>53.74</u> NR	0
Yes	1933 43.17	No 2451 56.74 NR	4

STRESS MANAGEMENT, Continued

6. Do you frequently hit or yell at someone when you get mad?

	# %	# %	
Males			
Yes	1492 65.32	No 789 34.54 NR 3	3
Females			-
Yes	1325 60.39	No 865 39.43 NR 4	1
Total			_
Yes	2817 62.91	No <u>1654 36.94</u> NR 3	7

7. Do you usually get a full nights sleep of about 7-9 hours?

	# %		# %		
Males			-		
Yes	1822 79.77	No	460 20.14	NR	2
Females		_			_
Yes	1830 83.41	No	363 16.55	NR	1
Total		_			
Yes	3652 81.55	No _	823 18.37	NR	3

8. Do you ask for help, rather than worrying about something you can't solve?

	# %	# %
Males		
Yes	1807 79.12	No 471 20.62 NR 6
Females		
Yes	1745 79.54	No 447 20.37 NR 2
Total		
Yes	3552 79.43	No 918 20.50 NR 8

9. Do you try to avoid people who make you angry?

	# %	# %
	<u>1743</u> <u>76.31</u>	No 540 23.64 NR 1
Females Yes Total	<u>1829</u> <u>83.36</u>	No <u>364</u> <u>16.59</u> NR <u>1</u>
Yes	<u>3572</u> <u>79.77</u>	No 904 20.19 NR 2

10. Do you generally do school work on time?

	# %		# %		
Males					
Yes	1914 83.80	No	368 16.11	NR	2
Females					_
Yes	1910 87.06	No	281 12.81	NR	3
Total					_
Yes	3824 85.40	No	649 14.49	NR	5

NUTRITION

4 - 6

1. Do you eat two or more servings of fruit or vegetables most days?

	# %	#	90		
Males					
Yes	1535 67.21	No 74	7 32.71	NR	2
Females					_
Yes	1489 67.87	No 70	4 32.09	NR	1
Total					_
Yes	3024 67.53	No 145	1 32.40	NR	3

Do you drink 1-5 glasses of soda pop, Kool Aide, Tang, or Hi-C a week?

	# %		# %		
Males					
Yes	1398 61.21	No	884 38.70	NR	2
Females					_
Yes	1276 58.16	No	915 41.70	NR	3
Total					
Yes	2674 59.71	No	1799 40.17	NR	5

3. Do you drink 6 or more glasses of soda pop, Kool Aide, Tang, or Hi-C a week?

	# %	# %
Males Yes Females	894 39.14	No <u>1388</u> <u>60.77</u> NR <u>2</u>
Yes	694 31.63	No <u>1500</u> <u>68.37</u> NR <u>0</u>
Yes	1588 35.46	No 2888 64.49 NR 2

4. Do you usually put salt on your food?

	# %		# %		
Males					
Yes	844 36.95	No	1435 62.83	NR	5
Females					
Yes	809 36.87	No	1383 63.04	NR	2
Total					_
Yes	1653 36.91	No	2818 62.93	NR	7
					_

5. Do you eat a meal or breakfast every morning?

	# %	# %
Males Yes Females	1693 74.12	No <u>588</u> <u>25.74</u> NR <u>3</u>
	1610 73.38	No <u>584</u> <u>26.62</u> NR <u>0</u>
Total Yes	3303 73.76	No <u>1172 26.17</u> NR <u>3</u>

NUTRITION, Continued

6. Do you eat fried foods like french fries, fried chicken, fried eggs, or hash browns daily?

	# %		# %		
Males Yes Females	889 38.92	No	1393 60.99	NR	2
Yes Total	832 37.92	No	<u>1361</u> <u>62.03</u>	NR	1
Yes	1721 38.43	No	2754 61.50	NR	3

7. Do you drink at least 3 glasses of milk a day?

	# %		# %		
Males Yes	1157 50.66	No	1125 49.26	NR	2
Females Yes Total	1072 48.86	No	1122 51.14	NR	0
Yes	2229 49.78	No	2247 50.18	NR	2

8. Do you eat 3 meals most days?

	# %		# %		
Males Yes Females	1977 86.56	No	304 13.31	NR	3
Yes	<u>1911</u> <u>87.10</u>	No	282 12.85	NR	1
Yes	3888 86.82	No	586 13.09	NR	4

ALCOHOL

4 - 6

1. When you see other people drink beer, wine or alcohol, do you also want to take a drink?

	#	%		# %		
Males						
Yes	508	22.24	No	<u>1775</u> <u>77.71</u>	NR	1
Females Yes Total	206	9.39	No	1988 90.61	NR	0
Yes	714	15.94	No	3763 84.03	NR	1

2. Would you take candy from a stranger without your parent's permission?

	#	웡		# %		
Males						
Yes Females	_54	2.36	No	2229 97.59	NR	1
Yes Total	_20	.91	No	2174 99.09	NR	0
Yes	<u>74</u>	1.65	No	4403 98.33	NR	1

3. If someone other than your parents offered you some beer, wine, or whiskey other than a taste or sip, would you drink it?

	#	용		# %		
Males						
Yes	<u> 192</u>	8.41	No	2091 91.55	NR	1
Females						_
Yes	78	3.56	No	2116 96.44	NR	0
Total						_
Yes	270	6.03	No	4207 93.95	NR	1

4. Do you drink 1-2 alcoholic beverages a week?

	#	%		# %	
Males					
Yes	128	5.60	No	2156 94.40	NR 0
Females					_
Yes	_34	1.55	No	2160 98.45	NR 0
Total					_
Yes	<u>162</u>	<u>3.62</u>	No	<u>4316 96.38</u>	NR 0

5. Do you drink 3-4 alcoholic beverages a week?

	#	읭		# %	
Males					
Yes	56	2.45	No	2228 97.55	NR 0
Females					_
Yes	16	0.73	No	2178 99.27	NR 0
Total					_
Yes	_72	1.61	No	4406 98.39	NR 0

ALCOHOL, Continued

6. Do you drink 5 or more alcoholic beverages a week?

	#	8		#	8		
Males Yes	_92	4.03	No	2192	95.97	NR	0
Females Yes Total	_12	0.56	No	2180	99.36	NR	2
Yes	104	2.32	No	4372	97.63	NR	2

7. Have you ever been drunk?

	#	8		#	8		
Males Yes Females	388	16.99	No	1893	82.88	NR	3
Yes	123	5.61	No	2069	94.30	NR	2
Yes	<u>511</u>	11.41	No	3962	88.48	NR	5

SAFETY

4 - 6

1. Do you usually wear a seat belt when you ride in a car?

	#	%		#	Olo Olo		
Males							
Yes Females	383	16.77	No	<u>1900</u>	83.19	NR	1
Yes Total	440	20.05	No	1753	79.90	NR	1
Yes	823	18.38	No	3653	81.58	NR	2

2. Do you always wear a life jacket while riding in a boat or canoe?

Males	#	olo Ol		#	g		
Yes Females	1591	69.66	No	689	30.17	NR	4
Yes Total	<u>1779</u>	81.08	No	404	18.41	NR	11
Vec	3370	75 26	No	1002	24 41	MID	1 =

Yes 3370 75.26 No 1093 24.41 NR 15
3. Do you ever take pills or medicine without your parent's or doctor's permission?

R 1
_
R 1
_
R 2
1

4. Do you usually laugh or talk with food in your mouth?

	#	olo Olo		#	96		
Males							
Yes	965	42.25	No	1318	57.71	NR	1
Females							_
Yes	690	31.45	No	1503	68.51	NR	1
Total							
Yes	<u> 1655</u>	36.96	No	2821	63.00	NR	2

5. Do you usually cross the street at crosswalks?

	#	90		#	O _O		
Males							
Yes	1234	54.03	No	1049	45.93	NR	1
Females							_
Yes	<u> 1618</u>	73.75	No	572	26.07	NR	4
Total							
Yes	2852	63.69	No	<u>1621</u>	<u>36.20</u>	NR	<u>5</u>

SAFETY, Continued

6. Do you ride your bike on the correct side of the street?

	#	용		#	8		
Males							
Yes	<u>1416</u>	62.00	No	860	<u>37.65</u>	NR	8
Females							
Yes	<u>1742</u>	79.40	No	450	20.51	NR	2
Total							
Yes	3158	70.52	No	1310	29.25	NR	10

7. Do you usually run up or down stairs or in the hallways?

	#	8		#	8		
Males							
Yes	1522	66.64	No	762	33.36	NR	0
Females							
Yes	1312	59.80	No	880	40.11	NR	2
Total							
Yes	2834	63.29	No	1642	36.67	NR	2

8. When wet, do you ever touch anything electrical, other than a hair dryer?

	#	8		#	8		
Males							
Yes	311	13.62	No	1970	86.25	NR	3
Females							_
Yes	185	8.43	No	2007	91.48	NR	2
Total							_
Yes	496	11.08	No	3977	88.81	NR	5

SMOKING

4 - 6

1. Does someone you care very much about smoke?

	#	96		#	8		
Males	1045	00.06			10.00		
Yes Females	1847	80.86	No	<u>436</u>	19.08	NR	<u>1</u>
Yes Total	1834	83.59	No	360	<u>16.40</u>	NR	0
Yes	3681	82.20	No	796	17.77	NR	1

2. Do any of your friends smoke tobacco cigarettes, cigars or pipes?

	#	8		#	8		
Males							
Yes	745	32.61	No	1539	67.38	NR	0
Females							_
Yes	484	22.06	No	1708	77.84	NR	2
Total							_
Yes	1229	27.44	No	3247	72.51	NR	2

3. Would you smoke a tobacco cigarette if a friend offered it to you?

	#	8		#	8		
Males Yes Females	105	4.59	No	2176	95.27	NR	<u>3</u>
Yes Total	38	1.73	No	2156	98.26	NR	0
Yes	143	3.19	No	4332	96.73	NR	<u>3</u>

4. Have you smoked any tobacco cigarettes, cigars or pipes within the last three months?

	#	8		#	8	
Males Yes Females	197	8.62	No	2085	91.28	NR <u>2</u>
Yes Total	68	3.09	No	2126	98.26	NR <u>0</u>
Yes	265	5.91	No	4211	94.03	NR <u>2</u>

5. Have you smoked any tobacco cigarettes, cigars or pipes within the last week?

	#	οlo		#	%		
Males Yes Females	67	2.93	No	2217	97.06	NR	0
Yes Total	17	0.77	No	2177	99.22	NR	0
Yes	84	1.87	No	4394	98.12	NR	0

SMOKING, Continued

6. Have you ever bought to bacco cigarettes or any tobacco products for you or your friends?

Males	#	Qi Qi		#	90		
Yes Females	344	15.06	No	1940	84.94	NR	0
Yes Total	128	5.83	No	2066	94.17	NR	0
Yes	472	10.54	No	4006	89.46	NR	0

7. In the future, will you probably smoke regularly?

	#	g ₀		#	90		
Males Yes Females	192	8.41	No	2091	91.55	NR	1
Yes Total	86	3.92	No	2104	95.90	NR	4
Yes	278	6.21	No	4195	93.68	NR	5

