Participant satisfaction : a naturalistic inquiry of a campus wellness program
by Mary Lynn Compton

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Physical Education
Montana State University

Abstract:
Participants' perceptions of the effectiveness of worksite wellness programs have not been the focus of the health promotion literature. The lack of inquiry in this area has been attributed to employers' needs to focus on quantitative study in an attempt to demonstrate a cause-and-effect relationship between the implementation of some type of health promotion program and decreased health care and disability costs.

The purpose of this study was to explore the reasons employees participated in the Montana State University (MSU) Employee Wellness Program, and to discover employees' perceptions of the benefits of participation. A purposeful sample of 19 MSU Wellness Program participants was selected based on their program experience and ability to communicate their experiences. Naturalistic inquiry (Cuba, 1978) and ethnographic interviewing (Spradley, 1979) methods were used in data collection and analysis. The Ethnoaraph (Seidel, Kjolseth, & Seymour, 1988) computer software program facilitated the content analysis of the interviews. The data yielded descriptive results.

The study uncovered peoples' satisfaction with the Employee Wellness Program. Their reasons for continued participation and adherence to healthenhancing behaviors were associated with the perceived benefits and satisfaction with the program. Participants also identified the . need for empowerment from external sources through awareness-building, enhanced physical and mental fitness, and support from program staff, supervisors, and significant others. Participants stressed the positive effects, both personal and job-related, that they experienced from participation.

The participants provided valuable recommendations for the program director and administrators of the Employee Wellness Program. Naturalistic inquiry provides rich descriptions and can be utilized as a needs assessment or evaluation tool to discover the cost-effectiveness of a health promotion program. It is recommended that a similar inquiry be conducted to discover the perceptions of non-participants and program drop-outs.

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A thesis submitted in partial fulfillment
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Mary Lynn Compton

This thesis has been read by each member of the graduate committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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Signature M Lynn Compton

Date 5/31/91

This thesis is dedicated in memory of my mother

Glenna Compton,

who always said that I was smarter than I thought I was.

VITA

Mary Lynn Compton was born in Keyser, West Virginia on April 18, 1953, the third daughter of Chester J. Compton and Glenna Louise Kemp Compton. She graduated from Keyser High School in 1971.

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Ms. Compton's work experience has included teaching health and physical education at the secondary school level, instructing fitness and wellness programs for the YMCA, designing and instructing programs for cardiac rehabilitation, adult and children's fitness, and community and worksite wellness. She is currently employed as the Health Promotion Director at Montana Deaconess Medical Center, Great Falls, Montana.

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ABSTRACT

Participants' perceptions of the effectiveness of worksite wellness programs have not been the focus of the health promotion literature. The lack of inquiry in this area has been attributed to employers' needs to focus on quantitative study in an attempt to demonstrate a cause-and-effect relationship between the implementation of some type of health promotion program and decreased health care and disability costs.

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CHAPTER ONE

INTRODUCTION

Background and Rationale

> I learned that my health was okay from the screening, and I learned new tricks from the nutrition session. I have a good fitness instructor, the camaraderie is wonderful, and I made a friend. (MSU Wellness Program participant)

In the past decade, wellness programs have become popular phenomena in worksites throughout the United States. Wellness, or health promotion, programs have been implemented for a variety of reasons. The rationales range from personal preference of the chief executive officer or administrator to expectations of financial gains (Warner, 1987). The primary reason for intervention with worksite wellness programs and policies has been to contain rapidly escalating health care costs (Evans, Harris, McNeill, & McKenzie, 1989; Selleck, Sirles, & Newman, 1989; Warner, 1987; Warner, Wickizer, Wolfe, Schildroth, & Samuelson, 1988). By 1984, corporate net profits were overshadowed for the first time by employee health care and benefits costs (Wall & Nicholas, 1985).

Employers have expected a broad range of benefits as a result of creating health-strengthening environments (Hollander & Lengermann, 1988). Expected benefits include improved employee health, morale, and

productivity; reduced absenteeism, turnover, and worker's compensation costs; improved company image; and reduced health care costs. These benefits are categorized as purely economic, physiologic, sociologic, or a combination of the three.

Certainly the individuals' physiological benefits from improved fitness have been well documented (Chenoweth, 1983; Dunnagan, 1987; Gettman, Pollock, & Ward, 1983; O'Donnell, 1984; Paffenbarger, Hyde, Wing, & Hsieh, 1986; Shephard, 1983), and the health promotion literature is replete with cost-benefit studies that both support (Bly, Jones, & Richardson, 1986; Bowne, Russell, Morgan, Optenberg, & Clarke, 1984; Patterson, 1986) and refute (Elias & Murphy, 1986; Warner et al., 1988) the economic benefits for employers. Warner et al. (1988) conducted a review of 650 references covering 10 health promotion (HP) program areas. The reviewers found meaningful cost-benefit information in only 2 of the 10 program areas; hypertension control and smoking cessation programs. Most of the studies had serious flaws from inadequate data, poor methodology, and false assumptions.

