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A COMPARATIVE ANALYSIS OF SCORES ON A
WELLNESS INVENTORY AMONG STUDENTS AT A UNIVERSITY WITH
A WELLNESS PROGRAM VERSUS STUDENTS AT A COMPARABLE
UNIVERSITY WITH A TRADITIONAL HEALTH PROGRAM

presented by

L. Joan Hull

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Educational
Administration



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**A COMPARATIVE ANALYSIS OF SCORES ON A WELLNESS INVENTORY
AMONG STUDENTS AT A UNIVERSITY WITH A WELLNESS PROGRAM
VERSUS STUDENTS AT A COMPARABLE UNIVERSITY WITH A
TRADITIONAL HEALTH PROGRAM**

By

L. Joan Hull

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of College and University Administration

1986

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ABSTRACT

A COMPARATIVE ANALYSIS OF SCORES ON A WELLNESS INVENTORY AMONG STUDENTS AT A UNIVERSITY WITH A WELLNESS PROGRAM VERSUS STUDENTS AT A COMPARABLE UNIVERSITY WITH A TRADITIONAL HEALTH PROGRAM

By

L. Joan Hull

Purpose of Study

The purpose of this study was to analyze and compare the attitudes, knowledge, and orientation of students from two separate institutions of higher education which are similar in selected variables but differ in their availability in wellness programming. One institution, the University of Wisconsin-Stevens Point provides a continuing and concerted effort in wellness programming; the other has no focused effort in wellness programming. This descriptive analysis compared six dimensions of wellness on the Life Assessment Questionnaire among students from the two institutions. The dimensions include: intellectual, emotional, physical, social, occupational, and spiritual.

The following research questions provided the guidelines for the research:

- 1) Do students in a university which has implemented a comprehensive wellness program show significantly higher scores on the wellness

L. Joan Hull

inventory than students from the comparative institution who responded to the same inventory?

- 2) Do the students at the University of Wisconsin-Stevens Point show significant gains over their entry level testing scores on the assessment instrument as compared to assessment scores taken at a later date?
- 3) In relation to gender ratio, the following question has significance for the study: Are there significant gender differences among the scores of the respondents to the assessment instrument?

Procedures

A three-way ANOVA using institution, gender, and age, and a one-way repeated measure ANOVA using gender as between subject and time as within subject were utilized. Each of the hypothesis was tested at the .05 level of significance.

Major Findings

- 1) Women scored higher than men on ten subscale variables. Significance was found on three of the subscale variables.
- 2) The University of Wisconsin-Stevens Point reported overall higher scores on all eleven subscale variables.

L. Joan Hull

Significance was found on seven of the subscale variables.

- 3) No significance was found on independent variable, age; however, the majority of the respondents consisted of age 20-24 years.
- 4) A three-way interaction of gender, age and institution was reported significant.
- 5) Three two-way interactions of gender and institution were reported significant.
- 6) Longitudinal data presented significance, after exposure, on eight subscale variables. This repeated measure combined with the influence of gender was significant on one subscale variable.
- 7) Potential findings were restricted by the inability to obtain truly comparable samples from the institutions.

DEDICATED TO
TED HULL

ACKNOWLEDGEMENTS

During the course of this study, the writer has received many scholarly and thought provoking suggestions and assistance from friends, colleagues and professors. Without their unconditional support, this study would not have been completed.

I am deeply appreciative and grateful to my doctoral-guidance committee members: Dr.'s Richard Featherstone, Howard Hickey, and Lawrence Lezotte and to my major professor and committee chairperson, Max Raines. Each gave uniquely in ways of compassion, humor, perseverance and wisdom.

I am further indebted to the staff, faculty and student body of the University of Wisconsin-Stevens Point and the University's National Wellness Institute. Especially Ms. Diane Dieterich and Ms. Lorraine Olski. Further acknowledgments go to Mr. Rob Renault who undoubtedly deserves a medal of honor for his unsinkable ability to ride the sometimes turbulent waters with me and Dr. Fred Leafgreen, Assistant Chancellor for Student Life, for his sensitive acknowledgement of dissertation writing and varied support throughout. Included here is gratitude

to the comparative institution's faculty, staff and student body for their patience, support and willingness to participate in this study.

Gratitude goes also to Mr. Ken Quire of the University of Michigan, School of Public Health, Department of Bio-statistics for his contributions regarding the data analysis and to the staff of the university's Statistics Laboratory. To Ms. Lorraine Hull, Michigan State University, for her knowledge and systemic follow through of University policy and procedure and her ever present kindness and regard.

My sincere appreciation is extended also to Jon George M.S.W., for his tireless efforts of reviewing each draft and critiquing appropriately with often tough but always kind criticisms and it is here I would like to acknowledge and thank those of my clients who gave so freely the wonderful, enriching and often heart-rending opportunity to accompany them on their journey(s) through life.

Special thoughts of contemplation go to Father Tom McDevitt and Sister Agnes Sheehan. Acknowledgements go also to my about-to-deliver typist, Susan Burrup; Patty Ernst M.S.W. and her beautiful daughter Alison; Martin Overhiser; Michael Steltenkamp S.S.J.; Martha Stravos M.S.W.; Maureen Waters; and to the people of S. State Street, Ann Arbor, Michigan: Brian DeBroux, Heidi Higley, Ken Hill, Sara Morgans, and Andrea Wine, who were all very much apart of

this process. And to Dr. Laurette Bradley and Tristine Smart for their constant acknowledgement of graduate school struggles and their wisdom of "when the vultures gather, the only way out for us poor souls is through witty conversation with humor abounding."

Further profound acknowledgment go to my love, laughter and tears people: Leonard Bianchi who gave not only in statistical consultation but also personal support that far outreached his scholarly academic responsibilities; Andy and Paige Ryan-Beauchene who were always available; Mike Cash, whose need for pressure relieved my stress remarkably; Steve DeBroux, who was often removed but always there; Bob Hill, for our fun times and great conversations on medicine and dental surgery; David Topolenski, whose humor kept me going when I needed it the most; Will Shampo whose love and care of others, coupled with his therapeutic skill will be the deciding factor in a child's life; and Mark W. Shannon, who will always be my best friend and whose support cannot be expressed in words.

And special welcome and thank you goes to little Janae, my typist's brand new infant daughter.

To Norman Hayner, M.D. and Margaret his wife, friend, companion, mother of their six children and mentor to all women. For without their faith in me, encouragement, incredible kindness, systemic wisdom, unconditional giving and belief in this research study this investigation would

not have been completed in such a timely and thoughtful manner.

And ultimately to my brother, Ted. His presence throughout my life instilled self-dedication, compassion, forthright knowledge of others needs, wisdom of life and strength through sacrifice. It is he to whom I dedicate this study.

TABLE OF CONTENTS

	<u>PAGE</u>
List of Tables	xi
List of Figures	xiii
 Chapter	
I. Statement of the Problem	1
Introduction	1
Need for the Study	4
Purpose of the Study	5
Definition of Wellness Concept	5
Assumptions	11
Research Questions	11
Theory	12
Delimitations	14
Significance of the Study	15
Overview	16
 II. Review of the Literature	 18
Introduction	18
Historical Influence	19
Crisis Implications in Twentieth Century Medicine	24
Exploration of Alternatives	26
Diffusion Efforts	40
Student Development	42
Paradigm Shifts	44
Programming Effort Within Institutions of Higher Education	53
Introduction	53
Southern Illinois - Carbondale	54
Michigan State University	55
University of Wisconsin-Stevens Point	56
Summary	64
 III. Design of the Study	 65
Introduction	65
Population	69
Sampling Procedure	72
History and Description of the Instrument	75
Measurements of the Lifestyle Assessment Questionnaire	76
Section I: Wellness Inventory Section	77

	<u>PAGE</u>
Section II: Topics for Personal Growth . . .	79
Section III: Risk of Death	81
Section IV: Medical Alert Section	83
Research Questions	84
Hypothesis and Subscale Variables	85
Hypothesis I	85
Hypothesis II	86
Hypothesis III	86
Hypothesis IV	87
Statistical Method Used in the Analysis	87
Reliability and Validity	88
Limitations	89
Summary	90
IV. Analysis, Results, and Interpretation of the Data	92
Introduction	92
Statistical Results and Summary Data	92
Presentation of the Data	93
Hypothesis Testing	99
Hypothesis I	99
Hypothesis II	100
Hypothesis III	104
Hypothesis IV	105
Discussion of the Analysis	117
Summary	119
V. Summary, Conclusion, Discussion, Implications and Recommendations for Further Research and Final Reflections	120
Purpose of the Study	120
Review of the Literature	120
Design of the Study	123
Findings of the Study	124
Conclusions and Discussion	125
Implications and Recommendations for Further Research	126
Glossary	141
Appendices	
A. Leading Causes of Death	145
B. Life Assessment Questionnaire	147
C. Wellness Program Brochures, Southern Illinois-Carbondale	157
D. The Wellness Report, Michigan State University	167
E. Developmental Questionnaire, Michigan State University	177

	<u>PAGE</u>
F. Wellness Program Information and Related Material, The University of Wisconsin-Stevens Point	180
G. Correspondence to the Comparative Institution Regarding the Research Proposal	191
H. Human Subject Committee Approval, Comparative Institution	197
I. Life Assessment Questionnaire Results and Interpretation	200
J. Human Subject Committee Approval, Michigan State University	210
K. Miscellaneous Correspondence	212
L. Miscellaneous Tables	214
M. Copyright Permission	248
Bibliography	251



LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
2.1	Cost to Identify Unique Problems From a Variety of Screening Efforts 61
3.1	Population 71
4.1	Cross-Sectional Analysis 93
4.2	Three-way Interaction Between Independent Variables Gender, Institution, and Age on Variable 5, Drug Use 95
4.3	Two-Way Interaction Between Independent Variables Gender and Institution on Subscale Variable 6, Environment 96
4.4	Two-Way Interaction Between Independent Variables Gender and Institution on Subscale Variable 7, Emotional Awareness 97
4.5	Two-Way Interaction Between Independent Variables Gender and Institution on Subscale Variable 8, Emotional Management 98
4.6	Gender Differentials 101
4.7	Institution Differentials 103
4.8	Age Differentials 106
4.9	Analysis of Repeated Measure 108
4.10	Age Differentials 116
L.1	Summary Table of Means Age by Gender by Institution 214
L.2	Summary Table of Means Age by Institution 220
L.3	Summary Table of Means Gender by Institution 223

TABLEPAGE

L.4	Summary Table of Means Gender by Age	225
L.5	Analysis of Variance Summary Table	227
L.6	One-Way Repeated Measure ANOVA	238

200

41

42

43

44

LIST OF FIGURES

<u>FIGURE</u>		<u>PAGE</u>
4.1	Three-Way Interaction Between Independent Variables Gender, Institution, and Age on Variable 5, Drug Use	94
4.2	Two-Way Interaction Between Independent Variables Gender and Institution on Subscale Variable 6, Environment	96
4.3	Two-Way Interaction Between Independent Variables Gender and Institution on Subscale Variable 7, Emotional Awareness	97
4.4	Two-Way Interaction Between Independent Variables Gender and Institution on Subscale Variable 8, Emotional Management	98



CHAPTER I
STATEMENT OF THE PROBLEM

Introduction

Stress-related illness has caused a major health crisis in the twentieth century. The continuing influence of a high-technological, sophisticated, post-industrial Western culture has given birth to a devastating strain on health and health care delivery. The negative stress imposed on the populace has resulted in serious social, economic, familial, and environmental difficulties. Furthermore, people are experiencing the consequences of these difficulties reflected in stress-related diseases that often result in chronic physical disabilities, mental illness, and death (including suicide). (see Appendix A) It has been determined that between eighty and ninety percent of illness as seen by various health practitioners is stress related (O'Non, 1982).

Manifestations of this crisis are seen in health care and health care delivery. Some report that the lack of human concern within the medical establishment is represented in the rising costs of medical attention along with increased mechanization and impersonalization, thus resulting in a lack of confidence, respect, and regard towards health practitioners. Iatrogenesis (from iатros, the Greek word for physician, and genesis, meaning origin)

is a fundamental erosion of basic human rights and is a negative interactive component of health care and health care delivery. In the words of sociologist Ivan Illich (1982), "It must be understood that what has turned health care into a sick making enterprise is the very intensity of an engineering endeavor that has translated human survival from the performance of organisms into the result of technical manipulation" (p. 7). Furthermore, "A vast amount of contemporary clinical care is incidental to the curing of disease, but the damage done by medicine to the health of individuals and populations is very significant. These facts are obvious, well documented, and well impressed" (p. 15).

In the forefront of contemporary medical literature and clinical investigation is the emerging concept of wellness. Consumer advocates and clinical practitioners of the wellness movement agree with the World Health Organization's definition of health as being "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (Guyther, 1982, p. 39).

It is one author's opinion that:

...current thinking in medical education usually precludes the practice of wellness medicine. Disease is emphasized over normalcy, and, most distressing of all, last-ditch measures are often preferred over preventive therapies. In contrast, wellness medicine rejects the notion that disease is an enemy to be

attacked and destroyed. Instead, it views disease as the natural expression of an imbalance in the body's biochemistry, physiology, psychology, and spirit level. Wellness medicine strives to correct these imbalances and views illness as a signal to change maladaptive behavior (Fletcher, 1983, p. 89).

The wellness concept includes optimum functioning of the individual and a "dynamic state of being that changes daily rather than a static dimension. (See Figure 1) Thus, there are as many degrees of wellness as there are degrees of illness" (Fletcher, 1983, p. 87).

Wellness is a "shift away from crisis-oriented health care that depends on high technology and medication. Wellness is an orientation that seeks to enrich and promote life-style activities that enhance well-being" (Fletcher, 1983, p. 89). The wellness philosophy offers a paradigm for alternatives in orthodox western medicine and contemporary thinking about health.

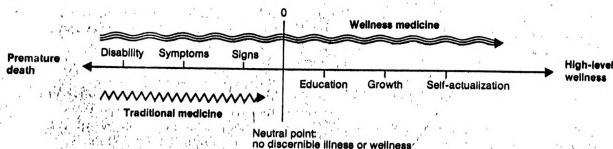


Figure 1. A representation of the health and illness continuum. Traditional medicine is oriented toward curing evidence of disease (left side of the continuum) but usually stops at the midpoint. Wellness medicine can intervene at any point on the scale, with the goal of helping the person move as far to the right as possible. From Fletcher, D.J. (1983, June). Post-graduate medicine, 73 (6), 87-89, 92.

Need for the Study

To combat the pervasive ramifications of stress and iatrogenic disease, a thorough investigation of alternative ideas of health and health care is needed. Sound empirical research to justify therapeutic models in an effort to provide adequate health education, services and treatment are fundamental. Furthermore, it appears the issues of health and health care delivery will remain a significant sociopolitical force in the years to come. Thus, it is essential that individuals devote their efforts to investigating the various facets of health and health care delivery in order to understand the full implications of this search for alternatives. Furthermore, an interdisciplinary approach to behavioral and biological sciences is needed to integrate clinical research and treatments. With a better understanding of wellness lifestyles and their components essential to maximizing one's health, institutions can develop educational experiences as a vehicle for dissemination, thus articulating alternatives for the betterment of society.

The purpose of this study is to explore the potentiality of higher education as a place for diffusion of the wellness movement. The pertinent area of investigation is: Is higher education programming in health and wellness correlated with a statistically

significant change of health practices of college students toward a more positive approach to healthy lifestyles which includes prevention and maintenance?

Purpose of the Study

The purpose of this study is to analyze and compare the attitudes, knowledge, and orientation of students from two separate institutions of higher education which are similar in selected variables but differ in the availability of wellness programming. One institution provides a continuing and concerted effort in wellness programming; the other has no focused effort in wellness programming. This descriptive analysis will compare six dimensions of wellness among students from the two institutions. The dimensions are: intellectual, emotional, physical, social, occupational, and spiritual.

Definition of Wellness Concept

Within each of the six wellness dimensions, items have been identified and prepared by professionals. Each item has been identified to define as accurately as possible each dimension of wellness in behavioral terms. Behavioral indicators have been identified so Life Assessment Questionnaire (LAQ) respondents may respond in terms of degree of participation (Hettler, 1985). Eleven items measure behavioral constructs and degree of participation

within the six dimensions. The eleven areas which encompass the six dimensions are measured by an assessment instrument that is adequately reliable and valid to serve as an acceptable dependent variable (see Appendix B). The six dimensions of wellness and their behavioral constructs are as follows:

- 1) Emotional development emphasizes an awareness and acceptance of one's feelings. Emotional wellness includes the degree to which one feels positive and enthusiastic about oneself and life. It includes the capacity to manage one's feelings and related behaviors including the realistic assessment of one's limitations, development of autonomy, and ability to cope effectively with stress. The emotionally well person maintains satisfying relationships with others;

Behavioral Construct

Emotional Awareness and Acceptance:
measures both the degree to which individuals have an awareness and acceptance of feelings, including the degree to which individuals feel positive and enthusiastic about themselves and life;



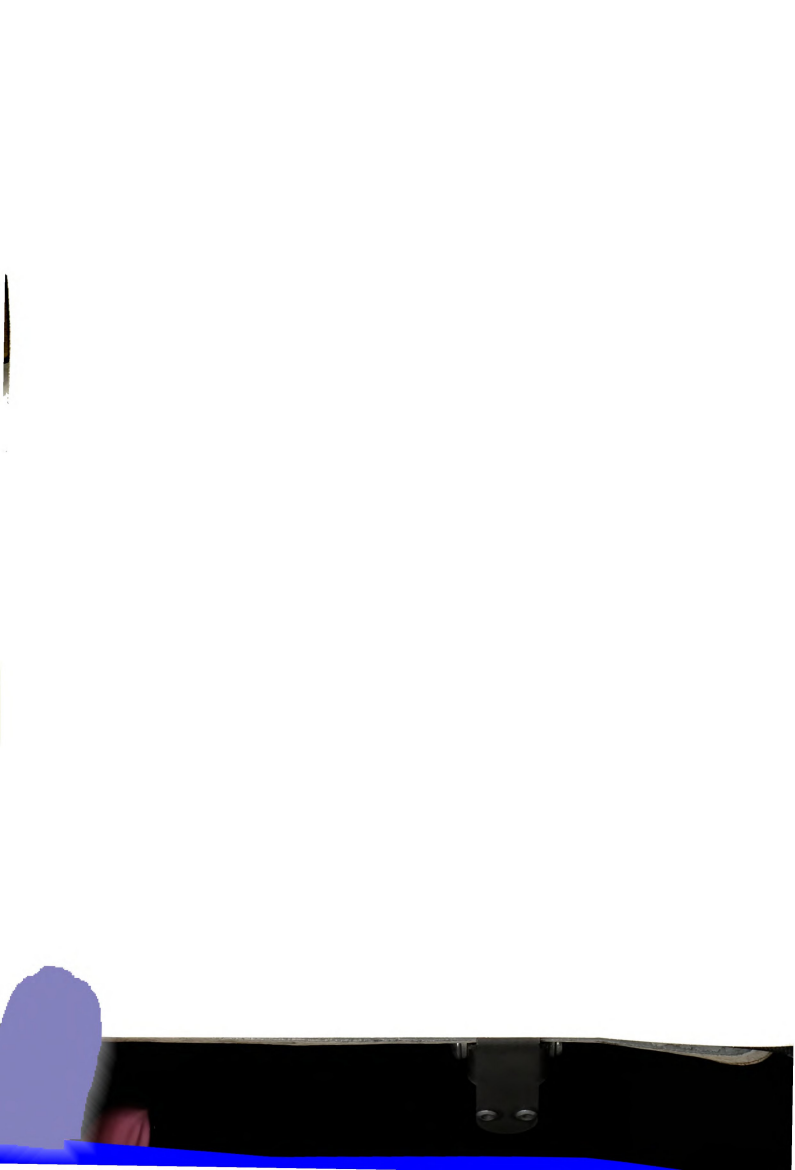
Emotional Management: measures the capacity to appropriately control one's feelings and related behavior, including the realistic assignment of limitations;

- 2) Intellectual development encourages creative and stimulating mental activities. An intellectually well person uses the resources available to expand her/his knowledge in improved skills along with expanding potential for sharing with others. An intellectually well person uses the intellectual and cultural activities in the classroom and beyond the classroom combined with the human resources and learning resources available within the university community and the larger community;

Behavioral Construct

Intellectual: measures the degree to which individuals engage their minds in creative and stimulating mental activities, expanding knowledge and improving their skills;

- 3) Physical Development encourages cardiovascular flexibility and strength and also encourages regular physical activity. Physical development encourages knowledge about food and nutrition and discourages the use of tobacco, drugs, and



excessive alcohol consumption. It encourages activities which contribute to high level wellness including medical self care and appropriate use of the medical system;

Behavioral Construct

Physical Exercise: measures commitment to maintaining physical fitness;

Physical Nutritional: measures the degree to which individuals choose foods which are consistent with dieting goals of the United States as published by the Senate Select Committee on Nutrition and Human Needs;

Physical Self-care: measures the behavior which helps individuals present or detect early illness;

Physical Safety: measures individual safe driving practices which minimize chances of injury or death in a vehicular accident;

Physical Drug Abuse: measures the degree to which individuals are able to function without the unnecessary use of chemicals;

4. Social Development encourages contributing to one's human and physical environment to the common welfare of one's community. It emphasizes interdependence with others and nature. It includes the pursuit of harmony in one's family;

Behavioral Construct

Social environmental: measures the degree to which individuals contribute to the common welfare of the community. This emphasizes one's interdependence with others and with nature;

5. Occupational Development is preparing for work in which one will gain personal satisfaction and find enrichment in one's life through work. Occupational development is related to one's attitude about her/his work;

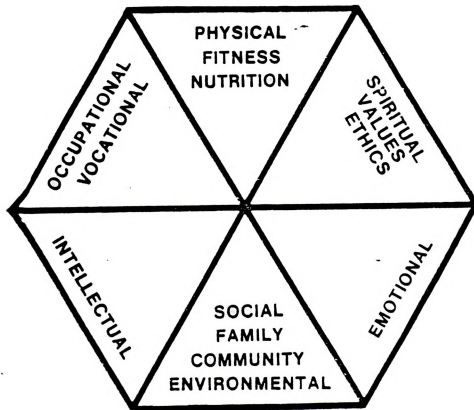
Behavioral Construct

Occupational: measures the satisfaction gained from work and the degree to which one is enriched by their work;

6. Spiritual Development involves seeking meaning and purpose in human existence. It includes the development of a deep appreciation for the depth and expanse of life and natural forces that exist in the universe.

Behavioral Construct

Spiritual: measures individual, ongoing involvement in seeking meaning and purpose in human existence; it includes an appreciation of the depth and expanse of life and the actual forces which exist in the universe. (Hettler, 1980, p. 3)

**SIX DIMENSIONS OF WELLNESS**

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Assumptions

A basic assumption of this research effort is that the wellness concept presented here is a sufficient expression of health and health care delivery, and furthermore, that the measures in the inventory Life Assessment Questionnaire (LAQ), are sufficiently presented and validated to serve as an adequate basis for instrumentation. (Available evidence to support this assumption is presented in Chapter III.)

Research Questions

The initial research questions pertinent to the study were designed to explore the possible diffusion efforts of institutions of higher education in providing health programming, thus changing health practices of college students toward a more positive and healthful approach. In an effort to ascertain programming achievements, an examination of inter- and intra-programming measures were taken. The original questions were formulated as follows:

- 1) Do students in a university which has implemented a comprehensive wellness program show significantly higher scores on the wellness inventory than students from the comparative institution who responded to the same inventory?
- 2) Do the students at the University of Wisconsin-Stevens Point show significant gains over their entry level testing scores on the

assessment instrument as compared to assessment scores taken at a later date?

- 3) In relation to gender ratio, the following question has significance for the study: Are there significant gender differences among the scores of the respondents to the assessment instrument?

Theory

A growing concern with the evidence of stress and its ramifications on ill health and the threat of iatrogenic influence has resulted in tremendous attention to alternative approaches to health care and health delivery. As recognized by Fletcher, the 1974 Canadian Report, "A New Prospective on the Health of Canadians," acknowledges that a person's health is influenced more by environment, lifestyle, and heredity than by medical care. In the United States, the publication Healthy People encourages a "second public health revolution to attack the killer diseases of civilization" (Fletcher, 1983, p. 89).

It has been postulated in contemporary literature that consumers turn away from orthodox western medicine which often is perceived as disabling instead of rehabilitating and return to the original forms as first described by Hippocrates: "A physician's studies should include a consideration of what is beneficial in a

patients's regimen while he (sic) is yet in health" (Fletcher, 1983, p. 87). And not focus primarily on the disease.

Theoretical consideration varies greatly as to appropriate measure of health care and health delivery; however, a general consensus on the urgent need to develop alternatives for health and health care delivery has been identified. Contradicting orientations in various schools of medicine are a negative implication in the development and acceptability of alternatives (Gage, 1983). Many argue that behavioral indicators are measured against nonbiological evidence; however, a highly consistent argument has emerged as to the need for a well-integrated paradigm of concepts, strategies and for alternative approaches to well being and health maintenance (Cousin, 1979; Gage, 1983, Illich, 1982; Pelletier, 1982).

In an effort to empirically reference alternative approaches to health, health maintenance, and health delivery, a reasonable population must be statistically assessed to measure the effects of wellness (alternative) programming. Because of the developmental characteristics and availability of university students, and in view of the missions of institutions of higher education, the university system has been chosen to provide this needed population.

To articulate the impetus of this research effort, there are two questions that need to be asked and answered: A) Can one modify the behavior of college students through an integrated wellness program and thereby increase both good health practices and physical conditioning, which will ultimately enhance management and coping skills within this population? and b) Can a wellness needs assessment be used as a satisfactory basis for stimulating a prevention/maintenance system to counter the present disease-oriented medical care system? According to recent research and clinical practice, this is a possibility, and reorientation from crisis-disease-oriented medicine to preventative health maintenance is underway (Pelletier, 1982). This study may assist in answering these questions.

Changing one's lifestyle to promote health is a mandate of a responsible society. Promoting high-level wellness within college and university systems could increase health and yield positive health indicators as determined by credibly biological and behavioral assessments.

Delimitations

The study was limited to two institutions of higher education. The institutions have been chosen because of similarities in mission, size, student characteristics, geographical location and financial implications in conducting the study.

Having confined the sample population to undergraduate students from two similar institutions of higher education, generalization of the results to any other population would be appropriate only to the degree that they are similar to the sample.

This study depends primarily on subjects' responses to questionnaire items. In order to adequately assess perceived high-level wellness or lack thereof, one must not only use acquired questionnaire data (as provided through this study), but also assess prior relevant health histories of individuals and families. Consensual data from prior physicians, mental health professionals, dentists, families, and all primary and tertiary care units are essential in the effort to continue investigation in this research area. Due to time constraints, and intention of the author's primary focus on investigation, and other extraneous variables, the latter suggestion is beyond the scope of this research effort.

Significance of the Study

The central theme of this study is to investigate the Potentiality of the wellness movement within the institutions of higher education and the movement's Propensity for changing health practices of college students toward a more positive and healthful approach.

In assessing the mission of higher education responsibilities in health care and service, the Journal

of the American College Health Association (JACHA) maintains that higher education is a "community of scholars and supporting personnel which exist for the pursuit of truth, the transmission of knowledge, the personal and social development of students and faculty, and welfare society" (March, 1977, p. 4). Furthermore,

. . . each institution has an opportunity indeed, an obligation, to see this period of continual change and remarkable flexibility in the lives of students as a rich opportunity to promote the development and synthesis of personality functions and relationships which will form the basis on continuing creative personal growth. (p. 8)

Others postulate positive implications of wellness medicine as an alternative in sound health programming within institutions of higher education. Current clinical and behavioral literature views wellness medicine as cost efficient and recognizes the high cost of twentieth century medicine and an alternative that acknowledges that personal habits have immediate health consequences; therefore, positive preventive maintenance instruction can help avoid the discomfort of illness and the expense of treatment (Barth & Johnson, 1983; Taylor and McKellip, 1980).

Overview

A review of substantial literature and related studies and their relevant linkage to the subject matter will be presented in Chapter II. In Chapter III, design and methodology emphasized in the study will be discussed,

the population involved will be described, instrumentation will be explained, survey methodology will be discussed, as well as the statistical analysis.

Chapter IV will be devoted to data analysis and interpretation and examination of the tested hypothesis. Chapter V will present a summary and conclusion of this effort. In addition, documents and other pertinent information germane to this study will be appended, as will a glossary and reference list.

CHAPTER II

REVIEW OF LITERATURE

The general belief these days seems to be that the body is fundamentally flawed, subject to disintegration at any moment, always on the verge of moral disease, always in need of continual monitoring and support by health-care professionals . . . There is a public preoccupation with disease that is assuming the dimension of a national obsession. . . Every mail brings word of the imminent perils posed by multiple sclerosis, kidney disease, cancer, heart disease, cystic fibrosis, asthma, muscular dystrophy, and the rest . . . There is, regrettably, no discernible counter propaganda. No agencies exist for the celebration for the plain fact that most people are, in real life, abundantly healthy (Thomas, 1977).

Introduction

The review of literature for this study will be undertaken using four key topics of investigation central to the theme. Drawing upon theory and philosophies of early physicians, an analysis is made as to similarities of historical medicine to twentieth century alternatives in medicine. A general summary will immediately follow.

Next will be an examination of pertinent issues in orthodox western medicine, specifically the identifiable crisis now being experienced. A discussion of technical, political, social and economic indicators will be presented showing their relevance to the medical crisis. Within this framework will be an exploration and identification of alternative models of medicine. A perspective on theory, philosophy, techniques, and strategies of potential models

will be articulated, with a close look at wellness medicine.

The third area of investigation will be a general review of aspects of the theory of development of college students and the subsequent responsibility of higher education. Next will come the historical and philosophical considerations of paradigm shifts; present paradigm activity germane in the experienced shift in education and medicine will be articulated.

A special subsection of this review of literature will deal with diffusion efforts and their availability within health alternatives. An inspection of three wellness programs within institutions of higher education will follow, with an analysis of their relevance as vehicles of dissemination for health education, training, practice, and delivery.

Historical Influence

The history of preventive medicine can be traced as far back as Biblical times, before the birth of Christ. The classic edition of medicine, the Bible, placed greater emphasis upon the prevention of disease than upon the treatment of bodily ailments; i.e., Exodus 15:26 reads, "If you listen carefully to the voice of Yahweh your God and do what is right in His eyes. If you pay attention to his commandments and keep his statutes, I shall inflict on you none of the evils that I have inflicted on the

Egyptians for it is I, Yahweh, who give you healing" (Jerusalem Bible, p. 156). The preventive alignment continued with the development of experimentation of Pasteur and Koch et. al., in which they considered the specific causation of infectious disease. This dominant force in medicine provides a theoretical foundation for therapy and prevention and an acquisition of new knowledge in the medical field. "There is no doubt that the doctrine of specific ideology has constituted an instrumentation of unmatched power for the experimental study of pathological process and has been responsible for most of the great advances, theoretical and practice, maligned in medicine during the prior century" (Stevens, 1976, p. 14).

Prevention techniques employed in historical times are not far removed from twentieth century though on health prevention and maintenance. With these concepts are techniques that draw upon an individual's homeostasis. The common and age-old practice of moderation in all things and an advocacy of the natural way of life belongs in their tradition. According to the Regimen Sanctatis Salecnitum, the epic guidebook of health and hygiene for all medieval people, practical rules on healthful living were a consideration of all things in moderation and advocacy of an even, neutral way of life. According to Hippocrates, his treatments were concerned primarily with Prognosis and treatment of the patient as a whole, and all

treatments were intended to assist nature with the recognition of diet in both health and disease; drugs were used rarely, and only when diet failed (Wain, 1970).

In ancient Greek mythology, Asclepias, the son of Apollo and the Nymph Cornis possessed curative powers beyond recognition. His ability to heal led to accusations of decreasing the number of souls in Hades for which Zeus destroyed him with a thunder bolt. To honor his soul, priest and physicians of the cult of Asclepias (Circa mid-fourteenth century, BC) maintained moderation for a healthy existence by prescribing diet, rest, exercise, massage, bath, and heliotherapy to help cure the sick (Truffert, 1982, p. 12). And as John Lude "in a precocious feminist treatise lamented, the female cottager who eats the coarse but wholesome bread of her own industry and drinks from the cooling stream is seldom troubled with these maladies that afflict the rich and indolent undone by the abuse of plenty" (Truffert, 1982, p. 179).

The regenerative powers of the body and its natural ability to correct foreign invasion were acknowledged by early Greek physicians. Primary was the healing process or that might do harm (*primum non nocere*). (Cousins, 1975) They put emphasis on the systematic organization and application of knowledge and throughout antiquity "healing was considered to be essentially, a spiritual phenomenon and was associated with many deities" (Capra, 1982, p. 305).

Environmental influence and the acknowledgment of its effect was inherent in the determination of an individual's well-being. Common among many early civilizations was the aim to achieve harmony with environmental forces. Health had a social and environmental orientation, with a sense of community responsibility in health affairs (Gage, 1983). According to Hippocrates, the physician considers the patient's involvement in health and that of natural elements of the universe. Health, according to Hippocratic writings, requires a state of balance among environmental influence, ways of life, and various components of human nature.

These components are described in terms of "humors" and "passions", which have to be in equilibrium. The Hippocratic doctrine of the humors can be restated in terms of chemical and hormonal balance, and the relevance of the passion refers to the independence of the mind and body, which is strongly emphasized in the text. Hippocrates was not only a shrewd observer of physical symptoms, but also left excellent descriptions of many mental disorders that still occur in our time. (Capra, 1982, p. 305)

Like their earlier counterparts, contemporary Practitioners of holistic¹ health maintain a similar theoretical and practical orientation. To quote from the current widely held definition of health, it is "a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity" (World Health

¹ In an effort to diminish the connotation of fashionable, unsystematic, and invalid medicine, the term "holistic medicine" will be replaced with "contemporary alternatives in medicine."

Organization, 1958). This recognized definition has the advantage of "de-emphasizing a primary biological image of health and accentuating the interaction of physical, mental, emotional, and social factors" (Gage, 1983, p. 36). Its approach is much like ancient Chinese thought: "physicians were paid only so long as their patients remained well, and payment stopped when illness began" (Howard 1983, p. 15).

Today as in the past, techniques employed to substantiate health are similar. A commonly held conviction among today's alternative medical practitioners is the adoption of natural, low-technological, or noninvasive strategies for meeting health care needs. It is intuitively attractive. Furthermore, it makes sense economically, providing natural and low-technological strategies are demonstrated to be no less effective than the highly technical strategies (Gage, 1983). The environment is the primary determinant of the state of general health of any population. Medical geography, the history of disease, medical anthropology, and social history of attitudes toward illness have shown that food, water, and air in correlation with the level of sociopolitical equality in the cultural mechanism make it possible to keep the population stable, and play the decisive role in determining how healthy grownups feel and at what age adults tend to die (Illich, 1982).

Crisis Implication in Twentieth Century Medicine

Even though past and present medical orientations coalesce in their ideology of prevention and preventative techniques, many extraneous factors have prohibited a sound health care system; and this has been deemed the medical crisis of today. Furthermore, it has been postulated that orthodox Western medicine which is viewed as disease-oriented and crisis-motivated can no longer care for the ill using techniques and manners previously applied. Arguments for a call to medical revolution include: the depersonalization of contemporary diagnosis and therapy; lack of responsibility, regard and respect for the consumer; and high cost, no-cure treatment and service. Clinical iatrogenesis, the diagnostic label for this phenomenon, is said to be the epidemic of twentieth century medicine. ". . . only modern malnutrition injures more people than iatrogenic disease in its various manifestations" (Illich, 1976, p. 26).

Awareness of iatrogenic influence has led professionals and consumers into a discussion of medical progress. Researchers concentrate on the sick-making powers of diagnosis and therapy and report a paradoxical damage caused by the crisis approach to sickness. "Furthermore, negligence becomes "random error" or "systems breakdown," and callousness becomes "scientific detachment," and incompetence becomes "a lack of specialized equipment" (Illich, 1982, p. 30). In the face of more impending social issues of income, food, and discrimination, a

concentration of public sentiment is demanding health service reform (Stevens, 1976).

Solutions to iatrogenic disease and an attempt to demystify medicine take many forms and have been attempted in many ways. However, a common agreement is a "grassroot consensus about a balance between the civil liberty to heal and the civil right to equitable health care" (Illich, 1982, p. 6). Such conditions are not new, but the changing social and medical environment has brought them into a new focus. The movement for equal opportunity and civil rights is now being matched by an awareness both among consumers and in the health professions of the gaps in basic health services, gaps which are particularly incongruous when contrasted with the sophisticated triumphs of the operating room (Illich, 1982).

Arguments as to appropriate and realistic views of the human entity have led to discussions and examination of medical treatment and diagnosis. Questioning the occurrence of mechanical manipulation through orthodox measures such as invasive procedures and sophisticated diagnostic assessment versus natural non-invasive techniques has led to consumer awareness and subsequent involvement. Questioning the use of often dangerous medication, the impersonalization of specialty medicine and high cost and often no-cure assessment and treatment

is at the forefront of the consumer demand for alternatives. Such invasive techniques "produce clinical damage that outweighs its potential benefits. . . Thus rendering society unhealthy. . . and expropriate the power of the individual to heal himself (sic) and shape his or her environment" (Illich, 1982, p. 9).

The Western orthodox medical model which justifies this development views disease, infection, or trauma as having a single cause for the diagnosis of the disorder. Disease and epidemics were considered as incurable visitations of providence. Civilization was content to take action to try to protect itself only when disease actually occurred. Valuable is the specific ideology of disease; it has proved inadequate in treating twentieth century humankind; however, in the process of healing, orthodox western medicine has lost sight of the individual as a dynamic, integrated whole, a complex interconnected system with capabilities for self-healing (Cousins, 1981; Gage, 1983; Illich 1976; Stevens, 1976).

An Exploration of Alternatives

In a social and economic structure with an unprecedented level of inherited stress, it is essential that individuals develop the means of moderating the effects of stress on their physical and mental well being. More and more, individuals in Western societies are

looking for new approaches to happiness and contentment. Current interest in counter-culture values, anti-consumerism and anti-technology, eastern religion and meditative practices, the wide-spread human potential and self-exploration movement and a renewed search for spiritual growth seem to indicate that people are seeking new values to help them cope with the pressures of modern living.

Prevention of disease has become a necessary consideration as medical care becomes increasingly maldistributed, costly, and often disorganized (Pelletier, 1982). Furthermore, with the increasing incidence of psychosomatic-related² physiological and psychological disorders, it is essential that the healing professions find methods not only of alleviating but preventing disease. These methods cannot be ones which require the individual to drop out. They must be incorporated into the existing social-vocational structures as well as into the basic framework of contemporary life-styles.

Different approaches to medicine and health care delivery offer an alternative used to combat twentieth century illness and clinical iatrogenic disease. Today a

² Common among clinical, technical and behavioral literature is the use of the term "psychosomatic" illness. It is this author's intention to articulate "stress-related" illness as a substitute in an effort to not reinforce the connotation of a histrionic response to an emotion.

new focus is emerging which is characterized by an alternative and radical approach to the individual's health and health care delivery. Alternative medicine recognizes the inextricable interaction between the person's psychological being and between his/her psychosocial environment. Mind and body function as an integrated unit and health exists when they are in harmony, while illness results when stress and conflict disrupt this unity (Gage, 1983; Pelletier, 1982; Selye, 1978).

This approach to health and health care is respectful, harmonistic, and reestablishes an emphasis on the patient. It adopts natural, low technological, or non-invasive strategies to meet health needs. It teaches individuals to monitor, respect, and be responsible for themselves and their environment while in health rather than in sickness. It calls for the acknowledgement of the natural regenerative powers of the body and an awareness of the mind-body interaction in vis medicatrix naturae. Thus, it strives for asymmetry that augments provider power over the consumer. It is the I-thou of alternative medicine and not the we-it of the orthodox approach (Cousins, 1981).

The obvious mismanagement of resources, the waste of human potential through disrespect and disregard, and a breakdown of familial and economic structures have left contemporary society with a host of individuals

experiencing deterioration of their psycho-social-immunological entity. The subject of stress and its consequences on an individual's entity is a current issue under investigation. The appropriate measures to safeguard against and/or treat stress-related illnesses are still in question. However, given the fact that stress is debilitating, the urgent need for techniques to combat its manifestations deserves much clinical inquiry (Pelletier, 1982; Selye, 1978).

Stress affects both genders and all ages, cuts across all social and economic class lines, and is not subject to an ethnic or color bar. Acknowledging stress and its subsequent harm is difficult at times; however, to maintain homeostasis and an understanding of somatic illness, one must be able to distinguish between injurious and non-injurious stress. Prolonged, unidentifiable, unabated stress is primarily responsible for the development of stress-related disorders, thus preventing sufficient recovery from the stress-alarm reaction. With non-injurious stress, a normal, adaptive stress reaction occurs when the source is identifiable and individual can maintain by returning quickly to an adequate level of functioning (Pelletier, 1982).

Stress is a state manifested by a specific syndrome which consists of all the non-specifically induced changes

within the biological system. This stress has its own characteristic form and composition, but no particular cause. The elements of this form are the visible changes due to stress, whatever its cause. There are additional indicators which can express the sum of all different adjustments that are going on in the body at any time or stress may simply be the psychological apparatus involved in emotional or aroused reaction to threatening or unpleasant factors in the life situation as a whole (Selye, 1978).