8. Do you often chew or put tobacco products in your mouth?

	#	90		#	8		
Males Yes Females	387	16.94	No	1894	82.92	NR	<u>3</u>
Yes Total	54	2.46	No	2139	97.49	NR	1
Yes	441	9.85	No	4033	90.06	NR	4

PHYSICAL ACTIVITY

4 - 6

1. Do you play outdoors a lot?

	#	%		#	8		
Males Yes Females	2134	93.43	No	_150	6.57	NR	<u>0</u>
Yes	1988	90.61	No	206	9.39	NR	0
Yes	4122	92.05	No	356	7.95	NR	0

2. Do you play hard twice a week?

	#	8		#	8		
Males Yes Females	2102	92.03	No	180	7.88	NR	2
Yes Total	1762	80.31	No	431	19.64	NR	1
Yes	3864	86.29	No	611	13.64	NR	3

3. Would you rather get a ride to school than to walk or ride your bike?

	#	8		#	8		
Males Yes Females	916	40.11	No	1363	59.69	NR	5
Yes Total	1051	47.90	No	1142	52.05	NR	1
Yes	1967	43.93	No	2505	55.94	NR	<u>6</u>

4. Do you often feel tired?

	#	8		#	90		
Males Yes Females	881	38.57	No	1401	61.34	NR	2
Yes Total	957	43.62	No	1236	56.34	NR	1
Yes	1838	41.05	No	2637	58.89	NR	<u>3</u>

5. Does your body hurt when you play?

	#	8,		#	8		
Males Yes Females	449	19.66	No	1834	80.30	NR	1
Yes Total	393	<u>17.91</u>	No	1799	82.00	NR	2
Yes	842	18.80	No	3633	81.13	NR	<u>3</u>

PHYSICAL ACTIVITY, Continued

7.

8.

6. Does your body hurt when you run?

1779

3832

Yes

Yes

Total

81.08

85.57

Molos	#	8		#	olo		
Males Yes	723	31.65	No	1559	68.26	NR	2
Females Yes	857	39.06	No	1336	60.89	NR	1
Total Yes	1580	35.28	No	2895	64.65	NR	<u>3</u>
Is playir	ng hard	somethir	ng you do n	most day	s?		
Males	#	%		#	%		
Yes Females	<u>1712</u>	74.96	No	570	24.96	NR	<u>2</u>
Yes Total	1192	54.33	No	1000	45.58	NR	2
Yes	2904	64.85	No	<u>1570</u>	35.06	NR	4
Do you li	ike to d	climb thi	.ngs?				
Malas	#	90		#	o _o		
Males Yes	2053	89.89	No	227	9.94	NR	4
Females	1550	01 00		410	10.00		_

NR <u>2</u>

NR <u>6</u>

18.82

14.29

413

640

No

No

STRESS MANAGEMENT

7 - 8

1.	Α÷	bedtime	т	fall	asleen	easily
_ -	AL	Dearmie	_	татт	asteep	easily.

	#	용		#	%		#	8	
Males									
Usually	755	43	Occasionally	671	39	Rarely/Never	316	18	NR 0
Females									
Usually	699	42	Occasionally	701	42	Rarely/Never	269	16	NR_0
Total									
Usually	1454	43	Occasionally	1372	40	Rarely/Never	585	17	NR 0
									_

2. I get 6-8 hours of sleep most nights.

	#	ક		#	%		#	용	
Males Usually Females	1380	79	Occasionally	262	15	Rarely/Never	100	6	NR <u>0</u>
Usually Total	1298	77	Occasionally	277	17	Rarely/Never	93	6	NR <u>0</u>
Usually	2678	78	Occasionally	539	16	Rarely/Never	193	6	$NR \ \underline{0}$

3. If I wake up in the middle of the night, it's not difficult for me to fall asleep again.

	#			#	8		#	બ્ર	
Males									
Usually	1020	59	Occasionally	375	21	Rarely/Never	347	20	NR 0
Females	020	= -	0	404	0.5	D1 /31	212	10	1
Usually Total	932	56	Occasionally	424	25	Rarely/Never	312	19	NK T
	1050		011	700	22	D1/N	CEO	10	NTD 1
Usually	1952	28	Occasionally	799	23	Rarely/Never	039	19	NR 1

4. When I feel under pressure, I bite my fingernails, tap my foot, start to perspire, or have some other nervous habit.

	# %		#	8		#	%	
Males								
Usually	580 3	3 Occasionally	568	33	Rarely/Never	594	34	NR 0
Females								
Usually	762 4	6 Occasionally	508	30	Rarely/Never	399	24	NR 0
Total								_
Usually	1342 3	Occasionally	1076	32	Rarely/Never	993	29	NR <u>0</u>

5. I take 15 to 20 minutes a day for myself to do whatever I want.

	#	9		#	8		#	용	
Males									
Usually	1035	60	Occasionally	371	21	Rarely/Never	336		NR <u>0</u>
Females Usually	925	56	Occasionally	437	26	Rarely/Never	305	18	NR 2
Total			-			4 ·			_
Usually	1960	57	Occasionally	808	24	Rarely/Never	641	19	NR <u>2</u>

STRESS MANAGEMENT, Continued

_	_					_				-
6.	Ι	worry	about	exams	iİ	Ι	am	not	well	prepared.

	#	%		#	9		#	용	
Males									
	1089	63	Occasionally .	424	24	Rarely/Never	_228	13	NR $\underline{1}$
Females									
	1206	72	Occasionally .	<u>353</u>	<u>21</u>	Rarely/Never	<u> 110</u>	7	NR 0
Total									
Usually	2295	67	Occasionally .	<u>777</u> .	23	Rarely/Never	338	10	NR $\frac{1}{2}$

7. I consciously take time each day to relax.

8
28 NR 0
25 NR 1
26 NR 1

8. I know that extreme pressure or tension plays a role in causing health problems, and I am learning some specific relaxation skills to prevent and control my problems.

	#	&		#	8		#	&	
	276	16	Occasionally	489	28	Rarely/Never	974	56	NR <u>3</u>
Females Usually Total	280	17	Occasionally	507	30	Rarely/Never	881	53	NR <u>1</u>
Usually	556	16	Occasionally	996	29	Rarely/Never	1855	55	NR <u>4</u>

9. I know how much pressure I can manage and can do something to control that pressure.

```
      Males
      #
      %
      #
      %

      Usually 765 44 Occasionally Emales
      44 Occasionally 634 36 Rarely/Never
      343 20 NR 0

      Females
      Usually 685 41 Occasionally 624 37 Rarely/Never
      359 22 NR 1

      Total
      Usually 1450 43 Occasionally 1258 30 Rarely/Never
      702 20 NR 1
```

10. I am able to recognize, control, and/or change some unwanted pressure in $\,$ my life such as the way I look, or if I'm being accepted by my friends.

	#	%		#	용		#	8	
Males									
Usually	991	57	Occasionally	548	31	Rarely/Never	201	12	NR <u>2</u>
Females									
Usually	1046	63	Occasionally	489	29	Rarely/Never	133	8	NR <u>1</u>
Total									
Usually	2037	60	Occasionally	1037	30	Rarely/Never	334	10	NR 3

NUTRITION

7 - 8

				. •				
1.	I eat 2 or m	more se	rvings of frui	t or v	eget	ables per day	•	
	W-1	# %		#	%		# %	
	Males Usually	770 44	Occasionally	610	35	Rarely/Never	362 21	NR <u>0</u>
	Females Usually 6	582 41	Occasionally	_585	35	Rarely/Never	362 21	NR <u>1</u>
	Total Usually <u>14</u>	452 43	Occasionally	1195	35	Rarely/Never	763 22	NR <u>1</u>
2.	I drink 1-5	glasse	s of soda pop,	Kool	Aide	, Tang, or Hi	-C a week	
	M-1	# %		#	%		# %	
	Males Usually	946 54	Occasionally	447	26	Rarely/Never	349 20	NR <u>0</u>
	Females Usually _8	883 53	Occasionally	446	27	Rarely/Never	339 20	NR <u>1</u>
	Total Usually <u>18</u>	329 54	Occasionally	893	26	Rarely/Never	688 20	NR <u>1</u>
3.	I drink 6 or	r more	glasses of sod	a pop,	K∞	l Aide, Tang,	or Hi-C	a week.
	M-1	# %		#	90		# %	
	Males Usually 6	<u> 37</u>	Occasionally	457	26	Rarely/Never	647 37	NR <u>1</u>
	Females Usually _5	547 _ 33	Occasionally	390	23	Rarely/Never	731 44	NR <u>1</u>
	Total Usually <u>1</u> 1	184 35	Occasionally	847	25	Rarely/Never	1378 40	NR <u>2</u>
4.	I put salt o	on my f	∞d.					
	Malas	# %		#	%		# %	
	Males Usually _5 Females	582 33	Occasionally	_542	_31	Rarely/Never	617 36	NR <u>1</u>
	Usually 5	512 31	Occasionally	_537	32	Rarely/Never	619 37	NR <u>1</u>
	Usually 10	094 _32	Occasionally	1079	32	Rarely/Never	1236 36	NR <u>2</u>
5.	I eat preswe	eetened	cereals for m	y morn	ing :	meal.		
	Males	# %		#	%		# %	
	Usually _4 Females	126 _ 24	Occasionally	613	35	Rarely/Never	701 41	NR <u>2</u>
	Usually _3 Total	327 _ 20	Occasionally	488	_29	Rarely/Never	852 51	NR <u>2</u>
	Usually	753 22	Occasionally	1101	32	Rarely/Never	<u>1553</u> <u>46</u>	NR <u>4</u>

NUTRITION, Continued

6. I eat three or more meals p	per day.	ay.
--------------------------------	----------	-----

# %		#	&		#	બ્ર	
335 77	Occasionally	270	15	Rarely/Never	135	8	NR 2
029 62	Occasionally	399	24	Rarely/Never	240	14	NR 1
							_
364 69	Occasionally	669	20	Rarely/Never	375	11	NR <u>3</u>
	335 77 029 62	335 77 Occasionally 029 62 Occasionally	335 77 Occasionally 270 029 62 Occasionally 399	335 77 Occasionally 270 15 029 62 Occasionally 399 24	335 77 Occasionally 270 15 Rarely/Never 229 62 Occasionally 399 24 Rarely/Never	335 77 Occasionally 270 15 Rarely/Never 135 029 62 Occasionally 399 24 Rarely/Never 240	# % # % # % # % # % # % # % # % # % # %

7. I drink three or more glasses of milk most days.

	#	8		#	9		#	9	
Males									
Usually	684	39	Occasionally	544	32	Rarely/Never	512	29	NR 2
Females									_
Usually	448	27	Occasionally	462	28	Rarely/Never	758	45	NR 1
Total									_
Usually	1132	34	Occasionally	1006	29	Rarely/Never	1270	37	NR 3
_						_			_

8. I eat a meal or breakfast most mornings.

NR <u>1</u>
_
NR 1
NR <u>2</u>

9. Fried foods such as; french fries, fried chicken, fried eggs, or hash browns are a part of my daily diet.

```
# % # % # % # % # % # % Males
Usually 472 27 Occasionally 836 48 Rarely/Never 431 25 NR 3
Females
Usually 438 26 Occasionally 774 47 Rarely/Never 455 27 NR 2
Total
Usually 910 27 Occasionally 1610 47 Rarely/Never 886 26 NR 5
```