> The dearth of sound evidence on the economic merits of workplace HP should not be interpreted as a negative assessment of the potential of such programs, however. Rather, it recommends a healthy skepticism in reading the literature and development of a new research-based body of understanding. (Warner et al., 1988, p. 106)

The economic and physiological studies have largely neglected the issue of program benefits as perceived by employees who participate in wellness and health promotion. Do participants perceive the benefits in the

same manner that management and program staff perceive them? Have employers addressed the issues of social costs and benefits that are outside the realm of purely economic interests? Have the employees interests and expectations of worksite wellness programs been met? Reports are lacking as to whether managers have met the real and perceived needs of the majority of employees.

The employer who offers wellness programs primarily as a benefit to enhance the health and well-being of employees may find that healthier, satisfied employees do mean less workplace stressors and absenteeism, decreased incidence of job-related injuries, higher productivity, improved morale, and hence, successful cost-effectiveness. Numerous authors have supported those beliefs based on survey data obtained from corporate executive officers and other top managers (Davis, Rosenberg, Iverson, Vernon, & Bauer, 1984; Holmes, 1986). However, few have reported the social, economic, psychological, or physical health benefits as perceived by the participants themselves (Chenoweth, 1983) except as related to health locus of controls. If business and industry expect to institutionalize a health-promoting culture, the rationale for program implementation must extend beyond the sole purpose of the companies' bottom line.

Purpose of the Study

The purpose of this study was to interview participants in the Employee Wellness Program offered by Montana State University in order to discover

their reasons for participation and their perceptions of the benefits of participation. The dearth of data available concerning the participants' feedback on how effectively programs are meeting their needs constitutes the rationale for the study.

Significance of the Study

Wellness, or health promotion programs are rapidly becoming a part of employee benefits in university and corporate settings across the United States in an attempt to decrease the company's health care and worker's compensation costs and to boost productivity. For the most part, efforts to measure the cost-benefits and cost-effectiveness of worksite wellness programs have verified the complexities of performing valid, quantitative data collection in the workplace (Fielding, 1988). Due to employee turnover, the inability to secure control groups, and the difficulty in measuring issues such as productivity, job satisfaction, and overall health costs, conclusive results have been shown in only a few longitudinal experimental studies (Bly, Jones, & Richardson, 1986; Bowne et al., 1984; Elias & Murphy, 1986; Shephard, 1983; Smith, 1986).

More qualitative, naturalistic inquiries describing employees' reasons for participating in wellness programs and their perceptions of program benefits have rarely been mentioned in current literature. The majority of experimental studies have focused on the bottom-line benefits to the employer and have overlooked the participants' perspectives. That focus is relative to the

financial savings of decreased health care utilization as a result of intervention with some type of health promotion program. However, it is the participants who make up a health enhancement program, and it must be judged by how well it serves the people who participate. Managers have proposed that they know what's best for workers, but what are the perceptions of the employees? Are the needs of the workforce being assessed and met? What could the participants contribute to the cost-effectiveness and cost-benefit issues? This can be determined only by asking those participants through a systematic research approach. By asking the participants, knowledge can be gained regarding the benefits of worksite health promotion and the reasons employees participate.

The use of qualitative or descriptive research is warranted in areas of study that are not conducive to traditional forms of scientific research (Polit & Hungler, 1989). Qualitative, naturalistic research is a natural and effective method for obtaining information from participants regarding their perceptions of the program. It is "holistic, that is, concerned with humans and their environment in all their complexities" (Polit & Hungler, 1989, p. 312). The data collection for this study followed Guba's (1978) conceptualization of naturalistic inquiry and Spradley's (1979) Developmental Research Sequence.

Delimitations of the Study

This study was delimited to a purposeful sample of employees who had participated in one or more types of programs offered through the Wellness

Program at Montana State University between 1985 and 1990. The types of programs, or domains, were categorized as either physical activities such as aerobics, racquetball, weight training, and running; or health screening, education, and awareness-building programs like cholesterol and mammogram testing, smoking cessation classes, and nutrition education.

Data were gathered through naturalistic and ethnographic interviewing techniques during the spring quarter of 1990. Data analysis was inductive, meaning the participants' specific responses were categorized into a general theme. The data yielded descriptive results.