Reports vary as to percent of stress-related illness, however, 50-80 percent is commonly acknowledged in most current popular literature, while some reports argue as high as 90 percent (Ward, 1982). Specific illnesses identified are peptic ulcers, mucous colitis, ulcerative colitis, bronchial asthma, atopic dermatitis, urticaria and angioneurotic edema, hayfever, arthritis, Raynouds' disease, hypertension, hyperthyroidism, amenorrhea, neurosis, paroxysmal tachycardia, migraine headaches, impotency, general sexual dysfunctions, sleep onset insomnia, alcoholism, and the whole range of cardiac and other vascular diseases, as well as neurotic and psychotic disorders (Pelletier, 1982). Other more chronic debilitating diseases under investigation include collagen disease, carcinogenic disease, metabolic disease, and

long-term episodic psychosis (Pelletier, 1982; Simonton and Simonton, 1975). Genetic predisposition is acknowledged; however, latent carriers reacting non-therapeutically to the stress alarm are a concern with today's health scientists and practitioners (Pelletier, 1982).

Such prominent medical researchers as Bernard, Wolff, Pavlov, Cornon, Selye, Simeons, and Finberger have developed a foundation of empirical evidence in the mind-body interaction and the negative effects of stress on its homeostasis. They acknowledge that all disorders are stress-related in the sense that both mind and body are involved in the etiology. Any disorder is created out of a complex interaction of social factors, physical and psychological stress, the personality of the person subjected to these influences, and the inability of the person to adapt adequately to pressure (Pelletier, 1982).

With the recognition of the complex interaction of factors, the possible identifiable symptoms may be assessed as well as their causation. However, the curative measures imposed on the individual by orthodox Western practitioners have often resulted in failure and iatrogenesis and thus substantiate the call for new methods of treatment and criteria for diagnosis. Evidence suggests that intrusive, sometimes heroic orthodox curative measures impose more

stress on the body when compared to techniques used to mobilize the natural recovery process (Gage, 1983; Illich, 1982). Recent empirical studies of the psycho-immunological entity have proved its powers in regeneration (Cousins, 1975).

The most current and substantial literature on natural treatment is within the area of relaxation response. Benson (1975) has popularized this concept. He notes major physiological changes: "decrease oxygen consumption and carbon dioxide elimination, decrease heart rate, respiratory rate, arterial blood lactate, and skeletal muscle tension, accompanied by increased alpha and occasional theta activity in the electroencephalogram. For any given system or individual, these changes vary but there is a definite tendency for them to occur collectively" (Pelletier, 1979, p. 120).

There are certain characteristics that Benson and his colleagues have identified as conducive to eliciting the relaxation response:

- 1) Mental Device: There should be a constant stimulus - e.g., a sound, word, or phrase repeated silently or audibly, or fixed gazing at an object. The purpose of these procedures is to shift away from logical, externally-oriented thought.

- 2) Passive Attitude: If distracting thoughts do occur during the repetition or gazing, they should be disregarded and the attention should be redirected to the technique. One should not worry about how well one is performing the technique.
- 3) Decreased Muscle Tonus: The subject should be in a comfortable posture so that minimal muscular work is required.
- 4) Quiet Environment: An environment with decreased environmental stimuli should be chosen. Most techniques instruct the practitioner to close his (sic) eyes. A place of worship is often suitable, as is a quiet room (Pelletier, 1979, p. 120).

Empirical studies have brought credibility to various meditative practices that date back over 2000 years. Through physical and behavioral clinical testing, alterations in an individual's psychological state accompanying meditation seem to be opposite to those characteristics of stress reaction. As reported by Tart, 1969; Lawrence, 1972; Forem, 1973; and Pelletier, 1982 such changes are evident also in mutual biological states through such alterations as (1) reduction of the metabolic rate (Anand, Chhina, and Singh, 1961; and Kasamatsu and Hirai, 1966), (b) reduction of the breathing rate to four-to-six breaths per minute from 12-14 per minute (Allison, 1970), (c) an

increase in the number of alpha waves of eight to twelve cycles in the brain (Akishige, 1970; Kamiya, 1968; Pelletier, 1974), (d) the appearance of the theta of five to eight cycles in the brain (Green, 1974; Pelletier, 1974), (e) a twenty percent reduction in blood pressure of hypertensive patients (Dotey et al., 1969), and other related reports from psycho-immunological research conducted with trained practitioners of transcendental meditation.

According to Tart et. al. further scientific evidence substantiates the benefits of meditative practices of Indian yogis through their ability to manipulate the autonomic system (Brasse, 1946; Wallace, 1970; Stroebel, 1975). Such empirical evidence suggests more stable psychological functioning (Schwartz & Galesman, 1974), autonomic stability (Orme-Johnson, 1973), less anxiety (Ferguson and Gown, 1973; Linden, 1973; Nidich, Seeman, and Dresken, 1973), and ability to experience an internal locus of control (Pelletier, 1982; Schwartz and Galeman, 1974).

Another non-invasive technique for stress reduction is biofeedback is the technique used to mediate a state of deep relaxation through the use of subliminal imagery, fantasies, and sensations, thus producing relaxation outside of the laboratory. The psycho-immunological carry-over benefits are well documented, and many credit biofeedback as the most valuable form of stress reduction

used in the twentieth century medicine.

"Autogenic training is based on a well-researched method of meditation, of all the systems noted, it is the most comprehensive and can serve as a model for all others that address themselves to clinical treatment of psychosomatic disorders" (Pelletier, 1979, p. 121). Out of the developmental experiments of its initiator Johannes H. Schultz (1932), in its original form DAS Autogene Training calls for exercises which are developed within. "The techniques developed and used in autogenic therapy have been designed to support and facilitate the natural self-healing mechanisms that already exist. Thus, the emphasis is not in trying to control the nature system, but rather on helping natural systems use their inherent potentials of self-regulatory adjustment more fully" (Pelletier, 1979, p. 121). Autogenic training, a comprehensive and purposeful deep relaxation technique, reports the same results as those of diligent meditation (Mason, 1985). This method is a rational physiological exercise designed to produce a general psycho-immunological reorganization in the subject which makes him/her manifest all the phenomena otherwise obtainable through hypnosis.

The technique of visualization is the summarizing and holding of certain images in the mind for examination and exploration of the efforts on consciousness (Pelletier,

1982). This methodology is credited as substantial in reducing the body's reaction to injurious stress, and this finding has prompted innovative clinical and experimental investigation into its therapeutic effects on specific dysfunctions, as with the Simonton and Simonton (1975) cancer research and visualization.

Other considerations are research in more obscure areas. Through the personal experience of Cousins (1968), the inscrutable question arose: "if negative emotions produce negative chemical changes in the body, would the positive emotions produce positive chemical change? And is it possible that love, hope, faith, laughter, confidence, and the will to live have therapeutic value or do chemical changes only occur on the downside?" (Cousins, 1981, p. 34). Clinical inquiry is modest; however, scientific research into the immunological benefits of laughter indicate a positive interaction on psycho-immunological harmony (Fry, 1977; Paskind, 1932).

University of Minnesota researchers, who study the chemical composition of tears, "have recently isolated two important chemicals, leucine-enkephalin and prolactin, from emotional tear" (Brody, 1984, p. 6). The first possibly being an endorphin. Also, Frey (1984) reports that "tears are an exocrine substance - something produced by the body that is released to the outside, like sweat,

urine and exhaled air - and that all exocrine processes rid the body of toxins" (p. 6). Furthermore, continued research might find that "tears cleanse the body of substances that accumulate under stress" (p. 6).

The old, frequently-held theory of "everything in moderation" has continued to be the unwritten rule for good health as is the recognition that proper nutrition, exercise, are correlated with longevity, as are well-balanced diet, vigorous, continual physical activity, and involvement in community affairs to the end of one's life (Cousins, 1981).

As an outcome of the various discussions of twentieth century health issues and the structural breakdown of society, an attempt to mobilize alternatives and curtail stress-induced damage to the human entity is underway. In the forefront of contemporary medical literature and clinical investigation is the concept and practical reality of wellness medicine.

Wellness medicine views health as, "A dynamic state of being that changes daily rather than a static dimension. Thus, there are as many degrees of wellness as there are degrees of illness" (Fletcher, 1983, p. 87). Wellness medicine emphasizes a shift away from crisis orientated health care that depends on high-technology and medication. Wellness is an orientation that seeks to enrich and promote

that seeks to enrich and promote life-style activities that foster well-being. In common with the alternative health movement, wellness medicine offers a possible paradigm for integrating concepts, strategies, and action. It maintains a positive view of health as well-being, individual responsibility for health, the importance of health education, control of social and environmental determinants of health, and low-technological therapeutic techniques (Fletcher, 1983).

Wellness medicine strives to rekindle the consumers' interest in health responsibility and the ethical standards of their practitioners, and to promote and maintain well-being rather than merely treating the symptoms. Wellness medicine attempts to re-educate society to the regenerative powers of the psycho-social-immunological entity by maintaining respect, regard, and knowledge for this system. It also holds in esteem specific non-invasive techniques as previously mentioned.

Wellness medicine provides a paradigm for building upon original, Greek medical thought and incorporating new empirical evidence of concepts and techniques. It substantiates the concept of an integrated whole, capable of regeneration given a modest amount of respect. Wellness medicine proposes an individual's responsibility for his/her own health care and stresses the crucial

implications of the social and environmental interplay upon an individual's treatment based on empirical scientific evidence, and it stresses the importance of health education.

Wellness medicine is not without its critics, however. To many, it conjures of off-beat, non-empirical based alternatives. Some feel it is the fashionable medical trend of the 1980's that lacks systematic and sustained verification. Further criticism is the social mandate that calls for total responsibility of the individual to maintain health and prevent illness; this is wellness medicine's most critical component. As Stein (1982) argues,

Obsessive preoccupation with health is one among many contemporary expressions of narcissistic, inward-turning that follows a sense of frightened impotence to affect change on the world . . . contracting disease has come to be seen by many as a sign of personal moral failure to maintain fitness . . . Wellness not only compounds the problems it proports to solve, but becomes itself the disease from which we must find a way to recover. (p. 641)

Other evidence of contention towards the wellness movement is the argument of the lack of biological evidence. This compounded with various professional denials of its validity has left little agreement on its ability to serve as an alternative approach.

There is agreement as to the basic ingredients that impact on health; however, there is less agreement on the value assigned to each. Genetic, behavioral, environmental, and medical characteristics must be weighed in this argument. Whatever the issues are and whichever approach is the most appropriate, the questions warrant concern and need to be evaluated with empirical scientific evidence.

Diffusion Efforts

But with test data comes the question of an appropriate diffusion strategy: what is the best vehicle for dissemination?

Most research on health education agrees with the executive director of the American College Health Association that individuals are shaped by the attitudes, knowledge, and behaviors adopting during high-school and college (Dilley, 1983). It is for this reason that wellness and self-care programming for college students is so vital and should be rigorously explored and evaluated. Furthermore, according to Barth and Johnson (1982), college and university health service personnel have a unique and vital opportunity to influence young people in areas of general health and personal well-being before chronic problems set in. Thus college can be an environment where self-awareness is encouraged and

reinforced. The time spent at a university is a time when many health habits and practices are initially developed and may persist throughout the remainder of one's life (Barth and Johnson, 1982). If the role of the university is not just to teach academic subjects, but also to produce well-rounded individuals, then the university must address the promotion of wellness among its students - not just provision of treatment for illness, nor even merely illness-prevention service (Dunn, 1977). This is not only to be for the present, but for the future of each student (Duncan, 1980).

And as Taylor and McKillip (1980) conclude, even in a relatively healthy college population, personal habits can be shown to have immediate health-related consequences; therefore, positive health efforts can help avert the discomfort of illness and the expense of treatment in the present as well. In addition, examination of the relationship among the personal habits observed suggests that relatively close student lifestyles may have different implications for planning. Therefore, a need for wellness education is indicated.

From a strictly financial point of view, wellness medicine is warranted for colleges and universities. Wellness medicine addresses the high cost of twentieth century health services and thus makes itself valuable to



the institution and far less vulnerable to attack in the face of budget constraints.

Student Development

Developmental scholars differ on the building blocks of cognitive and affective development. However, consistent elements can be found among the more substantial theories; the importance of individuality in maturation and growth, and the notion that "development is continuous and discontinuing" (Wadsworth, 1978).

Each critical item of psychosocial strength is systematically related to and built upon all the others (Erikson, 1950). And, according to Sylvia Ashton-Warner (1963), continuous development means that each subsequent development builds on, incorporates, and transforms previous development. If institutions of higher education are to have an impact as change agents, roles and responsibilities must be identified including those of faculty and staff. They must become advocates to implement the developmental processes of their constituents - the students.

In every society there exist institutions for the socialization of its members which foster personal development. In our society we have schools, colleges, summer camps, military schools, training programs, the Peace Corps, penal institutions, psycho-therapeutic relationships, and a wide range of other, similar agencies and programs. While their goals may differ, these are all agencies through which an individual passes

for a limited time for the purpose of being changed in some desired way. (Nevitt, 1966, p. 40)

Among the various institutions serving young adults, institutions of higher education hold a special responsibility in their function as change agents. According to Hettler (1980), "acquisition of appropriate mentoring and modeling in intellect, emotions, physical, social, occupational, and spiritual development is essential for optimal development during the college years (Leafgreen, 1981, p. 26). In essence, "provide an optimal, holistic, human functioning for all individuals" (p. 26).

Acknowledgment of individuality is the key element in developing programs that will foster all aspects of one's evaluating personae. According to Leafgreen (1981), Assistant Chancellor of the University of Wisconsin-Stevens Point, the specific mission of educators and student personnel professionals is three-fold: "facilitate change, growth and development by directing students in specific experiences, programs and strategies" (p. 32).

Leafgreen et. al. quoted Austin's (1977) findings and emphasized that:

. . . students do not follow uniform patterns of development during their undergraduate years . . . several patterns of students' development are stereotypical, few students follow any given path exactly as portrayed. These patterns serve to dramatize the great behavioral developmental differences that characterize what has to be called the college experience. (p. 31)

Paradigm Shifts

To develop a holistic approach to health that will be consistent with the new physics and the systems view of living organism, we do not need to break completely fresh ground, but can learn medical models existing in other cultures. Modern scientific thought - in physics, biology, and psychology - is leading to a view of reality that comes very close to the views of mystics and of many traditional cultures, in which knowledge or human mind and body and practice of healing are an integral part of natural philosophy and of spiritual discipline. A holistic approach to health and healing will therefore be in harmony with many traditional views as well as, consistent with modern scientific theories (Capra, 1982, p. 305).

In twentieth century America, old assumptions are being challenged and new ideas articulated. In science and technology a paradigm shifts is occurring as a response to our societal crisis.

"A paradigm is a scheme for understanding and explaining certain aspects of reality . . . A paradigm shift is a distinctly new way of thinking about old problems" (Ferguson, 1980, p. 6).

Scientific communities may respond in ways that make the shift subject to frustration and often bitter debate. Many people hold to the past, emotionally and habitually maintaining the old familiar truths. As Kuhn points out, "they usually go to their graves unshaken. Even when confronted with overwhelming evidence, they stubbornly stick with the wrong, but familiar" (Ferguson, 1980, p. 28).

Essential to paradigm shifts is building upon past empirically-based theory and constructs, thus making for construction not destruction. This is the credible evidence needed for scientists to accept change. A crucial motivation for paradigm shifts is the need to view the subject as a whole and not to seek answers to questions at the level in which they are asked. Understanding the word "context" is the key to understanding paradigm shifts. Literally, "context" means "the part or parts of a written or spoken passage preceding or following a particular word or group of words and so intimately associated with them as to throw light upon their meaning" (Websters Third New International Dictionary, 1966, p. 492). To explore the new paradigm that superseded Newton's physics - Mathematical Principles of Natural Philosophy (usually called Principia) (1978), one can see it "resolved much unfinished business, anomalies, riddles that would not fit into the old physics. The old mechanical rules were not universal, they did not hold at the level of galaxies and electrons. Our understanding of nature shifted from a clockwork paradigm to an uncertainty paradigm, from the absolute to the relative" (Ferguson, 1980, p. 27). As one can see, these shifts build upon the past partial truths, and integrate them with new thoughts, strategies, and actions.

Paradigm shifts are regularly marked by periods of frequent and deep debates over legitimate methods, problems, and standards for solutions. These times serve to define schools rather than produce consensus. Paradigms do not need total agreement by the scientific community, but they do need the acceptance of basic rules used to produce knowledge. However, as stated above, different communities respond differently for whatever reasons. Many times they produce in-house fighting as to appropriate decisions. For example, developing rules in quantum mechanics (which was subject to a paradigm shift in the 1950's) provided bitter debate between the chemist and physicist as to the question of whether a single atom was or was not a molecule. This question has yet to be determined as an accepted rule; however, the debate has not conjured up a total splitting and alienation of the two schools of thought. It built upon old partial truths to produce new knowledge.

And once we understand nature's transformative powers, we see that it is our powerful ally, not a force to be feared or subdued . . . In every age, said scientist-philosopher Pierre Teilhard de Chardin, man (sic) has proclaimed himself at a turning point in history. And to a certain extent, as he is advancing on a rising spiral, he has not been wrong. But there are moments when this impression of transformation becomes accentuated and is thus particularly justified. (Ferguson, 1980, p. 25)

Many feel the paradigm shift in health care delivery, service, and education is in such a period of debate. But unlike the chemical and physical science communities, the medical community is in a bitter debate as to alternatives based on sound empirical evidence and not just behavioral indicators. Kuhn acknowledges a popular acceptance of some scientific communities' lack of clinical inquiry into concepts they feel are irrelevant to their research. The scientists hold strong to their traditional mode of problem solving, and it is the general population that suffers from their acceptance of received knowledge.

During a paradigm shift, proponents of the new system must face strong and entrenched opposition. Insurmountable at times, against all odds, the paradigm shift continues. To quote from Albert Einstein (1947), "Great spirits have also encountered violent opposition from mediocre minds."

Paradigm shifts may be experienced in every aspect of society: health, education, law, business, civic and domestic affairs. Currently, the health services are experiencing a paradigm shift in which their structural basis is being questioned in its relevancy to treatment, technique, cost-implications, and social/ethical/professional responsibility.

The shift is being manifested through a collaboration which includes varied professionals, consumers and victims of iatrogenesis. A Recent editorial in American Medical News, decrying medicine's crisis of human relations

as follows: "Compassion and intuition are waylaid . . . Physicians must recognize that medicine is not their private preserve, but a profession in which all people have a medical statesmanship (sic) to correct a major failure - the patients' senses of unrequited love" (Ferguson, 1980). The emergent paradigm of health appears below:

THE EMERGENT PARADIGM OF HEALTH

<u>Assumptions of the Old Paradigm of Medicine</u>	<u>Assumptions of the New Paradigm of Health</u>
Treatment of symptoms and causes	Search for patterns and symptoms
Specialized	Integrated, concerned with the whole patient
Emphasis on efficiency	Emphasis on human values
Professional should be emotionally neutral	Professional's caring is a component of healing
Pain and disease are wholly negative	Pain and disease are information about conflict, disharmony
Primary intervention with drugs, surgery	Minimal intervention with "appropriate technology," complemented with full armamentarium of techniques (psychotherapies, diet, exercise)
Body seen as machine in good or bad repair	Body seen as dynamic system, context, field of energy within other fields
Disease or disability seen as thing, entity	Disease or disability seen as process
Emphasis on eliminating symptoms, disease	Emphasis on achieving maximum wellness, "meta-health"

<u>Assumptions of the Old Paradigm of Medicine</u>	<u>Assumptions of the New Paradigm of Health</u>
Patient is dependent	Patient is (or should be autonomous)
Professional is authority	Professional is therapeutic partner
Body and mind are separate; psychosomatic illness is mental, may be referred to psychiatrist	Body-mind perspective; psychosomatic illness is province of all health-care professionals
Mind is secondary factor in organic illness	Mind is primary of coequal factor in <u>all</u> illnesses
Placebo effect shows the power of suggestion	Placebo effect shows the mind's role in disease and healing
Primary reliance on quantitative information (charts, tests, dates)	Primary reliance on qualitative information, including patients' subjective reports and professional's intuition; quantitative data as adjunct
Prevention largely environmental: vitamins, rest, exercise, immunization, not smoking	Prevention synonymous with wholeness, work, relationships, goals, body-mind-spirit
	(Ferguson, 1980, p. 246-248)

With the contemporary ideas of the new practitioners and various schools of thought, western orthodox medicine is being investigated. The scientific innovators are throwing out a challenge:

. . . if our memories are as absorbent as research has demonstrated, our awareness as wide, our brains and bodies as sensitive, if we are heirs to such evaluating virtuosity, how can we be performing and learning at such mediocre levels? If we're so rich, why aren't we smart? (Ferguson, 1980, p. 297)

The answer is the level of appropriate educational experiences. Education is one of the least dynamic of institutions, lagging far behind medicine, psychology, the media, and other elements of our society (Ferguson, 1980). Fantini, former consultant on education, now at the State University of New York, contends, "The psychology of becoming has to be smuggled into the schools . . . Only a new perspective can generate a new curriculum, new levels of adjustment just as political parties are peripheral to the change in the distribution of power, so the schools are not the first arena for change in learning" (p. 281).

The negative implications of public, private, and parochial schools are seen in the impoverished expectations of students. "Our public schools were designed, fairly enough, to create a modestly literate public, not to deliver quality education or to produce great minds" (Ferguson, 1980, p. 287). If our schools are to be the center of learning, then we must allow for innovation by not separating learning from life. Individuals must recondition themselves to question partial truths and view the world as a whole, and not seek to answer questions at the level at which they are asked. The developing paradigm of education appears below:

DEVELOPING PARADIGM OF EDUCATION

Assumptions of the Old
Paradigm of Education

Emphasis on content,
acquiring a body of
"right" information, once
and for all.

Learning as a product, a
destination.

Hierarchical and
authoritarian structure.
Rewards conformity,
discourages dissent.

Relatively rigid structure,
prescribed curriculum.

Lockstep progress, emphasis
on the "appropriate" ages
for certain activities,
age segregation.
Compartmentalized.

Priority on performance.

Emphasis on external
world. Inner experience
often considered
inappropriate in school
setting.

Guessing and divergent
thinking discouraged.

Assumptions of the New
Paradigm of Learning

Emphasis on learning how
to learn, how to ask good
questions, pay attention
to the right things, be
open to and evaluate new
concepts, have access to
information. What is now
"known" may change.

Learning as a process, a
journey.

Equalitarian. Candor and
dissent permitted.
Students and teachers see
each other as people, not
roles. Encourages
autonomy.

Relatively flexible
structure. Belief that
there are many ways to
teach a given subject.

Flexibility and integration
of age groupings.
Individual not
automatically limited to
certain subject matter by
age.

Priority on self-image as
the generator of
performance.

Inner experience seen as
context for learning. Use
of imagery, storytelling,
dream journals, "centering"
exercises, and exploration
of feelings encouraged.

Guessing and divergent
thinking encouraged as
part of the creative
process.

Assumptions of the New
Paradigm of Education

Emphasis on analytical,
linear, left-brain
thinking.

Labeling (remedial,
gifted, minimally brain
dysfunctional, etc.)
contributes to
self-fulfilling prophecy.

Concern with norms.

Primary reliance on
theoretical, abstract
"book knowledge."

Classrooms designed for
efficiency, convenience.

Bureaucratically
determined, resistant to
community input.

Education seen as a social
necessity for a
certain-period of time, to
inculcate minimum skills
and train for a specific
role.

Assumption of the New
Paradigm of Learning

Strives for whole-brain
education. Augments
left-brain rationality
with holistic, nonlinear,
and intuitive strategies.
Confluence and fusion of
the two processes
emphasized.

Labeling used only in
minor prescriptive role
and not as fixed evaluation
that dogs the individual's
educational career.

Concern with the
individual's performance
in terms of potential.
Interest in testing outer
limits, transcending
perceived limitations.

Theoretical and abstract
knowledge heavily
complemented by experiment
and experience, both in
and out of classroom.
Field trips,
apprenticeships,
demonstrations, visiting
experts.

Concern for the environment
of learning: lighting,
colors, air, physical
comfort, needs for privacy
and interaction, quiet and
exuberant activities.

Encourages community
input, even community
control.

Education seen as lifelong
process, one only
tangentially related to
schools.

Assumptions of the Old
Paradigm of Education

Increasing reliance on technology (audiovisual equipment, computers, tapes, texts), dehumanization.

Teacher imparts knowledge; one-way street.

Assumptions of the New
Paradigm of Learning

Appropriate technology, human relationships between teachers and learners of primary importance.

Teacher is learner, too, learning from students.

(Ferguson, 1980, pp. 289-291)

Programming Efforts Within
Institutions of Higher Education

Introduction

University professionals agree that the system has a responsibility to provide adequate opportunities for students to mature and develop through the use of university resources. To various institutions of higher education, wellness programming serves as an opportunity to provide such resources. Wellness programming within institutions is still a rather new concept, and one not universally accepted.

Within the United States, the various programming efforts and achievements differ depending on an array of variables which directly and indirectly relate to the specifics of wellness medicine. For reasons of comparability and insight into various aspects of program development, i.e., budget, faculty, evaluation, etc., the author will provide brief descriptions of three mid-western

wellness programs operating within separate institutions of higher education.

Southern Illinois-Carbondale

Southern Illinois at Carbondale (SI-C) has been operating its wellness program since August, 1978. The program's goals are:

- 1) to assist students in maintaining their health through a promotion of healthy living habits, and
- 2) to educate students in the methodology of self-treatment and to help them decide when self-treatment is appropriate. (Southern Illinois-Carbondale, 1984, p. 1).

The Wellness Center has a philosophy of unconditional positive regard toward its students. It encourages maintenance, and other activities that significantly improve students' health so they remain in school and pursue their academic, career, and personal objectives with a high degree of concentration, commitment, and success. Out of this general commitment come their specific preventive and treatment services.

With continued collaboration with the medical staff and other personnel, students identify their needs, and are provided pertinent information and education on such topics as stress management, pain management, birth control, pregnancy, nutrition, weight management, smoking cessation, alcohol and drugs, and athletic injuries.



Added instruction into the specifics of prevention, maintenance, and responsible health care are also integral components of wellness promotion at SI-C (See Appendix C).

The Wellness Center's operating budget is provided entirely through annual semester student fees which are part of the overall medical benefit fee of \$75.00. Six dollars of that \$75.00 is assessed for the Wellness Center.

Maintained on a budget of approximately \$235,000, the Wellness center has a staff consisting of a director, coordinators for lifestyle programs, a coordinator for alcohol and drug education programming, a coordinator for special programs (minority, international, and disabled students), a coordinator of the student health assessment center, and a coordinator for the peer health advocates program. Also employed are three graduate assistants, two secretaries, and several student monitors. Approximately one-half of the staff are Master's degree health educators, with the remaining staff graduate counselors with rehabilitation and/or counselor-education backgrounds.

Michigan State University

Geared toward university students, specifically those residing in residence halls, Michigan State University's wellness program stresses the importance of "floor community". Developed in 1982 under the auspices of the University Housing Program and the Division of Student Affairs and Services, the program has professional and

support staff who play an active role in each student's wellness by disseminating both verbal and written information on the six dimensions of wellness (See Chapter I, p. 4). Four times a year "The Wellness Report," a newsletter, is distributed (See Appendix D). The newsletter offers pertinent information on various topics of wellness medicine and life-style improvement.

In conjunction with their supervisors, resident assistants plan appropriate wellness programs per floor based on the identification of individual needs and desires of the students. Identification is assessed as supervisors and resident assistants work together to ascertain through developmental questions potential problems before they become critical, and develop programs for the desired and unrealized needs of the residents (see Appendices E).

University of Wisconsin-Stevens Point

Wellness programming at the University of Wisconsin-Stevens Point started in 1972 under the general framework of lifestyle improvement. Spearheaded by the faculty of the Student Life Division of University Services, it maintains a philosophy of high-level wellness.

The entire University of Wisconsin-Stevens Point program has been influenced by the work of Robert Allen of the Human Resources Institute (HRI) of Morristown, New Jersey. The "lifegain" program developed by the HRI

focuses on evaluating the cultural norms that exist to support changes desired by the population. A university where external forces can be modified is an ideal location to attempt a wellness promotion program. the place where students live is supervised by university employees. The selection of resident assistants is within the control of the University. The food services contract can be modified toward wellness concepts. The university centers can be programmed to offer positive alternatives for evening activities. The health and counseling centers can be supportive with programs and individual consultation and another assistance is that most students are at the healthiest stage of their lives (Hettler, 1980).

The widespread public support for higher education can be channeled toward wellness promotion within the university. If the citizens of tomorrow have more skills in dealing with the forces of society and develop positive health practices during college years, they will be more productive citizens and decrease the amount of illness care required in the future. As Don Ardell (1977) has stated, "High level wellness is more rewarding than low level wellness" (Hettler, 1980, p. 90-91). Keeping this in mind, the University of Wisconsin-Stevens Point acknowledges the function of the university is to provide an "atmosphere and physical environment in which the students have the opportunity to improve their knowledge, skills, and attitudes" (Leafgreen, 1981, p. 32). In

reference to the six dimensions of wellness, University of Wisconsin-Stevens Point feels most colleges and universities provide the atmosphere and physical environment for intellectual development; however, few colleges and universities, however, provide equal resources for improving the other five dimensions. This is the primary focus of the wellness promotions to emphasize not one but all six dimensions of wellness.

For a variety of reasons, wellness promotion responds to and acknowledges societal-environmental stress and basic health indicators. The University of Wisconsin-Stevens Point attempts to assist students in establishing lifestyles that will serve them well into their later years, and will not lead to premature disability or death.

In this regard the University has developed tailor-made programs that attempt to address relevant issues of health and lifestyle improvement (see Appendix F). Under the general framework of University of Wisconsin-Stevens Point Student Life Division are the following services: (1) university health services, (2) university counseling services, (3) resident hall programs, and (4) university centers. The directors of student life meet regularly to evaluate programs in an attempt to "minimize competition for the students' time, arrange for sharing personnel and resources, whenever possible provide on-going planning and

evaluation activities, and discuss problem solving difficulties that arise" (p. 81).

The leadership of Student Life met in January 1979 to establish the following goals:

- 1) to assist the University of Wisconsin-Stevens Point community in the creation of a healthy and safe environment and one that provides stimulation, order, privacy, and freedom;
- 2) to provide opportunities that enhance the personal growth and development of students intellectually, socially, emotionally, physically, spiritually, and vocationally;
- 3) to provide services that support the academic mission of the community as well as services that enhance student's comfort in the community;
- 4) to provide, through research, assessment of the efficiency of the current program and the direction for our future program;
- 5) to maintain an effective and efficient delivery through resource responsibility - both fiscal and personnel; and
- 6) to maintain an ongoing professional development thrust, reaching into the university community as well as outside of the community to collaborate with colleagues. (Hettler, 1980, p. 82)

These goals have been simplified for Health Services to include three broad missions:

- 1) student services or traditional illness care;
- 2) student development or wellness promotion; and
- 3) outreach or creating a supportive environment on a local, state, and national basis. (Hettler, 1980, p. 82)

The Lifestyle Assessment Questionnaire (LAQ), the assessment tool used by the university, is essential in the total health promotion program. Originally developed in 1976, the LAQ is subject to continued revision. It is this instrument that is recommended to the students as their entrance health assessment instrument. Traditional entrance requirements concerning health assessments were used prior to Fall, 1974. At this time the University of Wisconsin-Stevens Point modified its orthodox appraisal of health history and physical examination and added the option of completing a Data Automated Student History (DASH) questionnaire provided by Medical Datamation of Bellevue, Ohio. The added option gained credibility with the increased evidence that it was not cost effective to require a history and physical examination for young, healthy adults. Brakenbaker (1977) demonstrated that it is more cost effective to do a health hazard appraisal than history and physical examination when the goal was to identify significant health problems. His table below indicates the cost per unique problem from a variety of screening efforts (See Table 2.1).

TABLE 2.1

Cost to Identify Unique Problems from
A Variety of Screening Efforts

Screen	Number of Tests Performed	Total Problems Found	Number of Problems/ Screen	Cost per Problem	Unique Problems Found	Cost per Unique Problem
History, physical	357	889	2.49	\$14.06	678	\$18.43
VDRL	251	2	.01	251.00	2	251.00
Chest	155	31	.20	75.00	25	93.00
PPD	76	18	.24	16.89	16	19.00
ECG	109	42	.39	44.12	29	63.90
Chem-12	235	195	.83	14.46	183	15.41
Pap smear (with pelvic)	318	76	.24	66.95	70	72.68
Urinalysis	313	155	.50	6.06	147	6.39
CBC	327	122	.37	16.08	117	16.76
HHA	474	2801	5.91	1.36	2616	1.36

Source: Blankenbaker, R. "Total Care the Cost-Effective Way." Paper presented at 13th Annual Meeting, Society of Prospective Medicine Proceedings (Bethesda, Md.: Health and Education Resources 1977).

The Student Health Advisory Committee (SHAC) was initiated at the University of Wisconsin-Stevens Point campus in 1972 and is the substantial educational component of their wellness promotion. The mission of the committee is to:

- 1) provide students with an opportunity for substantive and procedural involvement in policies of the health center,
- 2) improve the health center's services to regular and continued student involvement and input, and
- 3) aid in the dissemination of health-related information to student bodies and to conduct periodic surveys of student opinion regarding the Health Center. (Hettler, 1980, p. 87)

SHAC's programming includes a peer education component which is divided into task forces of fitness, nutrition, contraception, interpersonal relationships, stress management, blood pressure screening, and dental wellness. Life-style improvement programs are conducted in the dorms and university center buildings. Included in their regimen are health fairs, lectures, programs for high schools, fun runs, regular blood pressure screening in the university center, alternative evening activities, and social events for the membership.

Other SHAC activities take place during summer orientation, in which parents are invited to attend health



promotion presentations by directors of the health service and counseling centers. These presentations outline the variety of services available to students and subsequent topics for discussion between parents and students during the trip home.

At the conclusion of SHAC presentations, students are invited to leave their names and addresses if they are interested in becoming involved in various components of health promotion. SHAC membership thus invite consumer participation in all their education and prevention programs.

Health promotion activities are sponsored in residence halls by resident assistants. Courses in various departments develop around the theme of wellness and lifestyle improvement in the spirit of "evolving interest." In addition an intramural program has developed wellness clubs, and interest groups have promoted healthful changes in student cafeteria menus.

Faculty involvement is widespread with a large percentage of faculty participating in LAQ seminars and receiving individual printouts with interpreting information (p. 90). Established track and pool times are posted for both students and faculty and dual purpose trails have been developed for running and cross country skiing. An employee assistance program has been

Summary

Found within the review of literature are key issues central to the theme of this research study: a call for health care reform with the identification of psycho-immunological, historical, political and economic indices, a study of paradigm shifts in education and medicine, the viability of wellness as an alternative to orthodox medicine and appropriate diffusion efforts specifically those found within institutions of higher education.

The latter has been provided as subsections on higher education, including developmental issues of college students; missions and responsibilities of institutions of higher education and finally an examination of three wellness programs operating with institutions in this country.

CHAPTER III

DESIGN OF THE STUDY

Introduction

The purpose of this study is to investigate the potentiality of the wellness movement within institutions of higher education and the movement's potential for changing health practices of college students toward the wellness philosophy of healthful living.

This study will compare and analyze the attitudes, knowledge, and orientation of students from two separate institutions of higher education which are similar in many variables but differ in their approach to wellness programming. One institution provides wellness programming, while the other has no discernable effort in wellness programming. This descriptive analysis will compare the six wellness dimensions with their behavioral constructs:

- 1) Emotional development emphasizes an awareness and acceptance of one's feelings. Emotional wellness includes the degree to which one feels positive and enthusiastic about oneself and life. It includes the capacity to manage one's feelings and related behaviors including the realistic assessment of one's limitations, development of autonomy, and ability to cope effectively with

stress. The emotionally well person maintains satisfying relationships with others;

Behavioral Construct

Emotional Awareness and Acceptance:

measures both the degree to which individuals have an awareness and acceptance of feelings, including the degree to which individuals feel positive and enthusiastic about themselves and life;

Emotional Management: measures the capacity to appropriately control one's feelings and related behavior, including the realistic assignment of limitations;

- 2) Intellectual development encourages creative and stimulating mental activities. An intellectually well person uses the resources available to expand her/his knowledge in improved skills along with expanding potential for sharing with others. An intellectually well person uses the intellectual and cultural activities in the classroom and beyond the classroom combined with the human resources and learning resources available within the university community and the larger community;

Behavioral Construct

Intellectual: measures the degree to which individuals engage their minds in creative and stimulating mental activities, expanding knowledge and improving their skills;

- 3) Physical Development encourages cardiovascular flexibility and strength and also encourages regular physical activity. Physical development encourages knowledge about food and nutrition and discourages the use of tobacco, drugs, and excessive alcohol consumption. It encourages activities which contribute to high level wellness including medical self care and appropriate use of the medical system;

Behavioral Construct

Physical Exercise: measures commitment to maintaining physical fitness;

Physical Nutritional: measures the degree to which individuals choose foods which are consistent with dieting goals of the United States as published by the Senate Select Committee on Nutrition and Human Needs;

Physical Self-care: measures the behavior which helps individuals present or detect early illness;

Physical Safety: measures individual safe driving practices which minimize chances of injury or death in a vehicular accident;

Physical Drug Abuse: measures the degree to which individuals are able to function without the unnecessary use of chemicals;

4. Social Development encourages contributing to one's human and physical environment to the common welfare of one's community. It emphasizes interdependence with others and nature. It includes the pursuit of harmony in one's family;

Behavioral Construct

Social environmental: measures the degree to which individuals contribute to the common welfare of the community. This emphasizes one's interdependence with others and with nature;

5. Occupational Development is preparing for work in which one will gain personal satisfaction and find enrichment in one's life through work.

Occupational development is related to one's attitude about her/his work; and

Behavioral Construct

Occupational: measures the satisfaction gained from work and the degree to which one is enriched by their work; and

6. Spiritual Development involves seeking meaning and purpose in human existence. It includes the development of a deep appreciation for the depth and expanse of life and natural forces that exist in the universe.

Behavioral Construct

Spiritual: measures individual, ongoing involvement in seeking meaning and purpose in human existence; it includes an appreciation of the depth and expanse of life and the actual forces which exist in the universe. (Hettler, 1980, p. 3)

Population

The population from which the two samples were drawn consisted of students enrolled in spring and summer academic sessions within two comparable institutions. The institutions were chosen for their similarity of demographic data (student profiles) as well as subsidiary

composition (geographical, programming efforts, size, etc.).

The population currently enrolled at the University of Wisconsin-Stevens Point consists of approximately 9,050. The current updated student profile data show a breakdown of characteristics which, according to Mosier (1981) and Elsenroth (1984), have similarities that are quite striking, leading one to believe that a consistent pattern exists throughout 1980-1985. The population currently enrolled at the comparative institution consists of approximately 7,033. Also, this institution is comprised of similar variables. Within these populations, this study was concerned only with freshmen through senior students with the Fall 1984 class and gender distribution as shown in Table 3.1.

On matching subscale variables as closely as possible, one identifiable difference is perceived: programming efforts in wellness medicine. The University of Wisconsin-Stevens Point has provided wellness programming, whereas the comparative institution provides no concerted efforts in wellness programming. This does not imply that this institution does not provide healthful living instruction, and other tertiary health measures; it only implies no concerted, formal wellness efforts have taken place.

Table 3.1

Population

<u>University of Wisconsin Stevens Point</u>			<u>Comparative Institution</u>		
<u>Gender</u>	<u>Number</u>	<u>Percentage</u>	<u>Gender</u>	<u>Number</u>	<u>Percentage</u>
Male	4465	39.3	Male	3608	51.3
Female	4585	50.7	Female	3425	48.7
TOTAL	9050	100.0	TOTAL	7033	100.0
<u>Class</u>			<u>Class</u>		
Fresh	2855	35.5	Fresh	2800	39.8
Soph	1623	20.2	Soph	1305	18.6
Junior	1514	18.8	Junior	1337	19.01
Senior	2052	25.5	Senior	1589	22.69
TOTAL	8044	100.0	TOTAL	7031	100.00

*Special Classification 447 **

*Concerning statistical measurements, consideration will not be given to the special classification of students.

**No special classification cited for the comparative institution.

Note: Due to the inability to sample during a typical academic session, the comparative programming institutions population must be considered biased.

In an effort to maximize exposure to programming efforts through consistent participation in campus life, the exclusion of non-resident-hall students in this population would have been ideal. However, due to logistical constraints of sampling, resident-hall students were not used exclusively.

Sampling Procedure

At the University of Wisconsin-Stevens Point Campus, the original sample size was four hundred students enrolled in the spring academic session, April 1985. A random sample was drawn with a class and gender distribution of one hundred from each class; freshmen, sophomore, junior, and senior with equal gender distribution of fifty males and fifty females in each class. A response rate of 134 respondents was reported.

Specifically, the procedure was as follows: with the assistance of an administrative professional employed through the Department of Student Life, a request was made of the enrolled students who had previously taken the Life Assessment Questionnaire (LAQ). Included was a request for equal distribution of gender and class ranking. Initially the sampling procedure was to be computer generated, selecting every n^{th} student until the needs were met. This procedure was altered due to the inability of the computer files to generate the needed data of class rank. The recommended solution was to have work study

of the computer files to generate the needed data of class rank. The recommended solution was to have work study students use the student directory and go down each page to locate students who had taken the LAQ. As this was done the data was compiled on prospective lists until the gender and class quotas were met (Renault, 1976).

Due to the low response rate, a second sample was drawn in July, 1985 from students enrolled in the summer academic session. Specifically, the sample was computer generated, matching the proportions of the first sample.

The respondents were paired (when available) with their initial LAQ and identified by code for data identification and interpretation. The first and second samples were combined for the analysis and the response rate was 134. Interpretation sessions were offered in September 1985 on two different dates.