10. I eat at "fast food" restaurants 5 or more times a week.

	#	8		#	8		#	%	
Males									
Usually	97	5	Occasionally	341	20	Rarely/Never	1300	75	NR 4
Females									
Usually	91	5	Occasionally	282	17	Rarely/Never	1291	78	NR 5
Total									
Usually _	188	6	Occasionally _	623	18	Rarely/Never	2591	76	NR <u>9</u>

ALCOHOL

7 - 8

1.	When I see	e othe	r pe	ople drink bee	er, wi	ine c	or alcohol, I	also v	vant	a
	M-1	#	%		#	%		#	90	
	Males Usually Females	184	11	Occasionally	333	_19	Rarely/Never	1223	70	NR <u>2</u>
	Usually Total	_113		Occasionally	255	_15	Rarely/Never	1298	_78	NR <u>3</u>
	Usually	297	9	Occasionally	_588	<u>17</u>	Rarely/Never	2521	74	NR <u>5</u>
2.	I drink l-	-2 alc	ohol	ic beverages a	a week	۲.				
	Ma 1	#	_o o		#	8		#	o _o	
	Males Usually	86	5	Occasionally	195	_11	Rarely/Never	1460	84	NR <u>1</u>
	Females Usually	43	3	Occasionally	100	6	Rarely/Never	1524	91	NR <u>2</u>
	Total Usually	129	4	Occasionally	295	9	Rarely/Never	2984	<u>87</u>	NR <u>3</u>
I	drink 3-4 a	lcoho	lic	beverages a we	eek.					
		#	8		#	90		#	%	
	Males Usually	48	3	Occasionally	83	5	Rarely/Never	1610	92	NR <u>1</u>
	Females Usually	16	1	Occasionally	32	2	Rarely/Never	1620	97	NR <u>1</u>
	Total Usually	64	2	Occasionally	115	3	Rarely/Never	3230	95	NR <u>2</u>
4.	I drink 5	or mo	re a	lcoholic bever	rages	a we	ek.			
		#	9		#	બ્ર		#	9	
	Males Usually	42	2	Occasionally	48	3	Rarely/Never	1651	95	NR <u>1</u>
	Females Usually	20	1	Occasionally	18	1	Rarely/Never	1630	98	NR <u>1</u>
	Total Usually	62	2	Occasionally	66	2	Rarely/Never	3281	96	NR <u>2</u>
5.	I get drun	ık whe	n I	drink.						
		#	90		#	%		#	9	
	Males Usually	87	5	Occasionally	144	8	Rarely/Never	1509	87	NR 2
	Females Usually	69	5	Occasionally	108	6	Rarely/Never	1490	90	NR <u>2</u>
	Total Usually	156	5	Occasionally	252	7	Rarely/Never	2999	88	NR <u>4</u>

ALCOHOL, Continued

6. I drink alcoholic beverages with my friends.

```
Males
Usually 126 7 Occasionally 194 11 Rarely/Never 1421 82 NR 1
Females
Usually 80 5 Occasionally 167 10 Rarely/Never 1420 85 NR 2
Total
Usually 206 6 Occasionally 361 11 Rarely/Never 2841 83 NR 3
```

7. I drink alcoholic beverages with my parents and/or relatives.

```
Males
Usually 134 8 Occasionally 396 24 Rarely/Never 1211 70 NR 1
Females
Usually 72 4 Occasionally 299 18 Rarely/Never 1297 78 NR 1
Total
Usually 206 6 Occasionally 695 20 Rarely/Never 2508 74 NR 2
```

8. I will accept a ride in a car with someone who is or has been drinking alcohol.

```
Males
Usually 69 4 Occasionally 207 12 Rarely/Never 1464 84 NR 2
Females
Usually 36 2 Occasionally 149 9 Rarely/Never 1482 89 NR 2
Total
Usually 105 3 Occasionally 356 10 Rarely/Never 2946 87 NR 4
```

9. I enjoy the "feeling" alcohol gives me.

```
Males
Usually 89 5 Occasionally 219 13 Rarely/Never 1431 82 NR 3
Females
Usually 42 3 Occasionally 116 7 Rarely/Never 1510 90 NR 1
Total
Usually 131 4 Occasionally 335 10 Rarely/Never 2941 86 NR 4
```

10. Drinking alcoholic beverages makes me feel older or more grown-up.

```
# % # % # % # % # % Males
Usually 77 4 Occasionally 175 10 Rarely/Never 1488 86 NR 2
Females
Usually 54 3 Occasionally 143 9 Rarely/Never 1471 88 NR 1
Total
Usually 131 4 Occasionally 318 9 Rarely/Never 2959 87 NR 3
```

ALCOHOL, Continued

ll. I can concentrate better if I have had an alcoholic beverage to drink.

Males	#	olo Olo		#	엉		#	og O	
Usually _ Females	55	3	Occasionally _	85_	5	Rarely/Never	1600	92	NR <u>2</u>
	21	1	Occasionally _	53_	3	Rarely/Never	<u>1593</u>	96	NR <u>2</u>
	76	2	Occasionally	138	4	Rarely/Never	3193	94	NR 4

SAFETY

				/	-8					
1.	I check my	, home	to :	protect it fro	m fir	e an	d safety hazar	ds.		
		#	90		#	96		#	e S	
	Males Usually	307	18	Occasionally	753	13	Rarely/Never	 680	39	NR 2
	Females [*]			-			-			_
	Usually Total		<u>17</u>	Occasionally	760	46	Rarely/Never	622		NR <u>1</u>
	Usually	593	_17	Occasionally	1513	45	Rarely/Never	1302	_38	NR 3
2.	I wear a s	seat b	ælt '	when I ride in	a ca	r or	truck.			
	Males	#	બુ		#	90		#	%	
	Usually	147	8	Occasionally	362	21	Rarely/Never	1232	<u>71</u>	NR <u>1</u>
	Females Usually	138	8	Occasionally	397	24	Rarely/Never	1132	68	NR <u>2</u>
	Total Usually	285	8	Occasionally	759	22	Rarely/Never	2364	<u>70</u>	NR <u>3</u>
3.	I turn of	f or u	mplu	g appliances w	hen t	hey	are not in use	֥		
		#	90		#	90		#	%	
	Males Usually	763	44	Occasionally	471	27	Rarely/Never	508	29	NR 0
	Females Usually	916	55	Occasionally	584	35	Rarely/Never	168	10	NR 1
	Total Usually	1679	49	Occasionally	1055	31	- Rarely/Never	676	20	NR 1
4.	I wear a l	Life j	acke	t while riding	in a	boa	t or canoe and	l in w	ater	
		#	90		#	9		#	g _g	
	Ma¹es Usually	1019	_58	Occasionally	382	22	Rarely/Never	341	_20	NR <u>0</u>
	Females Usually	1032	62	Occasionally	377	22	Rarely/Never	259	<u>16</u>	NR <u>1</u>
	Total Usually	2051	60	Occasionally	759	22	Rarely/Never	600	<u> 18</u>	NR <u>1</u>
5.	I avoid ta tells me t		any	pills or medic	ine u	nles	s my parents c	or my	doct	or
	35-3	#	%		#	do		#	%	
	Males Usually	1309	75	Occasionally	202	12	Rarely/Never	229	_13	NR <u>2</u>
	Females Usually	1314	79	Occasionally	209	12	Rarely/Never	145	9	NR <u>1</u>
	Total Usually	2623	77	Occasionally	411	12	Rarely/Never	374	_11	NR <u>3</u>

SAFETY, Continued

6.	Τ	cross	the	street	onlv	at	crosswalks.

```
Males
Usually 194 11 Occasionally 675 39 Rarely/Never 872 50 NR 1
Females
Usually 289 17 Occasionally 735 44 Rarely/Never 644 39 NR 1
Total
Usually 483 14 Occasionally 1410 41 Rarely/Never 1516 45 NR 2
```

7. While eating, I laugh or talk with food in my mouth.

```
# % # % # % # % Males
Usually 188 11 Occasionally 292 17 Rarely/Never 1259 72 NR 3
Females
Usually 204 12 Occasionally 594 36 Rarely/Never 869 52 NR 2
Total
Usually 392 11 Occasionally 886 26 Rarely/Never 2128 63 NR 5
```

8. I ride my bike on the correct side of the street and stop at red lights or stop signs.

```
# % # % # % # % # % # % # % # % # % Males
Usually 680 39 Occasionally 490 28 Rarely/Never 571 33 NR 1
Females
Usually 928 55 Occasionally 444 27 Rarely/Never 295 18 NR 2
Total
Usually 1608 48 Occasionally 934 27 Rarely/Never 866 25 NR 3
```

9. I run up or down stairs, or in the hallways.

```
      Males
      #
      %
      #
      %
      #
      %

      Usually 630 36 Usually 560 33 Usually 710 43 Usually 1190 35 Usua
```

10. I touch electrical appliances, other than hair dryers when wet.

	#	જ		#	용		#	용	
Males									
Usually	125	7	Occasionally	237	14	Rarely/Never	1377	79	NR 3
Females									_
Usually	63	4	Occasionally	212	13	Rarely/Never	1392	83	NR 2
Total						_			_
Usually	188	6	Occasionally	449	13	Rarely/Never	2769	81	NR 5

SMOKING

1.	I smoke 1-3	toba	acco	cigarettes da:	ily.			
	Males	#	%	•	#	o _l o	# %	
	Usually _	29	2	Occasionally _	37	2	Rarely/Never 1672 96 NR 4	
	Females Usually _	28	2	Occasionally _	31	2	Rarely/Never <u>1608</u> <u>96</u> NR <u>2</u>	
	Total Usually _	_57	2	Occasionally	68	2	Rarely/Never <u>3280 96</u> NR <u>6</u>	
2.	I smoke 4-2	0 cig	jare	ttes daily.				
	Males	#	%		#	%	# %	
	Usually _ Females	24	_1	Occasionally _	20	1	Rarely/Never <u>1696</u> <u>98</u> NR <u>2</u>	
	Usually _ Total	22	_1	Occasionally _	15	_1	Rarely/Never <u>1630 98</u> NR <u>2</u>	
	Usually _	46	_1	Occasionally _	35	_1	Rarely/Never <u>3326</u> <u>98</u> NR <u>4</u>	
3.	I smoke tob	acco	cig	arettes to "pe	ck" my	ysel	f up.	
	14-1	#	용		#	%	# %	
	Males Usually _	31	2	Occasionally _	26	_1	Rarely/Never 1683 97 NR 2	
	Females Usually _	<u> 16</u> _	1	Occasionally _	37	2	Rarely/Never 1614 97 NR 2	
	Total Usually _	47	_1	Occasionally _	63	2	Rarely/Never <u>3297</u> <u>97</u> NR <u>4</u>	
4.	Smoking tob	acco	cig	arettes is plea	asant	and	relaxing.	
	W-1	#	8		#	9	# %	
	Males Usually _	36	_2	Occasionally _	46	3	Rarely/Never <u>1658</u> <u>95</u> NR <u>2</u>	
	Females Usually _	27	2	Occasionally _	55	3	Rarely/Never 1585 95 NR 2	
	Total Usually _	63	2	Occasionally _	101	3	Rarely/Never 3243 95 NR 4	
5.	When I feel smoke a tob				e my r	nind	off cares and worries, I	
		#	8		#	96	# %	
	Males Usually _	27	2	Occasionally _	46	3	Rarely/Never 1667 95 NR 2	
	Females Usually _		2	Occasionally	63	4	Rarely/Never <u>1576</u> <u>94</u> NR <u>2</u>	
	Total Usually _	55	2	Occasionally	109	3	Rarely/Never <u>3243 95</u> NR <u>4</u>	