Limitations of the Study

This study was limited by the participants' interpretations of the questions during the interviews, and by the interpretation of the data by the investigator. Although bias could not be completely eliminated, it was limited by triangulation of the data among the participants interviewed. The role of the naturalistic inquirer is not to make judgements concerning the information obtained, but to report the data as told by the participants. The data from this study are not generalizable to other wellness programs. Due to the descriptive nature of the methodology, the data analysis did not yield statistical information.

Operational Definitions

(1) Benefit, job-related: Any perceived improvement in job satisfaction, worktime attitude, morale, health, productivity, and networking opportunities as a result of participation in a physical activity, education, or health screening program.

(2) Benefit, personal: Any perceived physical, psychological, educational, social, or financial gains or betterment resulting from participation in a physical activity, education, or health screening program.

(3) Categories: Units within which to classify and interpret observed outputs (Guba, 1978, p. 43).

(4) Categories, saturation of: A point during naturalistic interviewing when successive examination of sources yields redundant information, or produces diminishing returns (Guba, 1978, p. 60).

(5) Componential analysis: A search for attributes within domains that signal differences (Spradley, 1979).

(6) Cost-benefit: When expense and return net zero (or profit) in actual dollars.

(7) Cost-effectiveness: The cost of reaching prestated program goals, usually behavior change, without regard to the financial cost to achieve the goal (LaRosa, Haines, & Kiefhaber, 1985).

(8) Domain: Any symbolic category that includes other categories; all members of a domain share at least one feature of meaning (Spradley, 1979, p. 100).

(9) Domain analysis: The process of questioning to find different kinds of domains; to confirm or disconfirm hypothesized domains by identifying semantic relationships (Spradley, 1979).

(10) Ethnographic interview: Friendly conversations into which the investigator slowly introduces new elements to assist participants in responding to varied categories (Spradley, 1979).

(11) Ethnographic analysis: A search for parts of a culture, the relationship among the parts, and their relationship to the whole (Spradley, 1979).

(12) Focused interview: A loosely structured interview in which the investigator guides the participant through a set of questions using a topic, or categorical guide (Polit & Hungler, 1989).

(13) Health promotion: The science and art of helping people change their lifestyle to move toward a state of optimal health (O'Donnell, 1986, p. 4).

(14) Health promotion program: Any health-enhancing programs offered by companies to increase well-being of employees and decrease health care costs; also called wellness programs and occupational health promotion programs.

(15) Holistic: Emphasizing the importance of the whole and the interdependence of its parts; associated with humans and their environment in all their complexities (Polit & Hungler, 1989).

(16) Inductive reasoning: The process of reasoning from specific observation to more general rules (Morse, 1989).

(17) Naturalistic inquiry: Any form of research that focuses on people through interviews and/or observation and aims at discovery and verification (Guba, 1978).

(18) Negative cases: Terms or explanations verbalized by a participant which contradicts or differs from information learned from other participants.

(19) Participants: Individuals involved in the Montana State University Employee Wellness Program who participated in the study due to their experiences and ability to communicate their experiences.

(20) Purposeful sample: A type of non-probability sampling method in which the researcher selects subjects for the study on the basis of personal judgement about which ones will be most representative or productive (Polit & Hungler, 1989).

(21) Rich description: Abundant and vividly described information that reveals participants' views and beliefs about their experiences.

(22) Semantic relationships: Two categories which are linked together; semantic relationships link a cover term to all the included terms in the topic being studied (Spradley, 1979).

(23) Semi-structured interview: A loosely structured interview in which the investigator asks general, open-ended questions allowing the participants to tell their stories in a narrative fashion (Polit & Hungler, 1989).

(24) Taxonomic analysis: A search for the internal structure of domains that leads to identifying contrast sets (Spradley, 1979).

(25) Themes: Commonalities across categories and natural variation in data as described by participants; the analysis of data begins with a search for themes (Polit & Hungler, 1989).

(26) Thin description: Categories that infrequently appear during the interview and the data collection indicating the need for further investigation.

(27) Triangulation, data source: Testing one source against another until the investigator is satisfied that the interpretations of shared and discrepant views is valid (Guba, 1978).

CHAPTER TWO

REVIEW OF RELATED LITERATURE

> Discovery has been the aim of science since the Renaissance. (Strauss & Corbin, 1990, p. 15)

Introduction

For the first time in modern history, two of America's most precious freedoms are threatened: the right to basic health care and the freedom of choice. Employers have begun to place restrictions on health care benefits according to workers' health profiles and lifestyle behaviors. It is understandable that employers have intervened since more than one-third of the nation's medical bill is subsidized by business and industry (Opatz, 1985; Wilson, 1988). The United States Chamber of Commerce estimated that in 1986, $4.5 billion were shifted from public programs to private sources (Chapman, 1989a).