The sample was representative of the University of Wisconsin-Stevens Point student body (Renault 1985). However, a possible bias must be reported because the first sample was drawn preceding finals week, May 1985. Therefore, it should be considered that respondents fall disproportionately on those with an interest in wellness (Renault, 1985).

Due to logistical concerns, the author was unable to draw a sample and assess the students at the comparative

institution during spring 1985. Therefore, the sample was drawn during the summer academic session, July 1985.

Initially, the preliminary procedure consisted of a written request to the Associate Vice President for Academic Affairs and the Director of Research (see Appendix G). Upon approval of the Human Subjects Committee, permission was granted (see Appendix H). Specifically, the procedure was as follows: After receiving the requested class roster of an equal gender and class distribution with identification of teaching faculty, the author (through random choice) identified classes that might participate in the study. Via the telephone, perspective faculty were contacted and a thorough discussion of the sampling procedures, research study, and all other pertinent information was provided. At this time, permission was either granted or denied.

During the month of July 1985, an assessment was done by entering the previously identified classes within the university. Following an introduction and explanation to the students, the author asked the student to take the Life Assessment Questionnaire home and bring it back to the next class period in completed form. Once this was done the questionnaire was collected and forwarded to the University of Wisconsin-Stevens Point for computer coding.

A biased sample is to be considered as summer school students at the comparative institution are not necessarily

representative of "typical" academic year students. A sample was drawn on 200 students with a response rate of 108.¹

History and Description of the Instrument

The Lifestyle Assessment Questionnaire (LAQ), second edition, is the assessment tool used by the University of Wisconsin-Stevens Point to measure high level wellness among its students. The LAQ was developed in 1976 and has undergone continuous revision. Various facets of the evaluation have been done by a committee of the Student Life Division at the University. When deemed necessary, alterations were undertaken through suggestions from LAQ respondents and professionals throughout the country.

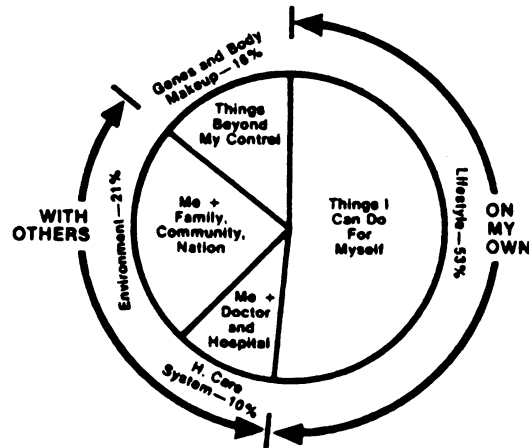
¹Originally, this research study sought to compare students on the basis of class standing on the assumption that class standing (freshman, sophomore, junior, senior) would have a significant interaction with the Life Assessment Questionnaire scores (LAQ). Time and scores were to be measured and compared based on data ascertained by a repeated measure ANOVA. The repeated measure data was then to be broken down by class standing and measured against their freshman entry level LAQ scores (Chapter 2, p. 69). However, due to sampling limitations and computer inability to produce the data; this was not feasible. In an effort to generate data needed to determine exposure influence at the University of Wisconsin-Stevens Point, a one-way repeated measure was taken (most recent LAQ scores) and measured against group gain scores (entry level LAQ scores). A repeated measure was not done at the comparative institution because of sampling bias and a low response rate (Chapter 3, p. 71 and 74).

Measurements of the Lifestyle
Assessment Questionnaire

The following material has been taken from the University of Wisconsin-Stevens Point Lifestyle Assessment Questionnaire, second edition: An Interpretation (1980).

The results of the Lifestyle Assessment Questionnaire are described below with the intention of helping the respondent assess his/her lifestyle behavior and current level of wellness (see Appendix I). This interpretation model will also be useful in identifying health hazards respondents face at this particular point in their life (University of Wisconsin, 1980, Inside front cover).

The major determinant for joyful living is you and your lifestyle. The circle graph below indicates the factors that contribute to increasing your enjoyment and quality of life. While it is true that doctors and hospitals have a significant role to play in the quality of our lives, this graph clearly indicates that it is individuals, through the choices that they make each day, that contribute the greatest percentage toward maximizing the quality of life and health. We believe this instrument can be a useful adjunct in helping individuals identify the most likely causes of death and disability, but more importantly identify the areas of self-improvement which will lead to higher levels of joy and wellness. This instrument can be used to begin a positive, wellness approach toward living. It is our belief that this instrument can help people realize that they are the most important providers of health or "illth" care. Many of the common killers in America are the direct result of individual behaviors. We all know that our behaviors can be described as our lifestyle. (p. 1)



Section 1: Wellness Inventory Section

This section the Lifestyle Assessment Questionnaire is designed to help the respondents assess their current levels of wellness. The printout provides respondents with a percentage of possible points achieved from each lifestyle dimension of wellness in addition to the average score of people taking the questionnaire in their group, and the total average of all people who have ever used this instrument.

The respondent's score is the percentage of possible points on the wellness statements. The higher the score,

the higher the level of wellness. The following scores indicate each respondent's level of wellness compared with averages of people taking this survey with the respondent and averages of all people who have taken the survey:

	Your Score	Group Average	Total Average
Physical-Exercise	79	67	58
Physical-Nutrition	85	81	66
Physical-Self Care	75	78	67
Physical Vehicle Safety	79	77	82
Physical Drug Usage	100	85	89
Social-Environment	80	84	73
Emotional-Awareness	88	90	83
Emotional-Management	84	88	76
Intellectual	72	63	66
Occupational	99	80	69
Spiritual	83	80	69
Composite Score	84	83	74

As can be noted on the sample, this person scored 79 percent for the Physical-Exercise section. This group - 67 percent, while the total population's average was 58 percent. This format is followed through each dimension and allows the respondent to view his/her score in comparison with these two groups. Again, it is through taking responsibility for each of these dimensions of his/her lifestyle that the respondent can move to the right of the wellness continuum toward a richer, fuller, high quality life (p. 3).

Section II: Topics for Personal Growth

The second section of the Lifestyle Assessment Questionnaire is designed to aid respondents in utilizing a computer as an automatic questionnaire. Respondents are asked to select from an extensive list of educational topics those areas on which they desired: (1) information, (2) group activities, or (3) confidential personal assistance. Some examples of the educational topics include stop smoking programs, loneliness, exercise programs, career development, etc. For each of the items for which they request information, group activities, or confidential personal assistance, the computer has provided the following:

- 1) courses for academic credit and the number of credit hours offered;
- 2) professionals on campus who have expertise in the particular area, with their phone numbers;
- 3) media resources such as movies, tapes, books, magazines, or pamphlets; and
- 4) community agencies that have expertise in the particular area.

The topics for the personal growth section will appear on each respondent's printout in the following form:

PERSONAL GROWTH SECTION - AUTOMATED REFERRAL

The following resources have been found helpful by
UW-SP students in learning about the following topics:

Stop Smoking Programs

A. Courses for Academic Credit

Health 104	Current Health Issues, 2 credits.
Psychology 170	Psychoactive Drugs and Behaviors, 3 credits.
Physical Education	Jogging, 1 credit.

B. People Within the University

Staff of Counseling	346-3553
Staff of Health Center	346-4646

C. Media

Pamphlets/brochures - Student Health Center

Tape - Smoking Modification - Elsenroth and
Hettler

Cassette - Joys of Smoking (2) - Student Affairs

Books - Learning to Live Without Cigarettes,
Allen, Angermann, and Fackler.
- Personal Health Appraisal, Sorochan.

D. Community Resources

YMCA - stop smoking program	346-1770
River Pines - live-in stop smoking programs	346-1880
Portage County Council on Alcohol and Drug Abuse	346-4611

As can be noted on the above sample printout, stemming
from this student's request for information on smoking
cessation, the computer provided him/her with an extensive

list of resources available for consultation on this particular topic. Similarly, if a respondent requested information, group activities, or confidential personal assistance on any of the educational topics, his/her printout would include a referral list for each of those topics (p. 7-8).

Section III: Risk of Death

Based on actuarial data from the United States government and the book How to Practice Prospective Medicine by Robins and Hall (1970), this section can help the respondents determine their chances of death over the next ten years.

The subsection Life Expectancy Results provides ;the respondent with three types of information:

- 1) respondents can determine the average number of remaining years that people of their age, race, and gender can expect to live;
- 2) based on respondent's answers concerning their lifestyles, heredity, and medical history, respondents can determine their expected years of remaining life; and
- 3) final information provided is the respondent's achievable expected years of remaining life.

This section will appear in a printout in the form below.

LIFE EXPECTANCY RESULTS
SAMPLE

	25	30	35	40	50	55	60
1. Average years of remaining life in your sex, age, race group.	53	*	*	*	*	*	*
2. Your expected years of remaining life based on your answers	38	*	*	*	*		
3. You can achieve this expected years of remaining life	56	*	*	*	*	*	*

The next subsection - Major Hazards to the Respondent, provides part of the printout and is intended to:

- 1) make them aware of the leading causes of death for their particular age, race, and sex group;
- 2) show them a comparison of their probability of a particular cause of death as compared to others of their age, race, and sex (labeled "average"), and to show them the predicted chance they could possibly achieve (labeled "achievable"); and
- 3) to identify for them the associated risk factors which contribute to particular causes of death.

This subsection appears on a printout in this form:

Major Hazards to You

<u>Rank</u>	<u>Hazard</u>	<u>10 Yr. Deaths per 100,000</u>	<u>Associated Risk Factors</u>
1	Motor vehicle accidents:		
	Average	815	
	Your	4238	Riding with
	Achievable	489	someone who
			has been
			drinking

From this sample, you can interpret that motor vehicle accidents are the greatest potential hazard to this person. Using actuarial tables, a predicted 815 people out of every 100,000 will die the next ten years from his/her age, race, and sex group because of motor vehicle accidents. This person's predicted chance is 4238; yet, if he/she changed the associated risk factors, drinking habits, seat belt habits, and riding with someone who has been drinking, an achievable score of 489 could be attained. (p. 6)

Section IV: Medical Alert Section

This last section of the Lifestyle Assessment Questionnaire is designed to provide respondents with information which they can utilize as a medical history and health status chart. This section, which could also be used as part of a medical chart in a health care system, addresses the following specific areas: a current problem list, current medications, a list of suggested lifestyle improvement needs, a list of allergies, a resolved problem list, and a list of immunizations. This section will appear on a printout in the following form:

Medical Alert Section

Current Problem List

Family history of heart disease

Patient has had major surgery

Current TB test

No reaction to TB

(p. 7)

Research Questions

Research questions pertinent to the study were posed to explore health programming whose purpose is to improve the health practices of college students. In an effort to ascertain programming achievements, an examination of inter- and intra-programming measures were taken. Questions were as follows:

- 1) Do students in a university which has implemented a comprehensive wellness program show significantly higher scores on a wellness inventory than students from the comparative institution who responded to the same inventory?
- 2) Do the students at the University of Wisconsin-Stevens Point show significant gains over their entry level testing scores on the assessment instrument as compared to assessment scores taken at a later date?
- 3) In relation to gender ratio, the following question has significance for the study: Are there significant gender differences among the

scores of the respondents to the assessment instrument?

To examine the above research questions, it was the author's intention to calculate group scores for both institutions and combined individual gain scores for the University of Wisconsin-Stevens Point, thereby providing comparability data between the group gain scores of both institutions and exposure data at the University of Wisconsin-Stevens Point in order to determine the outcomes of the following hypotheses.

Hypotheses and Subscale Variables

Hypothesis I

There will be a difference on the wellness inventory scores depending on respondents' gender. Across both institutions, women will score higher than men on measures as indicated on the wellness instrument.

Rationale

Through socialization, many men maintain unrealistic, virile attitudes. Therefore, they will not adequately self-report on the wellness instrument, thus scoring lower than women who maintain more realistic assessments of health indicators.

Variables

The dependent subscale variables will be the respondent score on the wellness instrument. The independent subscale variable will be the gender of the respondents.

Hypothesis II

There will be a difference on the wellness inventory scores between the University of Wisconsin-Stevens Point and the comparative institution.

Rationale

Due to the effects of wellness programming the University of Wisconsin-Stevens Point respondents will be more knowledgeable of concepts, strategies, techniques, and philosophies, thus benefiting in attitudes, knowledge, and orientation of health care and health values and, therefore, producing higher scores.

Subscale Variables

The dependent subscale variable will be scored on the wellness inventory. The independent subscale variables will be wellness programming efforts.

Hypothesis III

There will be a difference on the wellness inventory scores depending on the respondent's age. Scores will be significantly higher among the older respondents.

Rationale

Due to the effects of maturation, the respondents from both institutions will be more knowledgeable of concepts, strategies, techniques, and philosophies thus benefiting in attitudes, knowledge, and orientation of health care, and health values and, therefore, producing higher scores.

Subscale Variables

The dependent subscale variables will be scores on the Wellness inventory. The independent subscale variable will be age of the respondents.

Hypothesis IV

There will be a difference on the wellness inventory scores over time. Scores will be significantly higher after exposure to wellness programming efforts.

Rationale

With an introduction and varied instruction in wellness medicine, students with lengthened exposure to wellness programming will be more knowledgeable of concepts, strategies, techniques, and philosophies, thus benefiting in attitudes, knowledge, and orientation of health and health values, than those with less exposure.

Subscale Variables

The dependent subscale variables will be scores on the wellness instrument. The independent subscale variables will be respondents' lengths of exposure to wellness programming.

Statistical Method Used in the Analysis

In an attempt to produce a detailed analysis of data, and due to the number of subscale variables to be studied, an analysis of variance (ANOVA) was used;

specifically, a three-way ANOVA using institution, gender and age; and a one-way repeated measures ANOVA using gender as between subject and time as within subject. The main effects on the independent subscale variables were also tested. A statistical hypothesis was tested using a .05 level of significance.

Reliability and Validity

The following are the reliability coefficients and percent matches for the Lifestyle Assessment Questionnaire with N equaling 39:

	<u>Total</u>
Wellness Inventory Section	.76
<u>Subsections:</u>	
Physical Exercise	.77
Physical Nutritional	.74
Physical Self-Care	.60
Physical-Vehicle Safety	.59
Physical-Drug Usage	.57
Social-Environmental	.65
Emotional Awareness and Acceptance	.87
Emotional Management	.79
Intellectual	.86
Occupational	.58
Spiritual	.77
Risk of Death Section	
Percent Matches	89.92
Medical Alert Section	
Percent Matches	91.06
Personal Growth Section	
Percent Matches	86.60

(Elsenroth, 1982)

Limitations

To place the analysis in proper perspective, a list of limitations is examined. The following were revealed at the time of the analysis and are directly related. These limitations are in addition to the delimitation section presented in Chapter I.

- 1) The response rate of those involved in this study at the University of Wisconsin-Stevens Point was above average while the comparative institution reported just above average. The non-responses were attributable to the reality that summer academic sessions are not the ideal time to ask students to complete a lengthy questionnaire. Students are overburdened with "condensed" classes and more times than not, undergraduate students (from which this sample was drawn) are forced into summer school to pick up remaining classes needed to fulfill graduate requirements or to make adjustments to re-designed programs.
- 2) The length of the assessment instrument posed a problem for some individuals as 286 questions were a "bit too much" to warrant involvement.
- 3) By the very nature of subject of this study, many personal questions were asked, i.e., drug usage, communicable diseases, sexual practices. Some felt the questions were invasive and were in

violation of their best interest and posed confidentiality problems.

- 4) Sampling procedure was redesigned due to logistical constraints imposed by the author. As a result the "N" is disproportionate as observed: 134 respondents from the University of Wisconsin-Stevens Point and 108 from the comparative institution.
- 5) The response rate to some of the questions was low enough to warrant the exclusion of Subscale Variable 11, Spirituality. This subscale was disregarded in the one-way repeated measure (ANOVA) only.

Summary

A sample of 400 university students from the University of Wisconsin-Stevens Point and 200 students from the comparative institution were asked to respond to questions on the Life Assessment Questionnaire (LAQ) which was designed to measure health attitudes and practices. The response rates were 134 and 108 respectively.

Using an Analysis of Variance (ANOVA), a three-way ANOVA using institution, gender, and age was employed, as well as a one-way repeated measure ANOVA using gender as

between subject and time as within subject.² Each of the hypothesis was tested at the .05 level of significance.

²For further explanation of statistical procedures, refer to Campbell, David and Julian Stanley. Experimental and Quasi Experimental Design for Research.

CHAPTER IV ANALYSIS, RESULTS AND INTERPRETATION OF THE DATA

Introduction

The results of the analysis of the data is presented herewith. A summary table (4.1) is provided followed by presentation of the data. Included is the two-way and three-way interaction data and accompanying figures and tables (Figures 4.1 - 4.4 and Tables 4.2 - 4.5). Next, a report of the hypothesis immediately proceeds the appropriate Table of Means (Tables 4.6 - 4.10). The concluding section will be a discussion of the analysis and its findings.

Statistical Results and Summary Data

For detailed analysis of the data from this study, an analysis of variance (ANOVA) method was used. A three-way ANOVA using institution, gender and age, and a one-way repeated measure ANOVA using gender as between subject and time as within subject were utilized.¹ Statistical hypothesis were tested using a .05 level of significance. Summary paragraphs of the results are provided with calculations of the ANOVA included. Other table entries are provided when deemed necessary in reporting the data. Keys are displayed with respect to their specific tables.

¹For further explanation of statistical procedures refer to Campbell, David and Julian Stanley. Experimental and Quasi Experimental Research.

Presentation of the Data

Table 4.1

Cross-Sectional Analysis

<u>Subscales</u>	<u>Gender</u>	<u>Institution</u>	<u>Age</u>	<u>Interaction</u>
1. Exercise	-	*	-	-
2. Nutrition	-	*	-	-
3. Self-Care	*	*	-	-
4. Vehicle Safety	*	*	-	-
5. Drug Use	-	*	-	GAI ***
6. Environmental	-	-	-	GI **
7. Emotional Awareness	-	-	-	GI **
8. Emotional Management	-	-	-	GI **
9. Intellectual	-	*	-	-
10. Occupational	-	*	-	-
11. Spiritual	*	-	-	-

-
- * significant at .05 level
 ** .05 significant two-way interaction between gender (G) and institution (I)
 *** .05 significant three-way interaction between Gender (G) Age (A) and Institution (I)
 - no significance

In the cross-sectional data, significance differences were found between gender on three out of eleven subscales measures. Women outscored men on three of the dependent subscales, each reporting significance at the .05 level (Tables 4.1 and 4.6).

Institutions also were significant on seven of the dependent subscales. The University of Wisconsin-Stevens Point reported significantly higher scores on all seven dependent subscales at the .05 level (Tables 4.1 and 4.7).

A three-way interaction (on gender, age, and institution) was significant on one subscale (Figures 4.1 and Table 4.2) and the two-way interaction gender and institution was significant for 3 subscales (Figures 4.2, 4.3, and 4.4; Tables 4.3, 4.4, and 4.5)

The longitudinal data report after exposure, respondents scored significantly higher on eight out of ten independent variables (Table 4.9). Gender influence show women scored significantly higher than men after one year exposure on one dependent subscale measure (Table 4.9). The first measure reports a significance with regards to gender with women scoring higher on three subscales (Table 4.9).

Age I: 18-19 years; Age II: 20-24 years; Age III: 25 or older

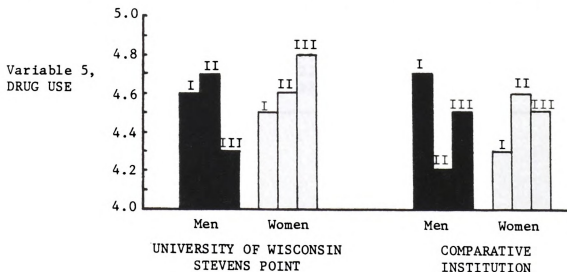


Figure 4.1

Three-Way Interaction Between Independent Variables
Gender, Institution and Age on Variable 5, Drug Use

Table 4.2

Three-Way Interaction Between Independent Variables Gender,
Institution and Age on Subscale Variable 5, Drug Use

<u>University of Wisconsin Stevens Point</u>				
<u>Gender</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	17	4.6	.40768
	II	16	4.7	.21361
	III	9	4.3	.44631
Women	I	27	4.5	.65257
	II	28	4.6	.45077
	III	38	4.8	.19303
<u>Comparative University</u>				
<u>Gender</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	2	4.7	.16318
	II	13	4.2	.99896
	III	19	4.5	.38822
Women	I	17	4.3	.79837
	II	22	4.6	.37516
	III	18	4.5	.44251

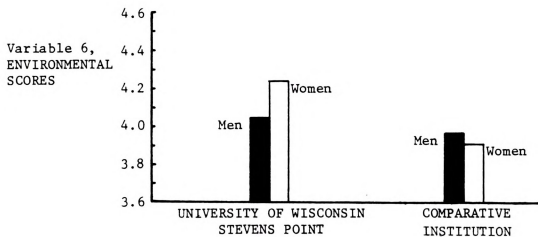


Figure 4.2

Two-way Interaction Between Independent Variables Gender and Institution on Subscale Variable 6, Environment

Table 4.3

Two-Way Interaction Between Independent Variables Gender, and Institution on Subscale Variable 6, Environment

<u>University of Wisconsin Stevens Point</u>			
<u>Gender</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	42	4.06	.57396
Women	86	4.30	.47837
<u>Comparative University</u>			
<u>Gender</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	40	3.96	.60093
Women	60	3.89	.57495

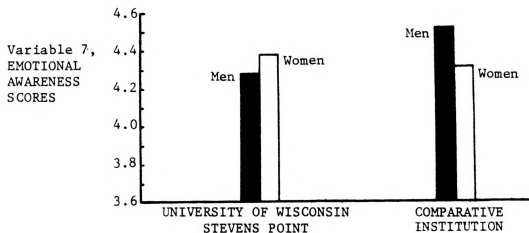


Figure 4.3

Two-way Interaction Between Independent Variables Gender and Institution on Subscale Variable 7, Emotional Awareness

Table 4.4

Two-Way Interaction Between Independent Variables Gender, and Institution on Subscale Variable 7, Emotional Awareness

<u>University of Wisconsin Stevens Point</u>			
<u>Gender</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	42	4.27	.61223
Women	40	4.37	.42706
<u>Comparative University</u>			
<u>Gender</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	85	4.52	.42209
Women	67	4.31	.46954

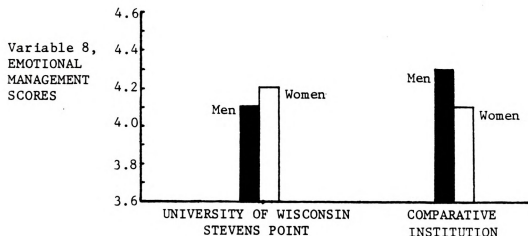


Figure 4.4

Two-way Interaction Between Independent Variables Gender and Institution on Subscale Variable 8, Emotional Management

Table 4.5

Two-Way Interaction Between Independent Variables Gender, and Institution on Subscale Variable 8, Emotional Management

<u>University of Wisconsin Stevens Point</u>			
<u>Gender</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	42	4.07	.63938
Women	39	4.16	.36932
<u>Comparative University</u>			
<u>Gender</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	86	4.26	.50841
Women	67	4.14	.42174

Hypothesis TestingHypothesis I

There will be a main effect on the Wellness Inventory scores depending on the respondents gender. Across both institutions, women will score higher than men on the eleven subscales as indicated on the wellness instrument:

- H₁ Women will score higher than men on subscale
Variable 1, Exercise.
- H₂ Women will score higher than men on subscale
Variable 2, Nutrition.
- H₃ Women will score higher than men on subscale
Variable 3, Self-Care.
- H₄ Women will score higher than men on subscale
Variable 4, Vehicle Safety.
- H₅ Women will score higher than men on subscale
Variable 5, Drug Use.
- H₆ Women will score higher than men on subscale
Variable 6, Environment.
- H₇ Women will score higher than men on subscale
Variable 7, Emotional Awareness.
- H₈ Women will score higher than men on subscale
Variable 8, Emotional Management.
- H₉ Women will score higher than men on subscale
Variable 9, Intellectual.

H₁₀ Women will score higher than men on subscale
Variable 10, Occupational.

H₁₁ Women will score higher than men on subscale
Variable 11, Spiritual.

Three hypotheses were significant at the .05 level.
They were H₃, H₄, and H₁₁ (Table 4.6).

Hypothesis II

There will be a significant difference on the wellness
inventory scores between the University of Wisconsin-Stevens
Point and the comparative institution.

H₁ University of Wisconsin-Stevens Point will score
higher than the comparative institution on
subscale Variable 1, Exercise.

H₂ University of Wisconsin-Stevens Point will score
higher than the comparative institution on
subscale Variable 2, Nutrition.

H₃ University of Wisconsin-Stevens Point will score
higher than the comparative institution on
subscale Variable 3, Self-Care.

H₄ University of Wisconsin-Stevens Point will score
higher than the comparative institution on
subscale Variable 4, Vehicle Safety.

H₅ University of Wisconsin-Stevens Point will score
higher than the comparative institution on
subscale Variable 5, Drug Use.

Table 4.6

Gender Differentials

Subscale Variable Name	<u>Males</u>			<u>Females</u>		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation
1. Exercise	83	3.4	.47866	152	3.4	.50049
2. Nutrition	83	3.7	.47608	153	3.8	.45814
3. Self-Care	83	3.5	.40557	153	3.8	.31439
4. Vehicle	82	4.1	.34357	153	4.3	.28023
5. Safety	82	4.5	.32719	153	4.5	.29810
6. Drug Use	82	4.0	.34318	153	4.1	.31187
7. Environment	82	4.3	.27983	152	4.4	.20625
8. Emotional	81	4.1	.27621	153	4.2	.22547
9. Management	82	3.6	.44209	153	3.8	.44000
10. Intellectual	74	4.1	.40089	148	4.2	.32670
11. Occupational	81	3.8	.62835	151	4.0	.48245
12. Spiritual						

*** Female scores significant at the .05 level



- H₆ University of Wisconsin-Stevens Point will score higher than the comparative institution on subscale Variable 6, Environment.
- H₇ University of Wisconsin-Stevens Point will score higher than the comparative institution on subscale Variable 7, Emotional Awareness.
- H₈ University of Wisconsin-Stevens Point will score higher than the comparative institution on subscale Variable 8, Emotional Management.
- H₉ University of Wisconsin-Stevens Point will score higher than the comparative institution on subscale Variable 9, Intellectual.
- H₁₀ University of Wisconsin-Stevens Point will score higher than the comparative institution on subscale Variable 10, Occupational.
- H₁₁ University of Wisconsin-Stevens Point will score higher than the comparative institution on subscale Variable 11, Spiritual.

Seven hypothesis were significant at the .05 level.

They were H₁, H₂, H₃, H₄, H₅, H₉, and H₁₀ (Table 4.7).

Table 4.7

Institution Differentials

University of Wisconsin
Stevens Point

Comparative
Institution

Subscale Variable Name	N	Mean	Standard Deviation	N	Mean	Standard Deviation	Value
1. Exercise	134	3.6	.44172	107	3.2	.47308	.0003***
2. Nutrition	134	3.8	.42361	108	3.6	.49684	.0025***
3. Self-Care	134	3.8	.34995	108	3.5	.34645	.0028***
4. Vehicle							
5. Safety	134	4.0	.34683	107	4.1	.26188	.0145***
5. Drug Use	133	4.7	.20628	108	4.4	.40781	.0177***
6. Environment	133	4.0	.34318	153	4.1	.31187	.1416
7. Emotional							
8. Awareness	132	4.4	.29306	108	4.3	.21960	.1622
8. Emotional							
9. Management	133	4.1	.33778	107	4.1	.16840	.5663
9. Intellectual	133	3.9	.43945	108	3.6	.46230	.0168***
10. Occupational	127	4.2	.42649	99	4.0	.33403	.0281***
11. Spiritual	132	4.0	.53523	106	3.9	.56817	.0915

*** University of Wisconsin-Stevens Point scores significant at the .05 level

Hypothesis III

There will be a difference on the wellness inventory scores depending on the respondents age. Scores will be significantly higher among the older respondents.

- H₁ Scores will be higher among the older respondents on subscale Variable 1, Exercise.
- H₂ Scores will be higher among the older respondents on subscale Variable 2, Nutrition.
- H₃ Scores will be higher among the older respondents on subscale Variable 3, Self-Care.
- H₄ Scores will be higher among the older respondents on subscale Variable 4, Vehicle Safety.
- H₅ Scores will be higher among the older respondents on subscale Variable 5, Drug Use.
- H₆ Scores will be higher among the older respondents on subscale Variable 6, Environment.
- H₇ Scores will be higher among the older respondents on subscale Variable 7, Emotional Awareness.
- H₈ Scores will be higher among the older respondents on subscale Variable 8, Emotional Management.
- H₉ Scores will be higher among the older respondents on subscale Variable 9, Intellectual.
- H₁₀ Scores will be higher among the older respondents on subscale Variable 10, Occupational.

H₁₁ Scores will be higher among the older respondents on subscale Variable 11, Spiritual.

No significance at the .05 level was reported with respect to age (Table 4.8).

Hypothesis IV

There will be a difference on the wellness inventory scores over time. Scores will be significantly higher after exposure to wellness programming efforts.

H₁ Scores will be higher on the repeated measures on subscale Variable 1, Exercise.

H₂ Scores will be higher on the repeated measures on subscale Variable 2, Nutrition.

H₃ Scores will be higher on the repeated measures on subscale Variable 3, Self-Care.

H₄ Scores will be higher on the repeated measures on subscale Variable 4, Vehicle Safety.

H₅ Scores will be higher on the repeated measures on subscale Variable 5, Drug Use.

H₆ Scores will be higher on the repeated measures on subscale Variable 6, Environment.

H₇ Scores will be higher on the repeated measures on subscale Variable 7, Emotional Awareness.

H₈ Scores will be higher on the repeated measures on subscale Variable 8, Emotional Management.

Table 4.8
Age Differentials

Subscale Variable Name	Age I				Age II				Age III			
	N	Mean	Standard Deviation		N	Mean	Standard Deviation		N	Mean	Standard Deviation	P Value
1. Exercise	65	3.4	.68616		91	3.5	.69970		67	3.4	.76992	.5787
2. Nutrition	65	3.7	.74684		92	3.8	.61912		67	3.7	.72300	.8913
3. Self-Care	65	3.7	.66365		92	3.7	.48236		67	3.6	.66327	.5321
4. Vehicle												
5. Safety	65	4.2	.62525		92	4.2	.53953		67	4.3	.51477	.3235
6. Drug Use	65	4.5	.62308		91	4.6	.53676		67	4.6	.39941	.6930
7. Environment	65	4.0	.62191		91	4.1	.47098		67	4.1	.66771	.4644
8. Emotional Awareness	65	4.4	.56356		91	4.2	.47153		66	4.3	.53944	.6131
9. Emotional Management	65	4.4	.58395		91	4.2	.47011		66	4.1	.52042	.8483
10. Intellectual	65	3.7	.75772		91	3.8	.60465		67	3.7	.67996	.5655
11. Occupational	65	4.1	.56466		85	4.2	.55612		62	4.1	.72649	.2510
12. Spiritual	65	4.0	.77754		90	4.0	.71001		65	4.0	.76918	.9079

Key: Age I: 18-19 years old
Age II: 20-24 years old
Age III: 25 or older

H₉ Scores will be higher on the repeated measures on subscale Variable 9, Intellectual.

H₁₀ Scores will be higher on the repeated measures on subscale Variable 10, Occupational.

Because of a low response rate on subscale Variable 11, Spirituality, it was deleted from the analysis of Hypothesis IV. The remaining ten variables were incorporated into the design.

Eight dependent subscales report a significance at the .05 level showing higher scores on the repeated measure (R) (exposure). They were H₁, H₂, H₅, H₆, H₇, H₈, H₉, H₁₀ (Table 4.9). Gender is statistically significant on the repeated measure on one subscale; it was H₅ (Table 4.9).²

²Table 4.10 has been included to show that age (maturation) has no statistical relevancy to gained scores as reported with the significant data. This is further discussed in Chapter V (p. 130).



Table 4.9

Analysis of Repeated MeasuresDependent Variable 1, Exercise

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	672561.21356	1	672561.21356	1687.47	0.0000
Gender	590.13023	1	590.13023	1.48	0.2267
Error	37464.78644	94	398.56156		
<u>Second Test</u>					
Repeated Measure	1687.79545	1	1687.79545	12.62	0.0006*
Repeated Measure and Gender	254.54545	1	254.54545	1.90	0.1709
Error	12568.45455	94	133.70696		

Cell Means for Second Dependent Variable

	<u>Male</u>	<u>Female</u>	<u>Marginal</u>
Gender =	*1.00000	*2.00000	
First Test	62.06061	56.16980	58.22917
Second Test	66.06061	64.79365	65.22917
Marginal	64.15152	60.46032	61.72917

* Statistically Significant

Table 4.9 Cont'd.

Analysis of Repeated MeasuresDependent Variable 2, Nutrition

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	827804.27762	1	827804.27762	1817.69	0.0000
Gender	240.94429	1	240.94429	0.53	0.4688
Error	42809.05051	94	455.41543		
<u>Second Test</u>					
Repeated Measure	1309.51572	1	1309.51572	11.34	0.0011*
Repeated Measure and Gender	89.55738	1	89.55738	0.78	0.3807
Error	10853.81241	94	115.46609		

109

Cell Means for Second Dependent Variable

	<u>Male</u>	<u>Female</u>	<u>Marginal</u>
Gender =	*1.00000	*2.00000	
First Test	68.27273	64.46619	65.77125
Second Test	72.33333	71.41270	71.72917
Marginal	70.30303	67.94440	68.75521
Count	33	63	96

* Statistically Significant

Table 4.9 Cont'd.

Analysis of Repeated MeasuresDependent Variable 5, Drug Use

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	1373837.79818	1	1373837.79818	7024.27	0.0000
Gender	159.17318	1	159.17318	0.81	0.3693
Error	18384.94661	94	195.58454		
<u>Second Test</u>					
Repeated Measure	214.30576	1	214.30576	2.02	0.1584
Repeated Measure and Gender	486.47243	1	486.47243	4.59	0.0348*
Error	9966.52237	94	106.02683		

110

Cell Means for Second Dependent Variable

	Gender =	Male *1.00000	Female *2.00000	Marginal
First Test		85.30303	90.56143	88.70420
Second Test		90.87879	90.56143	88.70420
Marginal		88.09091	90.00794	89.34896
Count	33		63	96

* Statistically Significant

Table 4.9 Cont'd.

Analysis of Repeated MeasuresDependent Variable 6, Environment

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	1003791.39619	1	1003791.39619	4051.09	0.0000
Gender	1285.22953	1	1285.22953	5.19	0.0250*
Error	23291.58297	94	247.78280		
<u>Second Test</u>					
Repeated Measure	2093.53571	1	2093.53571	21.59	0.0000*
Repeated Measure and Gender	3.53571	1	3.53571	0.04	0.8490
Error	9113.38095	94	96.95086		

111

Cell Means for Second Dependent Variable

	<u>Male</u>	<u>Female</u>	<u>Marginal</u>
Gender =	*1.00000	*2.00000	
First Test	70.06061	75.22220	73.47920
Second Test	76.72727	82.46032	80.48958
Marginal	73.39394	78.81270	76.96875
Count	33	63	96

* Statistically Significant

Table 4.9 Cont'd.

Analysis of Repeated MeasuresDependent Variable 7, Emotional Awareness

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	1193996.54771	1	1193996.54771	4203.14	0.0000
Gender	848.90188	1	848.90188	2.99	0.0871
Error	26702.76479	94	284.07197		
<u>Second Test</u>					
Repeated Measure	671.17460	1	671.17460	7.29	0.0082*
Repeated Measure and Gender	111.32044	1	111.32044	1.21	0.2742
Error	8651.49206	94	92.03715		

Cell Means for Second Dependent Variable

	<u>Male</u>	<u>Female</u>	<u>Marginal</u>
Gender =	*1.00000	*2.00000	
First Test	79.63636	82.46032	81.49580
Second Test	81.96970	88.00000	85.92708
Marginal	80.80303	85.20160	83.78330
Count	33	63	96

*Statistically Significant

Table 4.9 Cont'd.

Analysis of Repeated MeasuresDependent Variable 8, Emotional Management

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	1029279.30195	1	1029279.30195	3360.90	0.0000
Gender	491.30195	1	491.30195	1.60	0.2084
Error	28787.61472	94	306.25122		
<u>Second Test</u>					
Repeated Measure	863.35101	1	863.35101	7.70	0.0067*
and Gender	74.68434	1	74.68434	0.67	0.4165
Error	10541.56566	94	112.14432		

Cell Means for Second Dependent Variable

	<u>Male</u>	<u>Female</u>	<u>Marginal</u>
Gender =	*1.00000	*2.00000	
First Test	73.81818	75.86302	75.64170
Second Test	76.96970	81.65079	80.04167
Marginal	75.39394	78.71900	77.64170
Count	33	63	96

* Statistically Significant

Table 4.9 Cont'd.

Analysis of Repeated MeasuresDependent Variable 9, Intellectual

Source	Sum of Squares	Degrees of Freedom	Mean of Squares	F	Tail Probability
First Test					
Mean	790543.56063	1	790543.56063	1866.63	0.0000
Gender	1725.85230	1	1725.85230	4.08	0.0464*
Error	39810.39250	94	423.51481		
Second Test					
Repeated Measure	1074.39144	1	1074.39144	9.33	0.0029*
Repeated Measure and Gender	1.26644	1	1.26655	0.01	0.9167
Error	10824.97835	94	115.15934		

114

Cell Means for Second Dependent Variable

	Gender =	Male	Female	Marginal
		*1.00000	*2.00000	
First Test		61.81818	68.30159	66.02920
Second Test		66.96970	73.11111	71.00000
Marginal		64.39394	70.79635	68.53646
Count	33		63	96

* Statistically Significant



Table 4.9 Cont'd.

Analysis of Repeated MeasuresDependent Variable 10, Occupational

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	908426.35338	1	908426.35338	1788.39	0.0000
Gender	2817.68671	1	2817.68671	5.55	0.0206*
Error	47748.14141	94	507.95895		
<u>Second Test</u>					
Repeated Measure	2169.38314	1	2169.38314	9.00	0.0035*
Repeated Measure and Gender	238.59147	1	238.59147	0.99	0.3223
Error	22658.23665	94	241.04507		

115

Cell Means for Second Dependent Variable

	Gender =	Male	Female	Marginal
		*1.00000	*2.00000	
First Test		63.66667	74.07937	70.50000
Second Test		73.09091	78.89520	76.84375
Marginal		68.37879	76.44440	73.61880
Count	33		63	96

* Statistically Significant



Table 4.10

Age Differentials

Subscale Variable Name	Age I			Age II			Age III		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation
1. Exercise	65	3.4	.68616	91	3.5	.69970	67	3.4	.76992
2. Nutrition	65	3.7	.74684	92	3.8	.61912	67	3.7	.72300
3. Self-Care	65	3.7	.66365	92	3.7	.48236	67	3.6	.66327
4. Vehicle	65	4.2	.62525	92	4.2	.53953	67	4.3	.51477
5. Drug Use	65	4.5	.62308	91	4.6	.53676	67	4.6	.39941
6. Environment	65	4.0	.62191	91	4.1	.47098	67	4.1	.66771
7. Emotional Awareness	65	4.4	.56356	91	4.2	.47153	66	4.3	.53944
8. Emotional	65	4.4	.58395	91	4.2	.47011	66	4.1	.52042
9. Management	65	3.7	.75772	91	3.8	.60465	67	3.7	.67996
10. Occupational	65	4.1	.56466	85	4.2	.55612	62	4.1	.72649
11. Spiritual	65	4.0	.77754	90	4.0	.71001	65	4.0	.76918

Key: Age I: 18-19 years old
Age II: 20-24 years old
Age III: 25 or older

Discussion of the Analysis

In analyzing the data, certain trends are observed with respect to specific subscale variables that either prove significant at the .05 level or at least report positive but not significant results.

A significant difference exists between men and women respondents with women reporting higher scores on the majority of the subscale variables. Similarly, respondents from the University of Wisconsin-Stevens Point report overall higher scores. Even though age differences were not significant, more respondents fall into the age II category and program exposure has a significance on wellness scores. Specifically, the data reveals the following:

A three-way interaction (gender, age and institution) reported on subscale Variable 5, Drug Use. A two-way interaction (gender and institution) reported on subscale Variable 6, Environment; subscale Variable 7, Emotional Awareness; and subscale Variable 8, Emotional Management.

Gender significance on main effect report women scoring significantly higher than men on subscale Variable 3, Self-Care; subscale Variable 4, Vehicle Safety; and subscale Variable 11, Spirituality. Women also report higher scores at a later age than men.

Institution distribution report the University of Wisconsin-Stevens Point respondents scoring significantly higher on subscale Variable 1, Exercise; subscale Variable 2, Nutrition; subscale Variable 3, Self-Care; subscale Variable 4, Vehicle Safety; subscale Variable 5, Drug Use; subscale Variable 9, Intellectual; and subscale Variable 10, Occupational.

Longitudinal data from the University of Wisconsin-Stevens Point present a positive trend on the independent variable, exposure. As ascertained through the one-way repeated measure ANOVA. Respondents scored significantly higher, over time, on subscale Variable 1, Exercise; subscale Variable 2, Nutrition; subscale Variable 5, Drug Use; subscale Variable 6, Environment; subscale Variable 7, Emotional Awareness; subscale Variable 8, Emotional Management; subscale Variable 9, Intellectual; and subscale Variable 10, Occupational. An interaction between gender and the repeated measure shows significance on subscale Variable 5, Drug Use; and the first measure reports a significance with regards to gender with women scoring higher on subscale Variable 6, Environment; subscale Variable 9, Intellectual; and subscale Variable 10, Occupational.