SMOKING, Continued

6. Handling a tobacco cigarette is part of the enjoyment of smoking it.

```
Males
Usually 23 1 Occasionally 41 2 Rarely/Never 1676 97 NR 2
Females
Usually 29 2 Occasionally 41 2 Rarely/Never 1596 96 NR 3
Total
Usually 52 2 Occasionally 82 2 Rarely/Never 3272 96 NR 5
```

 When I smoke a tobacco cigarette, part of the enjoyment is watching the smoke as I exhale it.

```
Males
Usually 22 1 Occasionally 44 3 Rarely/Never 1673 49 NR 3
Females
Usually 44 3 Occasionally 44 3 Rarely/Never 1579 94 NR 2
Total
Usually 66 2 Occasionally 88 3 Rarely/Never 3252 95 NR 5
```

8. I inhale the tobacco cigarette smoke deeply into my lungs.

```
Males
Usually 38 2 Occasionally 44 3 Rarely/Never 1657 95 NR 3
Females
Usually 38 2 Occasionally 42 3 Rarely/Never 1586 95 NR 3
Total
Usually 76 2 Occasionally 86 3 Rarely/Never 3243 95 NR 6
```

9. I chew tobacco products daily.

```
Males
Usually 116 6 Occasionally 221 13 Rarely/Never 1403 81 NR 2
Females
Usually 19 1 Occasionally 25 1 Rarely/Never 1620 98 NR 5
Total
Usually 135 4 Occasionally 246 7 Rarely/Never 3023 89 NR 7
```

10. I enjoy the stimulation of chewing tobacco products.

PHYSICAL ACTIVITY

,	T 2 2 1 21								
1.	I ride my bike,		, or participa			rts.			
	# Males	90		#	olo		#	%	
	Usually 1459 Females	84	Occasionally .	219	13	Rarely/Never	59	3	NR <u>5</u>
	Usually <u>1275</u> Total	<u>76</u>	Occasionally	343	21	Rarely/Never	49	3	NR <u>2</u>
	Usually 2734	81	Occasionally .	562	16	Rarely/Never	108	3	NR <u>7</u>
2.	I take part in	stre	nuous activiti	es at	lea	st twice a wee	k.		
	# Males	%		#	96		#	8	
	Usually 1237	71	Occasionally	368	21	Rarely/Never	134	8	NR <u>3</u>
	Females Usually 937	57	Occasionally	540	32	Rarely/Never	190	11	NR <u>2</u>
	Total Usually <u>2174</u>	64	Occasionally	908	27	Rarely/Never	324	9	NR <u>5</u>
3.	I warm-up befor	e pa	rticipating in	spor	ts.				
	#	90		#	90		#	96	
	Males Usually 1073	62	Occasionally	485	28	Rarely/Never	181	10	NR <u>3</u>
	Females Usually 1015	61	Occasionally	502	30	Rarely/Never	150	9	NR <u>2</u>
	Total Usually 2088	61	Occasionally	987	29	Rarely/Never	331	10	NR <u>5</u>
4.	When I see othe	rs p	laying, I feel	like	joi	ning the activ	ity.		_
	#	%		#	90	-	#	90	
	Males Usually 1253	72	Occasionally	416	24	Rarely/Never	70	4	NR 3
	Females Usually 1107		Occasionally		31	Rarely/Never	40		NR 2
	Total Usually 2360		Occasionally			Rarely/Never			NR 5
5.						_			NK <u>5</u>
٠,	I encourage oth activities.	ELS	to participate	WILLI	ne .	III VIGOLOUS ga	iiles a	na	
	#	%		#	%		#	%	
	Males Usually 977	<u>56</u>	Occasionally	<u>598</u>	34	Rarely/Never	164	10	NR <u>3</u>
	Females Usually 875	53	Occasionally	637	38	Rarely/Never	154	9	NR <u>3</u>
	Total Usually 2360	70	Occasionally	936	27	Rarely/Never	110	3	NR <u>6</u>

PHYSICAL ACTIVITY, Continued

6. If my destination is within a few blocks, I prefer to walk rather than ride.

	#	8		#	96		#	%	
Males									
Usually	1055	63	Occasionally	562	33	Rarely/Never	49	4	NR 3
Females									_
Usually	853	51	Occasionally	619	37	Rarely/Never	267	16	NR 3
Total									_
Usually	1908	56	Occasionally	1181	35	Rarely/Never	316	9	NR 6
						· ·			_

7. Physical exercise is part of my life.

	#	용		#	90	`	#	8	
Males									
Usually	1046	63	Occasionally	548	32	Rarely/Never	73	5	NR 4
Females			- •						_
Usually	952	55	Occasionally	566	33	Rarely/Never	220	12	NR 2
Total			- •						_
Usually	1998	58	Occasionally	1114	33	Rarely/Never	293	9	NR 6

STRESS MANAGEMENT

1.	At bedtim	e, I :	fall as	sleep easily.							
,		#	olo Ol	1	#	90		#	90		
		1048	46.47	Occasionally	898	39.82	Rarely/Never	308	13.66	NR	1
	Females Usually Total	1067	47.42	Occasionally	869	38.62	Rarely/Never	314	13.96	NR	0
		2115	46.95	Occasionally	1767	39.22	Rarely/Never	622	13.81	NR	1
<u>2.</u>	I get a fui	ll ni	ght's s	sleep of 6-8 h	nours	most r	nights.				
	Males	#	olo Olo		#	90		#	90		
		1479	65.59	Occasionally	526	23.32	Rarely/Never	250	11.09	NR	0
		1477	65.64	Occasionally	530	23.56	Rarely/Never	242	10.76	NR	1
3.	Usually			Occasionally sy for me to				492	10.92	NR	1
		#	Q ₀	7	#	Q ₀		#	g _o		
	Males Usually	1293	57.32	Occasionally	600	26.61	Rarely/Never	362	16.05	NR	0
	Females			Occasionally							_
	Total Usually	2427	53.87	Occasionally	1319	29.28	Rarely/Never	759	16.85	NR	0
4.				ting my finger		s, tapp	ping my foot,	star	ting to)	
	perspire,			ner nervous ha							
	Males	#	Olo Olo		#	ું 8		#	Q ₀		
	Females			Occasionally .							_
	Usually Total	867	38.54	Occasionally	705	31.33	Rarely/Never	678	30.13	NR	0
	_			Occasionally			-			NR	1
·5.	I take 15			tes a day for	myse]	lf to d	do whatever I	want.	•		
	Males	#	90		#	go		#	%		
	Usually Females	1273	56.46	Occasionally	514	22.79	Rarely/Never	468	20.75	NR	0
	Total			Occasionally			_				_
	Usually	2458	54.56	Occasionally	1098	24.37	Rarely/Never	948	21.04	NR	1

STRESS MANAGEMENT, Continued

-									
6.	I worry al	out e	exams i	if I am not w	ell pı	repared	a.		
	Malas	#	90		#	00		#	96
	Males Usually Females	1243	55.12	Occasionally	633	28.08	Rarely/Never	379	16.81 NR 0
		1600	71.11	Occasionally	501	22.27	Rarely/Never	148	6.58 NR 1
		2843	63.11	Occasionally	1134	25.17	Rarely/Never	527	11.70 NR 1
7.	I conscion	usly 1	take t	ime each day	to rei	lax.			
	Males	#	96		#	90		#	90
		802	35.57	Occasionally	750	33.26	Rarely/Never	703	31.17 NR 0
		604	26.84	Occasionally	818	36.36	Rarely/Never	827	36.76 NR 1
		1406	31.21	Occasionally	<u>1568</u>	34.81	Rarely/Never	<u>1530</u>	33.96 NR 1
8.		and :	I am le	earning some			s a role in ca laxation skill		
	Males	#	8		#	90		#	8
		315	13.07	Occasionally	615	27.27	Rarely/Never	1323	58.67 NR 2
		226	10.04	Occasionally	635	28.22	Rarely/Never	1387	61.64 NR 2
		541	12.01	Occasionally	1250	27.75	Rarely/Never	2710	60.16 NR 4
9.	I know ho		h pres	sure I can ma	nage a	and car	n do something	g to d	control
	Males	#	90		#	90		#	96
		857	38.00	Occasionally	911	40.40	Rarely/Never	486	21.55 NR 1
		_753	33.47	Occasionally	979	43.51	Rarely/Never	_517	22.98 NR 1
		1610	35.74	Occasionally	1890	41.95	Rarely/Never	1003	22.26 NR 2
10.							ge some unwant eing accepted		
	Males	#	Olo		#	90		#	90
		1210	53.66	Occasionally	813	36.05	Rarely/Never	_230	10.20 NR 2
		1319	58.62	Occasionally	776	34.49	Rarely/Never	151	$\underline{6.71}$ NR $\underline{4}$
	Total								

NUTRITION

				9 .	- 12					
1.	I eat two	or m	ore sei	rvings of fru	it or	vegeta	ables most da	ys.		
		# _959	% 42.53	Occasionally	# 752	% 33.35	Rarely/Never	# _544	% 24.12	NR <u>0</u>
	Females Usually Total	785	34.89	Occasionally	780	34.67	Rarely/Never	684	30.40	NR <u>1</u>
	Usually	1744	38.71	Occasionally	1532	34.01	Rarely/Never	1228	27.26	NR <u>1</u>
2.	I drink l	-5 gla	asses o	of soda pop,	Kool A	Aide, 5	Tang, or Hi-C	a wee	ek.	
	Males	#	90		#	olo		#	90	
		1399	62.04	Occasionally	450	19.96	Rarely/Never	405	<u>17.96</u>	NR <u>1</u>
	Usually Total	1385	61.60	Occasionally	465	20.67	Rarely/Never	399	<u>17.73</u>	NR <u>1</u>
	Usually	2784	61.80	Occasionally	915	20.31	Rarely/Never	804	<u>17.85</u>	NR <u>2</u>
3.	I drink 6	or m	ore gla	asses of soda	pop,	Kool A	Aide, Tang, o	r Hi-C	C a wee	k.
	Males	#	olo Olo		#	olo Olo		#	g	
		1059	46.96	Occasionally	_512	22.71	Rarely/Never	683	30.29	NR <u>1</u>
		972	43.20	Occasionally	487	21.64	Rarely/Never	790	35.11	NR <u>1</u>
	Usually	2031	45.08	Occasionally	999	22.18	Rarely/Never	1473	32.70	NR <u>2</u>
4.	I read the	e lab	els on	food packages	3.					
	Males	#	કુ		#	g _o		#	8	
	Usually Females	279	12.38	Occasionally	698	30.95	Rarely/Never	1278	56.67	NR <u>0</u>
	Usually Total	319	14.18	Occasionally	805	35.78	Rarely/Never	1126	50.04	NR <u>0</u>
	Usually	_598	13.27	Occasionally	1503	33.36	Rarely/Never	2404	53.36	NR <u>0</u>
5.	I drink mo	ore th	nan 2 d	cups of coffee	e per	day.				
	Males	#	용		#	8		#	90	
	Females						Rarely/Never			
	Total						Rarely/Never			
	Usually	180	4.00	Occasionally	302	6.70	Rarely/Never	4022	89.28	NR <u>1</u>

