ABSTRACT

Baardseth, Cheryl R. The impact of the LaCrosse Wellness Project on the health behaviors and attitudes of students residing on the campus of the University of Wisconsin-LaCrosse., M.S. in Community Health Education, 1986, 70 pp. (Dr. Gary D. Gilmore).

This research examined the impact of a specific health promotion process, the LaCrosse Wellness Project (LWP), on the health behaviors and attitudes of college students. The groups participating in the research consisted of a sample of students living in the residence halls on the University of Wisconsin-LaCrosse campus in LaCrosse, Wisconsin. There were 15 Ss in the experimental group and 17 Ss in the control group. Three instruments were used for the evaluation of this research: the LWP Impact Evaluation, the LWP Process Evaluation, and the Student Response Inventory. The LWP Impact Evaluation was used as a pre- posttest for the experimental and control groups. Both of the groups also completed the Student Response Inventory during the posttest phase. Finally, during the posttest phase, the experimental group completed the LWP Process Evaluation. The LWP intervention materials for this experimental study included the LaCrosse Wellness Inventory and the Wellness Development Process. The Mann-Whitney U-test was chosen to analyze the data from 7 hypotheses. Relationships between variables for 2 hypotheses were analyzed using Spearman's r correlation factor. Significance was established at the $p \leq .05$ level. Statistical significance was found in 1 of 9 hypotheses. The group experiencing the LWP significantly showed a greater desire to establish a personal wellness definition than the group not experiencing the process.

THE IMPACT OF THE LACROSSE WELLNESS PROJECT ON THE HEALTH BEHAVIORS AND ATTITUDES OF STUDENTS RESIDING ON THE CAMPUS OF THE UNIVERSITY OF WISCONSIN-LACROSSE

A Thesis

Presented to

the Graduate Faculty

University of Wisconsin-LaCrosse

In Partial Fulfillment

of the Requirements for the

Master of Science Degree

by

Cheryl R. Baardseth

July, 1986

UNIVERSITY OF WISCONSIN-LACROSSE
College of Health, Physical Education and Recreation
LaCrosse, Wisconsin 54601

Candidate: Cheryl R. Baardseth

We recommend acceptance of this thesis in partial fulfillment of this candidate's requirements for the degree:

Master of Science - Community Health Education

The candidate has completed her oral report.

Thesis Committee Chairperson	7/21/86 Date
Thesis Committee Member	7-21-86 Date
Thesis Committee Member	7/21/86 Date

This thesis is approved for the College of Health, Physical Education and Recreation.

Dean, College of Health, Physical Education and Recreation	July 31, 1986 Date
Dean of Graduate Studies	July 31, 1986 Date

ACKNOWLEDGEMENTS

It is difficult to put into words the appreciation I feel for all the individuals who helped me reach this milestone in my life. Faculty, friends and family all in some way gave of themselves so that I could accomplish this goal. Specifically, I would like to recognize Dr. Gary Gilmore, my thesis chairperson, for his guidance, leadership, and infinite patience as I struggled through this research process. Also, I would like to extend a special thank you to Dr. Margaret Dosch and Dr. Tom Hood for their assistance.

Next, I would like to thank my research partner and friend, Julie Burns. I am grateful for her efforts and support during our research project.

Finally, I would like to express my appreciation to my husband, Luke, and my parents, Jan and Roland Kratz, for their encouragement, help, and love.

DEDICATION

"Only as high as I reach can I grow,
Only as far as I seek can I go,
Only as deep as I look can I see,
Only as much as I dream can I be."

Karen Ravn

For their love and support throughout the years, I dedicate this thesis to my husband and my parents.

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CHAPTER 1

INTRODUCTION

College encourages an individual to be concerned with the meaning of human existence, and to discover values and goals to which one can be devoted (Williams & Kitzinger, 1967). In this first chapter, the researcher will identify a problem which addresses the enhancement of individuals. The adoption of a proactive health program will be examined regarding its impact on collegiate lifestyle and health practices.

Background

Historically, the practice of medicine has been oriented toward disease treatment and acute care. In previous decades, technology and therapy primarily focused on cure and not prevention. For example, from 1925 to 1950, the discoveries of sulfa and penicillin and tuberculosis therapy were typical accomplishments of this "treatment" era (Yeater, 1983). However, since 1950, illness has been associated with individual lifestyle (Yeater, 1983). More attention has been paid to the significance of our habits, where we live, where we work, and our personal problems (Ramsey, 1982). Unlike the clinical efforts of the previous era, the extent of our control over these factors is as varied as the factors themselves. For example, there may be little an individual can do about an inherited disease. However, the factors that one can control (such as smoking, diet, or exercise) give an individual an opportunity to maintain or improve his/her health and well-being (Andreoli & Guillory, 1983).

Fortunately, a national interest in health promotion programs has emerged (Leafgren, 1984). In 1983, American consumers spent thirty billion dollars in the pursuit of positive health (Marshall, 1984). Several factors appear to support this recent trend in health promotion. These factors which are acting as catalysts for the wellness concept include the following: an increasing public concern for fitness and the role of diet in disease prevention, a growing resentment to rising inpatient care costs, and a growing acceptance of the idea that a healthy lifestyle is worthwhile (Stephenson, 1984).

Employee health promotion and wellness programs have been generating a great amount of enthusiasm recently (Forouzesh & Ratzker, 1984). Many businesses and industries are using such programs to help decrease their health care costs as they become more cognizant of short-term and long-term benefits (Forouzesh & Ratzker, 1984). Schools are also receiving attention as sites for disease prevention and health promotion because of their long-term, continuous contact with healthy children. With their nearly complete coverage of the population from ages 5-18, schools are logical places in which to influence positive health and health behavior (Mullen, 1983). The influence of the school environment is exerted through several means. Some of these include: formal classroom instruction on health and safety, contact with health professionals, and participation in physical education activities (Mullen, 1983).

Besides the primary and secondary education sites, many colleges and universities are now considering and developing health programs for their campuses (Leafgren, 1984). Colleges and universities are populated by adolescents and young adults, the age group for which common health problems,

violent deaths, injury, alcohol abuse, unwanted pregnancies, and sexually transmitted diseases occur (Andreoli & Guillory, 1983). According to Andreoli and Guillory (1983), behavior that is individually determined and expressed is clearly a major causal factor for the health and social problems of this age range. Wellness programs are finding a home on the college campus for other unique reasons. First, a campus with an emphasis on health promotion programming gains a competitive edge for attracting, retaining, graduating, and placing its students (Marshall, 1984). Second, with the expanding interest by society in health promotion, there will be an ongoing need for trained and qualified individuals to develop and evaluate wellness programs. Universities have an obligation to prepare students for pertinent career avenues. Professionally, people in many areas, including health education, physical education, psychology, sociology, communication, nutrition, home economics and business, may be involved in health promotion programs. Third, while it is true that not all students will choose to participate in a wellness program, those who do participate will enhance their self-confidence and their personal skills (Marshall, 1984). Institutions of higher learning generally have as one of their missions the responsibility to encourage each student to assess and make improvement in his/her lifestyle (Hettler, 1984). This study attempted to document the impact of a specific wellness program on the lifestyle of students residing on a college campus.

Need for the Study

As individual responsibility for physical, mental, and social well-being becomes increasingly accepted by the general population, health promotion

programs will assume an even greater importance in educational institutions. According to Hettler (1984), universities have a responsibility to the public to lead the way in lifestyle improvement endeavors. For the most part, colleges and universities offer many health promotion/self-improvement activities on their campuses. However, students may not be aware of these opportunities or their personal wellness needs. A process may be necessary to help students assess their well-being and to determine wellness intervention strategies. Also, a method, such as a theme-focused wellness process, may enhance the coordination of the students' needs with on- and off-campus resources. Therefore, the researcher implemented a wellness process, the LaCrosse Wellness Project (LWP) in the residence halls of the University of Wisconsin-LaCrosse. Assuming that this campus study would show significant lifestyle changes in the area of wellness, this process could be expanded and offered to all campus residents and students. The LWP could act as an umbrella to coordinate most or all campus activities and resources related to health promotion under one recognized program level. Finally, there appears to be a continued need for the research in this area to be shared with other campuses to assist them with the process of establishing new student wellness programs.

Statement of the Problem

This research project attempted to answer the following question: What is the impact of a specific health promotion process (the LaCrosse Wellness Project) on the health behaviors and attitudes of students living in residence halls on the campus of the University of Wisconsin-LaCrosse?