Considering the above, the data clearly demonstrate a relationship with respect to certain independent variables.

Summary

This chapter has presented the findings of this research study; a general overview of the data findings immediately preceded and hypothesis testing, with calculations of the ANOVA included. Accompanied pertinent figures and tables were displayed when appropriate.

A discussion of the analysis follows with attention to specifying findings related to the independent variables; gender, age, institution, and program exposure.

CHAPTER V

SUMMARY, CONCLUSION, DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH AND FINAL REFLECTIONS

Purpose of the Study

The purpose of this study was to compare and analyze the attitudes, knowledge, and orientation of students from two separate institutions of higher education which are similar in selected variables, but differ in their availability of wellness programming. One institution provides a continuing and concerted effort in wellness programming; the other has no focused effort in wellness programming. This descriptive analysis has compared six dimensions of wellness: intellectual, emotional, physical, social, occupational, and spiritual among students from both institutions.

Review of the Literature

A comprehensive review of the literature suggested that a growing concern with stress and its ramifications on ill health combined with the threat of iatrogenic disease has resulted in tremendous attention to alternative approaches to health and health care. As recognized by Fletcher, the 1974 Canadian Report, "A New Perspective on the Health of Canadians," acknowledges that a person's health is influenced more by his/her environment,

lifestyle, and heredity than by medical care. In the United States, the publication Healthy People encourages "a second public health revolution to attack the killer diseases of civilization" (Fletcher, 1983, p. 89).

It has been postulated in contemporary literature that consumers turn away from orthodox western medicine, which often is perceived as disabling instead of rehabilitating, and return to the original forms as first described by Hippocrates: "A physician's studies should include a consideration of what is beneficial in a patient's regimen while he (sic) is yet in health; not focus primarily on disease" (Fletcher, p. 87).

Theoretical considerations vary greatly as to an appropriate measure of health and health care; however, a general consensus of the urgent need to develop alternatives for health and health care delivery has been identified. Contradicting orientations in the various schools of medicine are a complication in the development and acceptability of alternatives (Gage, 1980). Many argue that behavioral indicators are measured against non-biological evidence; however, a highly consistent argument has emerged as the need for a well-integrated paradigm of concepts, strategies, and a need for action to alternative approaches to well-being and health maintenance (Cousins, 1979; Gage, 1980; Illich, 1982; Pelletier, 1982).

In an effort to empirically reference alternative approaches to health, health maintenance, and health care delivery, a reasonable population must be statistically assessed to measure the effects of wellness (alternative) programming. The university system was chosen to provide this needed population because of student developmental characteristics and the vulnerability of university students, in addition to recognizing the missions of institutions of higher education toward programming efforts to meet the needs and changes of the lifestyles of their constituents.

To articulate the impetus of this research effort, two questions were formulated:

- 1) Can one modify the behaviors of college students through an integrated wellness program and thereby increase both good health practices and physical conditioning, which will ultimately enhance management and coping skills within this population?
- 2) Can a wellness needs assessment be used as a satisfactory basis for stimulating a preventive maintenance system to counter the present disease-oriented medical care system? According to recent research and clinical practice, these are possibilities, and reorientation from crisis-



disease-oriented medicine to preventative health maintenance is underway. (Pelletier, 1982)

The contribution of this study may possibly assist in answering these questions.

Changing one's lifestyle to incorporate healthful living is a social as well as a personal responsibility. It is contended that the promotion of high level wellness within college and university systems could improve health and yield positive health indicators as determined by credible biological and behavioral assessments.

Design of the Study

The instrument from which the data for this study was obtained is the Lifestyle Assessment Questionnaire (LAQ), second edition, and is the assessment tool used by the University of Wisconsin-Stevens Point to measure high-level wellness among its students. The LAQ was developed in 1976 and has undergone continuous revision for the past three years. Various facets of the evaluation have been done by a committee of the Student Life Division at the University. When they deemed necessary, investigations were undertaken through suggestions from LAQ respondents and professionals throughout the country. This instrument was administered by the researcher to each separate population under investigation.

A combined total of 400 students from the University of Wisconsin-Stevens Point were sampled with 134 students responding. From the comparative institution, 200 students were sampled with 108 responding to the Life Assessment Questionnaire.

A three-way ANOVA using institution, gender and age was employed and a one-way ANOVA repeated measure using gender as between subject and time as within subject was also utilized. The statistical hypothesis was tested using a .05 level of significance. Using these analyses, independent subscale variables gender, institution, age and program exposure were measured with respect to the eleven dependent subscale variables.

Findings of the Study

To summarize, the results of the statistical analysis are as follows:

- 1) A difference existed between men and women with women scoring higher than men on ten subscale variables. A statistically significant difference existed on three of the subscale variables.
- 2) The University of Wisconsin-Stevens Point reported overall higher scores on all eleven subscale variables. A significant difference was reported on seven of the variables.

- 3) Even though age difference was not significant, more of the respondents fell into the age II category.
- 4) A three-way interaction of age, gender, and institution was reported significant.
- 5) Three two-way interactions of gender and institution were reported significant; and,
- 6) Longitudinal data presented a significant difference after exposure on eight subscale variables and this repeated measure combined with the influence of gender report significance on one subscale variable.

Conclusions and Discussion

Based on the findings of this study and with respect to the population surveyed, the following conclusions can be drawn:

- 1) A statistical significant relationship existed between gender with women scoring higher than men on three dependent subscale variables. Even though the remaining variables did not report a significance, a positive trend existed in reference to the female gender on their scores on the wellness assessment. The male respondents scored higher than their counterparts on one subscale variable. This apparently suggests

women, either through achieved and/or acquired patterns, reflected more interest in personal health, health care and related areas of concern. These scores could also suggest that women report more honestly than men on issues relating to personal health and health care.

- 2) As reported in the longitudinal analysis, a statistical relationship existed with respect to the repeated measure (exposure) to the wellness curriculum. This further corroborates that knowledge about wellness can be learned and; furthermore, the more time spent learning about wellness, the more knowledge an individual will gain and retain.
- 3) A statistically significant difference existed between the University of Wisconsin-Stevens Point and the comparative institution on the majority of the dependent subscale variables. These results imply that a wellness curriculum within an institution of higher education can produce significant learning.

Implications and Recommendations for Further Research

This study provides some statistical evidence that implies that the university system is a potential resource

center from which wellness instruction can operate successfully. The difference between the health and health lifestyles profiles of the University of Wisconsin-Stevens Point and the comparative institutional groups is recognizably different and statistically significant on the majority of the measures. Given the purpose of this resource study, this is of particular interest.

Areas for further investigation are as follows:

- 1) The data clearly show that wellness programming works (for whatever the reason) and fulfills its intention, as reflected in the scores on all of the eleven measures as they pertain to Hypothesis II. This was further corroborated by the factors of repeated measure (R) and repeated measure by gender (RS). When observing this significance, one could consider the maturation effect. However, this independent subscale variable does not prove significant as a main effect within its separate analysis. Because of this, and the obvious surfacing of traits, it would seem appropriate to investigate further diffusion efforts within the independent subscale variable, institution. Isolating traits as to their influence is essential. Specifics need to be researched which will ultimately aid in a more



thorough and credible assessment of programming efforts and development.

- 2) The two institutions of higher education under investigation in this study are located in the mid-western region of the United States. Precautions have been taken to identify institutions similar in demographic characteristics; however, geographical considerations must be questioned as to the appropriateness of inferences relative to other university systems operating within other geographical regions of this country. Generalization of the results to any other population would be appropriate only to the degree that they are similar to the sample. Assuming the analysis is correct, investigation is warranted to identify precipitating factors inherent to geographical location that might have influenced the significant scores. As mentioned in Chapter II, "The Review of Literature," medical geography plays a decisive role in determining health and health practices of individuals. Therefore, a valid interpretation of geographical relevancy will yield further research inquiry and



investigation. Precipitating factors needing further investigation are outlined below:

- a) Economic factors are known to have a determining influence on health care issues (Fuch, 1974; Illich, 1976; Kennedy, 1974; Sidel and Sidel, 1984; Stevens, 1976). Economic factors may have been the most powerful influence on how these students were taught to perceive reliable health care and health status. The economy persuades the medical decision maker of what kind of information he or she ought to have and how to arrange that information in terms of the relative value of various courses of actions (Fuch, 1974), therefore; economic factors need to be considered.
- b) Political orientation of the area suggests perhaps compelling difference in the way an individual perceives his or her responsibility on health issues (Kennedy, 1974) including direct involvement in social action on this issue.
- c) Religious influence, whether deterministic or anti-deterministic also may have had a direct bearing.



- d) Parental background or socio-economic status and educational achievement (or more importantly non-achievement) are known to be correlates of health practices. Pursuing an inquiry into these indices to determine the significance of their influence onto the programmed institution would be of interest.
 - e) The epidemiology of disease (if any) recognized within this region, needs to be explored, and;
 - f) The powerful influence of an international medical research and training facility on their sister campus in Madison should also be considered as an influencing variable.
- 3) The wellness lifestyle climate appears influential on the University of Wisconsin-Stevens Point institution. It is assumed its faculty and staff are wellness oriented, either by nature or by university influence. To deny this would be absurd, but to weigh its overall influence is a question of interest. Are programming efforts through orthodox curriculum, i.e. instruction, in-service, written literature, and audio visuals, responsible for the significant scores, or is it the explosive techniques of total exposure

through alternative clinical services, availability of vegetarian meals and related nutritional alternatives, dorm related activity, completion of the Life Assessment Questionnaire, and influential profiles of health professionals linked to the institution, and various alternative health education related resources, etc.? Determining the relative impact of educational techniques and strategies would be beneficial to curriculum experts, specifically those specializing in health education. Examining this database would be a good starting point for those particularly interested in wellness medicine and non-formal education.

- 4) It has been empirically proven that stress-related illness occurs after the stress-related incident when the autonomic and parasympathetic nervous systems have been engaged in constant activity resulting in patterns of neurophysiological alterations specific to particular disease (Pelletier, 1977). This reaction could be due to identifiable (or unidentifiable) stress but it does not discriminate between the ages. As a matter of fact, identifiable or unidentified, unabated prolonged stress has a damaging effect



on one's psycho-immunological entity. This observation suggests the urgency of intervention into health care services for our younger population and this acknowledgement should reinforce societal responsibility which is also a dimensional aspect of wellness. Given this, would it be beneficial to start programming efforts at an earlier age, possibly elementary school? Elementary school educators and curriculum specialists might find this data a starting point to investigate further programming efforts based on cognitive, affective, and developmental theories specific to children and/or adolescents.

- 5) Trait characteristics keep surfacing as indices needing investigation to further attempts to build sound health care education and delivery. As this study shows, traits can be identified and programs developed and/or altered to meet the needs of specific populations. Just as programming efforts have been developed around mission statements of university and college health services specific to the needs and acknowledgment of their clientele, it would seem plausible to develop programs for other



identifiable institutional populations, i.e., community programs for the older adult, psychiatric, developmentally disabled, and/or dually-diagnosed residential aftercare programs, or programs for any economically disadvantaged population.

- 6) As seen in the analysis, women score significantly higher on the majority of the dependent subscale variables than men. From a psycho-social and economic reference, it might be inferred that there are traits or characteristics, either acquired or achieved, in sex roles that are responsible for the statistical difference. Efforts to isolate these characteristics and theorize as to their causation would justify further research, especially in light of the contemporary issues of sex roles and related areas of concern. The women's health movement attempts to demystify women's bodies, and stress the urgent need for women to understand their bodies and become knowledgeable of competent care in the areas of health and health care delivery (Chesler, 1972; Corea, 1977; Fee, 1977; Reeves, 1971). The movement recognizes that the practice of medicine requires personal characteristics compatible with

those traditionally ascribed to women. The movement attempts to feminize healing by incorporating gentler concepts, and to diminish the warrior-doctor model of traditional medicine and return to the gentle-healer set by their medical foremothers (Corea, 1977). The movement stresses responsibility by the women for themselves. This is essential to maintain health and prevent disease, it recognizes the body as a whole system, capable of healing itself. This movement holds the psycho-immunological system in esteem and it resists intrusion, invasion and all unwanted and unnecessary manipulations (Chesler, 1972; Corea, 1977; Fee, 1977; Holt and Weber, 1981; Reeves, 1971).

The women's health movement proclaims the same message as the wellness movement. It shares an awareness of the natural regenerative powers of the body, and women's responsibility for their own health by pursuing knowledge of competent care based on the realities of her own unique psycho-immunological entity in the face of socio-political opposition. Much like wellness medicine and its practitioners, the women's health movement takes a stand against traditional



medical orientation and cites the urgent need for lifesaving change. Given this, further investigation is needed to explore the following areas of probable causation:

- a) given the feminist attempts to represent women more proportionately in the hierarchy of the medical profession and therefore improve the nature of the patient-doctor relationship (Fee, 1977), one must deliberate on the possibility of the University of Wisconsin-Stevens Point employing a greater percentage of female health professionals in the upper strata of its wellness oriented health services. And if there is a considerable difference, is it statistically significant enough to warrant the exclusion of random chance and therefore yield a reliable research finding?
- b) Another possibility of trait causation is exposure to organized feminist activity - be it literature, self-help groups, educational programs, etc. at the University of Wisconsin-Stevens Point as compared to the comparative institution. Could the statistical significance of the analysis be

due partially to such exposure? If this is so, then the ability of the women's movement to diffuse information needs to be further acknowledged as positive.

- 7) In regards to men, the questions need to be asked: could negative sociological and psychological factors influence their health care and bodily responsibility as reflected on the low Life Assessment Questionnaire score?

The autonomous male, the independent strong achiever who can be counted on to be always in control is still essentially the preferred male image. Success in the working world is predicated on the repression of self and the display of a controlled, deliberate, calculated, manipulated responsiveness. To be a leader requires that one be totally goal-oriented, undistracted by personal factors, and able to tune out extraneous "noise", human or otherwise, which is unrelated to the end goal and which might impede forward motion. The man who "feels" becomes inefficient and ineffective because he gets emotionally involved and this inevitably slows him down and distracts him. His more dehumanized competitor will then surely pass him. . . The male hero image in our culture is reflected in the men who constitute our fantasy identification figures. Most of them share certain specific characteristics: emotional mutedness or "cool", an extremely independent style, self-containment or lack of transparency of apparent emotional vulnerability, and in general, a very narrow band of outward expressiveness. (Goldberg, 1976, pp. 42-44)

Concerned sociologists, psychologists and other interested persons have identified the importance of

putting an end to this destructive journey men are subjecting themselves to. Endeavors are being made to intervene by raising the consciousness of these men; however, progress is slow. Unlike their female counterparts, men have responded poorly to attempts at consciousness-raising. Other research suggests that the carry over from self-help groups, literature and forums are minimal as the male is still in a cultural climate that has little tolerance for this emotional expressiveness (Goldberg, 1976). According to Collier and Gaiet (1956), a group of eight college men were asked by researchers to indicate their preferred heroes. As reported, they invariably preferred stories of males who were solitary, strong, independent, and in the process of actively striving to overcome obstacles (Goldberg, 1976).

Considering the low scores by the majority of the measures for men, one must consider traits these men developed through the socialization process. It has been postulated that men are pressured into and forced to live out the role of lover, husband, parent, breadwinner, strong, and silent man. This ultimately results in the inability of the psycho-immunological command and many times leads to disability and even death (Goldberg, 1976).

To continue with the edict of the wellness philosophy to respect the human entity and its dimensional

environment, coupled with the integral component of responsibility, a call for systemic intervention is needed to redesign programming efforts to meet the needs of this population. Keeping this in mind, it must be considered that negative sociological influence has a significant bearing on such measures as emotional and physical health and thus; well-being. There is an interesting note: men respondents scored higher than women only on one measure, which was subscale Variable 1, Exercise.¹ Could this be a self-fulfilling stereotype of virility and the continuation of a long standing male image of "man the athlete"? The disproportionate test scores presented herein might be factors that have resulted in the "hazards of being male". Steps need to be taken to isolate traits, redesign programming efforts specifically to meet the needs of men, ultimately altering this pattern of maladaptation. Reconditioning men as to the realities of their bodily function and its societal misrepresentation, and their responsibility towards self and others will serve to reinforce the wellness commitment. Further research in this area should be acknowledged as a responsibility of various health care researchers and providers, and can be

¹Whatever the reason for this significant score, physical fitness for health reasons could not be the main influence, especially as women were significantly higher on all the remaining variables.

looked upon as our defense against one of the structural breakdown of society eluded to in Chapter I.

There are many dimensions inherent in wellness medicine as it acknowledges the dimensional importance of healthful living. It incorporates responsibility towards self, it recognizes the urgency of education and it adheres to the socio-political and economics demands of the century. It recognizes the changing epidemiology of disease with its contributing factors and the amazing resiliency of the human body to correct itself through its natural regenerative powers. It recognizes that health is not merely the absence of disease or infirmity, but includes many areas of development: emotional, intellectual, physical, social, occupational and spiritual. The foundation of knowledge has been laid, and this research analysis makes a contribution to exploring alternative health care diffusion efforts within institutions of higher education. However, as previously mentioned, characteristic traits with their individualized qualities and idiosyncracies need to be studied if the college and university are to fulfill their missions of responsibility to their constituents, the students. This ultimately will perpetuate their images as a community of scholars who have come together to support and encourage the developing of the individualized minds and bodies of their students.

The isolation and study of traits in any given population is of utmost importance as an influential overlay plays a decisive role in determining one's nature and future development. Conditioned response through years of possible maladjusted learning is individualized and is unique to each person. Just as wellness medicine recognizes this, so should college and university programmers. To quote a long-standing observation: "one man's (sic) medicine is another man's poison." And as psycho-therapist, R.D. Laing observed, "What we call 'normal' is a product of repression, denial, splitting, projection, introjection and other forms of destructive action on experience . . . It is radically estranged from the structure of being . . . If our experience is destroyed, our behavior will be destructive . . ."

(Chesler, 1972, p.91).

To thoroughly study behavior and build reliable and credible programs, it is urgent to examine all possible indices at play, especially when exploring the vast intricate interconnected system known as the psycho-immunological entity. Given this, research inquiry is unlimited, for:

"To study the phenomenon of disease without books is to sail an uncharted sea; while to study books without patients is not to go to sea at all" (Sir William Osler, 1849-1919).



GLOSSARY

Alpha Activity: Electrical potential waves of the brain with a frequency band from eight to 13 cycles per second.

Amenorrhoea: Absence of menstrual periods.

Angioneurotic Edema: A condition of localized dropsy, similar in many ways to nettle-rash.

Arterial Blood Lactate: Concentration of lactate in arterial blood.

Atopic Dermatitis: is a chronic, patchy, mild inflammation of the surface of the skin.

Autonomic Nervous System: Portion of the nervous system consisting of motor neurons that act under direct voluntary control and that innervate internal organs.

Beta Activity: Electrical potential waves of the brain with a frequency band from 18 to 30 cycles per second.

Bronchial Asthma: A particular kind of difficulty arising from spasm of involuntary muscle around the small branches of the air tubes (bronchi) in the lungs, predominantly caused by allergy.

Cardiac disorders: Pertaining to the heart; relating to the esophageal opening of the stomach.

Collagen Diseases: Group of widely differing disorders found within the connective tissue. Included in this group are such disorders as systemic lupus erythematosus polyarteritis nodosa, dermatomyositis, scleroderma, and rheumatoid arthritis.

Connective Tissue: Combination of blood vessels and binding tissues that hold various parts of the body together, i.e. bones, joints, joint capsules.

Hay fever: A common form of allergy.

Hippocrates of Cos (around 400 B.C.): By common consent the greatest physician of all time; the father of medicine.

Histrionic: A personality characterized by excitability, emotional instability, over-reactivity, and self-dramatization equals an hysterical personality.

Homeostatis: The process of maintaining constant physical and chemical conditions within the body despite external change. It is the primary function of most organs.

Hypertension: High arterial blood pressure; in adults usually defined as pressures exceeding 140/90 mm. Hg.

Hyperthyroidism: Condition caused by excessive production or ingestion of thyroid hormone. The most common symptoms include weight loss, increase appetite, rapid heart rate, tremor, and fatigue.

Iatrogenic, Iatrogenesis: Caused by medicine, iatrogenic disease results from the treatment of other disease. Iatrogenic is best reserved for illnesses, often unrelated to the original illness or to the expected effect of the treatment, arising from treatment and sometimes persisting after the treatment has been stopped.

Immunological: The system that pertains to the bodies natural resistance to infection.

Impotence: Inability to perform coitus; disorder of male from failure of erection, but it may also occur in female from structural anomalies or painful inflammation with spasm of the muscles around the vagina.

Koch R. (1843-1910): German physician and pathologist. Pasteur laid the foundations of microbiology and Koch was its principle builder. Pasteur and Koch proved in general terms, that bacteria could cause disease and Koch showed which types of bacteria caused particular diseases.

Metabolic Disease: Resulting from alterations of the body chemistry, such as diabetes and gout.

Migraine Headache: A recurrent intense headache, usually confined to one side of the head and associated with nausea, vomiting, and visual disturbances.

Mucous Colitis: Inflammation of the colon (large intestine, lower bowel).



Neurotic Disorders: Resulting from an emotional maladaptation arising from an unresolved unconscious conflict.

Paroxysmal Tachycardia: Sudden onset of unduly rapid heart beat.

Pasteur, L. (1822-1895): French chemist; professor in Strasbourg, Lille, and Paris. Pasteur's greatest work was in biology, when he established the relationship of microbes to fermentation, putrefaction, and infectious disease. This discovery was one of the major turning points in medical history.

Pathology: Natural history of disease; study of abnormal changes in the body and their causes.

Peptic Ulcer: Erosion of a small patch in the lining of the stomach (gastric ulcer) or duodenum (duodenal ulcer), or occasionally of other parts of the digestive tract.

Placebo: An inert substance containing no medication but prescribed as medicine, given especially to satisfy a patient; also used in controlled studies to determine the efficacy of drugs.

Parasympathetic Nervous System: One of two divisions of the autonomic nervous system that regulates the internal environment of the body; its effects on internal organs are counter to those of the sympathetic system.

Psychosomatic: A term applied to diseases in which the physical manifestations are in part, at least, due to emotional or mental factors.

Psychotic Disorder: Resulting from a major mental disorder of organic or emotional origin in which the individual's ability to think, respond emotionally, remember, communicate, interpret reality, and behave appropriately is sufficiently impaired so as to interfere grossly with his/her capacity to meet the ordinary demands of life.

Raynauds' Disease: A disorder of small arteries, especially in the hands and feet, with sudden attacks of palor and coldness of the fingers or toes, lasting from a few minutes to an hour or more. The attacks are due to reduction of the flow of blood by spasm of the arteries.



Somatic: Of the body as opposed to the mind.

Sympathetic Nervous System: One of the two divisions of the autonomic nervous system that serves to prepare the body for emergencies.

Theta Activity: Electrical potential waves of the brain with a frequency between four and seven cycles per second.

Ulcerative Colitis: A secure, chronic inflammation of the colon.

Urticaria or nettle rash: A disorder of the skin characterized by an eruption resembling the effect produced by the sting of a nettle, namely, caused and or red-and-white patches, occurring in parts or over the whole of the surface of the body and attended with great itching and irritation. It may be acute or chronic.

APPENDIX A

LEADING CAUSES OF DEATH

TABLE 1
Leading Causes of Death: Ages 20-24 (1976)

Causes of Death	Rate*	Percent†	Chance in 100,000 of the Individual Dying From This Cause
Motor vehicle accidents	40.7	31.0	202.9
All other accidents	21.6	16.5	108.0
Homicide	16.6	12.6	82.5
Suicide	16.4	12.5	81.8
Malignant neoplasms	7.3	5.6	36.7
Diseases of heart	3.3	2.5	16.4
Other external causes	3.1	2.4	15.7
Influenza and pneumonia	1.7	1.3	8.5
Cerebrovascular diseases	1.5	1.1	7.2
Congenital anomalies	1.4	1.0	6.5
All other causes	17.7	13.5	88.3
All causes	131.3	100.0	654.5

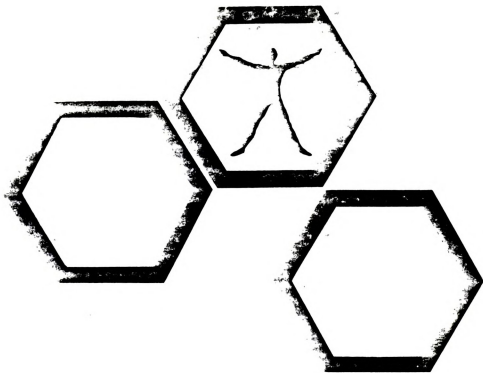
*Rates per 100,000 population.

†Percent of total deaths.

Source: Center for Disease Control, Public Health Service. Leading Causes of Death and Probabilities of Dying. United States, 1975 and 1976 (Atlanta: Center for Disease Control 1979).

APPENDIX B

LIFE ASSESSMENT QUESTIONNAIRE



LIFESTYLE ASSESSMENT QUESTIONNAIRE

3rd Edition



Institute for Lifestyle Improvement
University of Wisconsin-Stevens Point Foundation

PURPOSE

The Lifestyle Assessment Questionnaire is designed to help you assess your current level of wellness and the potential risks or hazards you choose to face at this point in your life. The LAQ is organized into four sections: 1) Wellness Inventory; 2) Topics for Personal Growth; 3) Risk of Death Section; and 4) Alert Section: Medical/Behavioral/Emotional. The results that you will receive from completing the questionnaire will reflect your strengths and the possible consequences of risks that you choose to take. The questionnaire results will also assess your interest in improving the quality of your life. You will also receive sources of information that will help you learn more about gaining higher levels of wellness. Your results will be provided in the Lifestyle Assessment Questionnaire Interpretation Guide which will explain the scoring and the meaning of your results for each of the four sections of this instrument.

CONFIDENTIALITY

The Institute for Lifestyle Improvement will maintain the confidentiality of your answers. The Institute will not permit any individually identified information from your questionnaire to be released to any person or organization other than the source from whom the LAQ was received.

Bill Hettler MD

Bill Hettler, M.D.

Dennis Eisenrath

Dennis Eisenrath, Ed.D.

Fred Leatgren

Fred Leatgren, Ph.D.

GENERAL INSTRUCTIONS

The attached answer sheet is to be used for recording your answers for the Lifestyle Assessment Questionnaire. Please make certain that you complete all of the information at the top of the answer sheet requesting your name, occupation, age, weight, height and Social Security Number. Results cannot be obtained for Section 3, Risk of Death, if you fail to provide this information. Use a No. 2 pencil for making your responses. Only your answer sheet need be returned for scoring. You may retain the questionnaire.



Institute for Lifestyle Improvement
UW-SP Foundation
University of Wisconsin-Stevens Point
Stevens Point, Wisconsin 54481

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WELLNESS INVENTORY SECTION

INSTRUCTIONS

This section will help determine the current level of wellness that you are experiencing. We hope that it will also give you ideas for areas in which you might improve. If you are uncomfortable in answering any item in this section or following sections, you may leave that item blank. Please respond to these statements using the following choices marking your responses on the attached answer sheet using a #2 pencil only.

- A— Almost always this is true (90% or more of the time)
 B— Very frequently this is true (approximately 75% of the time)
 C— Frequently this is true (approximately 50% of the time)
 D— Occasionally this is true (approximately 25% of the time)
 E— Almost never is this true (less than 10% of the time)
 — If item does not apply to you do not mark item

PHYSICAL EXERCISE—Measures one's commitment to maintaining physical fitness.

- I exercise vigorously for at least 20 minutes three or more times per week.
- I determine my activity level by monitoring my heart rate.
- I stop exercising before I feel exhausted.
- I approach exercise in a relaxed manner.
- I stretch before exercising.
- I stretch after exercising.
- I walk or bike whenever possible.
- When feeling tired, I arrange for sufficient sleep.
- I participate in a strenuous sport (tennis, running, swimming, handball, basketball, etc.)
- I use foot gear of good quality, designed for the activity in which I participate.
- If I am not in shape, I avoid sporadic (once a week or less often) strenuous exercise.
- After vigorous exercise, I "cool down" (very light exercise such as walking) for at least five minutes before sitting or lying down.

PHYSICAL/NUTRITIONAL—Measures the degree to which one chooses foods that are consistent with the dietary goals of the United States as published by the Senate Select Committee on Nutrition and Human Needs.

- When choosing non-vegetable protein, I select lean cuts of meat, poultry and fish.
- I maintain an appropriate weight for my height and frame.
- I minimize salt intake.
- I eat fruits and vegetables fresh and uncooked.
- I eat breakfast.
- I intentionally include fiber in my diet on a daily basis.

- I drink enough fluid to keep my urine light yellow.
- I plan my diet to insure an adequate amount of vitamins and minerals.
- I minimize foods in my diet that contain large amounts of refined flour (bleached white flour, typical store bread, cakes, etc.)
- I minimize my intake of fats and oils including margarine and animal fats.
- I include items from all four basic food groups in my diet each day (fruits and vegetables; milk group; breads and cereals; meat, fowl, fish or vegetable proteins).
- To avoid unnecessary calories, I choose water as one of the beverages I drink.
- I avoid adding sugar to my food and I minimize my intake of pre-sweetened foods such as sugarcoated cereals, syrups, chocolate milk, and most processed and fast foods.

PHYSICAL/SELF-CARE—Measures the behaviors that help one prevent or detect early illnesses.

- I record immunizations to maintain up-to-date immunization records.
- I examine my breasts or testes on a monthly basis.
- I have my breasts or testes examined yearly by a physician.
- I have a Pap test annually (Males—do not mark).
- I take action to minimize my exposure to tobacco smoke.
- When I'm experiencing illness or injury, I take necessary steps to correct the problem.
- I brush my teeth after eating.
- I floss my teeth after eating.
- My resting pulse is 60 or less.
- I get an adequate amount of sleep.
- I engage in activities that keep my blood pressure in a range that minimizes my chances of disease (e.g., stroke, heart attack and kidney disease).
- I select foods that keep my cholesterol level, high density lipids and triglycerides in a range that minimize my chances of disease.
- If I were to engage in sex and didn't want children at that time, I would use a contraceptive method.
- I take action to prevent contracting and/or transmitting venereal disease.

PHYSICAL/VEHICLE SAFETY—Measures one's ability to minimize chances of injury or death in a vehicle accident.

- I do not operate vehicles under the influence of alcohol or other drugs.
- I do not ride with vehicle operators who are under the influence of alcohol or other drugs.
- I stay within the speed limit.
- I use the information I learned in a driver education or defensive driving course.
- When traffic lights change from green to yellow, I prepare to stop.
- I maintain a safe driving distance between cars based on speed and road conditions.
- Vehicles which I drive are maintained to assure safety.
- Because they are safer, I use radial tires on cars that I drive.
- I use caution when riding bicycles or motorcycles (e.g., helmets, adequate lights, etc.).

- A— Almost always this is true (90% or more of the time)
 B— Very frequently this is true (approximately 75% of the time)
 C— Frequently this is true (approximately 50% of the time)
 D— Occasionally this is true (approximately 25% of the time)
 E— Almost never is this true (less than 10% of the time)
 — If item does not apply to you do not mark item

PHYSICAL/DRUG USAGE—Measures the degree to which one is able to function without the unnecessary use of chemicals.

49. I use drugs only when necessary.
50. I avoid the use of tobacco.
51. I consume two alcoholic drinks per day or less.
52. Because of the potentially harmful effects of caffeine (e.g., coffee, tea, cola, etc.), I limit my consumption.
53. I avoid using marijuana.
54. I avoid the use of hallucinogens (LSD, PCP, MDA, etc.).
55. I avoid the use of stimulants ("uppers"—e.g., cocaine, amphetamines, "pep pills", etc.).
56. I avoid the use of depressants ("downers"—e.g., barbiturates, minor tranquilizers, etc.).
57. I avoid using a combination of drugs unless under medical supervision.
58. I follow the instructions provided with any drug I take.
59. I avoid using drugs obtained from unlicensed sources.
60. I understand the expected effect of drugs I take.
61. I consider alternatives to drugs.

SOCIAL/ENVIRONMENTAL—Measures the degree to which one contributes to the common welfare of the community. This emphasizes the interdependence with others and nature.

62. I take steps to conserve energy in my place of residence.
63. I consider energy conservation when choosing a mode of transportation.
64. I offer support to members of my family when appropriate.
65. I contribute to the feeling of acceptance within my family.
66. I do my part to promote clean air.
67. When I see a safety hazard, I take action (warn others or correct the problem).
68. I avoid unnecessary radiation.
69. I report criminal acts I observe.
70. I contribute time and/or money to community projects.
71. I actively seek to become acquainted with individuals in my community.
72. I use my creativity in constructive ways.
73. My behavior reflects fairness and justice.
74. When possible, I choose an environment which is free of noise pollution.
75. When possible, I choose an environment which is free of air pollution.
76. I participate in volunteer activities benefiting others.
77. I go out of my way to help others.
78. I beautify those parts of my environment under my control.

EMOTIONAL AWARENESS & ACCEPTANCE—Measures the degree to which one has an awareness and acceptance of one's feelings. This includes the degree to which one feels positive and enthusiastic about oneself and life.

79. I have a good sense of humor.
80. I feel positive about myself.
81. I feel there is a satisfying amount of excitement in my life.
82. My emotional life is stable.
83. I am aware of my needs.
84. I trust and value my own judgment.
85. When I make mistakes, I learn from them.
86. I feel comfortable when complimented for jobs well done.
87. It is okay for me to cry.
88. I have feelings of sensitivity for others.
89. I feel enthusiastic about life.
90. I find it easy to laugh.
91. I am able to give love.
92. I am able to receive love.
93. I enjoy my life.
94. I have plenty of energy.
95. My sleep is restful.
96. I trust others.
97. I feel others trust me.
98. I accept my sexual desires.
99. I understand how I create my feelings.
100. At times I can be both strong and sensitive.
101. I am aware when I feel anger.
102. I can accept my anger.
103. I am aware when I feel sad.
104. I can accept my sadness.
105. I am aware when I feel happy.
106. I can accept my happiness.
107. I am aware when I feel frightened.
108. I can accept my feelings of fear.

EMOTIONAL MANAGEMENT—Measures the capacity to appropriately control one's feelings and related behaviors including the realistic assessment of one's limitations.

109. I am able to be open with those with whom I am close.
110. I can express my feelings of anger.
111. I can express my feelings of sadness.
112. I can express my feelings of happiness.
113. I can express my feelings of fear.
114. I can compliment myself for a job well done.
115. I accept constructive criticism without reacting defensively.
116. I recognize that I can have wide variations of feelings about the same person (such as loving someone even though you are angry with her/him at the moment).
117. I am able to develop close, intimate relationships.
118. I make conscious decisions about my sexual activity based on personal/spiritual values.
119. I stick to the limits I set for myself.
120. I can say "no" without feeling guilty.
121. I would feel comfortable seeking professional help to better understand and cope with my feelings.
122. I set realistic objectives for myself.
123. I can relax my body and mind (without using drugs).
124. I can be alone without feeling lonely.
125. I am able to be spontaneous in expressing my feelings.
126. I accept responsibility for my actions.

- 127. I am willing to take the risks that come with making change.
- 128. I manage my feelings to avoid unnecessary suffering.
- 129. I make decisions with a minimum of stress and worry.
- 130. I accept the responsibility for creating my own feelings.

INTELLECTUAL—Measures the degree that one engages her/his mind in creative, stimulating mental activities, expanding knowledge and improving skills.

- 131. I read a newspaper daily.
- 132. I read twelve books or more yearly.
- 133. I read on the average one or more national magazines weekly.
- 134. When I watch TV, I choose educational programs.
- 135. I visit a museum or art show at least three times yearly.
- 136. I attend lectures, workshops and demonstrations at least three times yearly.
- 137. I regularly use some of my time participating in hobbies such as photography, gardening, woodworking, sewing, painting, baking, art, music, writing, pottery, etc.
- 138. I read about local, state, national, and international political/public issues.
- 139. I make an effort to learn the meaning of new words.
- 140. I engage in some type of writing activity such as a regular journal, letter writing, preparation of papers or manuscripts.
- 141. I am interested in understanding the views of others.
- 142. I devote time to sharing ideas, concepts, thoughts, or procedures to advance the knowledge of others.
- 143. I gather information to enable me to make independent decisions.
- 144. I regularly listen to radio and/or TV news.

OCCUPATIONAL—Measures the satisfaction gained from one's work and the degree to which one is enriched by that work.

Please answer these items from your primary frame of reference, (e.g., your job, student, homemaker, etc.) If you are unemployed or retired, do not mark this section.

- 145. I enjoy my work.
- 146. My work contributes to my personal needs.
- 147. I feel that my job in some way contributes to others and/or society.
- 148. I interact cooperatively with others in my work.
- 149. I take advantage of opportunities to learn new skills in my work.
- 150. My work is challenging.
- 151. I feel my job responsibilities are consistent with my values.
- 152. I find satisfaction from the work I do.
- 153. I find healthy ways of reducing excessive stress when it occurs in my job.
- 154. I use recommended health and safety precautions.
- 155. I make recommendations for improving occupational health and safety.
- 156. I am satisfied with the degree of freedom to exercise independent judgements in my job.
- 157. I am satisfied with the amount of variety in my work.
- 158. I believe I am competent in my job.
- 159. My co-workers and supervisors respect me as a competent individual.

SPIRITUAL—Measures one's ongoing involvement in seeking meaning and purpose in human existence. It includes an appreciation for the depth and expanse of life and natural forces that exist in the universe.

- 160. I feel good about my spiritual life.
- 161. Prayer, meditation, and/or quiet personal reflection is/are important part(s) of my life.
- 162. I contemplate my purpose in life.
- 163. I reflect on the meaning of events in my life.
- 164. My values guide my daily life.
- 165. My values and beliefs help me to meet daily challenges.
- 166. I recognize that my spiritual growth is a lifelong process.
- 167. I am concerned about humanitarian issues.
- 168. I enjoy participating in discussions about spiritual values.
- 169. I feel a sense of compassion to others in need.
- 170. I seek spiritual knowledge.
- 171. My spiritual awareness occurs often but at times of crisis.
- 172. I believe in something greater or that I am part of something greater than myself.
- 173. I share my spiritual values.

2

TOPICS FOR
PERSONAL
GROWTH
SECTION

INSTRUCTIONS

This section is intended to help you identify areas in which you would like more information for continued learning assistance. In response to your selection from the following topics we will provide you with resources or services to meet your requests.

With regard to the following list, I would like information on the following topics:

1. Responsible alcohol use
2. Stop smoking programs
3. Sexual dysfunction
4. Contraception
5. Venereal disease
6. Depression
7. Loneliness
8. Exercise programs
9. Weight reduction
10. Self-breast exam
11. Medical emergencies
12. Vegetarian diets
13. Relaxation - stress reduction
14. Mate selection
15. Parenting skills
16. Marital (or couples) problems
17. Assertive training (how to say "no" without feeling guilty)
18. Biofeedback for tension headache
19. Overcoming phobias (ex. high places, crowded rooms, etc.)
20. Educational/Career goal setting/planning
21. Spiritual or philosophical values
22. Interpersonal communication skills
23. Automobile safety
24. Suicide thoughts or attempts
25. Drug abuse
26. Anxiety associated with public speaking, tests, writing, etc.
27. Enhancing relationships
28. Time management skills
29. Nutrition
30. Death and dying
31. Learning skills (speed reading, comprehension, etc.)

3

RISK
OF DEATH
SECTION

INSTRUCTIONS

This section is intended to help you identify the problems most likely to interfere with the quality of your life. This will give you a statistical assessment of the most likely causes of death facing you for the next ten (10) years. This section will also indicate what impact various personal behavioral choices have on that risk of death. Although this section will give you a printout indicating a statistical measurement of your risk based on national morbidity and mortality data, the printout will be no guarantee. We do feel, however, that it is a fairly accurate assessment of your current state of risk and offers suggestions for improving the quality of life and useful longevity.

Pre-existing diseases or chance occurrence can completely negate the recommendations or suggestions made on the printout of this section.

Please make certain that you complete all of the information at the top of the answer sheet requesting your name, occupation, age, weight, height and Social Security Number.

Record all of your answers for Section 3 on the attached answer sheet marking your responses in the appropriate boxes using a #2 pencil only.