NUTRITION, Continued

6.	Ι	add	salt	to	my	food.
----	---	-----	------	----	----	-------

Males
Usually 738 32.73 Occasionally 765 33.92 Rarely/Never 750 33.26 NR 2
Females
Usually 809 35.96 Occasionally 704 31.29 Rarely/Never 737 32.75 NR 0
Total
Usually 1547 34.34 Occasionally 1469 32.61 Rarely/Never 1487 33.01 NR 2

7. I eat presweetened cereals for my morning meal.

8. I eat snacks, such as candies, donuts, potato chips, or other sweets between meals.

 Males
 # %
 # %
 # %

 Usually 954 42.31 Usually Emales
 42.31 Usually 870 Occasionally 988 43.81 Usually 870 20casionally 1032 45.87 Usually 1814 40.27 Usually

9. I eat a meal or breakfast most mornings.

Males
Usually 1312 58.18 Occasionally 479 21.24 Rarely/Never 463 20.53 NR 1
Females
Usually 923 41.02 Occasionally 513 22.80 Rarely/Never 813 36.13 NR 1
Total
Usually 2235 49.61 Occasionally 992 22.02 Rarely/Never 1276 28.32 NR 2

10. I eat fried foods daily.

NUTRITION, Continued

11. I eat at "fast food" restaurants 5 or more times a week.

Males
Usually 254 11.26 Occasionally 579 25.68 Rarely/Never 1419 62.93 NR 3
Females
Usually 268 11.91 Occasionally 500 24.44 Rarely/Never 1430 63.56 NR 2
Total
Usually 522 11.59 Occasionally 1129 25.06 Rarely/Never 2849 63.24 NR 5

12. I eat three or more meals each day.

% # % # % # % # % # % # % # % Males
Usually 1443 63.99 Occasionally 510 22.62 Rarely/Never 300 13.30 NR 2
Females
Usually 850 37.78 Occasionally 684 30.40 Rarely/Never 711 31.60 NR 5
Total
Usually 2293 50.90 Occasionally 1194 26.50 Rarely/Never 1011 22.47 NR 7

ALCOHOL

				,	12					
1.	When I see drink.	e othe	er peop	ole drink been	r, wir	ne, or	alcohol, I al	so wa	ent to	
		#	90		#	90		#	96	
	Females Usually Total	373	16.58	Occasionally	771	34.27	Rarely/Never Rarely/Never	1104	49.07	NR <u>2</u>
2.	_			beverages a			Tarery/Never	2030	13.00	
۷.	I WILL I	#	8	beverages a	#	• %		#	%	
	Males					_	5 7 67			
	Usually Females	_548	24.30	Occasionally	468	20.75	Rarely/Never	1236	54.81	NR <u>3</u>
	Usually Total	<u>374</u>	16.62	Occasionally	436	19.38	Rarely/Never	<u>1437</u>	63.87	NR <u>3</u>
	Usually	922	20.47	Occasionally	904	20.07	Rarely/Never	2673	<u>59.33</u>	NR <u>6</u>
3.	I drink 3-	-4 alo	coholid	beverages a	week.	•				
		#	90		#	Q ₀		#	용	
		411	18.23	Occasionally	396	17.56	Rarely/Never	1446	64.12	NR <u>2</u>
	Females Usually	260	11.56	Occasionally	296	13.16	Rarely/Never	1692	75.20	NR <u>2</u>
	Total Usually	671	14.89	Occasionally	692	15.36	Rarely/Never	3138	69.66	NR <u>4</u>
4.	I drink 5	or m	ore alo	coholic bever	ages a	a week.				
	_	#	95		#	90		#	90	
		402	17.83	Occasionally	319	14.15	Rarely/Never	1532	67.94	NR <u>2</u>
		194	8.62	Occasionally	219	9.73	Rarely/Never	1835	81.56	NR <u>2</u>
	Total Usually	596	13.23	Occasionally	538	11.94	Rarely/Never	3367	74.74	NR <u>4</u>
5.	I get drur	nk wh	en I go	o to a party	that :	serves	alcoholic bev	verage	es.	
	_	#	ò		#	90		#	ο _ν ο	
	Males Usually	432	19.16	Occasionally	586	25.99	Rarely/Never	1235	54.77	NR 2
	Females Usually	278	12.36	Occasionally	538	23.91	Rarely/Never	1432	63.64	NR 2
	Total						Rarely/Never			
	USUALLY		13.76	occasionally	1124	44.93	waret\\mener	2007	27.20	1417 -

ALCOHOL, Continued

6.	I	like	to	hang	around	with	my	friends	who	drink	alcoholic	beverages.
----	---	------	----	------	--------	------	----	---------	-----	-------	-----------	------------

Males
Usually 540 23.95 Occasionally 829 36.76 Rarely/Never 881 39.07 NR 5
Females
Usually 359 15.96 Occasionally 813 36.13 Rarely/Never 1075 47.78 NR 3
Total
Usually 889 19.96 Occasionally 1642 36.45 Rarely/Never 1956 43.42 NR 8

7. I drink alcoholic beverages with my parents or relatives.

% # % # % # %

Males
Usually 238 10.55 Occasionally 660 29.27 Rarely/Never 1354 60.04 NR 3

Females
Usually 148 6.58 Occasionally 710 31.56 Rarely/Never 1390 61.78 NR 2

Total
Usually 386 8.57 Occasionally 1370 30.41 Rarely/Never 2744 60.91 NR 5

 I will accept a ride in a car with someone who is or has been drinking alcohol.

Males
Usually 271 12.02 Occasionally 609 28.53 Rarely/Never 1372 60.84 NR 3
Females
Usually 127 5.64 Occasionally 583 25.91 Rarely/Never 1536 68.27 NR 4
Total
Usually 398 8.83 Occasionally 1192 26.46 Rarely/Never 2908 64.55 NR 7

9. I enjoy the "feeling" alcohol gives me.

Males
Usually 496 22.00 Occasionally 645 28.60 Rarely/Never 1110 49.22 NR 4
Females
Usually 310 13.77 Occasionally 616 27.38 Rarely/Never 1321 58.71 NR 3
Total
Usually 806 17.89 Occasionally 1261 27.99 Rarely/Never 2431 53.96 NR 7

10. Drinking alcoholic beverages makes me feel older or more grown-up.

Males
Usually 111 4.92 Occasionally 342 15.17 Rarely/Never 1800 79.82 NR 2
Females
Usually 65 2.89 Occasionally 277 12.31 Rarely/Never 1906 84.71 NR 2
Total
Usually 176 3.91 Occasionally 619 13.74 Rarely/Never 3706 82.26 NR 4

ALCOHOL, Continued

11. I can concentrate better if I have had ar alcoholic beverage to drink.

12. Drinking alcoholic beverages makes me feel relaxed.

% # % # % # % # % # % # % # % # % Males
Usually 566 25.10 Occasionally 582 25.81 Rarely/Never 1091 48.38 NR 16
Females
Usually 365 16.22 Occasionally 580 25.78 Rarely/Never 1278 56.80 NR 27
Total
Usually 931 20.67 Occasionally 1162 25.79 Rarely/Never 2369 52.59 NR 43

SAFETY

				9 -	- 12					
1.	I check my	home	e to pr	rotect it from	n fire	e and s	safety hazards	5.		
		#	90		#	90		#	90	
	Males Usually	303	13.44	Occasionally	844	37.43	Rarely/Never	1103	48.91	NR <u>5</u>
	Females Usually	261	11.60	Occasionally	826	36.71	Rarely/Never	1162	51.64	NR 1
	Total Usually	564	12.52	Occasionally	1670	37.07	Rarely/Never	2265	50.28	NR 6
2.	I turn off	or i	unplug	appliances wh	nen th	ney are	e not in use.			
		#	્ર		#	્ર		#	90	
	Males Usually	911	40.40	Occasionally	655	29.05	Rarely/Never	685	30.38	NR 4
	Females Usually	1248	55.47	Occasionally	615	27.33	Rarely/Never	385	17.11	NR 2
	Total						Rarely/Never			_
3.	_			nen I ride in						_
		#	%		#	96		#	00	
	Males Usually		5.90	Occasionally	372	16.50	Rarely/Never	1747	77.47	NR 3
	Females						Rarely/Never			
	Total			_			Rarely/Never			
4.	_			_			or cance; and			
•	sports.		jacnee	WILLE TIME		2002	<i>51</i> 00165, min			
	Males	#	96		#	%		#	90	
		971	43.06	Occasionally	610	27.05	Rarely/Never	670	29.71	NR <u>4</u>
	Usually	1091	48.49	Occasionally	643	28.58	Rarely/Never	515	22.89	NR <u>1</u>
	Total Usually	2062	45.77	Occasionally	1253	27.81	Rarely/Never	1185	26.30	NR <u>5</u>
5.	I have dr	iven a	a vehic	cle after or v	while	consu	ming alcohol.			
	Males	#	90		#	o _l o		#	o _o	
	Usually	319	14.15	Occasionally	564	25.01	Rarely/Never	1369	60.71	NR <u>3</u>
	Females Usually Total	143	6.36	Occasionally	530	23.56	Rarely/Never	1574	69.96	NR <u>3</u>
		462	10.26	Occasionally	1094	24.28	Rarely/Never	2943	65.33	NR <u>6</u>

SAFETY, Continued

	Males	#	90		#	o _o		#	glo	
		323	14.32	Occasionally	824	36.54	Rarely/Never	1105	49.00	NR <u>3</u>
		239	10.62	Occasionally	808	35.91	Rarely/Never	1202	53.42	$NR \ \underline{1}$
		562	12.48	Occasionally	1632	36.23	Rarely/Never	2307	51.21	NR $\frac{4}{}$
7.	I run up o	or down	n stai	rs, or in the	e hall	Lways.				
	Males	#	90		#	00		#	olo	

6. While eating, I laugh or talk with food in my mouth.

 Males
 Usually
 780
 34.59
 Occasionally
 986
 43.73
 Rarely/Never
 485
 21.51
 NR 4

 Females
 Usually
 764
 33.96
 Occasionally
 1042
 46.31
 Rarely/Never
 443
 19.69
 NR 1

 Total
 Usually
 1544
 34.27
 Occasionally
 2028
 45.02
 Rarely/Never
 928
 20.60
 NR 5