Null-Hypotheses

The following null-hypotheses were developed for this study:

1) There is no statistically significant difference between the experimental group (Group 1) and the control group (Group 2) regarding self-disclosed involvement in self-improvement activities.

2) There is no statistically significant difference between Group 1 and Group 2 in the levels of use of campus medical services.

3) There is no statistically significant difference between Group 1 and Group 2 in the priority of self-improvement activities.

4) There is no statistically significant difference between Group 1 and Group 2 in the self-reported desire to be involved in self-improvement activities.

5) Group 1 will not be statistically higher than Group 2 in the desire to establish a personal wellness definition.

6) Group 1 will not be significantly greater than Group 2 regarding the actual sharing of their wellness definition.

7) There is no statistically significant difference between Group 1 and Group 2 in missed commitments due to illness.

8) There is no relationship between the number of hours worked per week by subjects in Group 1 and their reported participation in self-improvement activities.

9) There is no relationship between the number of hours worked per week by subjects in Group 2 and their participation in self-improvemnt activities.

Assumptions

The following assumptions were made:

1. All the subjects responded accurately to the research inventories and surveys.

2. No serious physical or mental deficiencies existed in any of the subjects.

Delimitations

The study involved the following delimitations:

1. Subjects in this study resided on the campus of the University of Wisconsin-LaCrosse.

2. Subjects were volunteers in the wellness process activities.

3. The study was delimited to primarily traditional college-aged students residing on campus; therefore, the research should not be extrapolated beyond this age category.

Limitations

The study involved the following limitations:

1. Volunteering subjects demonstrated an apparent interest in personal health by attending the wellness activities, and some may have been already involved in positive health behaviors to such a degree that significant change would be minimal.

2. Due to a small sample size, the results of this study may be biased by additional confounding variables.

Definiton of Terms

Wellness - "The daily striving for the goal of becoming healthier through ongoing assessment, intervention, and reinforement" (Gilmore, 1979, p. 12).

Health Promotion - "Health promotion is any combination of health education and related organizational, political, and economic interventions designed to facilitate behavioral and environmental adaptations that will improve or protect health" (Nelson & Simmons, 1983, p. 2).

LaCrosse Wellness Project - A two-phase process designed specifically to help individuals pursue wellness.

LaCrosse Wellness Inventory (LWI) - The LWI is the first phase of the LaCrosse Wellness Project. The purpose of this phase is to help the participant assess his or her current level of wellness through the completion of a comprehensive inventory including questions and statements from nine areas of wellness.

Wellness Development Process (WDP) - The WDP is the second phase of the LaCrosse Wellness Project. Participants receive a computerized assessment of their LWI responses and their own wellness workbook. They are then guided through a process which fosters personal involvement, leading to the development of an individualized wellness plan.

CHAPTER II

LITERATURE REVIEW

The problem addressed by this research study concerns the impact of a health promotion process on the health behaviors and attitudes of students living in campus residence halls. The factors involved in this type of intervention strategy are comples. Therefore, the following review of leterature will include an explanation of the wellness movement, an analysis of programming for wellness and a specific description of wellness on the university campus.

The Wellness Movement

The current major causes of morbidity and mortality are no longer bacterial and viral agents that come from the natural environment to attach the human host. They are, instead, the lifestyle factors exhibited by individuals with poor diet, inadequate exercise, use of harmful substances, including alcohol and tobacco, and other health-endangering behaviors, and forces from the human-made environment (Andreoli & Guillory, 1983). These forces take the form of air pollutants, food contaminants, and hazards in the workplace, home and school, and other settings in which human beings regularly spend time (Andreoli & Guillory, 1983). Therefore, the health care system has begun to address the National need for health promotion and prevention of disease. The effects of these health promotion efforts on populations of individuals will be measured with traditional yardsticks such as, morbidity and mortality, plus new ones like functional health status and quality of life (Nelson & Simmons, 1983).

Looking back at American health patterns, it can be seen that during the first half of this century, the principle gains in human health were achieved through public health efforts including improved sanitation, nutrition, and immunization. Today, however, infectious and contagious diseases have been replaced largely by cardiovascular disease, hypertension, malignant neoplasms, arthritis, diabetes, emphysema, gastrointestinal disorders, mental illness, allergic disease, and other chronic conditions (Ramsey, 1982). Clinical specialists are beginning to realize that the health problems characteristic of our times are somehow linked with the way we live in our environment and adapt to our daily routine (Ramsey, 1982). Therefore, current efforts are being directed at individuals to arouse their desire to assume responsibility for their personal actions and well-being.

Terminology and Concepts of Wellness

Health promotion, wellness, wholistic health and self-care are all terms which have been used to depict the current phenomenon in the health field. Although these words and concepts are frequently interchanged, each has a unique meaning which is important to the wellness movement. Therefore, the literature was reviewed to examine the distinctions among these terms in relation to practice and theory.

The available definitions of health promotion are numerous. However, Nelson and Simmons (1983), summarize health promotion as any combination of health education and related organizational, political, and economic interventions designed to facilitate behavioral and environmental adaptations that will improve or protect health. Although this definition appears

to be a viable one, Green (1985), states that defining the term health promotion, at best, is imprecise due to individual ideas of what health means and what the word promotion may mean to individuals.

A Canadian physician, Halbert Dunn, first defined high-level wellness in 1959. He referred to this philosophy of life as a way to maximize the potential of which the individual is capable, within the environment where he is functioning (Dunn, 1961). Wellness today has been defined operationally as "the daily striving for the goal of becoming healthier through ongoing assessment, intervention, and reinforcement" (Gilmore, 1979, p. 12). Finally, a third definition of wellness is provided by Hettler (1980); in which he describes it as an active process through which the individual becomes aware of and makes choices toward a more successful existence.

Holism, from the Greek holos, meaning whole (person), was used by Jan C. Smuts, in 1926, in a theory of relation of parts to the whole (Green, 1985). In this context, the phrase wholistic health care means physical, mental, social, spiritual, and emotional health. Health in each area results in health of the whole person, while illness in any one of the areas creates stress in the other areas (Green, 1985).

Medical self-care means learning to take care of one's minor health problems without directly consulting a health professional (Betinis, 1984). This includes assessing one's self for signs and symptoms of illness or injury and properly using self-treatment techniques. It can also involve recognizing when one is too ill for self-care and therefore needs to see a professional (Betinis, 1984). The concept of self-care assumes that an individual has the motivation, resources, knowledge, skills, information,

and ability to make informed decisions about health and lifestyle (Green, 1985).

Arenas for Practicing Wellness

There are many arenas in which health promotion strategies can be implemented. Both private and public sectors of society are getting involved. Three major sites (The worksite, community, and health care institution) were examined for their current health promotion trends. A fourth arena, the university, will be presented in detail later.

In recent years, there has been a proliferation of health promotion efforts in the occupational setting. A primary force behind this trend has been the rising cost of health care. In 1982, the United States spent well over $300 billion on health care, while corporations paid more than $77 billion of this bill (Rosen, 1984). The corporate expenses took the form of employee health insurance, absenteeism costs and productivity decrements (Reed, 1984). Occupational health once referred only to the attempt by management or unions to limit the number of employee accidents, such as limbs lost to machinery, eyes damaged by chemical sprays or lives lost in explosions or mine cave-ins. However, companies are now organizing programs to help reduce or eliminate self-destructive behaviors, (e.g. smoking or excess alcohol consumption), and to help them initiate healthier behaviors, such as aeorbic exercise and making better food choices. The six components of wellness most frequently addressed through workplace programs are fitness, hypertension control, smoking cessation, chemical dependency, stress management and nutrition education and weight control (Chen, 1982). It appears that the new worksite generation will be

characterized by employee assistance programs, health risk appraisals, behavior modification classes and educational programs.

Inpatient health care institutions are also potential arenas for health promotion activities. The hospital and nursing home are two good examples of major inpatient settings. The hospital is an excellent site in which to coordinate health promotion activities because of its established credibility in the eyes of the general public, and its high concentration of a captive audience of patients and staff (Andreoli & Guillory, 1983). The American Hospital Association has established a unit of their headquarters to deal soley with health promotion efforts and act as a clearinghouse and information source for such efforts (Knobel, 1983).

Although it may be too late to prevent totally the onset of certain diseases or disabilities, health promotion activities are being provided to the elderly. Activities designed to address individual problems in mobility, mental confusion, communication, hygiene, and other areas can be made possible in the nursing home setting and after discharge (Andreoli & Guillory, 1983). Since promotion of health is appropriate for people of all ages, it should occur in traditional institutional settings in which care of the sick has been the primary focus (Andreoli & Guillory, 1983).