The wellness movement is especially evident in the corporate search for alternatives to subsidizing the cost of health care for employees. One alternative has been to provide health-promoting programs and policies. The focus of worksite health promotion, or wellness, programs is to decrease utilization of health care dollars, to decrease employees' risks of acquiring

chronic illness, to enhance well-being, and potentially to decrease overall health care costs.

The growth of health promotion and the wellness philosophy in the workplace has been frequently described in the literature. Schmitz (1989) explained that several factors occurring simultaneously have had an impact on the birth and development of the field. Those factors include:

> (a) the shift in disease burden from acute to chronic, (b) the health care cost crisis, (c) increased corporate receptivity, (d) a realistic assessment of the current health care system, (e) increased government intervention, (f) the wellness movement, and (g) major cultural changes. (p. 8)

This literature review focused on the following aspects of worksite wellness programs: (a) definition of wellness and health promotion programs; (b) employers' economic, ethical, and social rationales for offering programs and policies; (c) cost-benefit versus cost-effectiveness of wellness programs; and (d) employees' rationale for participating and their perceived benefits.

Definitions of Health Promotion Programs

"Health promotion is the science and art of helping people change their lifestyle to move toward a state of optimal health" (O'Donnell, 1986, p. 4). Although no consensus definition exists to describe health promotion or wellness, O'Donnell's definition was used in this review to describe any efforts made by employers to improve the optimal health of their employees. Contributors to this field have come from diverse backgrounds, thus creating a varied focus on program content, goals, and definition. O'Donnell (1986)

listed 39 disciplines which have contributed to the evolution of health promotion. Several examples include nursing, physical education, exercise physiology, finance, ergonomics, marketing, occupational medicine, insurance, biostatistics, economics, social work, and government policy.

Professionals in the medical setting commonly use related terms such as disease prevention, self-help, self-care, or risk-reduction interventions. Occupational health programs have frequently been referred to as health promotion programs. However, occupational health programs are more specifically "designed to protect the physical health and safety of employees at the work place and to prevent work-related illness and injury" (American Hospital Association, 1982, p. 8). Popp (1989) stated that the title of an employee fitness or health promotion program makes no difference as long as the goal is to help employees prevent chronic illness. However, health promotion involves more than attempting to prevent chronic illness or to reduce risk. O'Donnell's (1986) definition looks beyond the risk-reduction focus by describing health promotion, or wellness, as a broad term encompassing disease prevention and health enhancement.

Opatz (1985) differentiated between wellness and health promotion:

> Wellness can be defined as the process of adapting patterns of behavior that lead to improved health and heightened life satisfaction....Health promotion, as a special case of the wellness concept, can be usefully defined as the systematic efforts by an organization to enhance the wellness of its members through education, behavior change, and cultural support. (p. 7)

Larry Chapman (1989b) defined the concept of wellness as "an intentional choice of a lifestyle characterized by balance, personal

responsibility and maximum enhancement of physical, mental and spiritual health" (p. 9). Chapman (1989b) also outlined the definition of a wellness program as "an organized program intended to assist employees (and their family members) in making voluntary behavior changes which reduce their health risks and/or enhance their ability to perform" (p. 1).

Wellness is the term more commonly recognized by the public and by lay persons in general, whereas health promotion is frequently used by health care professionals, corporations, and government policy makers (Schmitz, 1989).

Part of the difficulty in clarifying a universal meaning of health promotion is the dramatic variance in the actual content of worksite programs. For example, the American Hospital Association's (1990) definition of health promotion services is:

> Education and/or other supportive services that are planned and coordinated by the hospital and that will assist individuals or groups to adopt healthy behaviors and/or reduce health risks, increase self-care skills, improve management of common minor ailments, use health care services effectively, and/or improve understanding of medical procedures and therapeutic regimes. (p. xxiv)[1]

Although 83.6% of the United States hospitals responding to the American Hospital Association's 1989 annual survey reported that they offered

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health promotion services (American Hospital Association, 1990, p. 212),[2] it appears to be impossible to decipher what types of programs or services were actually offered. Employers reporting the existence of programs may infer that one or a combination of the following programs are offered: (a) awareness builders such as posters and payroll stuffers; (b) educational lectures; (c) health risk or wellness questionnaires; (d) health screenings; (e) nutritional awareness and weight management; (f) stress management; (g) cardiovascular health; (h) health-promoting environmental policies; (i) the promotion of physical, emotional, or spiritual health; and (j) physical fitness classes. Fitness programs range from basic exercise classes to comprehensive, on-site fitness facilities. During the literature review, the investigator noted that companies frequently reported having wellness programs when only physical fitness classes or facilities were made available (Allen & Delistraty, 1987; Chenoweth, 1983; Gray, 1984; Shephard, 1983) as opposed to comprehensive wellness components. Viewed in a holistic sense, an attempt to enhance the health of a workforce is complex, includes many variables, and involves more than simply improving employees' physical fitness levels.