8. I touch electrical appliances, other than hair dryers, when wet.

Males
Usually 166 7.36 Occasionally 447 19.82 Rarely/Never 1639 72.68 NR 3
Females
Usually 83 3.69 Occasionally 371 16.49 Rarely/Never 1793 79.69 NR 3
Total
Usually 249 5.53 Occasionally 818 18.16 Rarely/Never 3432 76.18 NR 6

9. I drive within 5 m.p.h. of the legal speed limit.

Males
Usually 975 43.24 Occasionally 689 30.55 Rarely/Never 586 25.99 NR 5
Females
Usually 1195 53.11 Occasionally 593 26.36 Rarely/Never 452 20.09 NR 10
Total
Usually 2170 48.17 Occasionally 1282 28.46 Rarely/Never 1038 23.04 NR 15

10. I cross the street only at crosswalks.

Males
Usually 187 8.29 Occasionally 637 28.25 Rarely/Never 1428 63.33 NR 3
Females
Usually 251 11.16 Occasionally 838 37.24 Rarely/Never 1158 51.47 NR 3
Total
Usually 438 9.72 Occasionally 1475 32.74 Rarely/Never 2586 57.40 NR 6

SMOKING

				,						
1.	I smoke 1-	3 tob	acco o	cigarettes a d	day.					
	Males	#	%		#	o _o		#	%	
	Usually	140	6.21	Occasionally	94	4.17	Rarely/Never	2016	89.40	NR <u>5</u>
	Females Usually	140	6.22	Occasionally	107	4.75	Rarely/Never	1997	88.75	NR 6
	Total Usually	280	6.22	Occasionally	201	4.46	Rarelv/Never	4013	89.08	 NR 11
2.	_			cigarettes a			2,			
۷.	1 bilone 4			cigarettes a	-	0		л	0	
	Males	#	8		#	_o o		#	8	
	Usually	135	6	Occasionally	55	2	Rarely/Never	2060	92	NR 5
	Females Usually	119	5	Occasionally	59	3	Rarely/Never	2065	92	NR <u>7</u>
	Total Usually	254	5	Occasionally	114	2	Rarely/Never	4125	92	NR 12
3.	I smoke to	bacco	ciga	rettes to perl	c myse	elf up.				
		#	ç ₀	-	#	90		#	g _o	
	Males		-	Ogganijanaliv	"		Dawalii /Norrow			NTD E
	Females			Occasionally						NR <u>5</u>
	Usually Total	40	2	Occasionally	120	5	Rarely/Never	2083	93	NR <u>7</u>
	Usually	105	2	Occasionally	224	5	Rarely/Never	4164	92	NR <u>12</u>
4.	Smoking to	bacco	ciga	cettes is plea	asant	and re	elaxing.	'-		
	Males	#	ક		#	do		#	90	
	Usually	133	6	Occasionally	147	7	Rarely/Never	1970	87	NR <u>5</u>
	Females Usually	125	6	Occasionally	168	7	Rarely/Never	1949	87	NR <u>8</u>
	Total Usually	258	6	Occasionally	315	7	Rarely/Never	3919	87	NR 13
5.		el "do	wn" o	want to take						
	shore a ce	#	e e		#	o _l o		#	96	
	Males	-								
	Usually Females	120		Occasionally						NR <u>6</u>
	Usually Total	129	6	Occasionally	163	7	Rarely/Never	1950	87	NR <u>8</u>
	Usually	249	6	Occasionally	_283	6	Rarely/Never	3959	88	NR <u>14</u>

SMOKING, Continued

6.	Handling a	toba	.cco ci	garette is pa	art of	f the e	enjoyment of s	mokin	g it.
		#	ક		#	%		#	96
		90	4	Occasionally	103	5	Rarely/Never	2056	91 NR 6
	Females Usually	53	2	Occasionally	86	4	Rarely/Never	2103	94 NR 8
	Total Usually	143	3	Occasionally	189	4	Rarely/Never	4159	92 NR 14
7.	•	ke a	tobaco	co cigarette,					•
	M-1	#	8		#	8		#	9
		85	4	Occasionally	118	5	Rarely/Never	2046	91 NR 6
	Females Usually	31	1	Occasionally	92	4	Rarely/Never	2119	95 NR 8
	Total Usually	116	3	Occasionally	210	5	Rarely/Never	4165	92 NR 14
8.	I inhale t	he to	bacco	cigarette sma	oke de	eeply i	into my lungs.		
		#	8		#	g _o		#	્
		155	7	Occasionally	124	5	Rarely/Never	<u>1970</u>	88 NR <u>6</u>
		146	6	Occasionally	127	6	Rarely/Never	1968	88 NR 9
	Total Usually	301	7	Occasionally	_251	6	Rarely/Never	3938	87 NR <u>15</u>
9.	I chew tob	acco	produc	cts daily.					
		#	o _l o		#	96		#	્
	Males Usually	297	13	Occasionally	278	12	Rarely/Never	1674	74 NR 6
	Females Usually	16	1	Occasionally	21	1	Rarely/Never	2204	98 NR <u>9</u>
	Total Usually	313	7	Occasionally	299	7	Rarely/Never	3878	86 NR 15
10.				ion of chewin					
		#	Q ₀		#	&		#	9
	Males Usually	278	12	Occasionally	288	13	Rarely/Never	1683	75 NR 6
	Females Usually			Occasionally					98 NR 9
	Total			Occasionally					
	000001						2 ,		

PHYSICAL ACTIVITY

1.	I climb st	airs	rather	than using e	escalat	ors c	r elevators.		
	Males	#	olo O		#	8		#	o _o
	Usually Females	607	27	Occasionally		39	Rarely/Never	761	34 NR 4
	Usually Total	619	28	Occasionally	1036	46	Rarely/Never	_586 _	26 NR 9
	Usually	1226	27	Occasionally	1919	43	Rarely/Never	1347	30 NR 13
2.	I regular	ly rid	le my b	ike, run, sw	im, or	walk	for exercise.	•	
	Males	#	00		#	બુ		#	96
	Usually Females	1232	55	Occasionally	_687 _	30	Rarely/Never	_331 _	<u>15</u> NR <u>5</u>
	Usually	1075	48	Occasionally	879	39	Rarely/Never	_288 _	13 NR 8
	Total Usually	2307	51	Occasionally	1566	35	Rarely/Never	619	<u>14</u> NR <u>13</u>
3.	I particip	pate i	n a st	renuous phys:	ical ac	tivit	y at least to	vice a	week.
		#	%		#	90		#	96
	Males Usually	1458	65	Occasionally	486	21	Rarely/Never	306	14 NR 5
	Females Usually	1041	46	Occasionally	658	29	Rarely/Never	543	24 NR 8
	Total Usually	2499	55	Occasionally	1144	25	Rarely/Never	849	19 NR 13
4.							enuous exercis		
		#	96		#	ુ		#	96
	Males Usually	1192	53	Occasionally	604	. 27	Rarely/Never	452	20 NR 7
	Females Usually			Occasionally			Rarely/Never		15 NR 8
	Total Usually			-			Rarely/Never		_
5.	-			-			ical activitie		10 Iu. 13
٥.	I encourag	, ,	%	to particip	#	%	icai activiti	#	8
	Males	#	-	0		•	Daniel I. /Norrow	"	_
	Usually Females						Rarely/Never		45 NR 6
	Usually Total						Rarely/Never		48 NR 8
	Usually	858	19	Occasionally	1545	34	Rarely/Never	2088	46 NR <u>14</u>

PHYSICAL ACTIVITY, Continued

6. I have enough energy to get through $my\ daily\ activities\ and\ still\ feel\ good\ in\ the\ evening.$

	#	9		#	90	#	&
Males							
Usually 13	347	60	Occasionally	633	28 Rarely/Never	269	12 NR 6
Females							
Usually 1	195	53	Occasionally	803	36 Rarely/Neve	243	11 NR 9
Total							
Usually 2	542	56	Occasionally	1436	32 Rarely/Never	512	11 NR <u>15</u>

7. I avoid riding in a car when my destination is within walking distance.

	#	8		#	90	#	8		
Males		_							
Usually	528	23	Occasionally	749	33 Rarely/Ne	ever 970	44	NR	8
Females -			_						_
Usually	495	22	Occasionally	851	38 Rarely/Ne	ever 896	40	NR	8
Total			_						
Usually	1023	23	Occasionally	1600	36 Rarely/Ne	ever 1866	41	NR	16

APPENDIX D

INVENTORY RATING SCALE

INVENTORY RATING SCALE¹

Directions: Enclosed is a list of statements regarding stress management behavior. Please read each statement and use the scale to the right to indicate its acceptability, based upon the degree to which the statement will reveal a subject's behavior (positive or negative) in regards to stress management. (Subjects responding to the inventory will be indicating their participation, or non-participation in the statement of stress management.) In this manner you will be judging the curricular validity of these behavior statements with respect to stress management. The inventory has been developed for use with eighth grade students.

The scale values are defined as follows:

- 1. <u>NOT ACCEPTABLE</u>: The item has <u>no</u> value as a statement for measuring the subject's stress management behavior.
- 2. <u>SOMEWHAT ACCEPTABLE</u>: The item has <u>some</u> value as a statement for measuring the subject's stress management behavior.
- 3. ACCEPTABLE: The statement is <u>valuable</u> as a statement for measuring the <u>subject's</u> stress management behavior.
- 4. <u>VERY ACCEPTABLE</u>: The item is <u>very valuable</u> as a statement for measuring the subject's stress management behavior.
- 5. <u>INDISPENSABLE</u>: The item is <u>absolutely</u> necessary as a statement for measuring the subject's stress management behavior.

¹The scale was developed by Dr. Gary Gilmore for use in his doctoral dissertation, The Development, Implementation, and Evaluation of a Family Health Education Program Incorporating the Concept of Prevention, The University of Tennessee, June 1974.