Community health promotion encompasses a wide range of resources. For example, neighborhood health centers, rural health clinics, public health departments and public and private nonprofit organizations all contribute to the cause. These organizations provide preventive health services, such as immunizations, blood pressure checks, physical examinations and health education through counseling, information dissemination and or group

education. Once again, the purpose of these efforts is to foster voluntary behavior for healthful living.

Economics of Wellness

Nearly one dollar of every ten spent in this country goes to pay for health care and related services (Reed, 1984). As a society, we have been increasingly willing to spend escalating proportions of both our personal and public dollars on more medical care services (Rentmeester, 1984). However, health promotion appears to be reducing health care costs through the reduction of illness and injury. Numerous reports have provided increasing evidence to support the idea of cost-efficiency of health enhancement activities. Most of these reports have been generated by the business sector, since one of the basic concerns of the corporate health investers has been the "bottom line" payoff. It is of concern to some that the emerging ecomonic data is descriptive in nature and has not conformed to the more rigid control study design of the research community (Rentmeester, 1984). However, even if these long-term studies would occur, changes in values and social systems would not necessarily follow (evidence cigarette smoking) (Rentmeester, 1984). Nevertheless, descriptive data documenting the economic benefits of employer-based wellness programs is impressive.

> In research being conducted at Blue Cross and Blue Shield of Indiana, significant changes are now being documented in employees health risk status, absenteeism, and health care costs, as the result of a comprehensive worksite health promotion program. The Health Promotion Service has been operated for about $3 to $4 per employee per month. From 1979 to 1982, over one million dollars have been saved in health care costs (Reed, 1984, p. 46).

The Health Promotion Service is a risk factor identification and reduction program. The Service consists of four components or phases: the pre-screening component, the screening phase, the intervention phase, and the follow-up and maintenance activities (Reed, 1984). Besides showing cost effectiveness, the researchers demonstrated significant changes in risk factors over a three to five year period (Reed, 1984).

Considering other health promotion efforts, the benefit-to-cost ratio for smoking at the work site has been estimated as 2:1, that is for every dollar an employer invests in these programs, a two dollar savings can be predicted (Rentmeester, 1984). Another major health cost problem for business and industry has been alcohol and drug abuse related illnesses. It is estimated that alcoholism costs industry more than $40 billion a year (Knobel, 1983). Employer-based wellness programs aimed at reducing alcohol and drug-related illnesses have been successful. General Motors has cut lost hours by 49% and disability by 29% for employees involved in their alcoholism program (Knobel, 1983). A second corporation, the Firestone Tire and Rubber Company attributed an annual savings of $1.7 million ($2,350 per participant) to their alcohol abuse program through improved attendance, decreased accident and sickness benefits, and reduced health care payments (Chen, 1982). To summarize, workplace wellness programs can lead to more safety-minded, knowledgeable, and cooperative employees, project a health conscious corporate image, appear to be cost-effective, and seem to contribute to higher productivity and profit (Chen, 1982).

Programming for Wellness

The search for ways to influence others is clearly not a new concern. For years the business community has acknowledged the need to promote their services, sell their ideas, proposals, budgets, and recommendations to decision makers and clientele. On the other hand, the direct intrusion of the market system and its ideology into the human services is a new dimension. For example, the concept of wellness is currently being packaged, promoted and "sold" throughout the country. However, as in any new product development in the commercial sector, the use of a systematic and aggressive marketing campaign is imperative in order to survive in a very competitive environment. In health promotion, no matter how well developed the product, if it cannot attract sufficient participants and keep them returning, the likelihood of success is limited. Therefore, in the programming of wellness, it is necessary to address the issues of marketing and program design.

Applying Marketing Strategies to Wellness Programming

Marketing may be defined as an orderly approach to producing, promoting and selling a service or product to satisfy consumer needs in the most efficient and cost-effective manner (Galaszewski & Prabhaker, 1984). Both marketing and health promotion strive to motivate change in consumer behaviors; this is the common denominator for integrating marketing principles into the program planning process (Bonaguro & Miaovlis, 1983). However, especially in the marketing of services, consumers may not be very aware of their own needs. Therefore, the professional service

provider must emphasize education and communication in addition to persuasion, when marketing his/her product. The marketing concept applied to wellness programming includes analyzing the market, developing the marketing mix and evaluating the program.

Analyzing the market. Needs assessment for health education and marketing research have one common denominator: identification of target populations (Bonaguro & Miaoulis, 1983). However, a needs assessment is usually limited to the collection of demographic and epidemiologic need-related data, whereas the marketing process is extended to include the needs and desires of public consumers. Market segmentation, is a more precise delineation of the needs and desires of the target group (Lancaster, McIlwain, & Lancaster, 1983).

> Segmentation is the gathering of information about consumer preferences which serves as the basis to categorize consumers into relatively homogeneous market groups; then appropriate communication strategies are developed to respond to the benefits desired by consumers (Bonaguro & Miaoulis, 1983, p. 7).

Health education target markets can be segmented in a variety of ways depending on the type of program being planned (dissemination of information, education, screening, or public policy change); the resources and information available; and the time allotted for data collection. For example, for a wellness program, markets can be segmented according to demographic variables of age, sex, race, income education, occupation, and other socio-economic characteristics. The major benefits of market segmentation are:

> 1) a more precise definition of consumer needs and behavior patterns, 2) improved identification of ways to provide services to population groups, and 3) more efficient utilization of health education resources through accomplishment of a better fit between products (programs and services) and consumers (Lancaster, McIlwain, & Lancaster, 1983 p. 45).

Developing the Marketing Mix. Product, promotion, place, and price are the four variables which determine the marketing mix. Each one of these variables contribute to the acceptance of the item or service by the consumer. Assembling the marketing mix is perhaps the most important conceptual contribution that marketers can make to health education (Lancaster, McIlwain, & Lancaster, 1983).

In health promotion, the product can include physical objects (e.g., exercise equipment), services (e.g., education or counseling), or a process (e.g., strategy for personal wellness). Promotion, the second "P" in the marketing mix, includes both advertising and personal selling. Advertising may be defined as any paid form of nonpersonal presentation and promotion of ideas, goods or services by an identified sponsor (Golaszewski & Prabhaker, 1984).

> Advertising essentially serves three functions within a health promotion effort: to increase the perceived quality of the product; educate the consumer to establish the product's main attributes and its relationship to their needs; and inform the consumer of necessary distribution and sales promotion concerns (when, where, prerequisites, etc.) (Golaszewski & Prabhaker, 1984, p. 190).

Personal selling involves direct contact with the consumer. The marketer can directly address the individual questions and concerns of the consumer. The primary objective of personal selling is to bring closure to the sale.

The third "P", place, refers to the distribution of the health product. More specifically, what are the location factors associated with product

and organizational resources which allow for the simple adoption of a health promotion program. Also, the campus population is characteristically motivated by exploration and development. College has always encouraged the individual to search for a philosophy of life, to be concerned with the meaning of human existence, and to discover values and goals to which one can be devoted (Williams & Kitzinger, 1967). Therefore, the campus setting is an ideal environment to establish or enhance a wellness program.

Rationale for Campus Wellness

Why offer health promotion services on a college campus? The rationale, stated simply, is that such a program provides a vehicle for students to learn how to implement personal change strategies before crises develop. For example, campus wellness programs can aim to reduce the risks associated with unresolved emotional/mental problems which may lead to the development of eating disorders, alcohol/drug abuse, or abnormal anxiety (Drum, 1984). Prevention-focused programs may help students enhance their physical well-being by promoting activity or effective use of medical services. Also, poorly managed social conflicts or spiritual uncertainties may be addressed through these strategies.

For many students, college is a metamorphic experience in which they are faced with greater pressures and demands, and make the transition from dependent adolescent to independent adult. As a result, a need for coping and problem solving skills arises. These skills not only help resolve immediate specific problems, but also apply to future difficulties (Heppner, Neal, & Larson, 1984). Proactive health education on campus

provides the skills and knowledge necessary to address the multidimensional challenges of this population. According to Elsenrath, (1984):

> Helping people to understand themselves, think clearly and rationally, recognize the inter-connections of their total functioning, and assume increasing degrees of self-directedness, is the goal both of universities and the wellness approach (Elsenrath, 1984, p. 30).