1. Sex:
 1. Male
 2. Female
2. Race:
 1. White
 2. Black
 3. Other
3. How would you describe your body build?
 1. Small
 2. Medium
 3. Large
4. What is your systolic (top number) blood pressure?
 1. 190 or more
 2. 170-199
 3. 150-169
 4. 130-149
 5. Less than 130

Note: If you don't know your blood pressure, we will use the average for your age, race, and sex.
5. What is your diastolic (lower number) blood pressure?
 1. 103 or more
 2. 97-102
 3. 91-96
 4. 85-90
 5. Less than 85

6. What is your blood cholesterol level?
 1. 270 or more
 2. 230-269
 3. 210-229
 4. 190-209
 5. Less than 190

Note: If you don't know your cholesterol level, we will use the average for your age, race, and sex.
7. Are you:
 1. An uncontrolled diabetic
 2. A controlled diabetic
 3. Not a diabetic
8. Which of the following best describes how much physical activity you get per week including work?
 1. Climb less than 5 flights of stairs or walk less than 1/2 mile 4 times per week (or equivalent activity)
 2. Climb 5-15 flights of stairs or walk 1/2-1 1/2 miles 4 times per week (or equivalent activity)
 3. Climb 15-20 flights of stairs or walk 1 1/2-2 miles 4 times per week (or equivalent activity)
9. Family history of heart disease:
 1. Both parents died before age 60 of heart disease
 2. One parent died before age 60 of heart disease
 3. Neither parent died before age 60 of heart disease
10. Do you smoke tobacco?
 1. Yes
 2. No
11. If item 10 is yes, how much do you smoke per day?
 1. 2 packs of cigarettes or more
 2. 1 1/2-2 packs of cigarettes
 3. 1-1 1/2 packs of cigarettes
 4. 1/2-1 pack of cigarettes or heavy pipe or cigar
 5. Less than 1/2 pack of cigarettes or light pipe or cigar
12. If item 10 is yes, how many years have you been smoking?
 1. Less than 2
 2. 2-5
 3. 5-10
 4. 11-15
 5. 16 or more
13. Are you a former smoker?
 1. Yes
 2. No
14. If item 13 is yes, how much did you smoke per day?
 1. 2 packs of cigarettes or more
 2. 1 1/2-2 packs of cigarettes
 3. 1-1 1/2 packs of cigarettes
 4. 1/2-1 pack of cigarettes or heavy pipe or cigar
 5. Less than 1/2 pack of cigarettes or light pipe or cigar
15. If item 13 is yes, how many years ago did you quit?
 1. 0-2 years
 2. 3-4
 3. 5-6
 4. 7-8
 5. 9 or more
16. Do you drink alcoholic beverages?
 1. Yes
 2. No
17. If item 16 is yes, how many drinks per week?
 1. More than 40 drinks
 2. 25-40
 3. 8-24
 4. 3-7
 5. 1-2
18. When consuming alcohol I consume not more than one drink per hour.
 1. Yes
 2. No
19. How many miles a year do you travel in a motor vehicle as a driver or passenger?
 1. Under 10,000
 2. 10,000-20,000
 3. 20,000-30,000
 4. 30,000-40,000
 5. Over 40,000
20. While traveling in a motor vehicle how often do you use seat belts?
 1. 20% or less of the time
 2. 20%-40%
 3. 40%-60%
 4. 60%-80%
 5. 80%-100%
21. How often do you find you are experiencing depression?
 1. Frequently
 2. Seldom
 3. Never
22. Has anyone in your immediate family (parents, brothers, sisters) committed suicide?
 1. Yes
 2. No
23. In regard to your heart, have you had:
 1. A murmur without preventive antibiotics
 2. A murmur with preventive antibiotics
 3. No murmur
24. In regard to your heart, have you had:
 1. Rheumatic fever without preventive antibiotics
 2. Rheumatic fever with preventive antibiotics
 3. No rheumatic fever
25. To the best of your knowledge, do you have any signs or symptoms of rheumatic heart disease?
 1. Yes
 2. No
26. Have you ever been arrested for burglary, robbery, or assault?
 1. Yes
 2. No
27. Do you carry a weapon with you?
 1. Yes
 2. No
28. Have you ever had bacterial pneumonia?
 1. Yes
 2. No
29. Have you ever had emphysema?
 1. Yes
 2. No
30. Has anyone in your family (parents, brothers, sisters) had diabetes?
 1. Yes
 2. No

31. Have you ever had polyps (growth in the intestines)?
 1. Yes
 2. No
32. Have you ever had undiagnosed rectal bleeding?
 1. Yes
 2. No
33. Have you ever had ulcerative colitis?
 1. Yes, 10 or more years ago
 2. Yes, less than 10 years ago
 3. No
34. Have you had a rectal examination with a lighted instrument within the last year?
 1. Yes
 2. No

IF FEMALE, ANSWER THE FOLLOWING QUESTIONS:

35. Do you perform a regular monthly self-breast examination?
 1. Yes
 2. No
36. Do you have a yearly exam by your physician?
 1. Yes
 2. No
37. How many of your blood relatives (mother, sister, aunts) have had breast cancer?
 1. 2 or more
 2. 1
 3. None
38. Have you ever had fibrocystic breast disease or other noncancerous disease?
 1. Yes
 2. No
39. Are you Jewish? (Cancer of the cervix is very rare in Jewish women)
 1. Yes
 2. No
40. Age of first intercourse. (Cancer of the cervix is more common in females who have first intercourse in teens and/or have multiple partners.)
 1. Under 20 years old
 2. 20-25 years old
 3. Over 25 years old or never
41. Pertaining to a Pap smear, mark the response most accurate for you. The following responses are irrelevant if you have had an abnormal Pap test ever. Abnormal Pap tests deserve regular follow-up.
 1. Haven't had one in last five (5) years
 2. Had 1 normal within the last five (5) years
 3. Had 1 normal within last year
 4. Had 3 normal within the last five (5) years
 5. Had one normal each of the last five (5) years
42. Have you experienced undiagnosed vaginal bleeding?
 1. Yes
 2. No
43. Do you now take birth control pills?
 1. Yes
 2. No

6.

4

ALERT SECTION

**medical/behavioral/
emotional**

INSTRUCTIONS

This section is intended to be used to identify high risk problems or past medical problems that we feel are important in establishing one's medical records. This can be used for a personal record by the individual or can be used by professionals as a problem list to be incorporated with the remainder of the individual's medical records. Please mark the number that is most correct in answering each question. Any question that you do not feel comfortable in answering or you think is not pertinent please leave blank.

Mark your answers on the attached answer sheet using a #2 pencil only.

MEDICAL

1. Do you have diabetes? 1. Yes 2. No
2. Do you have a seizure disorder (epilepsy)? 1. Yes 2. No
3. Do you have known heart trouble (acquired or congenital)? 1. Yes 2. No
4. Did any of your blood relatives die of heart disease under the age of 50? 1. Yes 2. No
5. Have you had major surgery? 1. Yes 2. No
6. Do you have a physical disability that interferes with routine activities including physical fitness programs? 1. Yes 2. No
7. Have you had a skin test for TB in the past two (2) years? 1. Yes 2. No
8. If item 7 is yes, which result did you have? ... 1. Reaction 2. No Reaction
9. Do you take any medication regularly such as daily or several times per week? 1. Yes 2. No
10. Do you have allergies to drugs? 1. Yes 2. No



11. Are you allergic to penicillin? 1.Yes 2.No
 12. Are you allergic to sulfa? 1.Yes 2.No
 13. Are you allergic to aspirin? 1.Yes 2.No
 14. Do you have additional drug allergies not listed above? 1.Yes 2.No
 15. Do you have asthma? 1.Yes 2.No

IMMUNIZATIONS

16. Did you have baby shots for DPT (diphtheria, whooping cough, and tetanus)? Ask your parents or doctor 1.Yes 2.No
 17. Have you had a booster for tetanus in the last five (5) years? (Recommended interval is 5-10 years) 1.Yes 2.No
 18. Have you had a form of polio vaccine? 1.Yes 2.No
 19. With regard to German measles:
 1. have had a blood test showing immunity or received rubella immunization.
 2. never had a blood test or the blood test showed no immunity to rubella (German measles).
 1.Yes 2.No
 20. Have you had a Pap test in the last year? 1.Yes 2.No
 21. Have you ever had an abnormal Pap test? ... 1.Yes 2.No
 22. Were you exposed to DES (diethylstilbestrol) while your mother was pregnant with you? (Ask your mother to check with her doctor if you are not sure.) 1.Yes 2.No
26. Have you ever attempted suicide? 1.Yes 2.No
 27. Have any of your relatives committed suicide? 1.Yes 2.No
 28. Do you frequently feel that life is not worth living? 1.Yes 2.No
 29. Does each day look so dull that you would rather not wake up in the morning? 1.Yes 2.No
 30. Do you feel overly tired and without motivation much of the time? 1.Yes 2.No
 31. Do you feel you have a serious emotional problem? 1.Yes 2.No
 32. Do you have a history of or have you recently experienced hallucinations (hearing or seeing things others don't)? 1.Yes 2.No
 33. Do you have difficulty feeling close to people? 1.Yes 2.No
 34. Do you worry excessively? 1.Yes 2.No
 35. Do you feel you've had an excessive number of illnesses in the past year? 1.Yes 2.No
 36. Do impulsive behaviors cause you serious problems? 1.Yes 2.No
 37. Are you unhappy too much of the time? 1.Yes 2.No
 38. Do you cry too often? 1.Yes 2.No
 39. Do you have difficulty controlling your temper? 1.Yes 2.No

BEHAVIORAL/EMOTIONAL

NOTE: The leading cause of death among young adults is auto accidents.

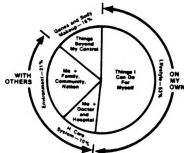
23. Do you drive a car, motorcycle, or bike after drinking alcohol? 1.Yes 2.No
 24. Do you ride with "drinking" drivers? 1.Yes 2.No

NOTE: The second leading cause of death among young adults is suicide.

25. Have you seriously considered killing yourself within the past year? 1.Yes 2.No

THE MAJOR DETERMINANT FOR JOYFUL LIVING IS YOU AND YOUR LIFESTYLE

The circle graph below indicates the factors that contribute to increasing your enjoyment and quality of life. While it is true that doctors and hospitals have a significant role to play in the quality of our lives, this graph



clearly indicates that it is individuals, through the choices that they make each day, that contribute the greatest percentage toward maximizing the quality of life and health. We believe this instrument can be a useful adjunct in helping individuals identify the most likely causes of death and disability, but more importantly identify the areas of self-improvement which will lead to higher levels of joy and wellness. This instrument can be used to begin a positive, wellness approach toward living. It is our belief that this instrument can help people realize that they are the most important provider of health or "illth" care. Many of the common killers in America are the direct result of individual behaviors. We all know that our behaviors can improve our chances for leading a long useful life. Collectively, all of our behaviors can be described as our lifestyle.

WORDS FROM THE PAST

"To ward off disease or recover health, men as a rule find it easier to depend on the healers than to attempt the more difficult task of living wisely."

—Rene duBois

"It's what you do hour by hour, day by day, that largely determines the state of your health; whether you get sick, what you get sick with, and perhaps when you die."

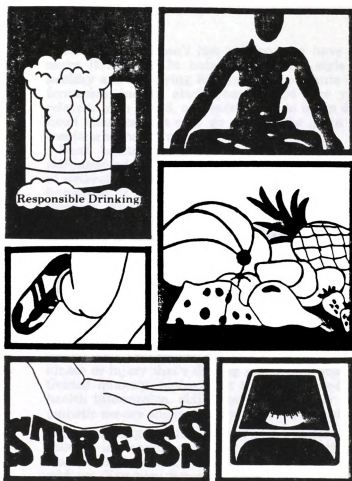
—Lester Breslow, M.D.

"For many years, while engaged in the practice of medicine, the author of this volume has been more and more impressed with the idea that the causes of the suffering, diseases, and premature deaths, which we witness around us on every hand, lie nearer our own doors . . . and that the men and women of today are, at least, equally as responsible for existing suffering, as those who have gone before them, and often much more so. In fact, he feels satisfied that by far the greatest portion of all the suffering, disease, deformity, and premature deaths which occur, are the direct result of either the violation of, or the want of compliance with the laws of our being; calamities, which, were the requisite knowledge possessed by the community, can and should be avoided."

—taken from the Preface to *Avoidable Causes of Disease* by John Ellis, 1859.

APPENDIX C

**WELLNESS PROGRAM BROCHURES
SOUTHERN ILLINOIS - CARBONDALE**



Wellness Center

Student Health Program

Southern Illinois University
at Carbondale



The Wellness Center

Good health doesn't just happen; you have to make it happen. In order to skillfully style a healthy and satisfying life, you need accurate information, insight about yourself and how you relate to your world, and motivation to make difficult changes that may go against the grain of comfortable habits and years of conditioning.

Good health means self-awareness, discipline, self-satisfaction, loving relationships, and a sense of well-being, even in the most trying times. Most important of all is that good health is quite attainable. We all have different capacities and may suffer from varying handicaps, but everyone of us can learn to optimize our health and wellness in some very definite ways.

The Wellness Center, a division of your Student Health Program, provides the following programs and services to help you maximize your health and care for yourself when ill.

Health Counseling—Are you needing some support and guidance in your quest for improved health and well-being? Do you have a chronic illness or injury that's driving you to distraction? Guided imagery, biofeedback training, up-to-date health information, skilled referrals and an empathetic ear are among the many services we offer.

Stress Management—There's no doubt about it; college is tough, and the stress of school, work, relationships, and future planning all add up. You can, however, learn effective techniques to manage your stress, relax your body and mind, improve concentration, and enhance self-awareness. We offer individual counseling, small



groups, single-session workshops, and biofeedback training.

Weight Loss—Do you want a weight loss program that is both healthy and effective? Learn the basics of self-control, good nutrition, and overall fitness. Get a program that is tailored to your needs and interests. We offer individual counseling, small groups, and single-session workshops.

Nutrition—What and how you eat have a definite impact on how well you feel and perform. We can help you analyze your diet, suggest improvements in your eating habits, and give information on vegetarian and other special diets. Individual counseling and single-session workshops are offered.

Fitness/Exercise—We specialize in designing fitness programs for people who have never been active and for those who want to improve their endurance and strength in a safe, supportive way. We also have considerable expertise to share with the advanced athlete of all sports. Individual



counseling, classes, and one-session workshops are offered throughout the year.

Stop Smoking—Tobacco smoking is a serious form of drug addiction, and most people find quitting difficult. We have tips and techniques to help you kick the nicotine habit. Our trained counselors



will provide information, inspiration, and support. Choose group or individual counseling to suit your needs and schedule.

Yoga, Meditation, Tai Chi—Each semester the

Wellness Center offers classes in yoga, meditation, Tai Chi, and other related disciplines. Each class is taught by a qualified instructor and is designed to help you explore and integrate your physical, mental, and spiritual self.

Pain Management—If you are experiencing chronic back pain or any other type of chronic physical discomfort, we can help you discover new methods for both understanding and managing the problem and preventing it from re-occurring in the future. We work closely with health service physicians and refer for medical assessment or treatment whenever needed.

Women's Health—if you need information or support for health concerns specific to women, we can help. Information and counseling on PMS (Pre-Menstrual Syndrome), Fertility Awareness (a natural method of predicting a woman's fertile times), and other related issues are available.

Birth Control—If you decide to be sexually active and don't want to risk a pregnancy, use birth control. We provide written information, individual counseling, and residence hall programs for men and women to help you choose the method of birth control that is right for you.

Pregnancy Counseling—We provide counseling, information, and referrals for both planned and unplanned pregnancy. Information is available on several resource options including prenatal care, community health services, adoption, and pregnancy termination.

Sexuality Information—We provide accurate information, short term counseling and referrals for personal sexual concerns.



Alcohol and Drug Information—Are you a responsible drinker or an alcohol abuser? When does recreational drug-taking become a problem?

Get current and complete information on alcohol and recreational, over-the-counter, and prescription drugs. Educational programs are scheduled throughout the year.

Alcohol and Drug Counseling—Worried about your alcohol or drug use? Do you have a friend or family member with a problem? Short-term counseling and referral for treatment are available for those experiencing personal, friendship, or family problems with alcohol or drugs.



Special Programs—Each year the Wellness Center sponsors activities designed to promote good health. Wellness Week, Time Out, Natural Foods Dinner, and Lifestyling Roadrun are just some of our annual events. Watch the *Daily Egyptian* for details.

Student Health Assessment Center (SHAC)—When you're in the Student Center, stop by SHAC in the south end of the first floor, where you'll find a health library, exhibits, and the Cold Assessment Center. You can also assess your blood pressure, body fat, weight, stress level, and flexibility. A nurse is available to talk with, evaluate your symptoms, give self-care advice, or refer you to other campus services.

Wellness Library—Stop by the Wellness Library for a complete selection of health, medical, self-care, and personal growth books. We have books on nutrition, vegetarianism, stress, weight loss, fitness, sexuality, yoga, meditation, alcohol, and drugs. Books may be checked out for two weeks. The library is located in Kesnar Hall.





Outreach Programs—We offer many of our programs in residence halls, the Student Center, classrooms, the Student Recreation Center, and other campus areas. If you would like a program for your group, give us a call. We'll do our best to accommodate your needs.

Health Questions—Do you have a health question or concern? Many can be easily answered over the phone. Give us a call at 453-5238 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

Practicum and Internship Training—We provide training and practical experience for students from several academic departments. Class credit is possible, and placements are available in the areas of stress management, fitness and exercise, nutrition, weight management, alcohol and drug education, birth control and pregnancy counseling, public relations/media, self-care, and patient education. If you are interested, give us a call.

Where is the Wellness Center?

The Wellness Center is located on the second floor of Kesnar Hall, directly across from the Health Service. We are open from 8:00 a.m. to 4:30 p.m., Monday through Friday. Call 536-4441 for an appointment or just drop by.

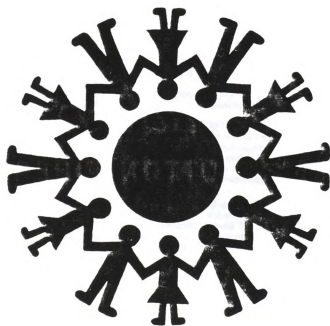
Student Health Assessment Center (SHAC) is located in the south end of the Student Center, first floor. Call 453-5238 or stop by.



SIU Wellness
Center

536-4441

Groups and Workshops



Wellness Center

Fall '84

Southern Illinois University
at Carbondale



The Wellness Center

The Wellness Center, a division of the Student Health Program, provides many programs and services to help you optimize your health and skillfully care for yourself when ill. We can help you to:

- Improve your health
- Manage stress
- Lose weight
- Improve nutrition
- Start or improve an exercise routine
- Learn yoga and meditation
- Learn self-care skills for medical problems
- Learn about birth control
- Make decisions regarding pregnancy
- Get information on sexual issues
- Work on personal alcohol or drug problems
- Cope with a family or friend's alcohol or drug problem
- Get information on any health concern

The following groups and workshops are designed to help you improve your physical, emotional, social, and spiritual well-being. We sincerely hope that you enjoy and benefit from them. For further information, call 536-4441, weekdays, 8:00 a.m.-5:00 p.m.



Ongoing Groups and Classes

(Registration is required for all groups and classes in this section. Call 536-4441.)

STRESS MANAGEMENT—Learn to decrease tension, increase school performance, improve concentration, and avoid unnecessary illness. Practical information, easy to learn relaxation techniques, and rational ways of managing daily stress and improving well-being will be covered.

- Section 1: Meets Wednesdays, 7:00-9:00 p.m., for three consecutive weeks beginning September 5.
 Section 2: Meets Tuesdays, 3:00-5:00 p.m., for three consecutive weeks beginning October 2.
 Section 3: Meets Wednesdays, 4:00-6:00 p.m., for three consecutive weeks beginning October 31.

PMS SUPPORT GROUP—PMS (Pre-menstrual syndrome) affects over 40% of all women, some severely. This self-help group is for students with PMS symptoms who would like to share their experiences and information with others.

Time to be announced, begins week of September 10.

FERTILITY AWARENESS: A NATURAL FORM OF BIRTH CONTROL—Learn how to use this method of predicting a woman's fertile times by recording and observing the natural changes during each menstrual cycle. The class will include tips for success, common problems with the method, and practical advice from experienced users.

- Section 1: Meets Wednesdays, 3:00-5:00 p.m., for two consecutive weeks beginning September 19.
 Section 2: Meets Thursdays, 4:00-6:00 p.m., for two consecutive weeks beginning October 25.

WEIGHT LOSS—Learn the basics of health enhancing permanent weight loss in this supportive group setting. Look forward to losing weight as a result of changing your habits and attitudes rather than starving. Co-sponsored by Intramural-Recreational Sports.

- Section 1: Time to be announced, begins week of September 24. Register by September 17.
 Section 2: Meets Wednesdays 3:30-5:30 p.m. for five consecutive weeks beginning October 17.

STOP SMOKING NOW—This five-week group is aimed at the smoker who is serious about quitting. Participants can expect three major benefits from this group setting: motivation, a structured program to follow, and group support. If you've been thinking about quitting, now's the time. Co-sponsored by Intramural-Recreational Sports.

- Section 1: Meets Wednesdays, 7:00-9:00 p.m., for five consecutive weeks beginning September 12.
 Section 2: Meets Thursdays, 3:00-5:00 p.m., for five consecutive weeks (except Thanksgiving) beginning October 25.



INTRODUCTION TO YOGA—An introduction to the physical, mental, and spiritual benefits of yoga. This five-week class will use a holistic approach integrating stretching, exercise, breathing, and meditation. Come with a pad or blanket and wear loose fitting clothing.

- Section 1: Meets Wednesdays, 6:30-8:30 p.m. for five consecutive weeks beginning September 12.
 Section 2: Meets Tuesdays, 4:00-5:30 p.m. for five consecutive weeks beginning October 16.

OVERCOMING BACK PAIN—If you are experiencing chronic backache or pain, come to this three-session class. Learn how to beat the pain through proper posture, body usage, exercise, stress management, and attitude. A full medical, strength, and flexibility evaluation will be performed prior to the start of class. Must register and arrange pre-group interview by September 18. Co-sponsored by Intramural-Recreational Sports.

Meets Thursdays, 3:30-5:30 p.m. for three consecutive weeks beginning September 27.

CONTROLLING YOUR HIGH BLOOD PRESSURE—One in five Americans has high blood pressure. Are you one of them? Many cases of hypertension can be healthfully managed without medication. Learn ways to control your own blood pressure through diet, exercise, and stress management in this three-week class.

Meets Mondays, 7:00-9:00 p.m. for three consecutive weeks beginning October 22.

MEDITATION—Learn the basics of meditation and the allied disciplines in this five-week class. Meditation philosophy, energizing exercises, breathing techniques, and guided meditation will all be included in the instruction.

Meets Wednesdays, 6:30-8:30 p.m. for five consecutive weeks beginning October 17.

Workshops

(Meet one time. No pre-registration required unless otherwise noted)

SEPTEMBER

FOOD AND FITNESS—Most of us are increasingly aware of the important roles nutrition and exercise play in achieving optimal health. But how do they relate to each other? What's a good balance? Do I need more protein if I jog or lift weights? Will hard workouts compensate for a diet of "junk food?" Join this lively discussion on these two vital aspects of staying fit. Co-sponsored by Intramural-Recreational Sports.

Wednesday, September 5, 7:00-9:00 p.m., Student Recreation Center.

INTRODUCTION TO TAI CHI CHUAN—Tai Chi is the widely proclaimed Chinese dance-exercise for health, well-being and self-defense. This workshop will include the philosophy and principles of Tai Chi, along with the opportunity to practice the basic movements. Dress comfortably. Co-sponsored by Intramural-Recreational Sports.

Monday, September 10, 6:30-9:30 p.m., Student Recreation Center.



ATHLETIC INJURIES: PREVENTION AND TREATMENT—More and more people are engaging in regular physical workouts, but exercise can be very demanding on the body. Through proper preventive and treatment measures time off due to injury can be reduced. An experienced athletic trainer will present techniques to relieve common ailments. Emphasis will be placed on alleviating running injuries. Co-sponsored by Intramural Sports.

Thursday, September 13, 7:00-9:00 p.m., Student Recreation Center.

A QUICK COURSE IN "NEWTRITION"—Tired of hearing how everything that tastes good is "bad" for you? This workshop will give practical, economical tips on how to eat better and enjoy it too. Do your body a favor and join us for a discussion of fats, sugar, refined versus complex carbohydrates, and some alternatives to meat as a main dish. Healthy snacks will be served.

Tuesday, September 18, 7:00-9:00 p.m., Illinois Room, Student Center.

MEN AND BIRTH CONTROL—Who says males can't be involved in birth control? This entertaining program features the funny, award-winning movie "Condom Sense" followed by a frank and informative discussion of today's options for safe birth control.

Thursday, September 20, 7:00-9:00 p.m., Illinois Room, Student Center.

STRESS MANAGEMENT—Many students are under considerable stress and not aware of it. Others know they need to manage stress but don't know how. This program will help you become more aware of the stress in your life and will introduce you to several techniques to effectively control it.

Tuesday, September 25, 7:00-9:00 p.m., Illinois Room, Student Center.

OCTOBER

THE VEGETARIAN ALTERNATIVE—Vegetarian diets can be safe and healthy if you know what you're doing. This workshop will cover protein combinations,



types of meatless diets and reasons why they make good sense. Discover tofu, chick-peas, and lentils and sample some tasty treats!

Thursday, October 4, 7:00-9:00 p.m., Mississippi Room, Student Center.

HOW SAFE IS SEX?—Sex is risky business these days. From herpes to pregnancy to the pain of breaking up, being involved in a relationship means taking some risks. This workshop will look at those risks and explore ways to minimize them. Join in the discussion of ways to have happier and healthier relationships.

Tuesday, October 16, 7:00-9:00 p.m., Illinois Room, Student Center.

HOLISTIC HEALTH: THE NEW MEDICINE—This film presents some of the pioneers in the holistic health movement and is filled with interviews and demonstrations on numerous methods of holistic prevention and treatment of health problems. Don't miss this provocative and inspiring film presentation.

Thursday, October 18, 7:00-9:00 p.m., Illinois Room, Student Center.



STRESS MANAGEMENT—See description for Stress Management Workshop on September 25.

Thursday, October 25, 7:00-9:00 p.m., Illinois Room, Student Center.

NOVEMBER

OH, MY ACHING BACK!—Do you have back problems? If so, you're in good company because backaches and pains account for more visits to doctors' offices than any other ailment. This workshop will focus on exercises and other techniques to help relieve those aches and

prevent more serious problems in the future. Co-sponsored by Intramural-Recreational Sports.

Thursday, November 1, 7:00-9:00 p.m., Illinois Room, Student Center.

IMPROVED HEALTH AND PERFORMANCE THROUGH GUIDED IMAGERY—Your imagination is a tremendous untapped resource that can help you improve your health and performance on many levels. Find out more about guided imagery and learn how to personally apply it to further develop your own insight and growth.

Thursday, November 8, 7:00-9:00 p.m., Illinois Room, Student Center.

PMS: PRE-MENSTRUAL SYNDROME UPDATE—PMS affects up to 40% of all women, some severely. The hormonal imbalance can cause over 100 different symptoms, all linked to a woman's menstrual cycle. This informative program covers the causes, symptoms and treatment for PMS with emphasis on ways women can more effectively deal with the syndrome by focusing on their overall health and wellness. Co-sponsored by Women's Services.

Tuesday, November 13, 3:00-5:00 p.m., Illinois Room, Student Center.

DEATH IN THE WEST—This strong anti-smoking film stirred such controversy that it was banned in the U.S. for several years. It focuses on the American cowboy smoking—from round-up time to respirator time. It's a moving, motivational experience you won't want to miss.

Wednesday, November 14, 7:00-8:00 p.m., Illinois Room, Student Center.

A GOOD NIGHT'S SLEEP—Daytime drowsiness, nighttime insomnia, and even snoring are sleep patterns that can interfere with everyday life. If you've been losing sleep over your insomnia, come to this workshop and find out some practical methods to help you get to sleep and stay asleep.

Wednesday, November 28, 7:00-9:00 p.m., Illinois Room, Student Center.

TIME OUT—Take "Time Out" from your regular routine—come to happy hour at the Student Recreation Center! Free alternative drinks, snacks, live music, and socializing will be available on three different Thursdays this semester. Co-sponsored by Intramural-Recreational Sports and the Wesley Foundation.

October 25, November 8, and December 6, 4:00-6:00 p.m., Student Recreation Center, First Floor Lounge.

APPENDIX D

**THE WELLNESS REPORT
MICHIGAN STATE UNIVERSITY**

published 4X per year
 UNIVERSITY HOUSING PROGRAMS OFFICE
 DIVISION OF STUDENT AFFAIRS AND SERVICES — MICHIGAN STATE UNIVERSITY

WELLNESS REPORT WELLNESS REPORT

OCTOBER 1983

This report is designed to offer you resources and ideas for your wellness programming. The Assistants to the Area Directors are Co-Editors of this Report, and are ready to work with you to develop programs, locate resources, and bring your discoveries to the length and breadth of UHPOland, through this newsletter.

IN ORDER TO HAVE RESOURCES TO SHARE WITH YOU, WE NEED INFORMATION FROM YOU ABOUT YOUR SUCCESSFUL PROGRAMS, DYNAMIC SPEAKERS, USEFUL MATERIALS, AND HELPFUL FORMATS. IN OTHER WORDS, WITHOUT YOUR INPUT THERE WILL BE NO OUTPUT (THE WELLNESS REPORT.)

The Wellness brochures "Wellcome to Wellness" should by now have been distributed to students, and the assessments returned to RAs. The RAs should have these tallied and now be beginning to make sense out of all the information and beginning to plan appropriate programs for their floors. Supervisors of RAs should be starting to work through the developmental questions and helping the RAs see their floors in each wellness dimension, anticipating problems before they become critical, and planning programs which respond to the expressed as well as unrealized needs of residents. Remember, program reports should be completed for all formal programs.

Please keep a file of these "WELLNESS REPORT"s in a notebook so that you have all the wellness programming resources assembled in one handy place. Each Senior Staff member receives this report. An extra copy is sent to each hall. Keep those resources coming in. MAY THE WELLFORCE BE WITH YOU.



EMOTIONAL

UNDERSTANDING AND MANAGING STRESS

8111 Latta

UHPO-338 Student Services

353-3780

The program has as its goal to make participants aware of the elements of stress and how they can manage those elements. The program is a lecture/discussion format that uses ideas from the group and the presenter. As an outcome of the session, participants should be able to describe the elements of stress, how they affect physical and psychological functioning and how they can be managed.

PREFERRED AUDIENCE: Students and/or staff - 30 or less

TIMES AVAILABLE TO DO PROGRAM: Evenings- willing to accommodate

CONFRONTATION (BASICS AND ADVANCED)

8111 Latta

UHPO-338 Student Services

353-3780

The programs are designed to 1) give information about the process of confrontation and 2) let students and/or staff practice the skill of confronting. The session on Basics focuses on more of a descriptive process of confrontation - the elements, guidelines and some practice. The session on Advanced techniques uses the experience of the participants to talk through and practice some of the more difficult situations they might encounter. A review of the elements and guidelines are included but, practical application is more heavily emphasized.

PREFERRED AUDIENCE: Student and/or staff - 30 or less

TIMES AVAILABLE TO DO PROGRAM - willing to accommodate



DEVELOPING SKILLS FOR COPING WITH OCCASSIONAL DEPRESSION

Nancy Stiller

T West McDowell

353-1600

No program description

PREFERRED AUDIENCE: Any audience - any size

TIMES AVAILABLE TO DO PROGRAM - Open

MENTAL HEALTH SERVICES AVAILABLE AT ST. LAWRENCE HOSPITAL

Rita Carbuhn

St. Lawrence Hospital

377-0350

A discussion of the many services available at St. Lawrence.

PREFERRED AUDIENCE: Variable- prefer small groups for discussion

TIMES AVAILABLE TO DO PROGRAM - Negotiable

LONG DISTANCE RELATIONSHIPS

Janine Thull

A 101 Bailey Hall

355-5753

The presentation will be a discussion of some of the problems and possible strategies to cope with and maintain long distance relationship between students and their parents, families and significant others.

PREFERRED AUDIENCE: Mixed male and female - up to 50

TIMES AVAILABLE TO DO PROGRAM: Evenings

THE ART OF MOTIVATION

Lee Meadows

UHPO-338 Student Services

353-3780

No program description

PREFERRED AUDIENCE: Variable

TIMES AVAILABLE TO DO PROGRAM: After 5 P.M.

EMPATHY/LISTENING SKILLS

Pat Kaczmarek

B 101 Armstrong

355-5515

Some lecture/information on empathy with discussion- role-play and listening skills.

PREFERRED AUDIENCE: RAs and students

TIMES AVAILABLE TO DO PROGRAM - Monday - Thursday evenings

INTELLECTUALSERVICES OF THE OFFICE OF THE OMBUDSMAN

Carolyn Stieber

101 Linton Hall

353-8830

Talk and questions/answers on the services of the office.

PREFERRED AUDIENCE: About 15 students

TIMES AVAILABLE TO DO PROGRAM - As available

PROCRASTINATION

Janine Thull

A 101 Bailey Hall

355-5753

The presentation covers how you can tell if you are a procrastinator, the reasons why, and some practical ways to overcome procrastinating.

PREFERRED AUDIENCE: 5-25

TIMES AVAILABLE TO DO PROGRAM: Evenings

CONSENSUS DECISION MAKING

BITT Latta

UHPO-338 Student Services

353-3780

Experiential presentation designed to introduce a group to the skill of making decisions in a consensus format. Some of the elements of what consensus decision-making is will be covered, but a majority of the time is spent in actual practice of the skill and processing the exercise.

PREFERRED AUDIENCE: Not less than 8 or larger than 30

TIMES AVAILABLE TO DO PROGRAM: Willing to accommodate

THE REFERENCE LIBRARY AT MSU

Anita Evans

MSU Library

353-8816

A slide-tape program on the library.

PREFERRED AUDIENCE: Variable

TIMES AVAILABLE TO DO PROGRAM: Flexible- though preferably not at night

LEADERSHIP

Terry Borg

E 32 Holmes Hall

353-6480

We all have a leadership style. Our goal here is to identify which type it is; realize what this leadership style implies; offer ways to adapt our unconscious leadership style to a conscious approach relative to what the situation demands.

PREFERRED AUDIENCE: 20

TIMES AVAILABLE TO DO PROGRAM: Evenings

THE STUDENT FOUNDATION

AnnMarie Prime and Tim Fox

220 Nisbet Building

353-2925

Slide presentation and explanation of MSU Student Foundation- visuals and information available.

PREFERRED AUDIENCE: As many as interested

TIMES AVAILABLE TO DO PROGRAM: Will try to accommodate

THE ACADEMIC FREEDOM REPORT AND YOU

Jim Livernois

159 Snyder Hall

355-9508

A presentation on the rights and responsibilities of all students as provided by the Academic Freedom Report. Areas covered: damage, alcohol policy, judicial process student Bill of Rights and noise.

PREFERRED AUDIENCE: Judiciaries, hall residents- no size limit

TIMES AVAILABLE TO DO PROGRAM: Tuesday and Thursday evenings

TIME MANAGEMENT

Rick Miltigan

3 E Wilson

353-0298

A one-hour presentation outlining study techniques - when is the most productive time to study. Program offers several suggestions for managing time so an individual can choose the one most suited to his/her needs. A 12 page booklet is supplied to everyone attending.

PREFERRED AUDIENCE: 15-25

TIMES AVAILABLE TO DO PROGRAM: 7-9 P.M. - Monday through Thursday

PARLIAMENTARY PROCEDURES OR HOW TO RUN A MEETING

Kate Murphy

UHP0-338 Student Services

353-3780

No program description

PREFERRED AUDIENCE: 25

TIMES AVAILABLE TO DO PROGRAM: Evenings

"SPEAKEASY" EFFECTIVE PUBLIC SPEAKING

Kate Murphy

UHP0-338 Student Services

353-3780

Hints on speaking effectively and confidently in front of groups.

PREFERRED AUDIENCE : 25

TIMES AVAILABLE TO DO PROGRAM: Evenings

THE ART OF DELEGATION

Kate Murphy

UHP0-338 Student Services

353-3780

Techniques of sharing responsibility.

PREFERRED AUDIENCE: 25

TIMES AVAILABLE TO DO PROGRAM: Evenings

ADVISING STUDENT GROUPS

Pat Kaczmarek B 101 Armstrong 355-5515
 Specifics on how to get started working with groups. The emphasis is on student government. There will be a discussion of situations advisors deal with through the year.
 PREFERRED AUDIENCE: RAs and students
 TIMES AVAILABLE TO DO PROGRAM: Monday through Thursday evenings

SOCIALBEING A MEMBER OF A GROUP

Mary Haas UHPO-338 Student Services 353-3780
 The program is designed to allow individuals to identify what kind of group member they are; identify skills needed for effective group functioning; and bring about discussion of group goals and progress.
 PREFERRED AUDIENCE: Hall student groups (caucus, government and committees)
 TIMES AVAILABLE TO DO PROGRAM: Variable

STUDENT GOVERNMENT- GROUP DYNAMICS

Terry Borg E 32 Holmes Hall 353-6480
 The program examines the role and function of groups in the formal and informal setting - a common sense approach to working and living with people.
 PREFERRED AUDIENCE - 30
 TIMES AVAILABLE TO DO PROGRAM: Evenings

THE STUDENT ACTIVITIES OFFICE

Ron Stump 101 Student Services 355-8286
 The Student Activities Office and its services, Off-Campus Living, Campus leadership development opportunities, campus student organizations, the ASMSU Boards, All-University Student Governance, University resources for planning an event, and how to plan all-University events.
 PREFERRED AUDIENCE - Open
 TIMES AVAILABLE TO DO PROGRAM: Open

TEAM BUILDING/CONSENSUS SKILLS

Keith O'Neal A 101 Butterfield 355-1509
 Structured facilitation/participative
 PREFERRED AUDIENCE: 4 to 40
 TIMES AVAILABLE TO DO PROGRAM: Variable

THE UNION ACTIVITIES BOARD

Colleen Hennessy and Don MacRae 322 Union 355-3354
 Information on programming
 PREFERRED AUDIENCE: 15- to 50
 TIMES AVAILABLE TO DO PROGRAM: Late afternoon or early evening

ASMSU PROGRAMMING BOARD

Paul D. Seyferth 319 Union 353-5255
 An explanation of the ASMSU Programming Board which includes 25 separate groups, programming in every facet of the wellness spectrum- an excellent resource for education and entertainment.
 PREFERRED AUDIENCE: 20+
 TIMES AVAILABLE TO DO PROGRAM: Weeknights

SOCIAL DYNAMICS

Richard Redden 339 Student Services 353-7748
 Attitudinal changes, male/female conflicts and the social environment
 PREFERRED AUDIENCE: 25-35
 TIMES AVAILABLE TO DO PROGRAM: Early evening, mid-afternoon and mornings

HEALTH CARE TOPICS SUCH AS DIET, NUTRITION, EXERCISE, CONTRACEPTION, SEXUALLY TRANSMITTED DISEASES AND SUNTANNING

Janice Pettingill Olin Health Center 355-7593
 Programs available on all the topics noted above.
 PREFERRED AUDIENCE: 10 or more
 TIMES AVAILABLE: Monday through Friday days, and Monday through Thursday evenings

IM SPORTS AND RECREATIVE SERVICES

Frank Beeman 201 IM Sports West 355-5250
 A discussion of all the opportunities available.
 PREFERRED AUDIENCE: Open
 TIMES AVAILABLE TO DO PROGRAM: Open

HEALTH TOPICS - MANY DIFFERENT AREAS

Christa Ludeking MSU Clinical Center 353-4900
 25 staff members of the MSU Clinical Center belong to a Speakers Bureau. Members can speak on a wide variety of health-related topics.
 PREFERRED AUDIENCE: 10-50
 TIMES AVAILABLE TO DO PROGRAM: Variable

INTRAMURAL SPORTS

Sally Bellotti 103 Circle IM 355-4711
 The program will cover offerings of all recreational activities offered by IM Sports. Students will have a profile of what is available for them individually.
 PREFERRED AUDIENCE: 25-35
 TIMES AVAILABLE TO DO PROGRAM: 3-6 P.M.

PATIENT SERVICES AT ST. LAWRENCE HOSPITAL - IN THE AREAS OF MENTAL HEALTH AND ALCOHOL

Rita Carbuin St. Lawrence Hospital 377-0350
 A description of the services available.
 PREFERRED AUDIENCE: Variable- prefer small groups for discussion
 TIMES AVAILABLE TO DO PROGRAM: Negotiable

PHYSICAL

WHEN PARTYING IS NOT FUN ANYMORE

Reed Schroer University Lutheran Church 332-2559
 As a past user of multiple drugs, and a well known drug education specialist, Mr. Schroer will talk with students about "poly drug" usage and the effects on relationships and on performance. Informal - conversation oriented.
 PREFERRED AUDIENCE: Students
 TIMES AVAILABLE TO DO PROGRAM: Flexible

THE YOUTH SERVICES DIVISION OF THE DRUG EDUCATION CENTER, INC.

Bob Sheehan the D.E.C. 351-4000
 The Youth Services Division of DEC, INC., provides short and long term individual counseling for persons concerned with their substance use. Mr. Sheehan will talk about the program, and about substance abuse.
 PREFERRED AUDIENCE: 10-40
 TIMES AVAILABLE TO DO PROGRAM: Early weekday evenings

ALCOHOL AND YOU (FOCUS ON SINGLE MALES)

Jim Wall UHPO-338 Student Services 353-3780
 How alcohol affects the person- social issues- relationship issues - etc.
 PREFERRED AUDIENCE: Open
 TIMES AVAILABLE TO DO PROGRAM: Dinner and after

RESPONSIBLE VERSUS IRRESPONSIBLE DRINKING BEHAVIOR

Pam Tigges S 2 Wonders Hall

353-2898

Lecturette will include facts about alcohol and how it effects the person, and what happens in the body. Small group discussion and activities will focus on responsible and irresponsible drinking behavior and the reasons why people choose to drink or not to drink.

PREFERRED AUDIENCE: 12-15

TIMES AVAILABLE TO DO PROGRAM: Open

FIRST AID, SELF DEFENSE OR DRUGS

Jim Dunlap

D.P.S.

355-2221

Three separate programs on the topic areas

353-9103

PREFERRED AUDIENCE: 20-100

TIMES AVAILABLE TO DO PROGRAM: Variable

SPECIAL CARE BECAUSE YOU'RE A WOMAN

Barbara Rosnik

American Cancer Society

351-0430

Discussion of breast cancer, breast self examination, also the warning signals and risk factors involved in breast and uterine cancer.