As health promotion and wellness programming continue to mature, the meanings and implications will become more clearly defined. For the

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purposes of this review, the terms "wellness program" and "health promotion program" will be used synonymously to describe any program, service, or worksite policy offered by an employer that is designed to facilitate one or more of the following: (a) the health screening process; (b) the enhancement of physical, psychological, spiritual, or social well-being; (c) assistance for individuals to decrease their risk of acquiring chronic illness; and (d) a potential decrease in health care costs.

Employers' Rationale for Program Implementation

According to Warner (1987), "No one knows precisely how much health promotion programming is occurring in the business community" (p. 40). The major limitation to knowing is that

> ...there are no generally accepted criteria as to what constitutes a worksite health promotion or disease prevention program. Program components as well as level and frequency of activity vary among companies that claim to have established programs. (Davis et al., 1984, p. 542)

Others have reported between 20% (Conrad, 1987) and 66% (Davis et al., 1984) of all U.S. employers offer some type of wellness program. The primary rationale for the organization and implementation of worksite health promotion programs is obvious: to impact the alarming escalation of health care costs, and to respond to the concern of millions of Americans interested in improving and maintaining their health (American Heart Association, 1988; O'Donnell, 1984; Opatz, 1985; Wilson, 1988). Employers frequently began programs with the expectation of decreasing health insurance costs, disability

and death benefits, treatment costs (Bowne et al., 1984), absenteeism (Elias & Murphy, 1986), on-the-job accidents, turnover rates, and increases in productivity, worker morale, worker health, and quality of life (Hollander & Lengermann, 1988).

Programs owe their beginnings to the changing conditions in the field of health and health care. Since the life-threatening diseases of the early 1900's have been eradicated, the primary causes of disability and death in industrial nations are no longer a result of pneumonia, influenza, and tuberculosis. Opatz (1985) outlined a popular explanation of "the dramatic shift in the ways we have been dying since the turn of the century" (p. 3). At the turn of the twentieth century, the three leading causes of death were due to infectious diseases (Schmitz, 1989). In 1987, diseases of the heart and blood vessels, cancer, and accidents were the leading causes of death in the United States (American Heart Association, 1989). More Americans currently suffer with chronic ailments than at any other time in history.

> Life expectancy has risen significantly and today's major causes of morbidity and mortality are directly or indirectly the result of personal lifestyles, such as poor dietary habits, substance abuse, and sedentary and stressful living. (Selleck et al., 1989, p. 412)

The LaLonde Report, published in 1974, identified four primary contributors to premature death and disability: human biology, environment, lifestyle, and health care (Schmitz, 1989). "Lifestyle factors consistently account for 50% of the causes of death, regardless of etiology. Thus,

improving lifestyle practices has the greatest potential for influencing morbidity and mortality" (Schmitz, 1989, p. 10).

Current technology can sometimes prolong the life of the chronically ill individual, but the prevention and cure of heart disease and cancer, and the reduction of accidents on and off the job are not achieved through the use of elaborate medical diagnostic and treatment equipment. The risk factors associated with premature morbidity and mortality, tobacco and excessive alcohol use, dietary fat consumption, obesity, and sedentary lifestyle are largely within the control of the individual (American Hospital Association, 1982).

Economic Rationale

The most commonly cited reason that companies offered health promotion programs was to decrease the level of health care costs and their rate of growth (Bly et al., 1986; Bowne et al., 1984; Fielding, 1982; Opatz, 1985; Popp, 1989; Warner, 1987). Chapman (1989a) described the emergence of wellness programs as one of four primary approaches to control health care costs in America, the other three approaches being cost-sharing, utilization management, and selective use of providers. In 1950, the nation's health care bill totaled $12 billion, or 4.6% of the gross national product (Wilson, 1988). By 1986, the annual bill reached approximately $450 billion, or nearly 11% of the gross national product (Bonk & Bensky, 1989; Wilson, 1988). In the past decade alone, national health expenditures have tripled (Schmitz, 1989). Employers are faced with exorbitant health insurance

premiums that far exceed allocations for insurance benefits (Evans et al., 1989) and the expense literally threatens the existence of organizations. By the year 2000, the cost of health care in the United States will exceed $1 trillion, or $4,000 per person per year (Opatz, 1985).