Establishing a Campus Wellness Program

Specific strategies exist that can facilitate the establishment of comprehensive wellness programs and opportunities in the campus community. Although health promotion programs are implemented in a variety of settings, the college environment is unique. The following guidelines serve as an example of how a wellness program may be correlated to the philosophy and organization of the campus.

1. Build a team. Identify staff and students who are already involved in wellness activities. These individuals can be a strong nucleus in building a wellness program (Leafgren, 1984).

2. Assess current activities and needs. Identify existing campus wellness opportunities and resources. Also, delineate the wellness needs of the campus. These factors will play a critical role in the development of a coordinated campus wellness program. Wellness is multidimensional and many campus activities and student services may already be contributing to the cause (Leafgren, 1984).

3. Establish preliminary goals and objectives. It is important that the team begins to unify its purpose so that it may effectively communicate to others. Also, this planning process encourages individuals to take ownership of the program and further their commitment to the project.

4. Attain administrative support. Considering that the philosophy of the organization and the availability of the resources is directly influenced by the administration, it is critical to acquire their support. If the administration

is really committed to the concept and are practicing wellness activities, they become an ideal model for staff and students (Leafgren, 1984). Also, resources such as personnel, materials and facilities may be more easily obtained.

5. Refine and prioritize goals and objectives. Enlist additional members and possibly establish subcommittees for each dimension of the wellness program (Jury, 1984). Invite representatives from administration and campus organizations who offer some expertise and/or interest in a particular wellness area. Have each sub-committee identify measurable goals within specific time frames. As a complete team, prioritize these goals and objectives.

6. Train staff and students. Training is necessary for all those who will be involved in implementing the wellness program. This training can be done through workshops and training sessions provided within the campus community (Leafgren, 1984).

7. Implement a pilot project. Any new approach to programming should be evaluated in terms of process, objectives and cost effectiveness. Piloting the program provides an excellent opportunity for initial evaluation and refinement.

8. Collect and research the program data. Research of the wellness program can provide an ongoing evaluation of its impact on the campus community (Leafgren, 1984). Also, this evaluation may be shared with other campuses for the establishment of new wellness programs.

Summary

Wellness is a complex concept. It has evolved over years of medical research and personal definition. Health promotion, wellness, wholistic health and self-care have all been identified with this idea. Currently, there are many arenas in which wellness strategies are being introduced. Schools, businesses, government agencies, etc. are all implementing various health promotion/wellness programs. These programs are being offered for many reasons: to help people achieve personal responsibility

for their health, to minimize the cost of medical services and to ultimaely reduce morbidity and mortality rates. In many situations, however, the people are unaware of the wellness concept and the potential benefits of its practice. Therefore, an aggressive marketing campaign may be necessary to educate the consumer and to promote the wellness product.

CHAPTER III

METHODOLOGY

The purpose of this research was to analyze the impact of a wellness process on the attitudes and behaviors of college students. Utilizing an experimental design, the LaCrosse Wellness Project was implemented, and its effects on the participants were studied and contrasted with a control group. This chapter examines the method and procedures used by the researcher to implement and evaluate program impacts.

Subject Selection

The population for this study was students attending the University of Wisconsin-LaCrosse in LaCrosse, Wisconsin. The groups participating in the research consisted of a sample of students living in the residence halls on the University campus. It was expected that the students would primarily range in age from 18 to 24 years. The following process was used to generate the sample:

1. Through discussion with housing staff members, each of the eleven campus residence halls were characterized by the gender and academic classification of their student population (freshmen, sophomores, juniors, seniors, and graduates) and the total population of residents;

2. The researcher along with the thesis committee (which is also the LWP Steering Committee) (see Appendix A) chose four of the eleven residence halls as the sample population based on their similar characteristics (gender, academic classification, and population);

3. The four cluster samples were randomly assigned to control and experimental groups;

4. Responding to verbal and written announcements in the residence halls, the subjects in the control and experimental groups volunteered to participate in a wellness research process.

The subjects in the experimental group agreed to complete the LaCrosse Wellness Project and to attend one meeting in January, one in February, and one in March. The subjects in the control group made a commitment to attend a brief wellness program on "Hug Therapy" in January and a follow-up meeting in March.

Instrumentation

Three instruments were used for the analysis of this research: the LaCrosse Wellness Project Impact Evaluation, the LaCrosse Wellness Project Process Evaluation and the Student Response Inventory. The LWP Impact Evaluation was used as a pre-posttest for the experimental and control groups. Both of the groups also completed the Student Response Inventory during the posttest phase. Finally, during the posttest phase the experimental group completed the LWP Process Evaluation.

LaCrosse Wellness Project Impact Evaluation. The intent of the Impact Evaluation was to assess attitudinal and behavioral changes toward a greater degree of wellness involvement (Gilmore, Dosch, & Hood, 1983). The instrument consists of 15 statements rated on a scale from zero to eight, and one open-ended statement (see Appendix B). The Impact Evaluation has been content-validated through the LWP Steering Committee (Gilmore, Dosch, & Hood, 1983). A Cronbach's alpha calculation of reliability resulted in an alpha value of .81 (Gilmore, Dosch, & Hood, 1984).

Student Response Inventory. This researcher and another investigator developed this instrument to gather additional demographic and

wellness information about the population (see Appendix C). The inventory questions were directly aligned with necessary descriptive information and specific hypotheses. This researcher analyzed information collected from questions 1, 2, 3, 5, 6, 7, 8, 12, 13, and 14 of the inventory.

A series of steps were followed in the development of the Student Response Inventory. First, an initial discussion was held between the researchers and the thesis chairperson to discuss the need for an additional instrument. Second, pertinent literature on campus wellness programs was reviewed, as well as information on the wellness services offered on the University of Wisconsin-LaCrosse campus. Third, the inventory was drafted by the researchers, considering suggestions by the LWP Steering Committee. Finally, the inventory was evaluated and subjected to a test of face validity by the LWP Steering Committtee. Each question was reviewed regarding its content and purpose.

LaCrosse Wellness Project Process Evaluation. The experimental group received the Process Evaluation to react to strengths, weaknesses, benefits, and the personal meaningfulness of each part of the overall process (Gilmore, Dosch, & Hood, 1983) (see Appendix D). This inventory was developed and content-validated through the LWP Steering Committee (Gilmore, Dosch, & Hood, 1983).

LaCrosse Wellness Project: The Intervention Materials

The intervention materials for this experimental study included the LaCrosse Wellness Inventory (LWI) and the Wellness Development Process (WDP). The LWI was used in the assessment stage of the LaCrosse Wellness Project. This comprehensive inventory helped the participant assess his/her current level of wellness in nine areas: rest and relaxation,

emotional and mental health, sexuality, personal habits, fitness, nutrition, drugs, safety, and environmental sensitivity. The participant's answers were computer analyzed and graphically presented to them. The content validation of the LWI occurred previously with a review by 11 national experts and the LWP Steering Committee (Gilmore, Dosch, & Hood, 1983). The reliability of the LWI, using Cronbach's alpha calculation, was .87 (Gilmore, Dosch, & Hood, 1984).

The WDP consists of the intervention and reinforcement strategies of the LaCrosse Wellness Project. This process, utilized the results of the LWI in "enabling the participants to review their wellness results, verify them, and then develop explicit and personal directions for change, strategies for change, reinforcements, and timetables" (Gilmore, Dosch, & Hood, p. 5, 1983).

Procedures

The procedures for this study were undertaken in five phases: 1) the Planning Phase, 2) the Training Phase, 3) the Pretest Phase, 4) the Intervention Phase, and 5) the Posttest Phase. These phases were strategically organized at the onset of the research process in anticipation of a large number of participants. It appeared necessary for example, that a training phase be implemented to train assistants to help with the processing. Also, an intricate planning process was needed because input and cooperation was needed from various campus offices, organizations, and staff, such as the housing office, the campus wellness committee, and hall directors and residence assistants.

More specifically, the planning phase began in December of 1985 and carried over to mid-January of 1986. This period was characterized by five critical meetings:

1) Initial discussion of the research project with the LaCrosse Wellness Project Steering Committee;

2) An explanation of the research project to the Assistant Director of Housing (who is the administrative coordinator for a group of residence halls);

3) A discussion of the LWP and proposed campus research with housing administrators (housing director, assistant directors), hall directors (full-time staff members in charge of a residence hall), and residence assistants (part-time staff members who are students responsible for a residence hall floor or wing);

4) Discussion of the research project with the Campus Wellness Committee; this committee is made-up of residence assistants from various campus residence halls and directed by one hall director;

5) Strategy discussion with the four hall directors and Assistant Housing Director of the cluster sample.