APPENDIX E

INVENTORY EVALUATION RESULTS

K-3

	STRESS MANAGEMENT	RATING BY JURORS							MEAN SCORE		
		<u>A</u>	<u>B</u>	<u>C</u>	D	<u>E</u>	F	1			
1.	Does it take you a long time to fall asleep at night?	5	5	2	5	4	5		4.3		
2.	Do you often bite your fingernails?	4	4	2	5	5	5		4.2		
3.	Do you often worry about doing bad in school?	4	5	3	4	4	4		4.0		
4.	Do you often get angry and yell?	4	4	4	4	4	4		4.0		

4-6

	STRESS MANAGEMENT	_	TIN B			URO E	RS F	MEAN SCORE
1.	Do you bite your fingernails, chew on a pencil, or eat when nervous or upset?	4	3	4	5	4	4	4.0
2.	Do you take time to relax everyday?	3	2	3	4	4	5	3.5
3.	At bedtime, do you fall asleep easily?	4	5	3	2	5	4	3.8
4.	If you wake up in the middle of the night, is it easy for you to fall asleep again?	3	3	4	4	4	4	3.7
5.	Do you often feel tired (except after hard physical activity)?	5	5	3	5	4	4	4.2
6.	Do you frequently hit or yell at someone when you get mad?	4	3	3	5	5	4	4.0
7.	Do you usually get a full nights sleep of about 7-9 hours?	4	5	2	5	4	4	4.0
8.	Do you ask for help, rather than worrying about something you can't solve?	4	4	3	4	4	4	3.8
9.	Do you try to avoid people who make you angry?	4	4	4	4	4	4	4.0
10.	Do you generally do school work							

10. Do you generally do school work on time?

	STRESS MANAGEMENT	RA A	TIN B	G B	Y J D	URC	RS F	MEAN SCORE
1.	At bedtime I fall asleep easily.	5	5	4	3	4	<u>-</u> 5	4.3
2.	I get 6-8 hours of sleep most nights.	3	5	4	3	4	4	3.8
3.	If I wake up in the middle of the night, it's not difficult for me to fall asleep again.	4	5	4	4	5	5	4.5
4.	When I feel under pressure, I bite my fingernails, tap my foot, start to perspire, or have some other nervous habit.	4	5	4	4	5	5	4.5
5.	I take 15 to 20 minutes a day for myself to do whatever I want.	3	2	4	4	4	5	3.7
6.	I worry about exams if I am not well prepared.	4	4	4	4	4	4	4.0
7.	I consciously take time each day to relax.	4	3	4	3	4	5	3.8
8.	I know that extreme pressure or tension plays a role in causing health problems, and I am learn- ing some specific relaxation skills to prevent and control m problems.		3	4	3	4	4	3.3
9.	I know how much pressure I can manage and can do something to control that pressure.	4	3	3	4	5	4	3.8
10.	I am able to recognize, control and/or change some unwanted pressure in my life such as the way I look, or if I'm being accepted by my friends.	, 4	3	3	4	4	4	3.7

	STRESS MANAGEMENT	RA' A	TIN B	<u>С</u>	<u>у</u> <u>D</u>	URO E	RS F	MEAN SCORE
1.	At bedtime, I fall asleep easily?	5	5	4	3	4	4	4.2
2.	I get a full night's sleep of 6-8 hours most nights.	4	5	4	3	4	5	4.2
3.	If awakened, it's easy for me to fall back asleep.	4	5	4	4	5	5	4.5
4.	I have a habit of biting my fingernails, tapping my foot, starting to perspire, or some other nervous habit.	3	4	4	5	4	4	4.0
5.	I take 15 to 20 minutes a day for myself to do whatever I want.	4	4	4	4	3	4	3.8
6.	I worry about exams if I am not well prepared.	5	3	3	4	4	4	3.8
7.	I consciously take time each day to relax.	4	3	4	4	3	4	3.7
8.	I know that extreme pressure or tension plays a role in causing health problems, and I am learning some specific relaxa- tion skills to prevent and control my problems.	2	3	4	3	4	4	3.3
9.	I know how much pressure I can manage and can do something to control that pressure.	5	3	3	5	4	5	4.2
10.	I am able to recognize, control and/or change some unwanted pressure in my life; such as the way I look, or if I'm being accepted by my friends.		3	3	4	5	4	3.8

k**-**3

	NUTRITION	RATING BY JURORS						MEAN SCORE	
		<u>A</u>	<u>B</u>	<u>C</u>	D	E	F		
1.	Do you eat a meal or breakfast every morning?	4	3	4	3	3	5	3.7	
2.	Do you eat fruits or vegetables most days?	5	3	3	4	5	5	4.2	
3.	Do you usually put salt on your food?	4	3	3	3	5	4	3.7	
4.	Do you eat cake, cookies, pie, candy, or other sweets every day?	3	3	2	3	5	5	3 . 5	

	NUTRITION	$\frac{RA}{A}$	TIN B	<u>С</u>			RS F	MEAN SCORE
1.	Do you eat two or more servings of fruit or vegetables most days?	2	3	3	4	4	5	3.5
2.	Do you drink 1-5 glasses of soda pop, Kool-Aide, Tang, or Hi-C a week?	5	5	3	4	5	5	4.5
3.	Do you drink 6 or more glasses of soda pop, Kool-Aide, Tang, or Hi-C a week?	5	5	3	4	5	5	4.5
4.	Do you usually put salt on your food?	4	2	3	4	5	4	3.7
5.	Do you eat a meal or breakfast every morning?	4	3	4	3	3	5	3.7
6.	Do you et fried foods like fren fries, fried chicken, fried egg or hash browns daily?		5	2	4	5	4	4.0
7.	Do you drink at least 3 glasses of milk a day?	5	3	3	4	5	5	4.2
8.	Do you eat 3 meals most days?	3	4	3	3	4	3	3.3

	NUTRITION	$\frac{RA}{A}$		<u>С</u>		URO E	RS F	MEAN SCORE
1.	I eat two or more servings of fruit or vegetables per day.	2	3	3	4	4	5	3.5
2.	I drink 1-5 glasses of soda pop, Kool-Aide, Tang, or Hi-C a week.	4	3	3	4	5	5	4.0
3.	I drink 6 or more glasses of soda pop, Kool-Aide, Tang, or Hi-C a week.	4	3	3	4	5	5	4.0
4.	I put salt on my food.	5	3	3	4	5	5	4.2
5.	I eat presweetened cereals for my morning meal.	2	3	3	3	5	5	3.5
6.	I eat three or more meals per day.	4	4	3	3	3	5	3.7
7.	I drink three or more glasses of milk most days.	3	3	3	3	3	5	3.3
8.	I eat a meal or breakfast most mornings.	4	4	3	3	3	5	3.7
9.	Fried foods such as; french fries, fried chicken, fried eggs, or hash browns are a part of my daily diet.	4	5	3	3	5	4	4.0
10.	I eat at "fast food" restaurants 5 or more times a week.	4	5	3	3	5	4	4.0

	NUTRITION	RA A	TIN	G B	Y J D	URO E	RS F	MEAN SCORE
1.	I eat two or more servings of fruit or vegetables most days.	2	3	2	4	5	5	3.5
2.	I drink 1-5 glasses of soda pop Kool-Aide, Tang, or Hi-C a week.	•	3	3	4	5	5	4.0
3.	I drink 6 or more glasses of soda pop, Kool-Aide, Tang, or Hi-C a week.	4	3	3	4	5	5	4.0
4.	I read the labels of food packages.	4	5	3	4	5	5	4.3
5.	I drink more than 2 cups of coffee per day.	3	3	3	3	4	4	3.4
6.	I add salt to my food.	5	2	3	4	4	4	3.3
7.	I eat presweetened cereals for my morning meal.	2	3	3	4	5	5	3.7
8.	I eat snacks, such as candies, donuts, potato chips, or other sweets between meals.	3	5	2	3	3	5	3.5
9.	I eat a meal or breakfast most mornings.	4	2	2	3	3	5	3.2
10.	I eat fried foods daily.	4	5	3	4	5	4	4.2
11.	I eat at "fast food" restaurants 5 or more times a week.	4	5	3	. 4	5	4	4.2
12.	I eat three or more meals each day.	3	3	3	3	4	3	3.2

K-3

	ALCOHOL	RATING BY JURORS					RS	MEAN SCORE	
		A	В	<u>C</u>	D	E	F		
1.	Would you use someone else's medicine without asking your parents first?	3	5	3	5	5	3	4.0	
2.	Would you take candy from a stranger without your parents permission?	3	4	2	4	3	4	3.3	
3.	When you see other people drink beer, wine, or alcohol, do you also want to take a drink of that beer, wine or alcohol?		5	3	4	4	5	4.0	
4.	Does drinking beer, wine or alcohol make you look grown-up?	4	5	4	5	4	4	4.3	
5.	Do you sometimes take medicine without asking a grown-up?	3	5	4	5	5	5	4.5	

	ALCOHOL		TIN B				RS F	MEAN SCORE
1.	When you see other people drink beer, wine, or alcohol, do you also want to take a drink?		3	3	4	4	4	3.5
2.	Would you take candy from a stranger without your parents permission?	3	4	2	4	4	3	3.3
3.	If someone other than your parents offered you some beer, wine, or whiskey other than a taste of sip, would you drink it?	3	4	4	4	4	4	3.8
4.	Do you drink 1-2 alcoholic beverages a week?	3	5	3	4	5	5	4.2
5.	Do you drink 3-4 alcoholic beverages a week?	3	5	3	4	5	5	4.2
6.	Do you drink 5 or more alcoholi- beverages a week?	с 3	5	3	4	5	5	4.2
7.	Have you ever been drunk?	3	5	4	4	4	5	4.2

	ALCOHOL	$\begin{array}{cccccccccccccccccccccccccccccccccccc$						MEAN SCORE
1.	When I see other people drink beer, wine, or alcohol, I also want to drink.	3	5	4	3	3	4	3.7
2.	I drink 1-2 alcoholic beverages a week.	3	5	3	3	4	3	3.5
3.	I drink 3-4 alcoholic beverages a week.	3	5	3	3	5	5	4.0
4.	I drink 5 or more alcoholic beverages a week.	3	5	3	3	5	5	4.0
5.	I get drunk when I drink.	3	5	3	3	5	5	4.0
6.	I drink alcoholic beverages with my friends.	3	4	2	3	4	5	3.5
7.	I drink alcoholic beverages with my parents and/or relatives.	3	5	3	3	4	5	3.8
8.	I will accept a ride in a car with someone who is or has been drinking alcohol.	3	5	4	3	4	4	3.8
9.	I enjoy the "feeling" alcohol gives me.	4	5	4	3	5	4	4.2
10.	Drinking alcoholic beverages makes me feel older or more grown-up.	4	5	3	3	5	4	4.0
11.	I can concentrate better if I have had an alcoholic beverage to drink.	4	5	3	3	4	5	4.0

	ALCOHOL	RA'	rin B		у <u>Ј</u>	URO E	RS F	MEAN SCORE
1.	When I see other people drink beer, wine, or alcohol, I also want to drink.	3	5	4	3	4	4	3.8
2.	I drink 1-2 alcoholic beverages a week.	3	5	3	3	4	5	3.8
3.	I drink 3-4 alcoholic beverages a week.	3	5	3	3	4	4	3.7
4.	I drink 5 or more alcoholic beverages a week.	3	5	3	3	5	4	3.8
5.	I get drunk when I go to a party that serves alcoholic beverages.	<i>Y</i> 3	5	3	3	3	4	3.5
6.	I like to hang around with my friends who drink alcoholic beverages.	3	4	3	3	4	5	3.7
7.	I drink alcoholic beverages with my parents or relatives.	n 3	5	3	3	4	5	3.8
8.	I will accept a ride in a car with someone who is or has been drinking.	3	5	4	3	4	4	3.8
9.	I enjoy the "feeling" alcohol gives me.	4	5	4	3	4	5	4.2
10.	Drinking alcoholic beverages makes me feel older.	4	5	3	3	4	5	4.0
11.	I can concentrate better if I have had an alcoholic beverage to drink.	4	5	3	3	4	5	4.0
12.	Drinking alcoholic beverages makes me feel relaxed.	4	5	4	3	5	4	4.2