PREFERRED AUDIENCE: Women in groups from 10-35

TIMES AVAILABLE TO DO PROGRAM: Need 2 weeks notice

COLORECTAL CANCER- THE CANCER NO ONE TALKS ABOUT

Barbara Rosnik

American Cancer Society

351-0430

The program focuses on warning signals, risk factors and early detection methods for colorectal cancer.

PREFERRED AUDIENCE: Open

TIMES AVAILABLE TO DO PROGRAM: Need 2 weeks notice

LUNG CANCER- ONE CANCER YOU CAN GIVE YOURSELF

Barbara Rosnik

American Cancer Society

351-0430

About 75% of all lung cancer is directly related to cigarette smoking. The program will focus on warning signals, risk factors and early detection methods.

PREFERRED AUDIENCE: Open

TIMES AVAILABLE TO DO PROGRAM: Need 2 weeks notice

ETHICS AND VALUES

Terry Borg

E 32 Holmes Hall

353-6480

The session is aimed to demonstrate how essential it is for new residents to develop their own set of ethics and values. It will deal with the necessity of developing voluntary personal values.

PREFERRED AUDIENCE: New residents

TIMES AVAILABLE TO DO PROGRAM: Evenings

SPIRITUALCULT AWARENESS

Jon Lacey

United Ministries in Higher Education

332-0861

A discussion of the issue.

PREFERRED AUDIENCE: Open

TIMES AVAILABLE TO DO PROGRAM: Weekday evenings

WHAT IS LIFE?

Lee Meadows

UHPG-338 Student Services

353-3780

The program is indescribable.

PREFERRED AUDIENCE: Variable

TIMES AVAILABLE TO DO PROGRAM: After 5 P.M.

WOMANCARE OF LANSING - Gynecological Care, Abortion and General Medicine
 Kathy Kleinfeld or Libby Bogdan-Louis Womancare 337-7350
 A discussion of any of the services of Womancare.
 PREFERRED AUDIENCE: Open
 TIMES AVAILABLE TO DO PROGRAM: Open- must call 3-4 weeks in advance

THE D.E.C. - SERVICES OFFERED, CONTRACEPTION, SEXUALLY TRANSMITTED DISEASES
 Ellen Ives The D.E.C. Medical Clinic 351-4000
 Question-answer format with information and discussion on any of the topics mentioned.
 PREFERRED AUDIENCE: Students or RAs- 10-40
 TIMES AVAILABLE TO DO PROGRAM: Weekday evenings

INTIMACY AND SEXUALITY

Jon Lacey

United Ministries in Higher Education
 332-0861

A discussion format on intimate relationships.
 PREFERRED AUDIENCE: Any size
 TIMES AVAILABLE TO DO PROGRAM: Weekday evenings



LIFE PLANNING

PLACEMENT SERVICES

Karen D. Nelson
 Career and life-planning workshops.
 PREFERRED AUDIENCE: Variable
 TIMES AVAILABLE TO DO PROGRAM: Days and some evenings

Placement Services 355-9510

PEACE CORPS

Nancy Horn or Elizabeth Brabbs

100 Center for International Programs
 353-1700

The program will include a film "The Toughest Job You'll Ever Love", a discussion of job categories and courses to take for preparation for going into the peace corps, and information on qualifications.
 PREFERRED AUDIENCE: Seniors- or others making long-term plans
 TIMES AVAILABLE TO DO PROGRAM: Anytime

MYERS-BRIGGS INTERPRETATION AND MANAGERIAL SKILLS

Kathy Stepanovich UHPO-338 Student Services 353-3780
 A test and interpretation of leadership types.
 PREFERRED AUDIENCE: 10-40
 TIMES AVAILABLE TO DO PROGRAM: Open

INTERVIEWING

BTIT Latta

UHPO-338 Student Services 353-3780

The program is intended to review the elements of interviewing and allow the group to practice the skill. If it is important to have the group practice, the session is close to 2 hours. Such elements as how to prepare, setting up the physical environment, different types of questions, etc., are covered.
 PREFERRED AUDIENCE: RAs and Senior Staff
 TIMES AVAILABLE TO DO PROGRAM: Willing to accommodate

RESUME WRITING AND INTERVIEWING SKILLS

Mary Beth Burton

126 E. Yakeley 355-8622

A discussion of the above topic.
 PREFERRED AUDIENCE: Up to 25
 TIMES AVAILABLE TO DO PROGRAM: Negotiable

SETTING GOALS & PERSONAL PRIORITIES

Bitt Latta

UHPO-338 Student Services

353-3780

Experiential/discussion/lecture. "If you don't know where you are going...you will probably end up somewhere else!" This session is directed toward understanding and using goal setting with time management techniques. The intent of the program is to 1) define goals, objectives and priorities; 2) discuss and review the importance of planning; 3) review the principles of time management in relation to setting goals; 4) identify barriers to effective goal setting.

PREFERRED AUDIENCE: 30 or less

TIMES AVAILABLE TO DO PROGRAM: Evenings

DUAL CAREER RELATIONSHIPS

Jim Wall

UHPO-338 Student Services

353-3780

Problems and pleasures

PREFERRED AUDIENCE: Open

TIMES AVAILABLE TO DO PROGRAM: Evenings 7-11pm

MARKETING YOUR LEADERSHIP SKILLS

Jim Wall

UHPO-338 Student Services

353-3780

Discussion on leadership

PREFERRED AUDIENCE: Open

TIMES AVAILABLE TO DO PROGRAM: Evenings - Dinner & after

CAREERS IN HIGHER EDUCATION

Jim Wall

UHPO-338 Student Services

353-3780

Strategizing

PREFERRED AUDIENCE: Open

TIMES AVAILABLE TO DO PROGRAM: Evenings - Dinner & after

WOMEN'S STUDIES PROGRAM

Joyce Ladenson and Catherine Goodwin

301 Linton Hall

355-4495

Information on the Women's Studies Thematic and its requirements

PREFERRED AUDIENCE: 20-25 (the more the better...)

TIMES AVAILABLE TO DO PROGRAM: Evenings

OVERSEAS STUDY OPPORTUNITIES

Charles A. Gliozzo and Nona A. Winn

108 International Center

353-8920

Discussion of opportunities and services available for students interested in exploring travel and study abroad.

PREFERRED AUDIENCE: 25-50

TIMES AVAILABLE TO DO PROGRAM: Mornings or afternoons

SERVICE-LEARNING CENTER

Jesse Gonzales

26 Student Services

353-4400

Discussion, slides and exercises covering 1) What is Service-Learning?; 2) Who volunteers and why; 3) Available programs and procedures for location or national internships;

4) Identifying your interests and skills. Presentations for specific interest areas:

1) Exploring career options; 2) Pre-Medical fields and Placements, Law and Government,

Human Services, Corrections, Communications, Special Education.

PREFERRED AUDIENCE: 20+

TIMES AVAILABLE TO DO PROGRAM: Monday through Thursday evenings

GETTING A SUMMER JOB

Cindy Helman

126 S. Hubbard

353-8466

Discussion of campus resources--Placement and Student Employment; review resume writing and interviewing; students may bring resumes and cover letters to be critiqued.

PREFERRED AUDIENCE: Variable

TIMES AVAILABLE TO DO PROGRAM: 30 min-1 hr. - Negotiable

BRIEF OVERVIEW OF FINANCIAL AIDS

Wanda J. Edwards

259 Student Services

353-5940

General survey of services available

PREFERRED AUDIENCE: Open

TIMES AVAILABLE TO DO PROGRAM: Negotiable

**HUMAN AWARENESS**OFFICE OF INTERNATIONAL STUDENTS & SCHOLARS

David Horner

109 Center for International Programs

353-1720

Explanation of services of office

PREFERRED AUDIENCE: Resident Assistants

TIMES AVAILABLE TO DO PROGRAM: 20-60 min. - Negotiable

MECCA COUNSELING CENTER

Carmen Gear

223 Brody Hall

353-5305

Workshop/presentation of materials

PREFERRED AUDIENCE: 10+

TIMES AVAILABLE TO DO PROGRAM: 8 am to 5 pm

CULTURAL AWARENESS & UNDERSTANDING DYNAMICS OF RACISM

Gene Henderson

109 Snyder-Phillips

355-9499

A basic understanding of the problems involved

PREFERRED AUDIENCE: Open

TIMES AVAILABLE TO DO PROGRAM: Negotiable

WHARTON CENTER FOR PERFORMING ARTS

Randy Daniels

Wharton Center

353-1982

Slide presentation and general information session

PREFERRED AUDIENCE: Variable to medium-size

TIMES AVAILABLE TO DO PROGRAM: 30 min. approximately - contact week in advance

CULTURAL AWARENESS

Hakan Ertep

134 E. Landon Hall

355-8714

General discussion and information session

PREFERRED AUDIENCE: 30 maximum

TIMES AVAILABLE TO DO PROGRAM: Evenings

A SLIDE PRESENTATION OF TURKEY

Hakan Ertep

134 E. Landon Hall

355-8714

Turkey: a visit through the land

PREFERRED AUDIENCE: 40 maximum

TIMES AVAILABLE TO DO PROGRAM: Evenings

MINORITY/MAJORITY RELATIONS

Sandy Anderson

E28 Holmes Hall

353-6480

A discussion of the above topic

PREFERRED AUDIENCE: RA/Sr Staff

TIMES AVAILABLE TO DO PROGRAM: Variable

MALE/FEMALE ROLES

Mary N. Haas

338 Student Services

353-3780

Exercise and discussion session. Program is aimed at providing discussion opportunity on 1) Male/female roles; 2) Identification of subtle discrimination in attitude and behaviors; 3) Shifting focus from people as physical objects to individuals.

PREFERRED AUDIENCE: Brother/Sister Floors

TIMES AVAILABLE TO DO PROGRAM: Open

HANDICAPPER STUDENTS

Judy K. Gentile

477 Communication Arts Bldg. 353-9642

Movie and panel discussion

PREFERRED AUDIENCE: 25+

TIMES AVAILABLE TO DO PROGRAM: Mornings

ATTITUDES TOWARD AGING AND THE AGED

Laurel McCluskie

155 S. Campbell

355-3689

Discussion and slide presentation

PREFERRED AUDIENCE: Open

TIMES AVAILABLE TO DO PROGRAM: 1 hour - arranged

HUMAN RELATIONS - ANTI-DISCRIMINATION

Stilas W. Taylor, Jr.

380 Administration Bldg.

353-3922

Visual presentation. Description of other services.

PREFERRED AUDIENCE: Open

TIMES AVAILABLE TO DO PROGRAM: Negotiable

CULTURAL DYNAMICS

Richard Redden

339 Student Services

353-7748

Ethnicity/roots; regional differences

PREFERRED AUDIENCE: 25-35

TIMES AVAILABLE TO DO PROGRAM: Early evening, mid-afternoon and mornings

WELLNESS - GENERALPROGRAMMING WITH WELLNESS MODEL

Pat Kaczmarek

8101 Armstrong

355-5515

Overview of Wellness Dimensions. Some how-to's of assessment and programming strategies. Discussion in groups about Wellness concept.

PREFERRED AUDIENCE: RAs and students

TIMES AVAILABLE TO DO PROGRAM: Monday - Thursday evenings

APPENDIX E

**DEVELOPMENTAL QUESTIONNAIRE
MICHIGAN STATE UNIVERSITY**

SUPERVISOR'S DEVELOPMENTAL QUESTIONS

(These are to be used in conjunction with a supervisor follow-up in a 1:1 with an RA approximately 4 weeks after the Wellness assessment has been done and tallied.)

EMOTIONAL:

1. Which residents don't seem to get along well? (Observations from the cafeteria, the floor, what you've heard, etc.)
2. Which rooms/suites don't seem to be 'clicking' yet?
3. Who went home the first weekend because they were homesick/or didn't feel like a part of the floor? Are they still going home every weekend?
4. Are there some residents who always eat alone? Why?
5. Are there some who you've seen crying, etc.?
6. Are there some who have attached themselves to you?
7. Do you have some residents who seem overwhelmed here?
8. What kind of programs have worked the best?
9. What else could you try?

INTELLECTUAL:

1. Did you have any residents who went and bought their books and started studying prior to classes starting? Why?
2. Do you have students who haven't started to study? Are you concerned about them?
3. What kinds of things have you heard your residents say about their classes, etc.?
4. Have all your residents talked with an adviser?
5. When your residents get together what do they talk about? (Social issues, etc.)
6. Have there been conflicts on the floor? If yes, how has the floor resolved these or have you done this alone?
7. What are the study habits of your floor?
8. What kind of programs have worked the best?
9. What else could you try?

SOCIAL:

1. Who seem(s) to be the leaders on the floor? Positive and negative?
2. Does your floor do things as a floor?
3. What kind of cliques have developed? Positive and negative?
4. What can be done to get people from the opposite ends of the floor to interact?
5. What has your floor done with noise issues? Have you had noise problems? Who confronts when there is a problem? Is it noisy on the floor?
6. What social activities have been successful on your floor?
7. Are there any loners on your floor?
8. What kind of programs have worked the best?
9. What else could you try?

PHYSICAL:

1. Which residents look different physically from the time you met them? How?
2. Do your residents have fun without alcohol?
3. How many of your resident have gotten drunk since school started? Is it often the same ones?
4. How many of your residents get "high"? On What? How often?
5. How often do your residents engage in physical exercise?
6. Do most of your residents participate in floor sports? (Do you have floor sports?)
7. When you eat with the floor, do most seem to be eating a balanced diet?
8. What kind of damage have you had on the floor? How has this been caused? What do your residents think of it. Who has been responsible for the damage?
9. What kind of programs have worked the best?
10. What else could you try?

-2-

SPIRITUAL: (Which religions are represented on your floor?)

1. Which residents ask about and attend religious services on the weekends?
2. Have you ever heard spiritual issues discussed on the floor?
3. Do the values on your floor seem to be equally held by all?
4. Has anybody on your floor had a death in their family or of a close friend?
How did they handle this? How did the floor respond?
5. Have there been conflicts on your floor where people have disagreed on what's right and wrong?
6. What kind of programs have worked the best?
7. What else could you try?

SEXUAL:

1. What do you hear? What kind of experimentation is going on?
2. Do you hear anything about a women's fear of sexual assault on your floor (female floors)? Do you hear anything about the guys boasting of their conquests, or what they'd like to do? (male floors)
3. What kinds of sexual lifestyles, etc. are represented?
4. Has anyone asked you about birth control or sexual diseases? Where have you referred them?
5. How has the bro/sis floor relationship developed?
6. Are there some residents who seem shy/afraid/uncomfortable around members of the opposite sex?
7. Are any residents discriminated against because of their sexual lifestyle or lack of sexual activity?
8. What kind of programs have worked the best?
9. What else could you try?

LIFE PLANNING:

1. Do people know why they're here? How do you know this?
2. Do you have some students whose academic areas don't seem in synch with their interests, capabilities, etc.?
3. What kinds of goals do your residents seem to have? Do these seem realistic?
4. Are any of your residents engaged to be married? Involved in a relationship at home where they're discussing marriage?
5. Are any of your residents part-time employees? Is this going o.k. for them?
6. What do you hear about your residents' finances?
7. Are your residents taking advantage of the rich cultural opportunities (dance, art, music, etc.) on campus?
8. What kind of programs have worked the best?
9. What else could you try?

HUMAN AWARENESS:

1. Have you heard sexist/racist jokes?
2. Does your floor seem to be polarized along racial lines?
3. Is anyone confronting racist/sexist jokes?
4. How are your mixed racial pairings of roommates/suitemates doing? What are the issues here?
5. How does your floor breakdown racially/ethnically?
6. Are there students who are alienated/isolated because of their sexual orientation, religion, physical appearance, etc.?
7. Which students can you use to widen your residents' knowledge of human diversity cultural background, etc.?
8. Do you have any bigots on the floor? How do you know?
9. What kind of programs have worked the best?
10. What else could you try?



Follow-Up Questions On General Floor Programming:

1. Overall, what does this information say to you? (include in this your personal observations, assessments, etc.)
2. What does the demographic information about your floor tell of your students' needs?
3. What have you learned about your floor since the assessment was done?
4. Because of all these things, are there some areas we need to address immediately?
5. Because of all these things, are there some areas we need to program in?



APPENDIX F

**WELLNESS PROGRAM INFORMATION AND RELATED MATERIALS
UNIVERSITY OF WISCONSIN-STEVENS POINT**

WELLNESS DIMENSIONS: PROGRAMS AND SERVICES

University of Wisconsin-Stevens Point

I. EMOTIONAL DIMENSION

- A. Counseling
 - 1. Individual counseling
 - 2. Relationship couples and premarriage consultation
 - 3. Assertiveness, personal growth groups
 - 4. Counseling groups for alcoholics
 - 5. Extensive alcohol education thrust
 - 6. Crisis intervention component
 - 7. Employee Assistance Program
 - 8. Psychological assessment and evaluation
 - 9. Dial Help (self help informational audio tape program)
 - 10. Mental health presentations
 - 11. Newspaper articles on mental health
- B. Health
 - 1. Extensive video tape library on emotional well being
 - 2. Presentations on emotional health
 - 3. Newspaper articles on taking care of oneself emotionally
 - 4. Biofeedback program
 - 5. Intervention and referral
- C. Residence Life
 - 1. Student Development Task Inventory interpretation
 - 2. Lifestyle Assessment Questionnaire interpretation
 - 3. Hall and wing programs with tapes, films and speakers
 - 4. Human development programs by Resident Assistants
 - 5. Individual consultation with students
 - 6. Topical months or weeks
 - 7. Hall Council relationship building
 - 8. Private environments in residence halls
 - 9. Numerous opportunities for involvement and success
 - 10. Myers-Briggs Personality Type interpretation
 - 11. Various sexuality programs
- D. Student Life Activities and Programs
 - 1. Volunteer service learning
 - 2. Leadership training
 - 3. Advising to student organization - leadership for relationship building

4. Leadership training for developing autonomy
 5. Nature walks in campus arboretum
 6. Extensive recognition programs throughout each year
 7. Variety of programs for fun and relaxation
- E. University Centers
1. Student Manager training program for effective relationships
 2. Private environments for study and relaxation
 3. Programs for entertainment and relaxation
 4. Extensive recreation programs, space, equipment
- F. Student Conduct
1. Individual consultation
 2. Referral to counseling or alcohol groups

II. INTELLECTUAL DIMENSION

- A. Counseling
1. Reading and study skills
 2. Testing (intelligence, aptitude, achievement)
 3. Academic advising
 4. Course development in psychology and wellness for ongoing academic programs
 5. Frequent guest lectures in variety of classes and regular teaching
- B. Health
1. Course development
 2. Information dispersal (pamphlets, etc.)
 3. Medical self care
 4. Lifestyle Assistants - information dissemination
 5. Radio, TV programs and "Well Said"
- C. Residence Life
1. Staff training (ongoing)
 2. Reading and study skills consultation
 3. Human development programs
 4. International program
 5. Staff training workshops
 6. Student growth workshops
 7. Variety of information programs: last lecture series, study skills world affairs, time management, etc.
 8. Tutoring programs
 9. LAQ, SDTI interpretations

- D. Student Life Activities & Programs
 - 1. Coordinate Arts & Lectures and cultural programs
 - 2. Teaching of skills at workshops
 - 3. Mini courses through University Center
 - 4. Ten student organizations dedicated to creative/intellectual pursuits
 - 5. Involvement in teaching two courses (Leadership Development and Applied Budget Preparation)
 - 6. Approximately ten student organizations involved in recognition of intellectual achievement or whose purpose is intellectual
 - 7. All leadership growth training is concept, skill, and behaviorally based
- E. University Centers
 - 1. Materials Center for reading and listening
 - 2. University Store for books and materials
 - 3. Arts and Crafts Center

III. PHYSICAL DIMENSION

- A. Counseling
 - 1. Body tune-up group (weight loss)
 - 2. Non-smoking group
 - 3. Progressive deep muscle relaxation
 - 4. Biofeedback training
 - 5. Meditation training
 - 6. Autogenic training and creative fantasy
- B. Health
 - 1. SHAC programs (Student Health Advisory Committee)
 - a. Stress management
 - b. Physical fitness
 - c. Nutrition
 - d. Contraception
 - e. Blood pressure monitoring and control
 - f. Dental wellness
 - g. "Well Said" biweekly publication
 - h. "Health Watch" radio-TV program
 - i. Videotape programs in Health Center waiting room
 - 2. Sponsor regular functions
 - 3. Lifestyle Assessment Questionnaire - administration and interpretation
 - 4. Class on medical self care
 - 5. Unplanned pregnancy - presentation monthly, campaign annually
 - 6. FIT Stop - Fun Information and Testing mobile - physical assessment program
 - 7. Nutrition task force

8. Lifestyle Assistants program

C. Residence Life

1. A number of wellness clubs, fitness programs and running groups
2. Weight lifting and exercise rooms including saunas
3. Intramurals coordination and promotion
4. Modeling by staff
5. Aerobics dance programs
6. Educational videotapes used extensively
7. Skating, horseback riding, repelling, cross country events
8. Gun control with Security

D. Student Life Activities and Programs

1. Diet education
2. Nutrition alternatives in dining centers
3. Outdoor recreation - a program for physical fitness
4. Approximately twenty student organizations dealing with physical dimensions (club sports, dietetics club, outdoor recreation)
5. Intramural programs liaison
6. Athletic programs liaison

E. University Centers

1. Recreation equipment for outdoor activities (sailboats, canoes, kayaks, johnboats, skis, camping equipment, resources on outdoor recreation areas, bicycles, golf equipment)
2. Indoor recreation
3. Arts and crafts center
4. Games Room
5. Billiards, table games, table tennis, instructive sessions for all above

F. Business Operations

1. Safety programs including fire prevention, fire drills
2. Maintain extensive library of audiovisual aids materials

G. Special Activities

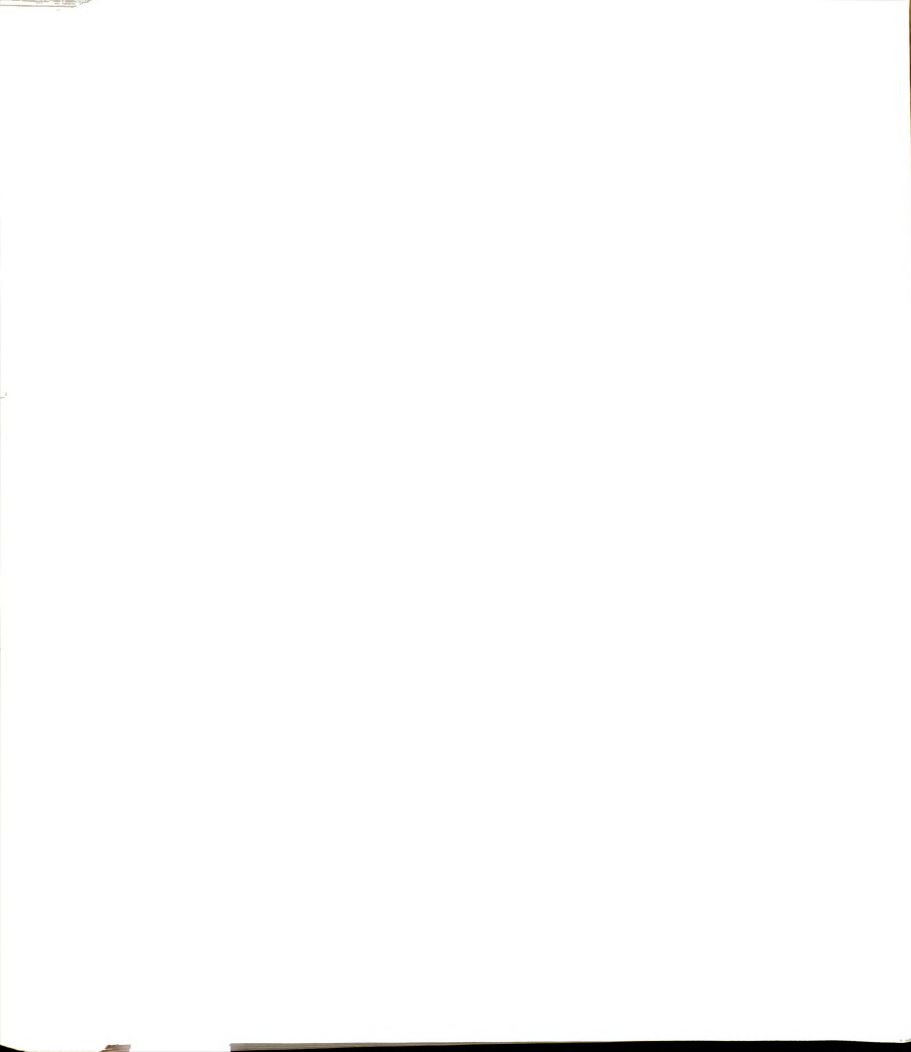
1. Dance marathon
2. Speakers - Don Ardell, George Sheehan, Bill Hettler, Sol Gordon, summer wellness videotapes of major speakers

IV. SOCIAL DIMENSION

A. Counseling

1. Marriage and family counseling
2. Sexuality groups

3. Group counseling sessions (assertiveness, loneliness and shyness, couples communication, etc.)
- B. Health
1. Student Health Advisory Committee sponsored gym all-nights, folk and square dancing, roller skating
 2. Environmental Health & Safety Committee
- C. Residence Life
1. Emphasis on community
 2. Hall government
 3. Social activities
 4. Interior design thrust for environment
 5. Custodial and maintenance programs
 6. Human development programs
 7. International program liaison
 8. Individual consultation on roommates' relationships and wing relationships
 9. Programs on assertiveness, parent relations, sex roles
 10. Parent-brother-sister weekends and variety of dances, parties
- D. Student Life Activities and Programs
1. Preserving outdoor recreational areas
 2. Student Government Association community building
 3. Coordination and officer training of 130 student organizations
 4. Dining room environments
 5. 12-15 "social" groups
 6. Activities & Programs' coordination of the different university communities
 7. Work with about fifteen environmental student groups
- E. University Centers
1. Facilities for social events and support services
 2. Snack bars
 3. People pockets
 4. Movies and coffeehouses, speakers, music, etc.



- F. Student Conduct and Related Education
 - 1. Individual consultation

V. OCCUPATIONAL-VOCATIONAL DIMENSION

- A. Counseling
 - 1. Career information resources
 - 2. Interest and ability assessment
 - 3. Individual counseling
 - 4. Computerized career decision making
 - 5. Career orientation and career development groups
 - 6. Career planning groups
 - 7. Task force for decision making a vocation program thrust among various units
- B. Health
 - 1. Lifestyle Assistant program emphasizes skill development
- C. Residence Life
 - 1. Career files
 - 2. Hall Council, government, and program leadership
 - 3. Resident Assistant program (170 students) emphasizes skill development
 - 4. Career and vocational individual consultation
 - 5. Student Help training (140 students)
 - 6. Volunteer Orientation Assistants
 - 7. Presentations and discussion groups on resumes, graduate schools, skill articulation
- D. Student Life Activities & Programs
 - 1. Volunteer service learning program
 - 2. Approximately thirty student organizations that are career oriented
 - 3. Leadership skills workshops
 - 4. Student staff training program (centers, halls, food service)
 - 5. Service learning philosophy and skill development pervade program
- E. University Centers
 - 1. Student employment in responsible positions
 - 2. Food Service Managers (100)
 - 3. Individual consultation
 - 4. Maintain placement opportunities
 - 5. Transcript of experiences of all student employees
 - 6. Arts & Crafts Center
 - 7. Student staff in all center areas (250)
- F. Career Planning & Placement

VI. SPIRITUAL DIMENSION

- A. Counseling
 - 1. Value clarification experiences
 - 2. Individual consultation
 - 3. Liaison with campus ministries
- B. Residence Life
 - 1. Student workshops on values and values clarification
 - 2. Human development attitudes and values
 - 3. Resident Assistant training on values and ethics
 - 4. Education associated with student misconduct
 - 5. Contracts for change of behavior and attitudes
 - 6. Student initiated Bible study groups
- C. Student Life Activities & Programs
 - 1. Fifteen student organizations dealing with spiritual values or religious beliefs
 - 2. Volunteer/service learning experiences
 - 3. Ethical, moral, and values development integrated in many training and leadership programs
- D. General
 - 1. Extensive videotape library (Leo Bascaglia, Jim Kern, etc.)
- E. Student Conduct
 - 1. Individual consultation
 - 2. Referral to counseling, ministries



Memo To: Sue Sturzl, Pres. Food Service Committee
From: Carol Weston
Re: Food Service Contract
Date: Sept. 29, 1982

For the past year, the Nutrition Task Force has been working to improve the nutritional habits of students and staff. The Task Force has been following the guidelines established by the U.S. Senate Select Committee in 1977:

- 1) reduce consumption of fat, especially saturated fat
- 2) reduce consumption of refined carbohydrates, especially sugar
- 3) reduce consumption of salt
- 4) increase consumption of complex carbohydrates

The Task Force has been successful in making changes in the food plan in accordance with the Dietary Goals. The students are supportive of the Task Force. This support is reflected in their changed dietary habits. Approximately 70% of the students prefer whole wheat bread over white bread. Sixty percent of the students are eating fresh fruits for dessert, and almost 70% are consciously choosing fewer fatty foods.

The Task Force would like to ensure the continuation of its efforts. I have been assigned by the Task Force to make recommendations that would incorporate the U.S. Dietary Goals and the educational programs of the Task Force into the food service contract. I have consulted with Drs. John Betinis and Bill Hettler, and these are our recommendations:

include two whole grain bread choices at each meal
include two fruits as dessert choices at lunch and dinner
whole wheat noodles available as an option for each noodle dish
brown rice used instead of white
bean dishes at least once a week
a high fiber - low fat entree at each meal
dough of any kind (i.e. crusts, pancakes, french toast) should be available in whole wheat each time served
use low fat cheese for every cheese dish, such as farmer's cheese, low fat mozzarella saltless crackers only
monthly "Wellness" nights where all choices will be low fat - high fiber - also a chance to try new dishes
buy low sodium products, especially soup broth
food service supply worker for entree card production
managers of eating centers, baker, head cook, head of food service at university be standing members of the Nutrition Task Force and required to attend meetings on a monthly basis
have health service staff or dietitian review semester menu before finalized
provide three in-service nutrition education programs to cooks and line workers each semester. Have classes to help cooks learn how to prepare new dishes or change old habits of cooking if needed
provide signage to support education and contests in consultation with health service
Provide attractive sign and display areas
Provide fruit juices instead of fruit drinks at each meal

add bran to casseroles and breads
have whole wheat pastries, muffins, and doughnuts available in the mornings

If you have any questions about these recommendations, call me.

Our food service would be an innovative, and model program if these changes were made in the board plan.

cc Bud Steiner
Bill Hettler
John Betinis
Fred Leafgren
John Jury
members of the Nutrition Task Force

STUDENT HEALTH ADVISORY RETREAT MEETING
January, 1980

Summary of Planning Activities from the SHAC Retreat held January 25, 26, and 27 at Boyd's Mason Lake Resort

A modified Delphi group process procedure was used to gather ideas, rank the ideas, and estimate the requirements to implement the ideas. Twelve students and eighteen faculty were involved in the process. The first part of this report will be a list in rank order of the suggestions that were made from the group and the average number of points each idea was given when rated by the entire group. A rating of 5 was the top score possible and a rating of 0 was the lowest score possible. The number after each idea is simply the average score that idea was given by the entire group.

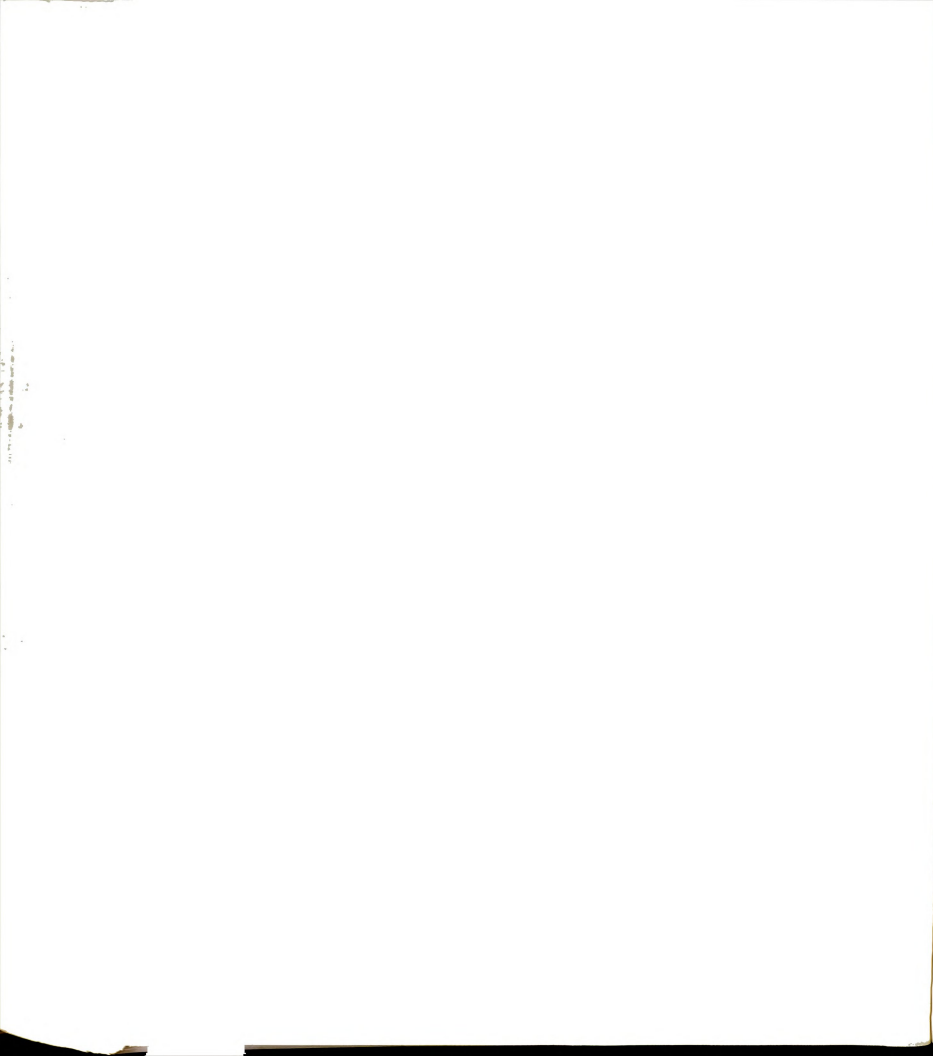
1. Increase the positive alternatives in the vending machines on campus. 4.6
2. List the caloric content of foods, showing the advantages to alternatives in all food service operations. 4.4
3. Identify additional spaces and promote those spaces that now exist for quiet time so individuals would have an opportunity for reflection, meditation, and relaxation. 4.4
4. A lifestyle development lab where individuals could assess themselves and begin to make improvements. 4.4
5. To improve the food service operation. 4.3
6. Advertising to increase the awareness of and utilization of wellness offerings that exist on the campus today. 4.3
7. Increase the non-smoking areas in academic buildings, residence halls, food service, and lounges. 4.3
8. To develop a centralized wellness resource center where informational materials on all six dimensions of wellness would be available on a walk-in basis to students. 4.2
9. Accredited wellness major. 4.2
10. Increase the utilization of campus tv, Pointer, and journal articles for the promotion of wellness. 4.2
11. Expand health related courses within the health and physical education department. 4.1
12. A personal or group wellness recess. This would be an officially designated time once or more each semester where people throughout the University in all positions from academic, student, clerical support, maintenance, and so on would be given an official designated time to investigate one of the dimensions of wellness for themselves. 4.0
13. Weekly radio spots to promote health seeking behaviors. 4.0
14. Faculty support to increase responsible use of alcohol. 4.0

15.	Incentives to increase the activity levels of the students and faculty on campus.	4.0
16.	More wellness workshops for students and faculty.	4.0
17.	Provide more opportunities for art to be displayed throughout the campus.	4.0
18.	More fitness facilities are needed.	4.0
19.	Whole bran on the tables.	4.0
20.	Provide vegetarian entrees that are hot in the grid such as vegie pastries.	4.0
21.	Alter the 4 credit physical education requirement with more emphasis on health related courses.	3.9
22.	Faculty improvement programs to increase the faculty's participation in personal wellness activities.	3.8
23.	To improve resident assistant training in dormitories with particular emphasis on encouraging responsible use of alcohol.	3.6
24.	Encourage the development of alternatives to the square.	3.6
25.	Develop a wellness oriented nightclub.	3.6
26.	Paid student leaders for wellness promotion.	3.5
27.	Encourage broader bus service and car pooling for students.	3.5
28.	Dorm representatives for SHAC to insure broad based input.	3.5
29.	Assertive training in dorms to improve the environment concerning loud, abusive activities and alcohol related confusion.	3.4
30.	Give support and encouragement for competitive mental sports.	3.4
31.	Construct more whirlpools, hot tubs, saunas, and a new swimming pool.	3.3
32.	Encourage the sanction for faculty time to pursue personal wellness.	3.2
33.	Increase health hazard awareness advertisements and programs.	3.2
34.	Develop a women's health issues course.	3.2
35.	An automated dial-a-videotape system so students could obtain information in the privacy of their room or designated room in a hall.	3.2
36.	Broaden the support by ongoing programs for all levels of staff within the University - this includes faculty, academic staff and classified.	3.1



APPENDIX G

CORRESPONDENCE TO THE COMPARATIVE INSTITUTION
REGARDING RESEARCH PROPOSAL



L. Joan Hull

October 19, 1984

I am writing at the recommendations of Fred Leafgren, Assistant Chancellor of Student Life, University of Wisconsin - Stevens Point, and Max R. Raines, Professor and Chair of my doctoral committee, Department of Administration and Curriculum, Michigan State University.

At present I am embarking on the finalization of my dissertation writing with the spirited determination of defending by the first of the year. The purpose of this study is to investigate the potentiality of the Wellness Movement within institutions of higher education and the Movement's propensity for changing health practices of college students towards a more positive and healthful approach.

This study will compare and analyze the attitudes, knowledge and orientations of students from two separate institutions of higher education which are similar in many variables but differ in their approach to Wellness programming. One institution provides Wellness programming, the other no discerning effort in Wellness programming.

The University of Wisconsin - Stevens Point, has been identified as the experimental school by virtue of their thoroughly defined and articulated Wellness program. (Please refer to enclosures.)

Throughout the past few months of assessing the Mid-West for a comparable school to serve as my control group, has been identified to best serve this purpose, and it is at this time I would like to ask for your permission and cooperation to survey your students for the purpose of comparing and analyzing.

As you have noticed, I have enclosed pertinent written materials regarding the University of Wisconsin - Stevens Point Wellness program and Chapter III of my dissertation for your review. Please pay special attention to the Life Assessment Questionnaire (LAQ), for it is this instrument that I will be utilizing for my data collection. Reliability coefficients and percent matches are also enclosed for your review.

Financial concerns have been eliminated through the gracious offer of Dr. Leafgren in providing me with as many LAQ as needed, and scoring time as well.


I would greatly appreciate your consideration of my request, and I will be contacting you in the near future to discuss any questions, concerns or thoughts you may have regarding this research effort.

Thank you for your kindness in the matter.

Enclosures

cc: Fred Leafgren, Ph.D.
Max R. Raines, Ph.D.

Sincerely,


L. Joan Hull



MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION
ECKERSON HALL

EAST LANSING • MICHIGAN • 48824-1034

April 5, 1985

Dear

I hope you had a good visit in Chicago and that papers you may have presented at AERA were well received. We have enclosed Chapters I and III of Joannie Hull's dissertation. We were delayed by a most unfortunate incident. The typist completed the drafts just prior to major surgery. Unfortunately in her anxiety and presses of finishing other assignments she lost Joannie's dissertation in the computer along with the floppy disc. After a period of recuperation she was sufficiently strong to complete another copy from the handwritten manuscript. This of course threw the project off schedule and caused the manuscript to go to our Human Subjects Committee just prior to Spring break.

The doctoral committee is quite pleased with the design. We are hopeful that the delay will not pose serious problems at I have enclosed a draft of a memo which might be used with any changes you might deem necessary. Ms. Hull is planning to come to during the period of administration to assist any way she can.

She will work out details for getting the inventories scored at Stevens Point and returned. We think the inventories should be returned from Stevens Point in sealed envelopes with self-selected code numbers on the envelope to protect anonymity. This way they could be picked up by students at their convenience from a designated location. It is our understanding that scoring, and profiling can be accomplished in a brief period. Normative results for will also be supplied in a short time. Results of the completed study will be available mid-summer or sooner.

I'll be calling Monday afternoon to answer any questions you may have.

Sincerely,



Max R. Raines
Professor

PS. Recently I was discussing the project with Dr. (and I have been friends and colleagues for many years.) He was quite pleased with the project and felt that it was in keeping with long range plans for strengthening health services that were projected during his presidency.

May 17, 1985

Dear Dr.

Per your discussion with Max R. Raines, Department of College and University Administration, Michigan State University, I am assured you are aware of my pursuit of study in regards to my doctoral dissertation...I am attempting to explore the potentiality of the wellness movement within Instituting of Higher Education and the movements propensity for changing health practices of college students towards a more positive and healthful approach. This study will compare and analyze the attitudes, knowledge and orientation of students from two separate institutions of higher education which are similar in many variables, but differ in the approach to wellness programming, one institution provides wellness programming, the other no discerning effort in wellness programming.

Presently, I am seeking approval of Human Subjects Committee and I have been in communication with Dr.'s _____ and _____ in this regard. I have already obtained the approval of Michigan State University (please refer to enclosure).

In order to expedite the sampling procedure, Dr. _____ had recommend I contact you in an effort to locate and contact the appropriate faculty and/or other staff needed for this activity. What is needed is: help in identifying classes in which faculty would allow the assessment of there student, either through passing out the instrument (Life Assessment Questionnaire) during class time asking for a response at that time or possibly passing the instrument in class and asking the students to return completed form during the next class session. Which ever is the most feasible would of course be left to your discretion.