Immediately following the planning process, a group of five individuals, including hall directors and resident assistants, were trained as LWP advisors. These people, along with two previously trained advisors, volunteered to help with the experimental process. The advisors were trained to provide directions for, and administer the LWI, the WDP, and provide resource and referral suggestions in relation to the follow-up materials (Gilmore, Dosch, & Hood, 1983). A procedural outline (see

Appendix E) was prepared and distributed to the advisors to assure uniformity in administration of the LWP.

At the end of January, the pretest phase was initiated. One meeting was held for the experimental group and one for the control group. The purpose of the research project was first presented to each of the groups. It was explained to the participants as a pilot project to help the researcher explore the impact of a wellness process in resident halls and as a way to evaluate the implementation process. Second, the consent forms and LWP Impact Evaluations were administered to both of the groups. Third, the experimental group received the LWI and a computer answer sheet. The computer sheet was coded with the participant's campus identification number.

The control group was presented with a 20-minute program on "Hug Therapy". The Campus Wellness Committee assisted the researchers by presenting this program to the group. It included the psychological and social benefits of friendly hugging; suggestions for the use of this therapeutic process, particularly in a campus setting; and a group experience. During the group experience, each participant was given a paper heart with another participant's name on it and then asked to find that person and give him/her a hug. The intent of this program was to provide a special wellness experience for the control group which would be helpful as well as entertaining.

In February, the intervention phase was implemented for the experimental group. The computer analyses of the responses to the LWI were presented to the participants. The advisors explained to the participants that portions of each statement from the LWI were listed on his or her

printout and each of their responses was indicated on a wellness continuum (Low to High). Also, their attention was drawn to the summary of their responses in the nine wellness areas and their total category scores reported as a percentage. It was emphasized to the particpants that this analysis included only a sample of wellness related questions and that their wellness attributes may not be actually reflected by this one printout. Besides reviewing the analysis of the LWI responses, wellness resources included crisis intervention services, student health services, social services, family planning services, etc. The students were also given a list of specific campus wellness activities and resources (see Appendix F). The LWI discussion was followed by the distribution of the WDP. This phase of the intervention assisted the participant in focusing in on one single wellness area and developing specific goals and objectives for health enhancement (reducing or eliminating negative actions or maintaining or improving positive ones). The participant then delineated an action to plan to address these goals and objectives. This plan included steps to be taken, reinformcement strategies to be implemented, and target dates. Throughout this process, a trained advisor was available to provide guidance to the participant as needed.

Finally in March, the LaCrosse Wellness Project Impact Evaluations and the Student Response Inventories were administered to the control and experimental groups, during the posttest phase. Also the LaCrosse Wellness Project Process Evaluations were distributed to the experimental group. The control group did not participate in the process evaluation since it was not involved in the LWP process.

Statistical Treatment of Data

Pretest and posttest scores from the LWP Impact Evaluations were used for analysis. The changed score values for the experimental group were compared with the control group. Data from the Student Response Inventories were also analyzed, however, this inventory was only administered once. The statistical method used to determine significance of between-group differences (control group and experimental group) for these two instruments was the Mann-Whitney U-test (Hypotheses 1 through 7). The Mann-Whitney U-test was chosen because the hypotheses included two independent samples from the same population and observation values from an ordinal scale. Significance was established at the $p \leq .05$ level.

Relationships between variables were analyzed using Spearman's r correlation factor (Hypotheses 8 and 9). This test was chosen to examine the degree to which rank scores on two variables within the same group were linearly related.

CHAPTER IV

RESULTS AND DISCUSSION

Introduction

The purpose of this research was to assess the impact of a specific wellness process on the attitudes and behaviors of college students residing on campus. Three instruments were used in this research project: The LaCrosse Wellness Project Impact Evaluation, the LaCrosse Wellness Project Process Evaluation, and the Student Response Inventory. This chapter will address the results of this study in five sections:

1. Demographic Information
2. Statistical Testing of Null-Hypotheses
3. Process Evaluation
4. Discussion
5. Summary

Demographic Information

In additon to the data which were collected for statistical analysis, demographic information was sought to specifically describe the sample population. This step was taken because of the unique nature of this study. It was the first time in which the LWP had been implemented in college residence halls for research purposes and thus, it seemed pertinent that the researcher learn as much as possible about the sample in order to thoroughly evaluate the program and its process in relation to this student

population. It was thought that this information would then be helpful to future wellness researchers and programmers implementing this program in a college setting.

Of the 32 people in the study, 15 were in the experimental group and 17 in the control group. There were five males and ten females in the experimental group and 11 males and six females in the control group. For the entire sample the mean age was 20.1 years. In the experimental group, the age range was 18 to 33 years, with a mean of 20.9 years. In the control group, the age range was 18 to 24 years, with a mean of 19.4 years.

Considering academic classification, six participants (40%) in the experimental group were freshmen, two (13%) were sophomores, three (20%) were juniors, two (13%) were seniors, and two (13%) were graduate students. In the control group, nine (53%) were freshmen, five (29%) were sophomores, one (6%) was a junior, and two (12%) were seniors. Most of these participants were carrying 12 to 18 academic credits. However, two people (12%) in the control group and one (7%) in the experimental group carried six to 11 credits. Besides class responsibilities, some of these students were also employed. Six (40%) students in the experimental group were working and five (29%) in the control group. In the experimental group, two (33%) were working more than 25 hours per week, three (50%) were working six to 15 hours and one (17%) was working five or less hours per week. In the control group, four (80%) were working six to 15 hours per week and one (20%) was working 16 to 25 hours per week.

Statistical Testing of Null-Hypotheses

Nine null-hypotheses were proposed for this research. The Mann-Whitney U-test was used to analyze hypotheses I through VII, and Spearman's r correlation factor was chosen to examine the relationship between variables in hypotheses VIII and IX. For clarity, each hypothesis will be presented individually with the data analysis and a brief statement of the findings. A more detailed discussion of the results will follow this review.

Null Hypothesis I. There is no statistical significant difference between the experimental group (Group 1) and the control group (Group 2) regarding self-disclosed involvement in self-improvement activities.

Analysis of the change score data between the two groups (N_1 = 14, N_2 = 15) revealed a U-value of 103.5 with a P-value of 0.95 for the two-tailed test. This was not significant at the $p \leq .05$ level, therefore, the null hypothesis was not rejected. By failing to reject the null hypothesis, it was indicated that the experimental group did not demonstrate a significant difference from the control group in their involvement in self-improvement activities.

Null Hypothesis II. There is no statistically significant difference between Group 1 and Group 2 in the levels of use of campus medical services.

The between group comparison (N_1 = 15, N_2 = 17) of this hypothesis resulted in a U-value of 124.5 and a P-value of 0.91 for a two-tailed test. Once again the null hypothesis could not be rejected because the calculation exceeded the significant level of $p \leq .05$. It appears that there

is no difference between how the members in the experimental group and the control group use the campus medical services.

Null Hypothesis III. There is no statistically significant difference between Group 1 and Group 2 in the priority of self-improvement activities.

A U-value of 122.5 and a P-value of 0.85 was calculated for the between group differences ($N_1 = 15$, $N_2 = 17$). This was not significant ($p \leq .05$) and the null hypothesis failed to be rejected on the basis of this two-tailed test. When members of the control group and the experimental group were asked about their priority of self-improvement activities, there was no significant difference between their responses.

Null Hypothesis IV. There is no statistically significant difference between Group 1 and Group 2 in the self-reported desire to be involved in self-improvement activities.

Analysis of the between group ($N_1 = 15$, $N_2 = 17$) revealed a U-value of 110.5 and a P-value of 0.53. This two-tailed test was not significant at the $p \leq .05$ level and therefore, the null hypothesis could not be rejected. The desire of the participants in the experimental group to be involved in self-improvement activities was not statistically different from the control group.

Null Hypothesis V. Group 1 will not be statistically higher than Group 2 regarding the desire to establish a personal wellness definition.

Analysis of the change score data ($N_1 = 15$, $N_2 = 17$) produced a U-value of 57.5 and a P-value of 003. Based upon this one-tailed test, the null hypothesis was rejected at the $p \leq .05$ level. The experimental group was statistically higher than the control group regarding the desire to establish a personal wellness definition.

Null Hypothesis VI. Group 1 will not be significantly greater than Group 2 regarding the actual sharing of their wellness definition.

A U-value of 109.0 and a P-value of .251 was calculated from the change score data (N_1 = 15, N_2 = 17). The null hypothesis was not rejected at the $p \leq .05$ level. The actual sharing of their wellness definition by the members of the experimental group was not significantly greater than the control group.