K**-**3

	SAFETY	RATING BY JURORS						MEAN SCORE
		A	В	<u>C</u>	D	<u>E</u>	F	
1.	Do you usually wear a seat belt when you ride in a car?		5	5	3	5	3	4.3
2.	Do you usually stop, look both ways, and listen before you cro the street?		5	5	3	4	4	4.2
3.	Do you sometimes light matches when grown-ups are not around?	4	4	4	4	4	3	3.8
4.	Do you sometimes try things even when grown-ups say you might get hurt?	5	3	4	3	4	4	3.8

	SAFETY	$\frac{RA}{A}$		G B			RS F	MEAN SCORE
1.	Do you usually wear a seat belt when you ride in a car?	4	4	4	4	5	4	4.2
2.	Do you always wear a life jacker while riding in a boat or canoe?		4	3	3	4	4	3.8
3.	Do you ever take pills or medicine without your parent's or doctor's permission?	5	4	5	3	4	4	4.2
4.	Do you usually laugh or talk with food in your mouth?	4	4	3	2	4	2	3.2
5.	Do you usually cross the street at crosswalks?	5	3	4	3	4	4	3.8
6.	Do you ride your bike on the correct side of the street?	4	4	4	3	4	3	3.7
7.	Do you usually run up or down stairs in the hallways?	4	3	3	3	3	3	3.2
8.	When wet, do you ever touch anything electrical, other than a hair dryer?	4	3	5	3	4	4	3.8

	SAFETY	RA A	TIN B	<u>С</u>		MEAN SCORE		
1.	I check my home to protect it from fire and safety hazards.	4	4	3	2	3	4	3.3
2.	I wear a seat belt when I ride in a car or truck.	5	4	5	3	5	4	4.3
3.	I turn off or unplug appliances when they are not in use.	5	3	5	3	4	3	3.8
4.	I wear a life jacket while riding in a boat or canoe and in water sports.	5	4	4	3	4	5	4.2
5.	I avoid taking pills or medicine unless my parents or my doctor tells me to.	5	3	4	3	4	4	3.8
6.	I cross the street only at crosswalks.	5	3	4	2	4	5	3.8
7.	While eating, I laugh or talk with food in my mouth.	4	4	3	2	4	3	3.3
8.	I ride my bike on the correct side of the street and stop at red lights or stop signs.	4	4	4	3	4	3	3.7
9.	I run up or down stairs, or in the hallways.	4	3	3	3	4	3	3.3
10.	I touch electrical appliances, other than hair dryers when wet.	4	4	5	3	4	5	4.2

	SAFETY	RATING BY JURORS						MEAN SCORE	
		<u>A</u>	В	C	D	E	F		
1.	I check my home to protect it from fire and safety hazards.	5	4	3	3	4	4	3.8	
2.	I turn off or unplug appliances when they are not in use.	5	3	5	3	4	4	4.0	
3.	I wear a seat belt when I ride in a car or truck.	5	5	5	3	5	4	4.5	
4.	I wear a life jacket while riding in a boat or canoe; and in water sports.	5	4	5	3	4	5	4.3	
5.	I have driven a vehicle after or while consuming alcohol.	5	5	5	4	5	3	4.5	
6.	While eating, I laugh or talk with food in my mouth.	5	4	3	2	4	3	3 . 5	
7.	I run up or down stairs, or in the hallways.	5	3	3	3	4	3	3.5	
8.	I touch electrical appliances, other than hair dryers, when wet.	4	4	5	3	4	5	4.2	
9.	I drive within 5 m.p.h. of the legal speed limit.	5	4	5	3	4	4	4.2	
10.	I cross the street only at crosswalks.	5	3	4	2	4	4	3.7	

K**-**3

	SMOKING	RA!	TIN	G B	YЈ	MEAN SCORE		
		A	В	<u>C</u>	D	Ε	F	
1.	Does someone you care very much about smoke?		5	4	4	3	4	3.8
2.	Does smoking make you look grown-up?	3	3	4	5	5	4	4.0
3.	Would it be easy for you to get a cigarette, cigar or pipt?	3	5	4	4	4	4	4.0
4.	Can smoking hurt you?	4	4	5	5	5	5	4.6

	SMOKING	RA A				RATING BY JURORS A B C D E F							
1.	Does someone you care very much about smoke?	4	5	4	4	3	4	4.0					
2.	Do any of your friends smoke tobacco cigarettes, cigars or pipes?	4	5	3	5	5	5	4.3					
3.	Would you smoke a tobacco cigarette if a friend offered it to you?	4	4	5	5	4	5	4.5					
4.	Have you ever bought tobacco cigarettes or any tobacco products for you or your friends?	4	4	4	4	3	4	3.8					
5.	Have you ever bought tobacco cigarettes, cigars or pipes within the last three months?	5	4	4	5	5	5	4.7					
6.	Have you smoked any tobacco cigarettes, cigars or pipes within the last week?	5	4	4	5	5	5	4.7					
7.	In the future, will you probably smoke regularly?	3	4	5	5	5	5	4.5					
8.	Do you often chew or put tobacco products in your mouth?	4	5	4	4	4	5	4.3					

	SMOKING		TIN B				RS F	MEAN SCORE
1.	I smoke 1-3 tobacco cigarettes daily.	4	4	4	5	4	5	4.3
2.	I smoke 4-20 tobacco ciggarettes daily.	4	4	4	5	4	5	4.3
3.	I smoke tobacco cigarettes to "perk" myself up.	3	4	4	4	5	5	4.2
4.	Smoking tobacco cigarettes is pleasant and relaxing.	3	4	4	4	5	5	4.2
5.	When I feel "down" or want to take my mind off cares and worries, I smoke a tobacco cigarette.	3	4	4	5	5	5	4.3
6.	Handling a tobacco cigarette, part of the enjoyment of smoking it.	3	4	4	5	5	5	4.3
7.	When I smoke a tobacco cigarette, part of the enjoymer is watching the smoke as I exhale it.	nt 3	4	4	4	5	5	4.2
8.	I inhale the tobacco cigarette smoke deeply into my lungs.	4	4	4	4	5	5	4.3
9.	I chew tobacco products daily.	4	4	4	4	4	4	4.0
10.	I enjoy the stimulation of chewing tobacco products.	3	4	4	4	4	4	3.8

	SMOKING	RATING BY JURORS A B C D E F						MEAN SCORE
1.	I smoke 1-3 tobacco cigarettes a day.	4	4	4	5	4	5	4.3
2.	I smoke 4-20 tobacco cigarettes a day.	4	4	4	5	4	5	4.3
3.	I smoke tobacco cigarettes to "perk" myself up.	3	4	4	4	5	4	4.0
4.	Smoking tobacco cigarettes is pleasant and relaxing.	3	4	4	4	5	4	4.0
5.	When I feel "down" or want to take my mind off cares and worries, I smoke a tobacco cigarette.	3	4	4	5	5	5	4.3
6.	Handling a tobacco cigarette is part of the enjoyment of smoking it.	3	4	4	5	5	5	4.3
7.	When I smoke a tobacco cigarett part of the enjoyment is watching the smoke as I exhale it.	æ,	4	4	4	5	4	4.0
8.	I inhale the tobacco cigarette smoke deeply in my lungs.	4	4	4	4	5	4	4.2
9.	I chew tobacco products daily.	4	4	4	4	4	4	4.0
10.	I enjoy the stimulation of chewing tobacco products.	3	4	4	4	4	4	3.8

K**-**3

	PHYSICAL ACTIVITY	RATING BY JURORS A B C D E F						MEAN SCORE
1.	Do you play outdoors a lot?	4	4	5	3	5	3	4.0
2.	Does your body move a lot when you play?	5	4	4	3	5	3	4.0
3.	Do you often feel tired?	2	3	4	4	3	2	3.0
4.	Does your body hurt when you play or exercise?	3	4	4	4	4	2	3.5
5.	Does your body hurt when you run?	3	4	4	4	4	2	3.5
6.	Do you like to climb things?	3	3	4	5	5	4	4.0

	PHYSICAL ACTIVITY			G B		MEAN SCORE		
1.	Do you play outdoors a lot?	4	4	5	4	5	4	4.3
2.	Do you play hard twice a week?	4	4	5	4	5	3	4.2
3.	Would you rather get a ride to school than walk or ride your bike?	4	3	5	5	4	3	4.0
4.	Do you often feel tired?	2	3	4	4	4	2	3.2
5.	Does your body hurt when you run?	3	4	4	4	4	3	3.7
6.	Does your body hurt when you play?	3	4	4	4	4	3	3.7
7.	Is playing hard something you do most days?	4	2	4	3	3	2	3.0
8.	Do you like to climb things?	3	3	5	5	5	5	4.3

	PHYSICAL ACTIVITY	RATING BY JURORS						MEAN SCORE
		<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	E	F	
1.	I ride my bike, run, or participate in sports.	4	3	5	4	5	3	4.0
2.	I take part in strenuous activities at least twice a week.	4	4	5	4	4	3	4.0
3.	I warm-up before participating in sports.	3	3	5	4	4	3	3.7
4.	When I see others playing, I feel like joining the activity.	4	3	4	4	4	3	3.7
5.	I encourage others to participate with me in vigorous games and activities.	4	2	4	4	4	3	3 . 5
6.	If my destination is within a few blocks, I prefer to walk rather than ride.	4	2	5	3	4	3	3 . 5
7.	Physical exercise is part of my life.	4	3	5	4	4	3	3.8

	PHYSICAL ACTIVITY			G E		MEAN SCORE		
1.	I climb stairs rather than using escalators or elevators.	5	3	5	3	5	3	4.0
2.	I regularly ride my bike, run, swim, or walk for exercise.	5	3	5	3	5	4	4.2
3.	I participate in a strenuous physical activity at least twice a week.	5	3	5	4	4	3	4.0
4.	I do some warm-up exercises before doing strenuous exercise.	4	3	5	4	3	3	4.2
5.	I encourage my family to participate in physical activities.	4	2	5	3	4	3	3.5
6.	I have enough energy to get through my daily activities and still feel good in the evening.	4	1	4	3	4	4	3.3
7.	I avoid riding in a car when my destination is within walking distance.	4	3	5	3	4	4	3.8

VITA 2

Darrel A. Lang

Candidate for the Degree of

Doctor of Education

Thesis: A COMPARISON OF SELECTED HEALTH BEHAVIORS OF KANSAS' STUDENTS

ENROLLED IN GRADES K-12

Major Field: Higher Education - Health Education

Biographical:

Personal Data: Born in New Hampton, Iowa, December 24, 1947, the son of Frederick and Mavis Lang. Married to LaDell J. Field on August 17, 1968.

Education: Graduated from New Hampton High School, New Hampton, Iowa, in May, 1966; received Bachelor of Science degree from Upper Iowa University in June, 1970; received Master of Science degree from University of Wisconsin--LaCrosse in May, 1980; completed requirements for the Doctor of Education degree at Oklahoma State University in July, 1985.

Professional Experience: Health Educator, Camden Central School District, Camden, New York, January, 1971, to June, 1974; Health Educator, Turkey Valley Community Schools, Jackson Junction, Iowa, August, 1974, to May 1979; Administrative Assistant, University of Wisconsin--LaCrosse, August, 1979, to June, 1980; Assistant Professor, Emporia State University, August, 1980, to present.