Unhealthy lifestyle behaviors of American workers have increased employers' costs (Bly et al., 1986; Bonk & Bensky, 1989; Opatz, 1985; Selleck et al., 1989). Tenneco's study demonstrated that their sedentary female employees incurred nearly 58% more health care costs than female exercisers, and sedentary male workers had 45% higher costs than their fit counterparts (Elias & Murphy, 1986). Smokers experience $190 more per year in medical costs than nonsmokers, and heavy smokers utilize the health care system a minimum of 50% more than nonsmokers (Fielding, 1982). Workers who do not subscribe to a wellness lifestyle have higher annual inpatient costs (Bly et al., 1986) and higher disability costs (Elias & Murphy, 1986) than those who do participate.

The conventional wisdom is that health promotion and disease prevention programs are sound financial investments and therefore cost-beneficial. However, many scholars have challenged that wisdom based on questionable evaluation issues that are discussed further in the following section on cost-benefit and cost-effectiveness issues. A recent concern about previously ignored indirect costs has raised additional questions about the net financial benefits. Those costs are associated with long-term health care, pension, and disability costs incurred by employees who remain on the job in their late

years or live longer into their retirement due to the success of health promotion programs. This issue deserves to be qualified and reevaluated (Warner, 1987).

Ethical and Social Issues

"The consideration of ethics for practitioners in worksite health programs is a frontier area" (Roman & Blum, 1987, p. 69). Because the focus of wellness programming has been primarily on health care cost-containment, and because the field is young, important ethical and social issues appear to have been overlooked. Authors who have contributed to this area of the literature recommended that health promotion managers and others who set worksite policy address the following ethics during program planning: (a) know the workers' rights to freedom of choice, i.e., that programmatic strategies do not extend employers' rights to a degree of ownership on employees' bodies, and careful plans must be laid when deciding what will be mandatory for workers; (b) avoid the use of subtle forms of coercion into programs; (c) design education and information-giving that avoids victim-blaming; (d) decide if the interests of both the employer and employee are being served; (e) avoid any restriction of participation based on individuals' job titles or responsibilities; (f) avoid providing benefits only to those who are expected to provide the biggest payoffs; (g) avoid paternalism and elitism; (h) ensure the reliability and validity of assessment devices; (i) assure workers that recommendations from assessments are based on sound, scientific information; (j) ensure that prescriptions will do more good than harm;

(k) provide detail on how health records will remain confidential; (l) avoid job discrimination based on poor health; (m) avoid the temptation of "drumming up business" to improve the economics or visibility of a program for internal political reasons; and (n) ensure that participants are thoroughly informed about the program (Matteson & Ivancevich, 1988; Popp, 1989; Roman & Blum, 1987). Roman and Blum (1987) suggested that a practical question to ask during the development and evaluation stages of health promotion programs is "Whose side are we on?" (p. 64).

Employers who offer health promotion programs may be viewed in a positive way by employees who participate. On the other hand, management may be viewed as paternalistic and as manipulating workers without actually providing real benefits (Shain, Suurvali, & Boutilier, 1986). Some authors indicated that most employers do not have a genuine concern for improving the health of America as a society, but are interested only in the company's bottom line. However, in a survey of Colorado businesses, 82% of the responding companies with existing programs identified "improvement in employee health" as the leading reason for implementing the program (Davis et al., 1984).

If, in fact, the whole is greater than the sum of its parts, should directors of health promotion design programs and services that will benefit society as a whole, emphasizing cost-effectiveness as opposed to direct profit potential? Warner (1987) stated that emphasizing the cost-effectiveness of

health promotion "would force recognition that health, and not profit, is the principal benefit of health promotion programming" (p. 39).

Because of the economic concerns of employers, a new trend toward "predictive medicine" at the worksite is emerging and is in direct opposition with prudent social and ethical issues. The premise of predictive medicine is that employment with a given company may be contingent on the individual's genetic predisposition for disease. The federal government's "human genome project" will enable medical providers to detect a broad range of predispositions to genetic diseases. Based on this new knowledge, employers may want to test employees and new applicants to detect their risk of developing diseases such as alcoholism, coronary artery disease, or Alzheimer's disease (Orentlicher, 1990). Preplacement exams including drug testing, physical examinations, and functional capacity testing are becoming commonplace (Anstadt, 1990). The Americans with Disabilities Act, passed by Congress in 1990, is designed to protect employees from discrimination based on disability and "restrict employers from using tests for genetic risks of disease" or use of "medical tests to detect disabilities in employees" (Orentlicher, 1990, p. 1005). Are companies and states exhibiting blatant disregard for the ethical concerns of society? Are they taking the economic argument so far that they will create a culture of "disabled citizens"?