Null Hypothesis VII. There is no statistically significant difference between Group 1 and Group 2 in missed commitments due to illness.

The between group comparison (N_1 = 15, N_2 = 17) resulted in a U-value of 126.5 and a P-value of 0.97. Therefore, the null hypothesis failed to be rejected because the actual value exceeded the significant level of $p \leq .05$ in this two-tailed test. There was no significant difference between the experimental group and the control group when members reported missed commitments due to illness.

Null Hypothesis VIII. There is no relationship between the number of hours worked per week by subjects in Group 1 and their reported participation in self-improvement actities.

A Spearman rank order correlation was performed on the values for the number of hours worked per week by subjects in Group 1 and the change score values of their reported participation in self-improvement activities. The observed correlation ($r_s = \bar{}.08$, p = .45, N_1 = 5) was not statistically significant at the $p \leq .05$ level. The null hypothesis was not rejected. As shown by the correlaiton factor, although not at a significant level, there is a small indication that as the number of

hours worked by participants in the experimental group increased, their involvement in self-improvement activities decreased.

Null Hypothesis IX. There is no relationship between the number of hours worked per week by subjects in Group 2 and their participation in self-improvement activities.

A Spearman rank order correlation was performed on the values for the number of hours worked per week by subjects in the control group and the change score values of their reported participation in self-improvement activities. The observed correlation ($r_s = 0.35$, $p = .28$, $N_2 = 5$), was not significant at the $p \leq .05$ level. Suprisingly, although not significant, there is some indication that as the number of hours worked per week by participants in the Control Group increased, so did their involvement in self-improvement activities.

Process Evaluation

Analysis of the process evaluations by the experimental group, disclosed reactions of the particpants to various aspects of the LWP. The subjects commented on the instructions and administration of the LWP, as well as related recommendations for improvement. In general, participants indicated that the LWP was satisfactory (a non-response was considered to be an indication of satisfaction). The actual response trends for the seven categories are shown in Table 1. Also, participants responded numerically to questions about the administration, clarity, meaningfulness and practicality of the LWP. On a scale from zero ("Not at All") to eight ("Totally") subjects rated eight areas. The mean

score values, as shown in Table 2, ranged from 5.3 for "LWP Practicality" to 6.7 for "LWI Statement Clarity". Considering that a score of four represents an average response, overall, the participants appear to feel very satisfied with the LWP process. More specifically, the mean score for "LWP Meaningfulness" was 6.2. The LaCrosse Wellness Project is a dynamic process which is modified to meet the needs of the pacticipants. Therefore, the process evaluation is extremely impor-tnat for the future use of the LWP.

Discussion

Statistical significance was found in one of the nine hypotheses addressed by this study. The one rejected null hypothesis concerned the desire of participants to establish a personal wellness definition. The group experiencing the LaCrosse Wellness Project significantly showed a greater desire to establish a definition. This result was also reported by Gilmore, Dosch, and Hood for a college student population in 1983 when pre-post change score values for an experimental group and control group were examined. In this present research, as with the Gilmore, Dosch and Hood study, none of the intervention activities in which the experimental subjects were involved, directly assigned subjects the development of a personal wellness definition. This then was considered a personalized result of the LWP process.

Although statistical significance failed to be demonstrated for eight of the hypotheses, the study may still be considered a milestone for the University of Wisconsin-LaCrosse. For the first time a

TABLE 1

RESPONSE TRENDS FROM THE LWP PROCESS EVALUATION

I. Verbal Instructions:	All Right or No Response	93.3%	(14)
	Too Lengthy		
II. Written Instructions:	All Right or No Response	86.6%	(13)
	Unclear Directions	13.3%	(2)
III. LaCrosse Wellness Inventory:	All Right or No Response	73.3%	(11)
	Inappropriate Scale	6.7%	(1)
	More Explanation	6.7%	(1)
	Repetitive Questions	6.7%	(1)
IV. Reaction to Stretch Break:	All Right or No Response	83.3%	(11)
	Not Helpful	20.0%	(3)
	Did Not Wish to Take	6.7%	(1)
V. Wellness Development Process:	All Right or No Response	83.3%	(11)
	Need Motivation Component	8.3%	(1)
	Too Lengthy	8.3%	(1)
VI. WDP Improvement Suggestions:	All Right or No Response	41.7%	(5)
	More Explanation	25.5%	(3)
	More Succinctness	16.6%	(2)
	More Sharing	8.3%	(1)
	Need Motivation Component	8.3%	(1)
VII. LWP Improvement Suggestions:	All Right or No Response	50.0%	(6)
	More Explanation	25.0%	(3)
	More Time	8.3%	(1)
	More Follow-up	8.3%	(1)
	Individualize the Experience	8.3%	(1)

Note: N in parenthesis equals the number of responses. Percentage values are rounded out to the next highest number.

TABLE 2

RESPONSE MEANS FROM LWP PROCESS EVALUATION

		$\bar{X}$ (0 - 8 Range, N = 15)
I.	Ease of Taking LWI:	6.3
II.	LWI Statement Clarity:	6.7
III.	LWI Meaningfulness:	6.2
IV.	Ease of Taking WDP:	5.6
V.	WDP Clarity:	5.9
VI.	WDP Meaningfulness:	5.9
VII.	LWP Practicality:	5.3
VIII.	LWP Meaningfulness:	6.2

specific wellness process was implemented in the residence halls of the campus. A procedure for implementing such a process was developed and contacts were established within the campus system. Future wellness programmers and researchers will have a basic format and tested process for referral.

The null hypotheses not rejected were related to some aspect of the adoption of self-improvement activities, the use of campus medical services, the actual sharing of a wellness definition, and missed commitments due to illness. Several factors were considered by the researcher which might have influenced the findings.

The first consideration invovled the basic premise that the sample was self-selected. These volunteers already might have been involved in self-improvement activities since they were interested enough to participate in this research project. Therefore, there could have been little change detected in their wellness activities.

Second, the posttest data was collected approximately one month following the implementation of the intervention process. This time period may have been too brief to measure considerable impact changes. The adoption of self-improvement activities, the use of campus medical services, and missed commitments due to illness, are all variables that could easily have been influenced by the time span.

A third consideration that most likely affected the statistical analyses was the small number of participants involved in the study. The results cannot be generalized outside this population. Implications such as the students' motives for participaitng in the process and

their interest in wellness could not be overcome by the limited number of subjects. It appears that the time of year was not conducive to students' schecules. For example, by second semester, students have become more involved with other campus activities and organizations. Therefore, an early program effort during the fall semester may encourage more particpation.

Summary

Significant change was measured in only one of the nine hypotheses developed for this research: The experimental group will not be statistically higher than the control group in the desire to establish a personal wellness definition. Although statistical significance failed to be demonstrated for eight of the hypotheses, accomplishments were made through this study. A procedure for implementing a specific wellness process, the LaCrosse Wellness Project, was developed and contacts were established within the University of Wisconsin-LaCrosse campus system. Therefore, future wellness programmers and researchers will have a basic format and tested process for referral. Also, the feedback which was attained through analysis of the LaCrosse Wellness Project Process Evaluation will be pertinent for these future efforts.

As discussed earlier, the small number of participants makes it difficult to generalize the results of this study. However, the demographic data which was collected and analyzed does provide some insight into the lifestyle characteristics and challenges of some of the students. Wellness programmers would be well advised to consider the time

constraints caused by academic, employment, extra-curricular and social obligations which students must coordinate into their daily routine.

CHAPTER V

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

For this study, the adoption of a proactive wellness process was examined regarding its impact on collegiate lifestyle and health practices. The LaCrosse Wellness Project was implemented in two residence halls of the University of Wisconsin-LaCrosse. The primary focus of this program was to help students assess their well-being and to establish wellness intervention and reinforcement strategies. The purpose of this research was to assess the changes and differences in health behaviors and attitudes between the students participating in the LaCrosse Wellness Project and those in a control group. This chapter will address the findings, conclusions, and recommendations of this research.

Findings

Analysis of the data resulted in the following findings:

1. Students completing the LaCrosse Wellness Project did not demonstrate a significant difference in their involvement in self-improvement activities from the students who received only the "Hug Therapy" program.

2. Students completing the LaCrosse Wellness Project did not demonstrate a significant difference in their use of campus medical services from the students who received only the "Hug Therapy" program.