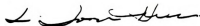
For statistical purposes what is need is a response rate of 50 students equally distributed among the four class levels. The methodology used will hopefully account for equal gender distribution, therefore, the total sample needed is 200. If this could be done at the beginning of your summer session, it would greatly be appreciated.

May 17, 1985

If I can provide with further detailed description, please do not hesitate to call, however I will be out of the state until June 1, therefore I may be reach in Washington, D.C. at

Thank you for your kindness and consideration in this matter.

Sincerely,



L. Joan Hull

Enclosure

CF:

Max R. Raines Ph.D



June 10, 1985

Ms. L. Joan Hull

Dear Ms. Hull:

I am sorry that I was out of town when your letter of May 17 arrived asking for our cooperation in conducting a survey in some of the summer school classes at My schedule will not enable me to make contact with the faculty members who are teaching summer school to obtain their permission and cooperation in submitting and collecting the surveys in their classes.

What I will do, however, is provide you with the classes that will contain sufficient numbers of freshmen, sophomores, juniors and seniors to meet your sample size and the names of the faculty who are teaching those courses along with their addresses. I would suggest that you make direct contact with them to solicit their support. I will write a memorandum to each of them indicating that is cooperating in this research study and that you will be contacting them directly to see if they are willing to assist you in this project.

Attached is a list providing the names of courses, faculty members, and their addresses.

Sincerely,

Ms. L. Joan Hull

June 24, 1985

Dear

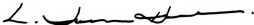
Per our phone conversation of 18 June 85, I would like to thank you for allowing me access to your students in an effort to collect partial data for my doctoral dissertation. It was my understanding, we decided upon giving the students questionnaires at the end of class, asking them to complete it at home and return it the next class period.

As I informed you, I will be in the area July 1-5, at this time I will contact you to arrange specifics and discuss with you any logistical concerns, if any.

If you have any questions prior to my visit to
, I may be reached in at

Until then, thank you for your kindness and consideration in this matter.

Sincerely,



L. Joan Hull

APPENDIX H

**HUMAN SUBJECT COMMITTEE APPROVAL
COMPARATIVE INSTITUTION**

April 24, 1985

Dr. Max R. Raines
Department of Educational Administration
College of Education
Erickson Hall
Michigan State University
East Lansing, Michigan 48824-1034

Dear Dr. Raines:

A doctoral research proposal by L. Joan Hull to assess "wellness" among students was brought to my attention by Dr. of He raised with me the issue of human subject review. University policy requires that all research using University students must be submitted to the University's Human Subjects Research Review Committee whether or not the research has been reviewed by a review board external to the University.

I have enclosed an application for conducting research on human subjects. It should be completed by Ms. Hull and signed by you as department chair. human subject policies and procedures closely follow 45 CFR 46. Research is either (1) exempt from review (but reported), (2) given an expedited review because of minimal risk to the subjects or (3) subject to full Committee review. The criteria for all three are detailed in 45 CFR 46.

I see no real problems with Ms. Hull obtaining approval as long as privacy and anonymity is preserved and subjects can refuse to or withdraw from participation.

If you have questions, please contact me at

Sincerely,

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION
BRICKSON HALL

EAST LANSING • MICHIGAN • 48824-1034

May 10, 1985

Dear Dr.

I have enclosed my application for your review including other related material.

If you or any other member of your staff and/or faculty have further questions, I may be reached at _____ however, from May 15 until June 2 I will be in Washington D.C. at _____ Please do not hesitate to call.

I am sorry for the apparent difficulties with my printing, if you would prefer it typed please send another form and I would gladly make arrangements to have it typed.

Sincerely,


L. Joan Hull

LJH/bh

cc

May 16, 1985

TO:

FROM:

Exempt status has been approved under
46.101 (3) of 45 CFR 46 for your project
"Wellness Programming within University Health
Services." Please inform us of any revisions to
your approved research plan.

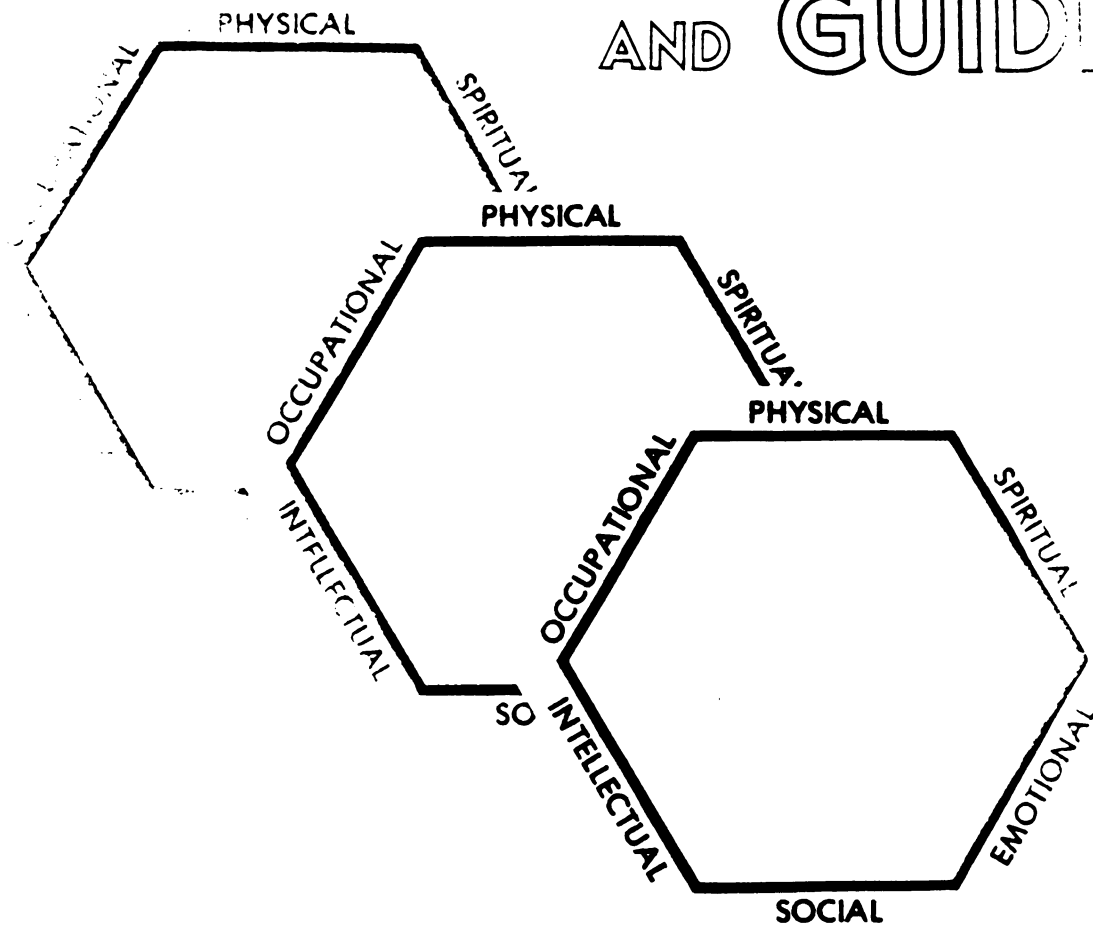
JOS:KE

cc:

APPENDIX I

LIFESTYLE ASSESSMENT RESULTS AND INTERPRETATION

LIFESTYLE ASSESSMENT RESULTS AND GUIDE



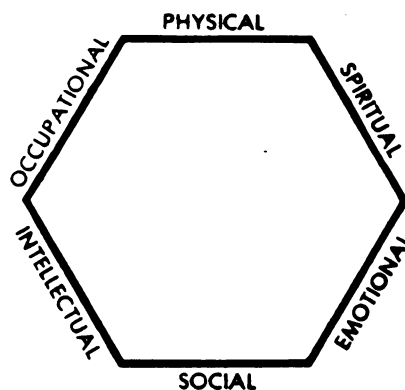
UW-SP Institute for Lifestyle Improvement

South Hall
UWSP
Stevens Point, WI 54481
(715) 346-2511

We are pleased that you have elected to participate in the Lifestyle Assessment program. We hope that the LAQ results will provide information and direction in support of your efforts to live a wellness lifestyle.

This evaluation instrument and the analysis it provides were designed to allow you to record information pertaining to your lifestyle, and to show you how you can make positive modifications in your lifestyle, toward wellness and greater longevity. We define wellness as an active process through which the individual becomes aware of and makes choices leading toward a more fulfilling life.

We invite you to read this document carefully, to understand your current lifestyle and what it is doing to and for you, to reflect upon what you might wish to do to enhance your lifestyle, and to assess — and exercise — your choices toward a more fulfilling life.



THE SIX DIMENSIONS OF WELLNESS

YOUR GUIDE TO THE LIFESTYLE ASSESSMENT QUESTIONNAIRE (LAQ)

The results of your Lifestyle Assessment Questionnaire (LAQ) are contained in this Guide. The results and Guide will enable you to assess your lifestyle and may be used to help you examine your lifestyle behavior and current level of wellness. They may also be used to identify the health hazards you face at this point in your life.

It is important to remember that you are your own best health manager. Computerized results will not transform your wellness condition, but they can aid you in examining the day-to-day decisions which make up your chosen lifestyle. The LAQ measures the outcomes of decisions you have already made about your lifestyle, and provides a base to assist you in your quest for high level wellness.

In recognition of the personal nature of
many of the items contained in the L.A.Q..

Bill Hettler M.D.
Bill Hettler, M.D.



Based on models by: Lewis Robbins, M.D., M.P.H., Indianapolis, Indiana
 John Travis, M.D., Cape Rice
 S.B. Hestler, M.D., Stevens Point, Wisconsin

THE WELLNESS CONTINUUM

The disease care system in the United States is portrayed on the left side of the Wellness Continuum. Most physicians are trained primarily to address disabilities and symptoms, and to record premature deaths. The best medical care can only bring you back to the midway point of the Wellness Continuum — a point of no illness and a state of mediocrity. (Mediocrity as used here means the absence of disease, but not the highest level of health possible for you.)

We emphasize that traditional medical care performs a very valuable service. Expertise is needed in certain situations, but to move beyond the midpoint and to the right of the Continuum, it is important that you assume the responsibility for yourself, through careful attention to your lifestyle. Movement toward high level wellness can be achieved through education, growth in personal awareness, attitude clarification, and changes in lifestyle.

In the center portion of your Guide, there are four (4) headings which describe each section of the LAQ and correspond to the results of the questionnaire you completed:

- Section 1 — WELLNESS INVENTORY
- Section 2 — PERSONAL GROWTH
- Section 3 — RISK OF DEATH
- Section 4 — MEDICAL ALERT

AS YOU BEGIN, CHECK TO BE SURE THAT THE VITAL INFORMATION AT THE TOP OF YOUR PRINTOUT IS ACCURATE (AGE, RACE, GENDER, HEIGHT, AND WEIGHT). ANY ERRORS IN THE RECORDING OF THIS INFORMATION MAY INVALIDATE THE RESULTS OF YOUR LIFESTYLE PRINTOUT. If you find that any of this information is not accurate, correct it and return your LAQ for re-scoring.

If the information at the top of your printout is correct, you are ready to begin reviewing the results of your Lifestyle Assessment Questionnaire by starting with the first section of the Guide — the Wellness Inventory.

WELLNESS INVENTORY

The Wellness Inventory section of the LAQ is designed to help you assess your current level of wellness. Eleven areas which encompass the six dimensions of wellness are measured. They are listed on the next page.



WELLNESS INVENTORY

Physical Exercise: Measures your commitment to maintaining physical fitness.

Physical Nutritional: Measures the degree to which you choose foods which are consistent with the dietary goals of the United States, as published by the Senate Select Committee on Nutrition and Human Needs.

Physical Self-Care: Measures the behavior which helps you prevent or detect early illnesses.

Physical-Vehicle Safety: Measures your safe driving practices which minimize chances of injury or death in a vehicular accident.

Physical Drug Abuse: Measures the degree to which you are able to function without the unnecessary use of chemicals.

Social-Environmental: Measures the degree to which you contribute to the common welfare of the community. This emphasizes your interdependence with others and with nature.

Emotional Awareness & Acceptance: Measures both the degree to which you have an awareness and acceptance of your feelings, including the degree to which you feel positive and enthusiastic about yourself, and life.

Emotional Management: Measures the capacity to appropriately control your feelings and related behavior, including the realistic assessment of your limitations.

Intellectual: Measures the degree to which you engage your mind in creative, stimulating mental activities, expanding your knowledge and improving your skills.

Occupational: Measures the satisfaction gained from your work and the degree to which you are enriched by that work.

Spiritual: Measures your ongoing involvement in seeking meaning and purpose in human existence. It includes an appreciation of the depth and expanse of life and of the natural forces which exist in the universe.

YOUR WELLNESS INVENTORY SCORE

Your score is the percentage of points attainable on the wellness statements. The higher your score, the higher your level of wellness.

Wellness Inventory scores appear on printouts as shown in the following sample format:

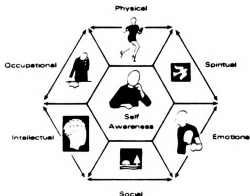
Category	SAMPLE		
	Your Score	Group Average	Total Average
Physical-Exercise	79	67	58
Intellectual	82	79	80
Social	52	78	66
Emotional-			
Awareness	38	90	83
Occupational	99	78	70
Spiritual	83	80	69
Composite Score	84	83	74

Note from the sample above that this person scored 79% for the Physical-Exercise category. The group with which this person completed the LAQ scored an average of 67%, and the total average for everyone who has ever completed the LAQ was 58%. This format is followed through each wellness dimension and allows you to see your score in comparison with others.

If your LAQ was processed and returned as part of a group (school, business, etc.), then you can compare your scores with the averages for your group and with the averages for everyone who has ever taken the LAQ. If your LAQ was done on an individual basis and not as part of a group, it was processed as part of a random group and you should compare your scores only with the **total average** scores.

You may also wish to examine your consistency across the wellness categories. For example, in the previous sample, this person received a score of 99% in the Occupational area and a score of 52% in Social. High level functioning in all areas is a goal consistent with a wellness lifestyle.

If you are dissatisfied with your wellness scores in any category, you may choose to make changes in your lifestyle. You can improve your wellness scores by making active positive choices about your lifestyle. Suggestions to help you accomplish this task may be found in the "Major Hazards To You" and "Medical Alert" sections of your L.A.Q. results.



TOPICS FOR PERSONAL GROWTH

In the Topics for Personal Growth Section of the Lifestyle Assessment Questionnaire, you were asked to select from a list of educational topics those from which you desired 1) information; 2) group activities, or 3) confidential personal assistance. This section of the Lifestyle Assessment Questionnaire Computer Printout is a **referral** source for your personal benefit.

The computer has been programmed to print information on up to six Topics for Personal Growth. If you **selected more than six topics**, the computer will provide information on those areas that represent the greatest opportunity for enhancing your lifestyle. If you would like additional information that this computer has not provided, please write to us.

For each of the items for which information has been printed, the computer has provided:

- Media resources.
- Agencies which offer assistance or information.

NOTE: If your LAQ was processed and returned as part of a group, and your organization provided information for local referral, that information will be provided in your printout. Otherwise only referral resources available nationally will be listed. If local resources are not listed, we encourage you to seek them out.



TOPICS FOR PERSONAL GROWTH

RISK OF DEATH



The Topics for Personal Growth Section will appear on your printout in this form:

SAMPLE

PERSONAL GROWTH SECTION—AUTOMATED REFERRAL

The following resources have been found to be helpful in learning about the topics:

STOP SMOKING PROGRAMS

A. MEDIA

Books—**Learning to Live Without Cigarettes—**
Allen, Angermann, and Fackler

B. COMMUNITY RESOURCES

YMCA—Stop smoking programs

Your Family Physician

American Cancer Society

Your local hospital

American Lung Association

From this sample printout, you can see that this person's request for information on smoking cessation resulted in a list of resources available for use in dealing with this topic. Similarly, if you requested information, group activities, or confidential personal assistance on any of the educational topics, your printout will include a referral list for up to six topics that you have chosen.



RISK OF DEATH

The Risk of Death Computer printout details factors which influence your longevity. Longevity is an indirect measure of quality of life. By understanding and taking action on the information provided in this section, you may increase your longevity and thereby the opportunity to reach even higher levels of wellness.

The Risk of Death section consists of these subsections: (1) Life Expectancy Results, (2) Major Hazards To You, and (3) A Hazard Summary.

The first sub-section, Life Expectancy Results, appears on your printout in this format:

LIFE EXPECTANCY RESULTS

	SAMPLE	25	30	35	40	45	50	55	60
1 Average years of remaining life in your sex, age, race group	53							
2 Your expected years of remaining life based on your answers	38							
3 You can achieve this expected years of remaining life	56							

This sub-section, presented in the form of a bar graph, provides three types of actuarial information:

Line 1 indicates the average number of remaining years of life people of your age, race, and gender, can **expect** to live.

The results shown on line 2 are based on your answers concerning your lifestyle, heredity, and medical history. If you choose to make no changes in your present lifestyle, this graph predicts your **expected** years of remaining life.

Line 3 indicates what you may be able to achieve should you choose to make all the lifestyle changes suggested.

Later in your printout, suggestions will be made on how you can take steps toward greater longevity. The word "**expected**" has been printed in bold face to emphasize the fact that all longevity data is determined by predictions based on previous group results. (The computer cannot actually tell you how long you, as an individual, will live or at what age you will die. The computer makes a prediction using actuarial information.)

3

RISK OF DEATH



MAJOR HAZARDS TO YOU

The Major Hazards to You subsection will alert you to the leading causes of death for your age, race, and sex group. It will also show you a comparison of your probability of a particular cause of death in comparison to others of your age, race and sex group (labeled "average" on your printout); and explore with you what you can achieve through a positive lifestyle change.

The major hazards to you are rank ordered on the basis of your responses. The most likely cause of death for you, based on your responses is rank ordered #1. The second most likely cause of death for you is rank ordered #2 and so on.

SAMPLE

MAJOR HAZARD TO YOU Rank	Hazard	10 Year Deaths Per 100,000	Associated Risk Factors
1	Motor Vehicle Accidents		
	Average	815	Drinking Habits
	Your	4238	Seat Belt Habits
	Achievable	489	Riding With Someone Who Has Been Drinking
2	Suicide		
	Average	102	
	Your	518	
	Achievable	102	
3	Pneumonia		
	Average	14	Smoking Habits
	Your	31	Drinking Habits
	Achievable	6	

From the sample above, you can interpret that motor vehicle accidents is the greatest potential hazard to this person. Using actuarial tables, a predicted 815 people out of every 100,000 will die during the next ten years from his or her age, race, and sex group because of motor vehicle accidents. This person's predicted chance is significantly higher at 4238; yet, if he or she changed the associated risk factors, Drinking Habits, Seat Belt Habits, and Riding With Someone Who Has Been Drinking, an achievable score of 489 could be attained.

Occasionally, the achievable chances of death are higher than the average chances of death. This can occur if you have a family history or personal history which places you at greater risk than the average person even when good health practices are followed.

You can now examine the top health hazards for you and compare your predicted chances with those of your age, race, and sex group; and determine the estimated increase in longevity you can achieve by making a positive change in your lifestyle.

HAZARD SUMMARY

The final part of this RISK OF DEATH section on your computer printout is the Hazard Summary. Based upon the data you provided concerning your lifestyle, the computer will give you a "health age" and an "achievable health age." This section of your printout will appear in this form:

SAMPLE

HAZARD SUMMARY

Based on the Lifestyle Assessment Questionnaire you have completed, you have a health age of 33 years. If you follow all the suggestions we have given, you can reduce your health age to 15.

As you can note on the sample above, this person has a health age of 33 years. This means that they have the same risk of death as an average 33 year old person. The computer also indicates that if this person would follow the suggestions for decreasing his or her health age, it could be decreased to the level of an average 15 year old person.

You can also reduce your health age by following the suggestions made to you on your computer printout.

MEDICAL ALERT

The Medical Alert Section of the Lifestyle Assessment Questionnaire provides you with information which you can use to develop your own medical history and health status chart. This section addresses the following areas:

- Current Problem List
- Current Medications
- Suggested Lifestyle Improvement Needs
- Allergies
- Immunizations
- Resolved Problem List

This section will appear on your printout in this form:

SAMPLE

MEDICAL ALERT SECTION

CURRENT PROBLEM LIST

Family history of heart disease
No recent TB test
Loneliness

CURRENT MEDICATIONS

SUGGESTED LIFESTYLE IMPROVEMENT NEEDS

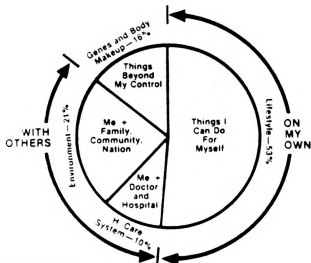
Sober Drivers Are Safer
Stopping Drinking
Always Wear Seatbelts
Lowering Systolic Blood Pressure
Lowering Diastolic Blood Pressure
Lowering Cholesterol Level

RESOLVED PROBLEM LIST

IMMUNIZATIONS

Initial series of DPT
Tetanus Booster within 5 years
Has had polio vaccine
Rubella status unknown
Allergies
Molds
Weeds

We encourage you to keep a home health record. This section of your computer printout can serve that purpose.



The Lifestyle Assessment Questionnaire was developed in 1975 by the Department of Health Education and Welfare, Division of Disease Control.

The most significant determinate to your quality of life has been shown to be lifestyle choices (as shown in the illustration above).

We hope the Lifestyle Assessment Questionnaire and your computer printout have provided you with the knowledge necessary for improving the understanding of yourself and the role you can play in assuming responsibility for maintaining a high quality lifestyle.

BEHAVIOR CHANGE CHECKLIST

1. Identify a specific behavior that you would like to change and feel you can change. Start with a less difficult behavior.
2. Make a tally sheet for one week and record the behavior you would like to change. Record the number of times it occurs, the circumstances when it occurs, your feelings and how important was the behavior (1 most important — 5 least important).
3. Immediately reward yourself in a healthy way for following the desired behavior.
4. Break the automatic habit. Many behaviors occur without conscious thought (smoking, eating, driving a car without a seatbelt). Break up the routine. Put your cigarette in a different place, agree to eat with your opposite hand, etc.
5. Withdraw rewards, when possible, for undesirable behavior.
6. Change your environment, if possible. Look for people and social systems that are compatible and supportive of your desired behavior.
7. Focus on the positive effects rather than what you are losing as a result of the change.
8. Think flexibly. Most limitations are internal. We tend to blame others for our inability to change when creative thinking would provide an effective strategy for the desired behavior.
9. Learn through observing others — healthy others, especially those with whom you can easily identify.
10. Convert difficult goals and complex behavior change into a small and achievable steps (i.e., running a marathon may involve beginning with a short walk/run exercise program gradually evolving over a six month or year period into a full marathon.)
11. Practice, practice, practice! Repetition is an important key to learning.
12. When in doubt, consult with knowledgeable others.
13. Learn from your failures. Behavior change often times takes time. Thomas Edison was once asked why he persisted in his desire to invent a new type of battery in the face of frequent failure. He replied, "What failure? I have no failures. Now I know 50,000 ways it won't work." You are not a failure when you fail.

APPENDIX J

**HUMAN SUBJECTS COMMITTEE APPROVAL
MICHIGAN STATE UNIVERSITY**

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION
ERICKSON HALL

EAST LANSING • MICHIGAN • 48824-1094

March 19, 1985

MICHIGAN STATE
UNIVERSITY

MAR 19 1985

OFFICE OF RESEARCH DEVELOPMENT

Henry Bredeck
Asst. Vice President
Res. & Grad. Stds. VP
238 Administration Bldg.

Dear Henry:

This project is designed to compare responses to a wellness inventory among samples of students from two universities---one having a well developed program and the other exploring the possibility of developing such a program. The experimental university has had a wellness program for almost a decade and routinely administers the instrument to all of its incoming freshmen, providing individual consultations for those who seek interpretations. This university has been "planning to re-administor" the inventory to students to assess "gains" in wellness practices. They have said that Ms. Hull's proposed study gives them the impetus to carry out their plans and they are providing the instruments and computer scoring at no cost to Ms. Hull. It also provides an opportunity for them to compare their scores with the scores of students (in a matched residential setting) who are residing in the control university which is also interested in a "wellness assessment". The students of the latter institution will use code numbers enabling each participating student to obtain the results of the inventory without revealing his/her identity and then if they choose seeking interpretations from the physicians in the local health center. While students in both institutions will be invited to participate by administrators of their respective colleges their participation will be voluntary. Group administration of the instrument will be used.

Dr. Larry Lezotte is on Ms. Hull's doctoral committee and feels that the proposed methodology adequately protects student rights in what we believe is a useful study. An early appraisal by your committee will be much appreciated since several unanticipated mishaps (like losing the first three chapters in the computer) have delayed Ms. Hull's progress.

Sincerely,



Max R. Raines
Professor of Higher Education

MRR/bh

MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
238 ADMINISTRATION BUILDING
(517) 355-2186

EAST LANSING • MICHIGAN • 48824

April 2, 1985

Ms. L. Joannie Hull
Educational Administration

Dear Ms. Hull:

Subject: Proposal Entitled, "A Comparison of Wellness Programs"

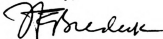
UCRIHS review of the above referenced project has now been completed. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and the Committee, therefore, approved this project at its meeting on April 1, 1985.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval prior to April 1, 1986.

Any changes in procedures involving human subjects must be reviewed by the UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to our attention. If we can be of any future help, please do not hesitate to let us know.

Sincerely,



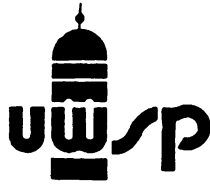
Henry E. Bredeck
Chairman, UCRIHS

HEB/jms

cc: Dr. Max Raines

APPENDIX K

MISCELLANEOUS CORRESPONDENCE



university of wisconsin/stevens point • stevens point, wisconsin 54481

You have been selected to participate in a research project designed to help us measure the impact of programming here at UWSP.

If you agree to help us, we will ask that you complete a new Lifestyle Assessment Questionnaire (LAQ) and allow a researcher to use the results of that LAQ and the LAQ you took when you first enrolled at UWSP.

To repay you for your assistance, we will interpret the results of your latest LAQ, along with those of your first, at no cost to you!!! (We will contact you later about times and places of interpretations.)

We believe that the information gained from this project will help us to develop better and more useful programming, and we hope that you will agree to help us.

If you wish to participate in the project, please

- * sign the waiver sheet below;
- * complete the enclosed LAQ answer sheet;
- * return both the waiver and answer sheets within 5 days.

We appreciate your assistance and feel sure that it will be a valuable contribution to our programming effort.

Sincerely,

FRED LEAFGREN

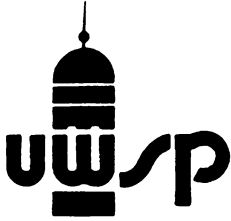
Assistant Chancellor for Student Life

I hereby authorize the University of Wisconsin-Stevens Point to disclose answers from two (2) Lifestyle Assessment Questionnaires (LAQs) completed by me, with the understanding that no personally identifiable information will be revealed.

This waiver expires upon completion of the research project for which it is given, except that the researcher may use the findings in a publication, if appropriate.

Signature

Date



university of wisconsin/stevens point • stevens point, wisconsin 54481

Dear student,

Thank you for helping us with our research project. Your cooperation and patience, as well as the time you devoted to the project, were greatly appreciated.

Although the project has not been completed (it will take more time to interpret all of the data), early indications suggest that our ongoing programming has had a positive effect on the lifestyles of UWSP students. That's great news for all of us!

In return for your help on this project, we agreed to interpret the results of your LAQs for you. We have now made arrangements to do that and are enclosing with this letter copies of both your initial and most recent LAQs. (The photocopied LAQ is the first one you took.)

If you wish to have your LAQ results interpreted, please come to the Turner Room in the University Center at one of the following times:

Monday September 9 4:00 p.m.

Tuesday September 17 4:00 p.m.

Once again, thank you for your assistance.

Sincerely,

FRED LEPPOREN

Assistant Chancellor for Student Life

APPENDIX L

MISCELLANEOUS TABLES

Table L.1

Summary Table of Means
Age by Gender by Institution
Subscale Variable 1, Exercise

University of Wisconsin Stevens Point					Comparative Institution				
<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	17	3.6	.66614	Men	I	2	3.7	1.08740
	II	17	3.7	.65029		II	13	2.4	.50088
	III	9	3.6	.60581		III	19	3.1	.82915
Women	I	27	3.5	.57300	Women	I	17	3.1	.79513
	II	38	3.5	.74455		II	21	3.2	.75347
	III	20	3.8	.55017		III	18	3.1	.65281

Subscale Variable 2, Nutrition

<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	17	3.9	.72226	Men	I	3.6	1.14220
	II	17	3.8	.52773		II	3.7	.63163
	III	9	3.7	.69694		III	3.4	.77312
Women	I	27	3.7	.71736	Women	I	3.5	.84550
	II	38	3.8	.59807		II	3.6	.72402
	III	20	4.2	.54580		III	3.7	.59215

Table L.1 Cont'd.

Summary Table of Means
Age by Gender by Institution

Subscale Variable 3, Self Care

University of Wisconsin Stevens Point				Comparative Institution			
<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>Mean</u> <u>Standard Deviation</u>
Men	I	17	3.7	.76857	Men	I	3.3 .58472
	II	17	3.7	.46464		II	3.6 .46948
	III	9	3.4	.59710		III	3.1 .66018
Women	I	27	3.8	.64289	Women	I	3.5 .60103
	II	38	3.8	.47600		II	3.7 .54582
	III	20	4.1	.55699		III	3.8 .38263

Subscale Variable 4, Vehicle Safety

<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>Mean</u> <u>Standard Deviation</u>
Men	I	17	4.1	.60990	Men	I	3.9 .99191
	II	17	4.3	.48103		II	3.9 .63289
	III	9	4.1	.61619		III	4.1 .47638
Women	I	27	4.3	.76501	Women	I	4.2 .38063
	II	38	4.3	.52935		II	4.1 .45360
	III	20	4.7	.25446		III	4.4 .35924

Table L.1 Cont'd.

Summary Table of Means
Age by Gender by Institution

Subscale Variable 5, Drug Use

University of Wisconsin
Stevens Point Comparative Institution

<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	17	4.6	.40768	Men	I	2	4.7	.16318
	II	17	4.8	.21361		II	13	4.2	.99896
	III	9	4.3	.44631		III	19	4.5	.38822
Women	I	27	4.5	.65257	Women	I	17	4.3	.79837
	II	28	4.6	.45077		II	22	4.6	.37516
	III	38	4.8	.19303		III	18	4.5	.44251

Subscale Variable 6, Environmental

<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	17	3.9	.67662	Men	I	2	4.3	.83189-1
	II	16	4.2	.47774		II	13	4.0	.56019
	III	9	4.2	.43823		III	19	3.8	.70230
Women	I	27	4.2	.50699	Women	I	17	3.8	.74327
	II	38	4.3	.41510		II	22	3.9	.40383
	III	20	4.6	.46416		III	18	3.9	.58401

Table L.1 Cont'd.

Summary Table of Means
Age by Gender by Institution

Subscale Variable 7, Emotional Awareness

University of Wisconsin
Stevens Point Comparative Institution

<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	17	4.4	.77462	Men	I	2	4.7	.11785
	II	16	4.4	.44723		II	13	4.3	.34475
	III	9	4.0	.45847		III	19	4.3	.49245
Women	I	27	4.5	.45848	Women	I	17	4.5	.35896
	II	38	4.5	.42974		II	22	4.1	.54423
	III	19	4.6	.33795		III	18	4.3	.42980

Subscale Variable 8, Emotional Management

<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	17	4.1	.79458	Men	I	2	4.4	0.00000
	II	16	4.2	.49695		II	13	4.2	.32087
	III	9	3.9	.54486		III	18	4.1	.41574
Women	I	27	4.2	.57168	Women	I	17	4.2	.32172
	II	38	4.2	.48510		II	22	4.1	.51819
	III	20	4.4	.46490		III	18	4.1	.34683

Table L.1 Cont'd.

Summary Table of Means
Age by Gender by Institution

Subscale Variable 9, Intellectual

University of Wisconsin Stevens Point					Comparative Institution				
<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	17	3.3	.80991	Men	I	2	3.6	0.00000
	II	16	3.8	.54360		II	13	3.7	.60371
	III	9	3.7	.63345		III	19	3.5	.68265
Women	I	27	3.9	.71362	Women	I	17	3.5	.68394
	II	38	3.9	.53282		II	22	3.5	.71823
	III	20	3.9	.54916		III	18	3.7	.65511

Subscale Variable 10, Occupational

<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	16	4.0	.67291	Men	I	2	4.3	.18856
	II	16	4.3	.49961		II	12	3.9	.48913
	III	9	4.0	.72485		III	15	4.0	.63619
Women	I	27	4.3	.55826	Women	I	17	4.0	.49669
	II	36	4.4	.58602		II	20	4.0	.47821
	III	19	4.4	.54130		III	18	4.1	.58414

Table L.1 Cont'd.

Summary Table of Means
Age by Gender by Institution

Subscale Variable 11, Spiritual

University of Wisconsin
Stevens Point

Comparative Institution

<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Sex</u>	<u>Age</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Men	I	17	3.8	.84786	Men	I	2	4.4	.70711
	II	16	3.9	.88841		II	13	3.8	.76731
	III	9	3.7	.75981		III	18	3.8	.80790
Women	I	27	4.1	.73028	Women	I	17	4.0	.79127
	II	38	4.1	.56514		II	21	3.8	.79974
	III	19	4.4	.58838		III	18	3.9	.65252

219

Key: Age I = 18-19 year olds
 II = 20-24 year olds
 III = 25 years and up

Table L.2

Summary Table of Means
Age by Institution

Age I				Age II				Age III			
Subscale Variable 1, Exercise											
UW-SP	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean
	45	3.5	.61963	57	3.6	.70250	30	3.7	.68898	37	3.1
Comparative	20	3.2	.78902	34	3.3	.66734					

Table L.2 Cont'd.

Summary Table of Means
Age by Institution

<u>Age I</u>				<u>Age II</u>				<u>Age III</u>			
<u>Subscale Variable 5, Drug Use</u>											
UW-SP Comparative	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean
	45	4.6	.56319	56	4.6	.40419	30	4.7	.36999	30	4.7
	20	4.4	.74330	35	4.4	.68825	37	4.5	.41060	37	4.5
<u>Subscale Variable 6, Environment</u>											
UW-SP Comparative	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean
	45	4.1	.58611	56	4.2	.43303	30	4.4	.60891	30	4.4
	20	2.9	.69765	35	3.9	.46206	37	3.9	.63901	37	3.9
<u>Subscale Variable 7, Emotional Awareness</u>											
UW-SP Comparative	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean
	45	4.4	.60269	56	4.5	.43128	29	4.3	.63760	29	4.3
	20	4.4	.47646	35	4.2	.48500	37	4.3	.45740	37	4.3
<u>Subscale Variable 8, Emotional Management</u>											
UW-SP Comparative	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean
	45	4.1	.65894	56	4.2	.47782	30	4.2	.65779	30	4.2
	20	4.2	.37795	35	4.1	.45655	36	4.1	.37852	36	4.1

Table L.2 Cont'd.

Summary Table of Means
Age by Institution

<u>Age I</u>				<u>Age II</u>				<u>Age III</u>			
<u>Subscale Variable 9, Intellectual</u>											
	N	Mean	Standard Deviation	N	Mean	Standard Deviation		N	Mean	Standard Deviation	
UW-SP	45	3.7	.79354	56	4.0	.52769		30	3.8	.69193	
Comparative	20	3.6	.68254	35	3.6	.67384		37	3.6	.67211	
<u>Subscale Variable 10, Occupational</u>											
	N	Mean	Standard Deviation	N	Mean	Standard Deviation		N	Mean	Standard Deviation	
UW-SP	43	4.2	.60460	53	4.3	.55934		29	4.1	.85857	
Comparative	20	4.0	.46860	32	4.0	.47460		33	4.1	.59913	
<u>Subscale Variable 11, Spiritual</u>											
	N	Mean	Standard Deviation	N	Mean	Standard Deviation		N	Mean	Standard Deviation	
UW-SP	45	4.0	.78220	56	4.4	.65973		29	4.0	.81535	
Comparative	20	4.1	.78454	34	3.8	.77580		36	3.9	.72700	

Key:

Age I = 18-19 year olds

Age II = 20-24 year olds

Age III = 24 years and up



Table L.3

Summary Table of Means
Gender by Institution

University of Wisconsin Stevens Point				Comparative Institution			
Subscale Variable	N		Mean	Standard Deviation		N	Mean
	Men	Women		Men	Women		
Exercise	43	86	3.6	.63486		40	3.2
			3.6	.64973		66	3.1
Standard Deviation							.69636
							.69014
Subscale Variable 2	43	86	3.9	.63575		40	3.5
Nutrition	Men	Women	3.9	Men	Women	67	3.6
				.64003			.71967
							.70318
Subscale Variable 3	43	86	3.6	.62919		40	3.3
Self Care	Men	Women	3.9	Men	Women	67	3.6
				.55580			.61904
							.54637
Subscale Variable 4	43	86	4.2	.55413		39	4.0
Vehicle Safety	Men	Women	4.4	Men	Women	67	4.2
				.58515			.61072
							.43319
Subscale Variable 5	42	86	4.6	.38775		40	4.4
Drug Use	Men	Women	4.6	Men	Women	67	4.5
				.49112			.70722
							.60318
Subscale Variable 6	42	86	4.1	.57396		40	4.0
Environment	Men	Women	4.3	Men	Women	67	3.9
				.47837			.60093
							.57495

Table L.3 Cont'd.

Summary Table of Means
Gender by Institution

University of Wisconsin Stevens Point				Comparative Institution			
Subscale Variable	N		Mean	Standard Deviation		N	Mean
	Men	Women		Men	Women		
7 Emotional Awareness	42	40	4.3	.61223		85	4.5
			4.4	.42706		67	4.3
							.42209
							.46954
<hr/>							
Subscale Variable	N		Mean	Standard Deviation		N	Mean
	Men	Women		Men	Women		
8 Emotional Management	42	39	4.1	.63938		86	4.3
			4.2	.36932		67	4.1
							.50841
							.42174
<hr/>							
Subscale Variable	N		Mean	Standard Deviation		N	Mean
	Men	Women		Men	Women		
9 Intellectual	42	86	3.6	.69691		40	3.6
			3.9	.58926		67	3.6
							.63800
							.69885
<hr/>							
Subscale Variable	N		Mean	Standard Deviation		N	Mean
	Men	Women		Men	Women		
10 Occupational	41	83	4.1	.62051		33	4.0
			4.3	.56826		65	4.1
							.65212
							.54578
<hr/>							
Subscale Variable	N		Mean	Standard Deviation		N	Mean
	Men	Women		Men	Women		
11 Spiritual Safety	42	85	3.8	.83318		39	3.8
			4.2	.62877		66	3.9
							.75753
							.74822

Table L.4

Summary Table of Means
Gender by Age

		<u>Age I</u>			<u>Age II</u>			<u>Age III</u>		
Subscale Variable		N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Exercise	Men	19	3.6	.67940	30	3.6	.59553	28	3.3	.79126
	Women	44	3.4	.68638	59	3.4	.75744	38	3.4	.70388
Subscale Variable 2	Men	19	3.8	.73825	30	3.8	.56710	28	3.5	.74372
	Women	44	3.6	.76564	60	3.7	.65165	38	3.9	.61359
Subscale Variable 3	Men	19	3.6	.74464	30	3.7	.46367	28	4.1	.51389
	Women	44	3.7	.63430	60	3.8	.50071	38	3.9	.49910
Subscale Variable 4	Men	19	4.1	.62447	30	4.0	.59889	28	4.1	.51389
	Women	44	4.2	.64106	60	4.2	.50366	38	4.5	.33810
Subscale Variable 5	Men	19	4.6	.38824	29	4.6	.73188	28	4.5	.41220
	Women	44	4.0	.62440	60	4.1	.45111	38	4.2	.65412
Subscale Variable 6	Men	19	3.9	.65337	29	4.1	.52220	28	3.9	.63858
	Women	44	4.0	.62440	60	4.1	.45111	38	4.2	.61410

Table L.4 Cont'd.