Cost-Benefit and Cost-Effectiveness of Health Promotion

Health promotion advocates commonly assume that promoting wellness and risk reduction is inherently good, and that programs should be supported without question. However, survival often depends on evaluation and documentation of the cost-benefits and cost-effectiveness of a program (Higgins, 1986).

Two types of cost analyses have been described (Fielding, 1982; Higgins, 1986; LaRosa, Haines, & Kiefhaber, 1985; Popp, 1989; Warner et al., 1988). The cost-benefit analysis calculates both the costs and the benefits of a program in a dollar value, followed by comparing the costs to benefits by the use of a ratio. If the program alters behavior and generates a net cost savings, it is considered a cost-beneficial success (Warner, 1987). The cost-effectiveness analysis includes a determination of costs and benefits, but is not calculated into a dollar value. Rather, it measures the cost of reaching prestated program objectives, usually behavior change, without regard to the financial cost to achieve the goal (LaRosa et al., 1985). To obtain a true picture of the cost-benefits and cost-effectiveness of worksite health promotion programs, evaluation of wellness programs must become part of the planning process. "A creature of the times, health promotion has come to be defined in economic terms" (Warner, 1987, p. 53). However, it is unclear whether health promotion programs in general attain the expected economical benefits.

A controversy over the accuracy and adequacy of program evaluations is apparent (Fielding, 1988; Popp, 1989; Warner et al., 1988). Controlled scientific studies on the cost-benefits of health promotion programs are scarce. Bowne et al. (1984) cited weak methodology, inadequate data and sample size, false assumptions, and lack of longitudinal research as common problems in many studies. Fielding (1988) explained that worksites are difficult places to conduct research due to high employee turnover, operational differences, the time and cost associated with long-term data collection, difficulty in establishing control groups, and the challenge of randomizing subjects which denies program benefits to a significant number of employees.

Two longitudinal studies demonstrated the cost-benefits of health promotion programs. Johnson and Johnson's "Live for Life" program involved over 11,000 employees during a five-year period. The researchers explored the relationship between their health care costs and utilization rates and the availability of a comprehensive worksite health promotion program. The mean annual inpatient cost increases for two experimental groups were $43 and $42 per person, and the control group had a mean annual increase of $76 per person ($P < .001$). For the period of the study, a total of $980,316 was saved compared to pre-program years (Bly et al., 1986).

Prudential's Southwestern Home Office's five-year study of major medical and disability costs for employees yielded positive cost-benefit results from their physical fitness and health promoting efforts. With a participation

rate of 19.1% (N=265), the average combined medical and disability cost savings per participant was $353.38 for a savings of $1.93 for every dollar invested in the operation of the program. The Prudential group experienced a 45.7% decrease in major medical costs during the post-entry year (Bowne et al., 1984).

In a review of the literature on programs containing health care costs, Elias and Murphy (1986) identified problems with the Prudential study which "limit its usefulness in attributing cost savings to health promotion programs" (p. 760). Those problems included: (a) bias, (b) a noncomparable control group, and (c) lack of a mechanism for monitoring adherence to the fitness program.

Despite the paucity of well-documented data to show a cause-and-effect relationship between worksite health promotion programs and health care cost savings, companies have actively maintained wellness programs (Popp, 1989). Warner et al. (1988) recommended:

> The dearth of sound evidence on the economic merits of work-place HP [health promotion] should not be interpreted as a negative assessment of the potential of such programs, however. Rather it recommends a healthy skepticism in reading the literature and development of a new research-based body of understanding. (p. 106)

Goodman and Steckler (1989) stressed that until wellness is institutionalized, i.e., "the innovation is becoming a stable part of the organization" (p. 66), such programs will not survive "regardless of how theoretically sound, well implemented, successful, or desirable they may prove to be" (p. 64).

Employees' Reasons for Participating and Their Perceived Benefits

Millions of Americans have taken an interest in improving and maintaining their own health. Despite this trend, society as a whole has continued to follow an illness-oriented medical model for health which is dependent on the curative medical system. A review of the literature clearly shows the lack of research on the reasons employees participate in wellness programs and how they perceive the benefits of participation. Some authors have described the use of worker needs assessments, but little attention has been given to the benefits as perceived by the employees. This lack of attention to the participants' viewpoint is a weak link in the health promotion literature.