3. Students completing the LaCrosse Wellness Project did not demonstrate a significant difference in their priority of self-improvement

activities from the students who received only the "Hug Therapy" program.

4. Students completing the LaCrosse Wellness Project did not demonstrate a significant difference in their desire to be involved in self-improvement activities from the students who received only the "Hug Therapy" program.

5. Students completing the LaCrosse Wellness Project did demonstrate a significant difference in their desire to establish a personal wellness definition from the students who received only the "Hug Therapy" program.

6. Students completing the LaCrosse Wellness Project did not demonstrate a significant difference in the actual sharing of their wellness definition from the students who received only the "Hug Therapy" program.

7. Students completing the LaCrosse Wellness Project did not demonstrate a significant difference in missed commitments due to illness from the students who received only the "Hug Therapy" program.

8. There was no significant relationship between the number of hours worked per week by students completing the LaCrosse Wellness Project and their participation in self-improvement activities.

9. There was no significant relationship between the number of hours worked per week by students not receiving the LWP intervention and their participation in self-improvement activities.

Conclusions

Based upon the findings, the following conclusions were established:

1. Evidence indicated that students completing the LaCrosse

Wellness Project did demonstrate a significant difference in their desire to establish a personal wellness definition from the students who did not complete the LWP. This would seem to indicate that a certain degree of commitment to personal wellness had taken place, since the LWP experience did not include the activity of establishing a wellness definition.

2. Students experiencing the LaCrosse Wellness Project did not show a significantly greater involvement in self-improvement activities than the group of students who received only the "Hug Therapy" program.

3. Considering the use of campus medical services, there was no difference detected between the goup receiving the treatment of the LaCrosse Wellness Project and the group who did not. However, the students may now be aware of another campus wellness resource, although their use of the service was not reflected in this limited time period.

4. Although the students completing the LWP did show a significant desire to establish a personal wellness definition, they did not report actually sharing the wellness definition with others any differently than the group receiving only the "Hug Therapy" program.

5. Analysis showed that the group receiving the LaCrosse Wellness Project and the group who did not receive the process similarly reported missing commitments due to illness. The LaCrosse Wellness Project appeared not to have reduced the number of missed commitments for the participating group.

The researcher examined possible reasons for the lack of significance for most of the hypotheses. The following factors were proposed for consideration:

1. A small number of subjects were involved in the study. An increase in sample size might lead to more conclusive results by generating data which would be more indicative of the population.

2. Many subjects might have been involved in numerous positive behaviors prior to the study. Therefore, change in behavior would have been minimal.

3. The time of year might have affected participation. For example, by second semester, many students are already busy with specific club and organizational activities and thus have less time to devote to a new activity.

4. The time period in which this study was completed may have been too brief to detect accurately behavioral changes. Self-improvement activities may require weeks of preparation and/or practice before they actually become lifestyle habits. Also, the limited time span may have influenced the reported use of campus medical services and reported number of missed commitments due to illness. An extended research period may have been more appropriate for detecting differences between the group participating in the LWP and the group receiving only the "Hug Therapy" program.

5. The methodology for this study may have been inappropriate. The program intervention and data collection techniques were planned as group activities. However, many individual meetings needed to be scheduled during the intervention and follow-up phases to accommodate participants' schedules. This unexpected interruption in the methodology might have influenced the results of the study.

Recommendations

1. Replication of this study would be useful. However, the sample size should be increased. The following changes would be helpful in generating a larger group: a) Incorporating the wellness program strategies into existing residence hall meetings, such as council meetings (a select group of students living in the residence halls who plan and coordinate hall activities) and floor/wing meetings (an assembly of students who live on a particular floor or in a specific wing of a residence hall); b) Planning and implementing an aggressive marketing campaign to interest students in the wellness process. This strategy may include educating the student about wellness and the LaCrosse Wellness Project through flyers, posters, and table tents. It may also involve promoting the "product", the LWP, through making others aware of the process at residence hall meetings, student organization meetings, and informational sessions to explain the goals and objectives of the process and answer any questions students may have. c) Soliciting input from hall directors and residence assistants regarding successful methods for communicating with their particular hall population; and d) Implementing the wellness process early in the fall semester before students are heavily involved with other activities.

2. Further research should include an evaluation of the marketing efforts utilized in the programming. This is recommended in order to determine which strategies would be most helpful for product promotion in future wellness endeavors by researchers and campus programmers. The marketing efforts may be evaluated in terms of program participation and how it relates to the marketing tools utilized and the resources of

time, finance, and personnel.

3. Future campus wellness strides should be directed toward establishing a unified campus wellness committee including student, staff, administrative and LWP representatives to help assess campus wellness needs and resources and to help plan program strategies. More specifically, resources such as personnel, materials, and facilities may be more easily attained through this universal representation. Also, the promotion of wellness resources and programs, and the development and distribution of educatinal materials may be more effective with a diversified campus force behind the work. Finally, this committee could be responsible for establishing future campus wellness goals and objectives and evaluating current strategies. Wellness researchers and programmers, students and their organizatinos, as well as staff and administration could all benefit from this cooperative effort to coordinate campus wellness actions.

4. A follow-up study should attempt to characterize more fully the students' lifestyles with regard to their involvement in extracurricular activities, employment situations, and volunteer programs. An insight into the students' time commitments would be useful for planning future wellness programs and necessary campus intervention opportunities, such as offering more workshops and programs at the specific residence halls instead of at one central location. These activities might include exercise programs, stress management workshops or nutrition classes.

5. The LaCrosse Wellness Project is recommended as a permanent wellness process for the University of Wisconsin-LaCrosse campus. This

process appears to stimulate students to become personally involved in wellness, as shown by the statistically significant desire of participants to establish a personal wellness definition. Specifically, this desire represents a formative wellness stage with potential for additional involvement. It must be noted that this desire evolves from the LWP experience and not an assigned activity.

The LaCrosse Wellness Project is an educational process which encourages self-responsibility for the assessment, intervention, and reinforcement of wellness actions. College students may apply this unique attribute to their personal well-being or to other areas of their life, such as academic performance. However, these additional applications would need to be investigated formally since they are based on the researcher's experience and observation.

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APPENDIX A

LACROSSE WELLNESS PROJECT STEERING COMMITTEE

Dr. Gary D. Gilmore
Professor and Program Coordinator
University of Wisconsin-LaCrosse
LaCrosse, Wisconsin

Dr. Margaret F. Dosch
Professor
Community Health Education
University of Wisconsin-LaCrosse
LaCrosse, Wisconsin

Dr. Thomas L. Hood
Assistant Vice Chancellor for Academic Development
University of Wisconsin-LaCrosse
LaCrosse, Wisconsin

APPENDIX B

LACROSSE WELLNESS PROJECT IMPACT EVALUATION

APPENDIX B

LACROSSE WELLNESS PROJECT IMPACT EVALUATION

Code Number _____ Phase A

La Crosse Wellness Project Impact Evaluation

Directions: Read each statement and then circle the number which best reflects your desired and actual level of involvement in wellness.

	Not at all		To Some degree		Basically		To a great degree		Totally
1. I would like to establish a personal definition of wellness.	0	1	2	3	4	5	6	7	8
2. I have established a personal definition of wellness that I use today.	0	1	2	3	4	5	6	7	8
3. I would like to share my understanding of wellness with at least one other person.	0	1	2	3	4	5	6	7	8
4. I have shared my understanding of wellness with at least one other person during the past month.	0	1	2	3	4	5	6	7	8
5. I would like to share my understanding of wellness with more than one person.	0	1	2	3	4	5	6	7	8
6. I have shared my understanding of wellness with more than one person during the past month.	0	1	2	3	4	5	6	7	8
7. I would like to become involved in at least one self-improvement activity.	0	1	2	3	4	5	6	7	8
8. I have become involved in at least one self-improvement activity during the past month.	0	1	2	3	4	5	6	7	8

(Please describe it: _____)

Used with the permission of the LaCrosse Wellness Project

Phase A

	Not at all		To Some degree		Basically		To a great degree		Totally
9. I would like to become involved in more than one self-improvement activity.	0	1	2	3	4	5	6	7	8
10. I have become involved in more than one self-improvement activity during the past month.	0	1	2	3	4	5	6	7	8
(Please describe them: _____ _____ _____)									
11. I would like to establish a reinforcement strategy for each one of my self-improvement activities.	0	1	2	3	4	5	6	7	8
12. I have established a reinforcement strategy for each one of my self-improvement activities.	0	1	2	3	4	5	6	7	8
13. I will continue my self-improvement activity/activities for at least one month from today.	0	1	2	3	4	5	6	7	8
14. I will increase steadily my level of proficiency in my self-improvement activity/activities for at least one month from today.	0	1	2	3	4	5	6	7	8
15. I will assess periodically how I am doing in my self-improvement activity/activities.	0	1	2	3	4	5	6	7	8

16. I attribute my present level of involvement in wellness to: _____

_____

APPENDIX C

STUDENT RESPONSE INVENTORY

ID#_____ STUDENT RESPONSE INVENTORY

1. Gender M_____ F_____

2. Age_____

3. Classification

___A. Freshman

___B. Sophomore

___C. Junior

___D. Senior

___E. Graduate

4. Hometown_____

5. How many credits are you currently taking?

___A. 5 or less

___B. 6 to 11

___C. 12 to 18

___D. more than 18

6. Are you currently employed?

___yes ___no

7. If employed, approximately how many hours do you work per week?

___A. 5 or less

___B. 6 to 15

___C. 16 to 25

___D. more than 25

type of work_____ place of employment_____

8. In the past month, to what degree have you missed important commitments, such as class, work, or meetings, because of illness?