Summary Table of Means
Gender by Age

		Age I			Age II			Age III		
				Standard			Standard			Standard
		N	Mean	Deviation	N	Mean	Deviation	N	Mean	Deviation
Subscale Variable 7		Men	Women		Men	Women		Men	Women	
Emotional Awareness		19	44	.74003	29	60	.39889	28	37	.50507
				.42285			.51199			.41093
Subscale Variable 8		N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Emotional Management		19	44	.75487	29	60	.42032	27	38	.46370
				.48597			.50151			.42779
Subscale Variable 9		N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Intellectual		19	44	.76960	29	60	.56314	28	38	.66299
				.72604			.63501			.59847
Subscale Variable 10		N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Occupational		18	44	.64077	28	56	.51619	24	37	.65575
				.54292			.57810			.57282
Subscale Variable 11		N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Spiritual		19	44	.83848	29	59	.82448	27	37	.78013
				.74938			.66341			.65412

Key: Age I = 18-19 years old
 II = 20-24 years old
 III = 25 years and up

Table L.5

Analysis of Variance Summary TablesDependent Subscale Variable 1, Exercise

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
Mean	1457.64754	1	1457.64754	3094.13	0.0
Gender	0.51791	1	0.51791	1.10	0.2955
Age	0.02528	2	0.01264	0.03	0.9735
Institution	3.21853	1	3.21853	6.84	0.0096
GA	0.46333	2	0.23167	0.49	0.6120
GI	0.88523	1	0.88523	1.88	0.1718
AI	1.50377	2	0.75188	1.60	0.2051
GAI	0.32906	2	0.16453	0.35	0.7054
Error	89.89309	191	0.47064		

Key:

GA = Gender x Age
 GI = Gender x Institution
 AI = Age x Institution
 GAI = Gender x Age x Institution

Table L.5 Cont'd
Analysis of Variance Summary Tables

<u>Dependent Subscale Variable 2, Nutrition</u>					
<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
Mean	1680.70045	1	1680.70045	3629.14	0.0
Gender	0.02657	1	0.02657	0.06	0.8110
Age	0.13614	2	0.06807	0.15	0.8634
Institution	1.51392	1	1.51392	3.27	0.0722
GA	1.22269	2	0.61134	1.32	0.2695
GI	0.16696	1	0.16696	0.36	0.5489
AI	0.05593	2	0.02797	0.06	0.9414
GAI	0.17819	2	0.08910	0.19	0.8251
Error	88.45449	191	0.46311		

Key: GA = Gender x Age
 GI = Gender x Institution
 AI = Age x Institution
 GAI = Gender x Age x Institution

Table L.5 Cont'd

Analysis of Variance Summary TablesDependent Subscale Variable 3, Self Care

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
Mean	1611.20988	1	1611.20988	5155.36	0.0
Gender	3.02644	1	3.02633	9.68	0.0021
Age	0.59732	2	0.29866	0.96	0.3864
Institution	1.32203	1	1.32203	4.23	0.0411
GA	2.69572	2	1.34786	4.31	0.0411
GI	0.01547	1	0.01547	0.05	0.8242
AI	0.16150	2	0.08075	0.26	0.7726
GAI	0.06892	2	0.03446	0.11	0.8957
Error	59.69345	191	0.31253		

Key:

GA = Gender x Age

GI = Gender x Institution

AI = Age x Institution

GAI = Gender x Age x Institution

Table L.5 Cont'd

Analysis of Variance Summary TablesDependent Subscale Variable 4, Vehicle Safety

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
Mean	2116.71273	1	2166.71273	7258.94	0.0
Gender	2.74988	1	2.74988	9.43	0.0024
Age	1.28558	2	0.64279	2.20	0.1131
Institution	1.39822	1	1.39822	4.79	0.0298
GA	0.36379	2	0.18189	0.62	0.5370
GI	0.04723	1	0.04723	0.16	0.6878
AI	0.27089	2	0.13545	0.46	0.6292
GAI	0.65558	2	0.32779	1.12	0.3271
Error	55.69576	191	0.29160		

Key: GA = Gender x Age

GI = Gender x Institution

AI = Age x Institution

GAI = Gender x Age x Institution

Table L.5 Cont'd
Analysis of Variance Summary Tables

<u>Dependent Subscale Variable 5, Drug Usage</u>				
<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u> <u>Tail Probability</u>
Mean	2504.15067	1	2504.15067	9001.05
Gender	0.02023	1	0.02023	0.07
Age	0.05700	2	0.02850	0.10
Institution	0.53203	1	0.53203	1.91
GA	0.86037	2	0.43019	1.55
GI	0.06510	1	0.06510	0.23
AI	0.61444	2	0.30722	1.10
GAI	3.16067	2	1.58033	5.68
Error	53.13744	191	0.27821	0.0040

Key: GA = Gender x Age
 GI = Gender x Institution
 AI = Age x Institution
 GAI = Gender x Age x Institution

Table L.5 Cont'd

Analysis of Variance Summary TablesDependent Subscale Variable 6, Environment

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
Mean	2022.71048	1	2022.71048	6568.05	0.0
Gender	0.10542	1	0.10542	0.34	0.5592
Age	0.10334	2	0.05167	0.17	0.8457
Institution	1.94600	1	1.94600	6.32	0.0128
GA	0.53616	2	0.26808	0.87	0.4204
GI	1.33735	1	1.33735	4.34	0.0385
AI	1.30200	2	0.65100	2.11	0.1236
GAI	0.56224	2	0.28112	0.91	0.4031
Error	58.82075	191	0.30796		

Key: GA = Gender x Age

GI = Gender x Institution

AI = Age x Institution

GAI = Gender x Age x Institution

Table L.5 Cont'd

Analysis of Variance Summary TablesDependent Subscale Variable 7 Emotional Awareness

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
Mean	2342.32563	1	2342.32563	10812.16	0.0
Gender	0.30511	1	0.30511	1.41	0.2368
Age	0.46135	2	0.23067	1.06	0.3468
Institution	0.00235	1	0.00235	0.01	0.9172
GA	0.52288	2	0.26144	1.21	0.3014
GI	1.63173	1	1.63173	7.53	0.0066
AI	1.22442	2	0.61221	2.83	0.0617
GAI	0.38512	2	0.19256	0.89	0.4128
Error	41.37785	191	0.21664		

Key:

GA = Gender x Age

GI = Gender x Institution

AI = Age x Institution

GAI = Gender x Age x Institution

Table L.5 Cont'd

Analysis of Variance Summary TablesDependent Subscale Variable 8, Emotional Management

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
Mean	2110.37022	1	2110.37022	8499.24	0.0
Gender	0.17718	1	0.17718	1.71	0.3993
Age	0.11340	2	0.05670	0.23	0.7961
Institution	0.01307	1	0.01307	0.05	0.8188
GA	0.77790	2	0.38895	1.57	0.2115
GI	0.94687	1	0.94687	3.81	0.0523
AI	0.36197	2	0.18099	0.73	0.4838
GAI	0.09966	2	0.04983	0.20	0.8184
Error	47.42549	191	0.24830		

Key: GA = Gender x Age

GI = Gender x Institution

AI = Age x Institution

GAI = Gender x Age x Institution

Table L.5 Cont'd
Analysis of Variance Summary Tables

<u>Dependent Subscale Variable 9, Intellectual</u>				
<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u> <u>Tail Probability</u>
Mean	1652.23274	1	1652.23274	3806.66
Gender	0.70083	1	0.70083	1.61
Age	0.31713	2	0.15856	0.37
Institution	0.83278	1	0.83278	1.92
GA	0.82705	2	0.41352	0.95
GI	0.99756	1	0.99756	2.30
AI	0.15766	2	0.07883	0.18
GAI	0.78273	2	0.39137	0.90
Error	82.90111	191	0.43404	

Key: GA = Gender x Age
 GI = Gender x Institution
 AI = Age x Institution
 GAI = Gender x Age x Institution

Table L.5 Cont'd

Analysis of Variance Summary TablesDependent Subscale Variable 10, Occupational

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
Mean	2089.17107	1	2089.17107	6466.54	0.0
Gender	0.14977	1	0.14977	0.46	0.4968
Age	0.01867	2	0.00934	0.03	0.9715
Institution	0.68603	1	0.68603	2.12	0.1467
GA	0.35599	2	0.17799	0.55	0.5773
GI	0.72092	1	0.72092	2.23	0.1369
AI	0.94061	2	0.47031	1.46	0.2358
GAI	0.31999	2	0.16000	0.50	0.6102
Error	61.70717	191	0.32307		

Key:

GA = Gender x Age

GI = Gender x Institution

AI = Age x Institution

GAI = Gender x Age x Institution

Table L.5 Cont'd

Analysis of Variance Summary TablesDependent Subscale Variable 11, Spiritual

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
Mean	1916.76941	1	1916.76941	3640.04	0.0
Gender	1.13789	1	1.13789	2.16	0.1432
Age	0.30308	2	0.15154	0.29	0.7503
Institution	0.74182	1	0.74182	0.14	0.7078
GA	1.29225	2	0.64612	1.23	0.2955
GI	1.82588	1	1.82588	3.47	0.0641
AI	1.03508	2	0.51754	0.98	0.3761
GAI	0.67323	2	0.33662	0.64	0.5288
Error	100.57669	191	0.52658		

Key:

GA = Gender x Age

GI = Gender x Institution

AI = Age x Institution

GAI = Gender x Age x Institution

Table L.6

One-Way Repeated Measure ANOVADependent Subscale Variable 1, Exercise

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	672561.21356	1	672561.21356	1687.47	0.0000
Gender	590.13023	1	590.13023	1.48	0.2267
Error	37464.78644	94	398.56156		
<u>Second Test</u>					
Repeated Measure	1687.79545	1	1687.79545	12.62	0.0006
Repeated Measure and Gender	254.54545	1	254.54545	1.90	0.1709
Error	12568.45455	94	133.70696		

238

Cell Means for First Dependent Subscale Variable

	<u>Male</u>	<u>Female</u>	<u>Marginal</u>
Gender =	*1.00000	*2.00000	
First Test	62.24242	56.16980	58.22917
Second Test	66.06061	64.79365	65.22917
Marginal	64.15152	60.46032	61.72917
Count	33	63	96

* Significant at .05

Table L.6 Cont'd.

One-Way Repeated Measure ANOVADependent Subscale Variable 2, Nutrition

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	827804.27762	1	827804.27762	1817.69	0.0000
Gender	240.94429	1	240.94429	0.53	0.4688
Error	42809.05051	94	455.41543		
<u>Second Test</u>					
Repeated Measure	1309.51572	1	1309.51572	11.34	0.0011
Repeated Measure and Gender	89.55738	1	89.55738	0.78	0.3807
Error	10853.81241	94	115.46609		

Cell Means for Second Dependent Subscale Variable

	Male	Female	Marginal
Gender =	*1.00000	*2.00000	
First Test	68.27273	64.46619	65.77125
Second Test	72.33333	71.41270	71.72917
Marginal	70.30303	67.94440	68.75521
Count	33	63	96

* Significant at .05

Table L.6 Cont'd.

One-Way Repeated Measure ANOVADependent Subscale Variable 3, Self-Care

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	816335.17859	1	816335.17859	2295.48	0.0000
Gender	4.34526	1	4.34526	0.01	0.9122
Error	33429.02453	94	355.62792		
<u>Second Test</u>					
Repeated Measure	122.93076	1	122.93076	1.50	0.2242
Repeated Measure and Gender	90.09743	1	90.09743	1.10	0.2976
Error	7718.52237	94	82.11194		

Cell Means for Third Dependent Subscale Variable

	<u>Male</u>	<u>Female</u>	<u>Marginal</u>
Gender =	*1.00000	*2.00000	
First Test	68.60606	70.36508	69.76042
Second Test	68.36364	67.28100	67.65000
Marginal	68.48485	68.80159	68.69271
Count	33	63	96

* Significant at .05

Table L.6 Cont'd.

One-Way Repeated Measure ANOVADependent Subscale Variable 4, Vehicle Safety

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	1137037.52606	1	1137037.52606	3073.27	0.0000
Gender	712.13023	1	712.13023	1.92	0.1686
Error	34777.78644	94	369.97645		
<u>Second Test</u>					
Repeated Measure	116.59172	1	116.59172	1.16	0.2846
Repeated Measure and Gender	33.77922	1	33.77922	0.34	0.5638
Error	9461.88745	94	100.65838		

Cell Means for Fourth Dependent Subscale Variable

	Male	Female	Marginal
Gender =	*1.00000	*2.00000	
First Test	79.36364	84.31599	82.60417
Second Test	78.60606	81.77778	81.64583
Marginal	78.98485	83.09680	81.64583
Count	33	63	96

* Significant at .05

Table L.6 Cont'd.
One-Way Repeated Measure ANOVA

<u>Dependent Subscale Variable 5, Drug Use</u>				
<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>
<u>First Test</u>				
Mean	1373837.79818	1	1373837.79818	7024.27
Gender	159.17318	1	159.17318	0.81
Error	18384.94661	94	195.58454	0.3693
<u>Second Test</u>				
Repeated Measure	214.30576	1	214.30576	2.02
Repeated Measure and Gender	486.47243	1	486.47243	4.59
Error	9966.52237	94	106.02683	0.0348

242

Cell Means for Second Dependent Subscale Variable

	Male	Female	Marginal
Gender =	*1.00000	*2.00000	
First Test	90.87879	89.44444	89.93750
Second Test	85.30303	90.56143	88.70420
Marginal	88.09091	90.00794	89.34896
Count	33	63	96

* Significant at .05

Table L.6 Cont'd.

One-Way Repeated Measure ANOVADependent Subscale Variable 6, Environment

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	1003791.39619	1	1003791.39619	4051.09	0.0000
Gender	1285.22953	1	1285.22953	5.19	0.0250
Error	23291.58297	94	247.78280		
<u>Second Test</u>					
Repeated Measure	2093.53571	1	2093.53571	21.59	0.0000
Repeated Measure and Gender	3.53571	1	3.53571	0.04	0.8490
Error	9113.38095	94	96.95086		

243

Cell Means for Second Dependent Subscale Variable

	<u>Male</u>	<u>Female</u>	<u>Marginal</u>
Gender =	*1.00000	*2.00000	
First Test	76.72727	82.46032	80.48958
Second Test	70.06061	75.22220	76.96875
Marginal	73.39394	78.81270	76.96875
Count	33	63	96

* Significant at .05

Table L.6 Cont'd.

One-Way Repeated Measure ANOVADependent Subscale Variable 7, Emotional Awareness

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	1193996.54771	1	1193996.54771	4203.14	0.0000
Gender	848.90188	1	848.90188	2.99	0.0871
Error	26702.76479	94	284.07197		
<u>Second Test</u>					
Repeated Measure	671.17460	1	671.17460	7.29	0.0082
Repeated Measure and Gender	111.32044	1	111.32044	1.21	0.2742
Error	8651.49206	94	92.03715		

244

Cell Means for Second Dependent Subscale Variable

	<u>Male</u>	<u>Female</u>	<u>Marginal</u>
Gender =	*1.00000	*2.00000	
First Test	81.96970	88.00000	85.92708
Second Test	79.63636	82.46032	81.49580
Marginal	80.80303	85.20160	83.78330
Count	33	63	96

* Significant at .05

Table L.6 Cont'd.

One-Way Repeated Measure ANOVA

Dependent Subscale Variable 9, Intellectual

Source	Sum of Squares	Degrees of Freedom	Mean of Squares	F	Tail Probability
First Test					
Mean	790543.56063	1	790543.56063	1866.63	0.0000
Gender	1725.85230	1	1725.85230	4.08	0.0464
Error	39810.39250	94	423.51481		
Second Test					
Repeated Measure	1074.39144	1	1074.39144	9.33	0.0029
Repeated Measure and Gender	1.26644	1	1.26655	0.01	0.9167
Error	10824.97835	94	115.15934		

246

Cell Means for Second Dependent Subscale Variable

	Male	Female	Marginal
Gender =	*1.00000	*2.00000	
First Test	66.96970	73.11111	71.00000
Second Test	61.81818	68.30159	66.02920
Marginal	64.39394	70.79635	68.53646
Count	33	63	96

* Significant at .05

Table L.6 Cont'd.

One-Way Repeated Measure ANOVADependent Subscale Variable 10, Occupational

<u>Source</u>	<u>Sum of Squares</u>	<u>Degrees of Freedom</u>	<u>Mean of Squares</u>	<u>F</u>	<u>Tail Probability</u>
<u>First Test</u>					
Mean	908426.35338	1	908426.35338	1788.39	0.0000
Gender	2817.68671	1	2817.68671	5.55	0.0206
Error	47748.14141	94	507.95895		
<u>Second Test</u>					
Repeated Measure	2169.38314	1	2169.38314	9.00	0.0035
Repeated Measure and Gender	238.59147	1	238.59147	0.99	0.3223
Error	22658.23665	94	241.04507		

247

Cell Means for Second Dependent Subscale Variable

	<u>Male</u>	<u>Female</u>	<u>Marginal</u>
Gender =	*1.00000	*2.00000	
First Test	73.09091	78.89520	76.84375
Second Test	63.66667	74.07937	70.50000
Marginal	68.37879	76.44440	73.61880
Count	33	63	96

* Significant at .05

APPENDIX M

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National Wellness Institute



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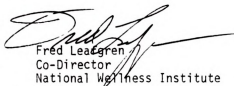
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BIBLIOGRAPHY

- "'86 Cost of Heart Disease Estimated at \$78.6 Billion," The Detroit Free Press. January 13, 1986.
- Abse, Dannie. Medicine on Trial. New York: Crown Publishers, Inc., 1967.
- Adams, Ruth. "Vitamin C vs. Cancer Research: Linus Paulings Defense," Better Nutrition, the Consumers Guide to a Better Life, Healthier Life. May 1985, 14-16.
- Aday, LuAnn, Ronald Anderson, and Gretchen V. Fleming. Health Care in the U.S., Equitable for Whom? Beverly Hills, London: Sage Publications, 1980.
- Allison, John. "Respiratory Changes During Transcendental Meditation," Lancet. 1970, vol. I, 833-834.
- Amkraut, Alfred and George F. Solomon. "From the Symbolic Stimulus to the Pathophysiologic Response: Immune mechanisms," International Journal of Psychiatry in Medicine. 1975, vol. 5, 541-563.
- Anand, B. K., G. S. Chhina, and B. Singh. "Some Aspects of Electroencephalographic Studies of Yogis," In C.T. Tart, (ed)., Altered States of Consciousness. New York: Wiley and Sons, 1969.
- Anderson, Ronald and Odin Anderson. A Decade of Health Services: Social survey trends in use and expenditure. Chicago and London: The University of Chicago Press, 1967.
- Arano, Luisa Coglianti. The Medicine Health Handbook, Tacuinum Sanitatis. New York: George Braziller, 1976.
- Ardell, D. High Level Wellness: An alternative to doctors, drugs and disease. Emmaus, Pennsylvania: Rodale Press, 1977.
- Astin, A. Four Critical Years: Effects of college on beliefs, attitudes and knowledge. San Francisco: Jessey-Bass, 1977.

- Associated Press. "Millions Needlessly Die of Preventable Illness Study Says," The Ann Arbor News. July 29, 1984, H1.
- Bahnson, Bahne Clause and Marjorie Brooks Bahnson. "Role of the Ego Defenses: Denial and repression in the etiology of malignant neoplasm," Annals, New York Academy of Science. 1966, vol. 125, 827-845.
- _____. "Ego Defenses in Cancer Patients," Annals, New York Academy of Science. 1969, vol. 164, 546-549.
- Barth, Greg and Geri Ann Johnson. "A Survey of Wellness/Healthy Lifestyling on College and University Campuses," Journal of American College Health. 1983, 31.
- Benson, Herbert. The Relaxation Response. New York: Avon Publishers of Bash, Camelot, Discus, Equinox and Flare Books, 1975.
- Betinis, John. "Medical Self-Care in a University Setting," Health Values: Achieving high-level wellness. 1984, 8.
- Blankenbaker, R. "Total Care the Cost-Effective Way," Paper presented at 13th annual meeting, Society of Prospective Medicine Proceeding. Bethesda, Maryland: Health and Education Researchers, 1977.
- Bloomfield, Harold, Michael Peter Cain, Dennis T. Jaffe, and Robert B. Kory. TM* Discovery Inner Energy and Overcoming Stress. New York: Delacorte Press, 1975.
- Boston Womens Health Book Collective. Our Bodies Ourselves. Boston: Simon and Schuster, 1976.
- Brody, Jane. "New Research into Crying Sheds Light on the Role of Tears," The Ann Arbor News. Feb. 26, 1984, C6.
- Brook, Robert, H. and Francis A. Appel. "Special Article: Quality of Care Assessment: Choosing a method for peer review," The New England Journal of Medicine. 1973, vol. 288, 1323-1328.
- Bruhn, John G. and David F. Cordova. "A Developmental Approach to Learning Wellness Behavior Part I: Infancy to early adolescence," Health Values: Achieving high-level wellness. 1977, vol. 1, 246-254.

- _____. A Developmental Approach to Learning Wellness Behavior, Part II: Adolescence to maturity, Achieving High-Level Wellness, 1978, vol. 2 No. 1, 16-21.
- Brunk, Mary. "A Student Wellness Club that Works,"
- Campbell, Donald and Julian Stanley. Experimental and Quasi Experimental Design for Research. Chicago: Rand McNally College Publishing Co., 1963.
- Capra, Fritjof. The Turning Point: Science, society, and the rising culture. Toronto, New York, London, Sydney: Boston Books, 1982.
- Center for Disease Control, Public Health Service. Leading Causes of Death and Probability of Dying, United States, 1975 and 1976. Atlanta: Center for Disease Control, 1979.
- Chambers, Carolyn Clark. "Focus on Health: Environmental wellness," Nurse Practitioner. 1981, December, 32-38.
- Chesler, Phyllis. Women and Madness. New York: Avon Books, Publishers of Bash, Camelot, Discus, Equinox and Flare Books, 1972.
- Clark, Matt, Mariana Gosnell, Nancy Stadtman and Daniel Shapiro. "Search for a Cure: Interleukin - 2 seems to help the body's own immune system fight cancer," Newsweek. December 16, 1985, 60-65.
- Cohen, Marc S. "The Student Wellness Resource Center: A holistic approach to student health," Health Values: Achieving high-level wellness. 1980, vol. 4, 209-212.
- Cohn, Victor. "Most People are Satisfied with Their Doctors," The Ann Arbor News. December 15, 1985, H7.
- Coren, Gena. The Hidden Malpractice, How American Medicine Treats Women as Patients and Professional. New York: William Morrow and Company, Inc., 1977.
- Cousins, Norman. Anatomy of an Illness: As perceived by the patient. Toronto, New York, London, Sydney: Boston Books, 1981.
- _____. The Healing Heart: Antidotes to panic and helplessness. New York and London: W.W. Norton and Company, 1983.

- Crump, Constance. "Women's Health Care Goes Mainstream," The Ann Arbor News. January 19, 1986, F1.
- Daley, Mary. Gyn/Ecology. The Metaethics of Radial Feminism. Boston: Beacon Press, 1978.
- Davis, Adelle. Lets Eat Right to Keep Fit. New York: Harcourt, Brace Jovanovich, Inc., 1954.
- Dilley, James W. "Report of the Executive Director: Is the sky really falling?" Journal of the American College Health Association. 1983, vol. 32, 5-6.
- Dreifus, Claudia (ed). Seizing Our Bodies: The politics of women's health. New York: Random House Inc., A Vintage Original, 1977.
- Duff, Raymond, S. and August B. Hollingshead. Sickness and Society. New York, Evanston and London: Harper and Row Publishers, 1968.
- Duncan, David F. "Editorial: Promoting high-level wellness in a university student population," Health Values: Achieving high-level wellness. 1980, 4, 207.
- Dunn, Betty and Elizabeth Abel. "Focus on Wellness," Geriatric Nursing. 1983, March/April, 111-112.
- Dunn, Halbert L. "High-Level Wellness for Man and Society," American Journal of Public Health. 1959, vol. 49, 786-792.
- Editors of Consumers Report. "Some Plain Truth about Popular Remedying and Common Ailments," The Medicine Show. Mount Vernon, N.Y.: Consumers Union, 1970.
- Ehrenreich, Barbara and John Ehrenreich. (Prepared by) A Health-PAC Book. The American Health Empire: Power, profit, and politics. New York: Vintage Books, a Division of Random House, 1971.
- Einstein, Albert. From a placard. February 1983.
- Elsenroth, Dennis. "The Role of the Counseling Center in the Promotion of Wellness," Health Values: Achieving high-level wellness. 1984, vol. 8, 30-34.
- Enarson, Harold L. "Perspectives on College Health in the 80's: A president's view," Journal of College Health Association. 1981, vol. 30, 11-13.

- Erickson, Erik. Childhood and Society. New York: W.W. Norton Press, Inc., 1950.
- Ferguson, Marilyn. The Aquarian Conspiracy: Personal and social transformation in the 1980's. Los Angeles: J.P. Tarcher, Inc., 1980.
- Fletcher, David L. "Wellness: The grand tradition of medicine," Postgraduate Medicine. 1983, vol. 6, 87-90.
- Forem, Jack. Transcendental Meditation: Maharishi Mahesh Yogi and the science of creative intelligence. New York: E.P. Dutton and Co., Inc., 1973.
- Fuch, Victor, R. Who Shall Live? Health, Economics, and Social Change. New York: Briar Banks, Inc., 1974.
- Gage, Robert, W. "Contradictions in Health: Frustration or Excitement," The Journal of American College Health. 1983, vol. 32, 35-40.
- Gawain, Shakti. Creative Visualization. Toronto, New York, London, Sydney, Auckland: A Bantom New Age Book, 1978.
- Gelb, Harold and Paula M. Siegel. Killing Pain Without Prescription, a New and Simple Way to Free Yourself from Headache, Backache, and Other Sources of Chronic Pain. New York, Cambridge, Philadelphia, San Francisco, London, Mexico City, Sao Paulo, Sydney: Barnes and Noble Books. A Division of Harper and Row, Publishers, 1980.
- Glaser, Gilbert H. EEG and Behavior. New York and London: Basic Books Inc., Publishers, 1963.
- Goldberg Herb. The Hazards of Being Male, Surviving the Myth of Masculine Privilege. New York: A Signet Book, 1976.
- Guyther, Roy J. "Wellness," Maryland State Medical Journal. 1982, November, 39-42.
- Haggard, Howard, W. Devils, Drugs, and Doctors. New York: Pocket Books, Inc., 1929.
- Hamilton, Mildred. "General Practice Becomes Medical Specialty of the 80's," The Detroit Free Press. November 1985.
- Hayner, Norman S. Personal Communication. March, 1986.

Hettler, Bill. Editorial: Health Values: Achieving high-level wellness. 1984, vol. 8, 4.

_____. "Reflections," Health Values: Achieving high-level wellness. 1983, 7.

_____. "Wellness: Encouraging a lifetime pursuit of excellence," Health Values: Achieving high-level wellness. 1984, 8.

_____. "Wellness Promotion on a University Campus," The Journal of Health Promotion and Maintenance, 1980, vol. 3, 77-95.

Holt, Linda Hughey, and Melva Weber. The American Medical Association Book of Women Care. New York: Random House, 1982.

Housing Office of The University of Wisconsin-Stevens Point. Educational Role of the Residence Hall in the University Community. Stevens Point, Wisconsin: 1970-1971.

Howard, Robert, B. "Wellness: Attainable goal or impossible dream?" Postgraduate Medicine. 1983, vol. 73, 15-19.

Illich, Ivan. Medical Nemesis: The expropriation of health. New York: Pantheon Books, 1976.

Irish, Donald P. and Daniel W. McMurry. "Professional Oaths and American Medical Colleges," Journal of Chronic Diseases. 1965, vol. 18, 275-289.

Jerusalem Bible. The Holy Bible in Four Translations. New York: The Iversen-Normon Associates, 1972.

Journal of the American College Health Association. "Recommended Standards and Practices for College Health Program," Journal of the American College Health Association. 1977, vol. 25, 1-35.

Kamiya, J. "Operant Control of the EEG Alpha Rhythm and Some Reported Effects on Consciousness," In C. T. Tart, (ed)., Altered States of Consciousness. New York: Wiley and Sons, 1969.

Kasamatsu, A. and T. Hirai. "An electroencephalographic Study on the Zen Meditation," In C. T. Tart, (ed)., Altered States of Consciousness. New York: Wiley and Sons, 1969.

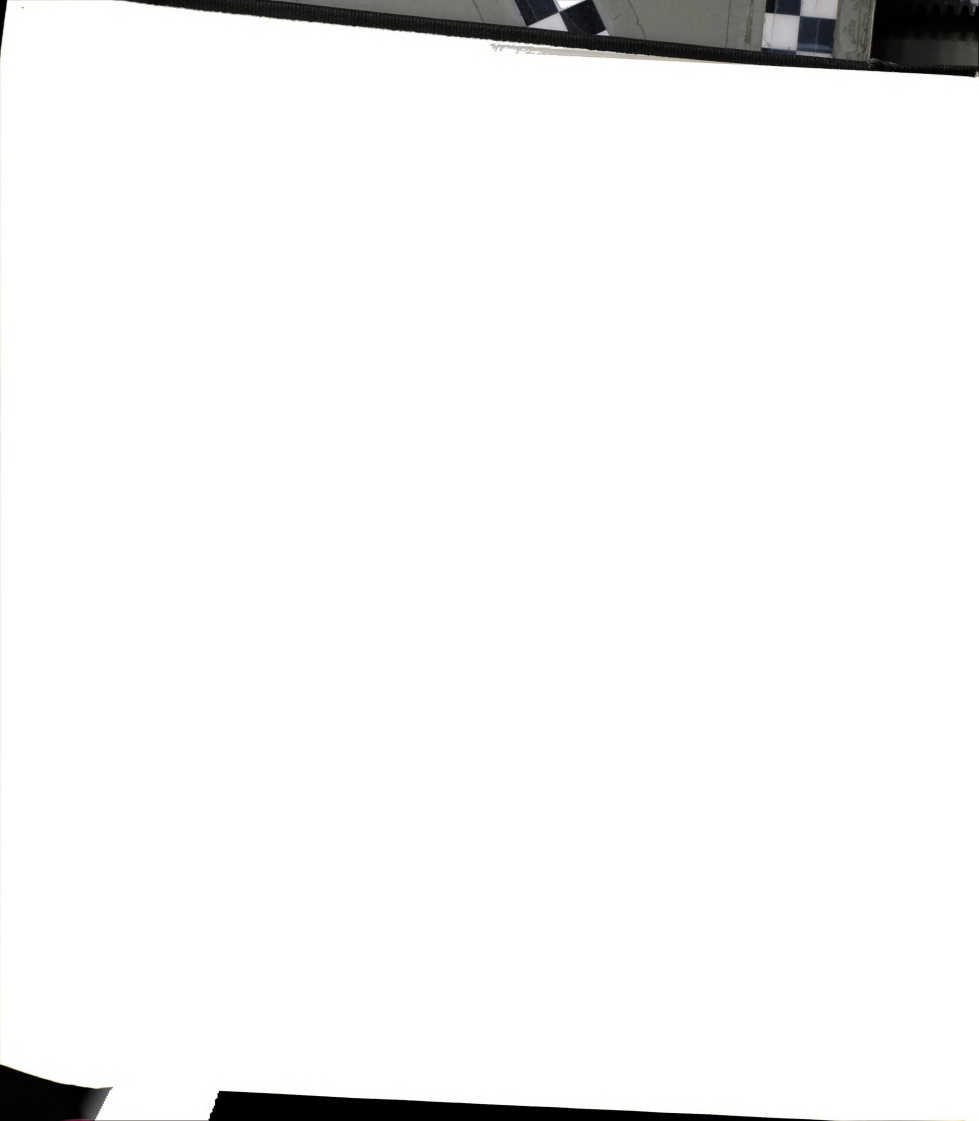
- Kennedy, Edward M. In Critical Condition, The Crisis in American Health Care. New York: Simon and Schuster, 1972.
- Kennedy, Ian. The Unleashing of Medicine. A Searching Look at Health Care Today. St. Albans, London, New York, Australia, Canada, New Zealand: Granada Publishing Limited, 1983.
- Kings, Stanley H. Perceptions of Illness and Medical Practice. New York: Russell Sage Foundation, 1962.
- Kotelchuck, David (ed). A Health/PAC Book. Prognosis Negative: Crisis in the health care system. New York: Vintage Books. A Division of Random House, 1976.
- Krieger, Dolores. The Therapeutic Touch. How to Use Your Hands to Help or to Heal. Englewood Cliffs, N.J.: Prentice House, 1979.
- Krivoski, James K. and Nicholas A. Piccolo. "A High-Level Wellness: The good life in higher education," The Journal of College and University Student Housing. 1980, vol. 10, 19-22.
- Kuhn, Thomas, S. The Structure of Scientific Revolutions. (2nd ed.), vol. II, No. 2, Chicago: University of Chicago Press, 1970.
- Kulp, Janice. "The Health Activation Program: Encouraging self-care in college students," Health Values: Achieving high-level wellness. 1980, vol. 4, 217-221.
- Kunz, Dora (compiled by). Spiritual Aspects of the Healing Arts. Wheaton, Illinois U.S.A/Madras, India/London, England: The Theosophical Publishing House, 1985.
- Laing, Ronald D. and A. Esterson. Sanity, Madness, and the Family. New York: Pelican Books, 1970.
- Laitner, Bill. "Fill up on Fiber, Doctor Says," The Detroit Free Press. January 31, 1986, 3C.
- Lawrence, Jodi. Alpha Brain Waves. New York: Avon Books, 1972.
- Leafgreen, Fred. "Coordinating Student Services to Enhance Wellness Opportunities," Health Values: Achieving high-level wellness. 1984, vol. 8, 9-12.

- _____. "Educational Programming," New Directions for Student Services. 1981, vol. 13, 23-33.
- Lewis, Roger. In Defense of the Body. An Introduction to the New Immunology. Garden City New York: Anchor Books, Anchor Press/Doubleday, 1974.
- Lloyd, G. E. R. (ed), J. Chadwick, W. N. Mann, I. M. Lonie, and K. T. Withington, (translated by) Hippocratic Writing. England, New York, Australia, Canada, New Zealand: Penguin Books Ltd., 1983.
- Lovett, E. D. "The Wellness Resource Center," Journal of American College Health Association. 1978, vol. 26, 178-182.
- Mander, Anica Vesel Rush, and Anne Kent. Feminism as Therapy. New York, and Berkeley: Corp., A Random House, Inc., 1974.
- Marshall, Phillip R. "The Chancellor's View of Wellness," Health Values: Achieving high-level wellness. 1984, vol. 8, 6-8.
- Mason, L. John. "Visualization Enhances Relaxation," People and Stress. 1984, 25-46.
- _____. "Autogenic: Basic relaxation," People and Stress. 1984, 21-28.
- _____. "Next, Try Progressive Relaxation," People and Stress. 1984, 29-33.
- McCormack, Patrick. "Second Opinions are Ordered to Eliminate Unnecessary Surgery," The Ann Arbor News. November 28, 1984, E4.
- McKeown, Thomas and C. R. Lowe. Medicine in Modern Society. Oxford: Blackwell Scientific Publications, 1949.
- McKeown, Thomas. The Role of Medicine: Dreams, mirage or nemesis. Princeton, New Jersey: Princeton University Press, 1979.
- Mechanic, David and Margarite Newton. "Some Problems in the Analysis of Morbidity Data," Journal of Chronic Disease. 1965, vol. 18, 569-580.
- Melzack, Ronald. The Puzzle of Pain. New York: Basic Books, Inc., Publishers, 1973.



- Merton, Thomas. New Seeds of Contemplation. New York: A New Direction Book, 1961.
- Murray, Frank. "If you Have Shingles, Try Vitamin C," Better Nutrition, the Consumers Guide to a Better Life, Healthier Life. May 1985, vol. 11-12, 33.
- Nevitt, Sanford. Self and Society. New York: Atherton Press, 1966.
- New York Times. "Pre-Menstrual Syndrome Remains Mystery," Detroit Free Press. January 1976.
- O'Brien, Francis and Karen Sothers. The "University of Wisconsin-Stevens Point Stress Management Program," Health Values: Achieving high-level wellness. 1984, vol. 8, 35-38.
- O'Non, John. Personal Communication. July, 1983.
- Osler, William. From a placard. October, 1985.
- Pearson, Dirk and Sandy Shaw. Life Extension: A practical scientific approach. New York: Warner Books Inc., 1982.
- Peck, Scott M. The Road Less Traveled: A new psychology of love, traditional values and spiritual growth. New York: A Touchstone Book, 1978.
- Pelletier, Kenneth R. Holistic Medicine. San Francisco: Robert Briggs Associates, 1979.
- _____. Mind as Healer, Mind as Slayer: A holistic approach to preventing stress disorders. New York: A Delta Book, 1977.
- Perry, John Weir. The Far Side of Medicine. Englewood Cliffs. New Jersey: A Pectrum Book, 1974.
- Pleck, Joseph, H. and Jack Sawyer. Men and Masculinity. Englewood Cliffs, New Jersey: Prentice Hill, Inc., 1974.
- Rappaport, Kim. "Professor Thinks the Secret of Sports (and Life) is 'Mind Power'," The Ann Arbor News. July 29, 1984.
- Reeves, Nancy. Womankind: Beyond stereotypes. Chicago: Aldine Publishing Company, 1971.

- Reif, Arnold. "High Level Wellness and Low Level Wellness: An Overview," Health Values: Achieving high-level wellness. 1978, vol. 2, No. 4, 198-210.
- Renault, Rob. Personal Communication. May 1985.
- _____. Personal Communication. August 1985.
- _____. Personal Communication. December 1985.
- Restak, Richard M. "Jim Fixx's Death Should Lead to Re-examination of Running," The Ann Arbor News. July 29, 1984.
- Robbins, L. and J. Hall. How to Practice Prospective Medicine. Indianapolis, Indiana: Methodist Hospital of Indiana, 1970.
- Saper, J. and Kenneth R. Magee. Freedom From Headaches. New York: Simon and Schuster, 1978.
- Schmitz, Cindy. "Self-Care for Credit: alternatives to activity courses in physical education," Health Values: Achieving high-level wellness. 1984, vol. 8, 24-26.
- Selye, Hans. The Stress of Life. New York, St. Luis, San Francisco, Bogota, Dusseldorf, Madrid, Mexico, Montreal, Panama, Paris, Sao Paulo, Tokyo, Toronto: McGraw-Hill Book Co., 1978.
- Shealey, Tom. "New Vitamin Discoveries and You," Prevention. 1986, vol. 38, 28-32, 109.
- Sidel, Victor W. and Ruth. Reforming Medicine: Lessons of the Last Quarter Century. New York: Pantheon Books, 1984.
- Simonton, O. Carl, Stephanie Simonton-Matthews, and James Creighton. Getting Well Again. Toronto, New York, London, Sydney: Bantom Books, 1980.
- Solomon, George F. "Emotions, Stress, the Central Nervous System, and Immunity," Annals, New York Academy of Science. 1969, vol. 164, 335-343.
- Starr, Paul. The Social Transformation of American Medicine: A rise of a sovereign profession and the making of a vast industry. New York: Basic Books, Inc., Publishers, 1982.



- Stein, Howard, F. "Wellness As Illusion," Delaware Medical Journal. 1982, vol. 54, 637-641.
- Stevens, Rosemary. American Medicine and the Public Interest. New Haven and London: Yale University Press, 1971.
- Stone, Irwin. The Healing Factor, "Vitamin C" Against Disease. New York: Grosset and Dunlap, 1972.
- Swami, Rama. A Practical Guide to Holistic Health. Honesdale, Pennsylvania: The Himalayan International Institute, 1980.
- Szasz, Thomas. The Myth of Mental Illness: Foundations of a theory of personal conduct. New York, Hagerstown, San Francisco, London: Perennial Library, Harper and Row, Publishers, 1974.
- Task Force of the Committee on Public Information. The American Psychiatric Association. A Psychiatric Glossary. New York: Basic Books, Inc., 1975.
- Taylor, Gordon Rattray. The Biological Time Bomb. New York: Signet Books, Published by the New American Library, 1969.
- Taylor, Marc E. and Jack McKillip. "Immediate Health-Related Consequences of Student Lifestyles," Health Values: Achieving high-level wellness. 1980, vol. 4, 213-216.
- Thomas. From a placard. October, 1985.
- Toffler, Alvin. Future Shock. New York: A Bantom Book, (Published by arrangement with Random House), 1970.
- Treffert, Donald, A. "'Rustproofing' People: Wellness in perspective," Postgraduate Medicine. 1982, vol. 71, 179-184.
- Tunley, Roul. The American Health Scandal. New York: Harper and Row, Publishers, 1966.
- "Up-to-Date Health Record Helps in Emergencies," The Ann Arbor News. 1984.
- Vierke, Scott. "The Lifestyling Program: Moving toward high level wellness." Health Values: Achieving high-level wellness. 1980, vol. 4, 237-241.

- Volpe, Peter E. Biology and Human Concerns. Dubuque, Iowa: Wm. C. Brown Co. Publishers, 1975.
- Wadworth, Barry. Piaget for the Classroom Teacher. New York: Longman, 1978.
- Wallis, Claudia. "Unlocking Pains Secrets: The question for doctors: How do you spell relief?" Time. June 11, 1984, 58-66.
- Withaldas, Yogi. The Yoga System of Health and Relief from Tension. New York: Cornerstone Library, 1957.
- Wacker, Warren E. "Opinions, Presentations, Abstracts and Proceedings of the Sixtieth Annual Meeting of the American College Health Association - Seattle, Washington, 1982, Presidential Address," Journal of American College Health Association. 1982, vol. 31, 9-14.
- Wain, Harry. A History of Preventive Medicine. Springfield, Illinois: Charles C. Thomas Publishers, 1970.
- Warner-Ashton, Sylvia. Teacher. New York: Simon and Schuster, 1963.
- Websters Third New International Dictionary. Springfield, Massachusetts: G and C Merriam Company, 1966.
- Weston, Carol. "Lifestyle Assistant Program," Health Values: Achieving high-level wellness. 1984, vol. 8, 18-21.
- Winch, Ann W. "Presidential Address," Journal of the American College Health Association. 1983, vol. 342, 3-4.
- Wingate, Peter. Medical Encyclopedia. Middlesex, England; New York, New York; Victoria, Austria; Ontario, Canada; Auckland, New Zealand: Penguin Books, Ltd., 1976.
- Young, James Harvey. The Medical Messiahs: A social history of health quackery in twentieth century America. Princeton, New Jersey: Princeton University Press, 1967.



Zach, Jim. "Combining Wellness Promotion with Family Practice in a University Setting," Health Values: Achieving high-level wellness. 1984, vol. 8, 27-29.

Zilbergers, Bernie. Male Sexuality. Boston: A Bantom Book, 1978.

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