Not At All		Low		Moderate		High		Very High
0	1	2	3	4	5	6	7	8

9. In the past month, to what degree have you missed important commitments, such as class, work, or meetings, because of reasons other than illness (e.g. forgot, too tired, conflicting commitments).

Not At All Low Moderate High Very High

0 1 2 3 4 5 6 7 8

Please list these reasons

_____

_____

_____

_____

10. To what degree do you participate in residence hall programs?

Not At All Low Moderate High Very High

0 1 2 3 4 5 6 7 8

11. Where do you usually seek medical service?

on campus	off campus	
_____	_____	Outpatient treatment for accidents and illnesses
_____	_____	Physical therapy services
_____	_____	Minor surgical procedures
_____	_____	For women: Gynecological services
_____	_____	Laboratory services
_____	_____	Allergy treatments
_____	_____	Others (please indicate)_____

_____

12. In the past month, to what degree have you sought medical services at the University Health Center?

Not At All Low Moderate High Very High

0 1 2 3 4 5 6 7 8

13. In the past month, to what degree have you prioritized self-improvement activities (e.g., weight control, stress management, exercise) as compared with all other activities?

Not At All		Low		Moderate		High		Very High
0	1	2	3	4	5	6	7	8

14. In the past month, to what degree have you wanted to become involved in self-improvement activities?

Not At All		Low		Moderate		High		Very High
0	1	2	3	4	5	6	7	8

15. In the past month, to what degree have you considered dropping out of school?

Not At All		Low		Moderate		High		Very High
0	1	2	3	4	5	6	7	8

16. In the past month, to what degree have you sought out formal assistance from any support services on campus? (e.g., health center, counseling and testing, academic skills, academic advisor)

Not At All		Low		Moderate		High		Very High
0	1	2	3	4	5	6	7	8

17. In the past month, to what degree have you sought out informal sources of support? (e.g., resident assistant, family, friends, significant others)

Not At All		Low		Moderate		High		Very High
0	1	2	3	4	5	6	7	8

18. In the past month, to what degree have you participated in resources for individual improvement available on campus? (e.g., stress management, exercise, nutrition education, substance abuse, weight control, workshops, clubs)

Not At All		Low		Moderate		High		Very High
0	1	2	3	4	5	6	7	8

19. In the past month, to what degree have you participated in resources for individual improvement available off campus? (refer question 18)

Not At All		Low		Moderate		High		Very High
0	1	2	3	4	5	6	7	8

13. List activities

_____

_____

_____

_____

16. List formal support services

_____

_____

_____

_____

17. List informal sources of support

_____

_____

_____

_____

18. List resources for individual improvement (on campus)

_____

_____

_____

_____

19. List resources for individual improvement (off campus)

_____

_____

_____

_____

NOTE: On this page, participants were instructed to review five previous questions (13, 16, 17, 18, and 19), and list any activities, resources and/or services that actually related to his or her lifestyle.

APPENDIX D

(24)

LACROSSE WELLNESS PROJECT PROCESS EVALUATION

PROCESS EVALUATION

LA CROSSE WELLNESS PROJECT (LWP)

Participant responses to the items on this sheet are requested to help in the evaluation of the Inventory. Participants will not be identified. Please give careful thought to each item.

1. Were there any specific weaknesses of the verbal instructions given by your leader? (Please list)

2. Were there any specific weaknesses in the written directions of the Inventory? (Please list)

3. Were there any specific weaknesses of the Inventory, itself? (Please list)

4. Was the stretch break beneficial to you?

5. Were there any specific weaknesses of the Wellness Development Process? (Please list)

6. What specific suggestions do you have to improve the Wellness Development Process?

7. What specific suggestions do you have to improve the overall experience?

La Crosse Wellness Project, 1985.

(15)

On a scale from 0 to 8, rate the following and circle the number.

	Not at All			Somewhat			Basically		Very Much	Totally
A. La Crosse Wellness Project Inventory										
1) Ease of Taking	0	1	2	3	4	5	6	7	8	
2) Clarity of Statements	0	1	2	3	4	5	6	7	8	
3) Meaningfulness of the Inventory Results	0	1	2	3	4	5	6	7	8	
B. WOP Booklet										
1) Ease of Going Through the Process	0	1	2	3	4	5	6	7	8	
2) Clarity of the Process	0	1	2	3	4	5	6	7	8	
3) Meaningfulness of the Process to You	0	1	2	3	4	5	6	7	8	
C. Practicality of Taking the Steps You Outlined in the LWP (Are you really going to take these steps?)	0	1	2	3	4	5	6	7	8	
D. Meaningfulness of the Overall Experience	0	1	2	3	4	5	6	7	8	

La Crosse Wellness Project, 1985.

APPENDIX E

ADVISOR OUTLINE

APPENDIX E

Advisor Outline

I. Computer Analysis of the LaCrosse Wellness Inventory

A. Verify demographic information
*Remember: results are based upon gender and age

B. Portions of each statement from the inventory (LWI) are arranged in categorical order on the printout
*Remember: the letter indicates the response you selected and is shown on the wellness continuum

C. Discuss the percentages which have been calculated in each one of the nine wellness categories
*Remember: the score is based on the number of responses which the participant made in that category

the percentages are indicators only

there is no ending point to the percentages (wellness is ongoing)

D. Review the listing of community resources at the bottom of the printout

II. Wellness Development Process

A. Participants are to read pages one and two and then stop

B. Explain that the process begins on page three and that from page four through nine, there will be a worksheet on the right and an educational module on the left. Participants should read the educational module first, this will help them complete the worksheet.
*Remember: Emphasize that throughout the process, participants are trying to go from a large component to small workable units

C. Have participants stop when they reach page nine, and review the steps they have taken thus far
*Remember: Ask participants if they have any questions or are having any difficulties with the process

D. Ask participants to read page ten so that they have an idea of what is meant by "Enhancment"

*Remember: Point out that participants go right on to page 13 after completing page 11

E. After reading page 13, participants should review the sample action plan on page 14 and then proceed to the development of their own plan

*Remember: Encourage participants to complete additional plans in the future

III. Small Group Discussion

Discuss the followig questions with your group members:

A. With whom would you like to share your wellness plan?

B. Were there any problems with the process?

C. What helped you in the process?

D. Do you feel campus residents could benefit from a wellness program such as this?

APPENDIX F

CAMPUS WELLNESS ACTIVITIES

APENDIX F

CAMPUS WELLNESS ACTIVITIES

Academic Skills Center

*free tutoring
*assistance with study skills
*time budgeting

1st Floor Wilder Hall

Helpful

Career Services

*vocational counseling
*career goals
*employment interviews
*employment options

2nd Floor of Wilder

Clubs

*Aikido
*Cross Country Ski Club
*Hockey
*Karate
*Health Club
*Badminton
*Bowling
*Ski Racing Team
*Soccer
*Trekker Outing
*Trekker Sailing
*Trekker Ski Club

LACROSSE WELLNESS PROJECT

Fun

Workshops and Classes

*Stress Manage Management
*Human Sexuality
*Mental Health
*Nutrition
*Physical Activities

See the General Catalog for additional choices!

Intramurals

A fun opportunity to compete in your favorite team sports. Schedules and further information may be obtained in the Intramural Office, Mitchell Hall.

Relaxing

Healthy

Health Center

*outpatient care
*laboratory service
*physical therapy
*medical counseling
*health education

Located in Whitney Center