Summary

The trend for employers to offer some type of health promotion program for workers is substantial. The theory supporting health promotion is one of a cause-and-effect relationship; i.e., if individuals change negative health behaviors, they will reduce their risk of lifestyle related illness, decrease health care costs, decrease absenteeism, and boost productivity and morale (Goldbeck & Kiefhaber, 1981). Researchers have been unable to demonstrate a causal relationship from present studies. Much of the research has quantitatively measured physiological parameters such as fitness improvement, weight loss, or changes in blood lipids and blood pressure as a result of complying with fitness and dietary regimens. Changes in absentee

rates have also been quantitatively measured. Qualitative study is needed to determine how employees perceive the program benefits and the reasons why they participate. Discovering answers to these questions could yield new information regarding how program success is viewed, if the correct strategies are being used to recruit unhealthy workers, and if the programs are cost-effective.

CHAPTER THREE

METHODOLOGY

> The trouble with generalizations is that they don't apply to particulars. (Lincoln & Guba, 1985, p. 110)

The purpose of this study was to explore the reasons why employees participated in the Montana State University Employee Wellness Program, and to discover their perceptions of the benefits of participation. It was a case study in which the design was a natural construct to discover wellness participants' beliefs about the effectiveness of the Wellness Program. Participants' perceptions about worksite wellness programs is one area of the health promotion literature in which little information is available. "Qualitative research is often based on the premise that knowledge about humans is not possible without describing human experience as it is lived and as it is defined by the actors themselves" (Polit & Hungler, 1989, p. 312). The following sections describe the study design, the participant sample, and the procedures.

Design

The design for this study was naturalistic inquiry. Naturalistic inquiry (Guba, 1978) and ethnographic (Spradley, 1979) methods were used to elicit knowledge from the participant's point of view. Naturalistic inquiry is an effective method of research when the goal is to better understand peoples' perceptions (Fetterman, 1989; Guba, 1978; Marshall & Rossman, 1989; Morse, 1989; Spradley, 1979). The design is a general and flexible one that is emergent and variable. "The design is a hunch as to how you might proceed" (Bogdan & Biklen, 1982, p. 47). It is a holistic one that helped the investigator discover the phenomena as a whole. This inquiry facilitated the discovery of peoples' everyday reasoning about what they knew, how they knew it, and their concerns and beliefs of reality as they saw it. Because the purpose was to understand the complexity of phenomenon rather than to measure it, the research was generated from research questions rather than hypotheses. Information for this study was learned from the participants and the research questions were used as the guide to discovery.

The nature of this research problem involved learning from the insiders' perspectives in order to describe the reality about the everyday experiences of the participants. In an attempt to learn more about the reality of the Wellness Program, the chameleon-like qualities of peoples' perceptions created not one objective reality, but multiple, or alternative realities.

> Much of the reality with which the naturalistic inquirer must deal exists only in the minds of individual people and depends heavily on their separate perceptions....the reality manifold is constantly

> changing in terms of time, people, episodes, settings, and circumstances. One should expect 'reality' to be different at different times, recognizing the differences will depend on the situation and not necessarily or merely on a lack of reliability in methodology (Guba, 1978, p. 15).

Naturalistic inquiry has its roots in ethnography (Guba, 1978), which has traditionally been used in anthropological and social research and more recently in the evaluation of physical education.

Traditional methods of inquiry have not provided adequate answers to the complex questions in the rapidly growing field of health promotion. A trend toward naturalistic research was recently discussed in detail in a 1989 Research Quarterly publication. As outlined in Locke's (1989) article, he described the uses for naturalistic inquiry:

> It is ideal for clarifying situations in which the operative variables are unclear, determining why interventions have unpredicted effects, defining fresh ways to look at overly-familiar problems, understanding how tasks, policies, roles, or other systemic elements are perceived by participants, and for ferreting out of a social setting those subtle influences which may be disguised or displaced in their behavior representations. (p. 11)

Worksite wellness program operations encounter all of the above mentioned situations.

Interviews were conducted to discover new knowledge and to produce narrative descriptions of the findings. One or more hypotheses were expected to emerge from the information discovered. "Both questions and answers must be discovered from informants" (Spradley, 1979, p. 84). As new questions and input arose from discussions with participants, those

questions were added to subsequent interviews for the purpose of data source triangulation.

Rigor is necessary in all research. Traditional research uses internal validity, external validity, reliability, and objectivity to establish rigor. In naturalistic inquiry, credibility, transferability, dependability, and confirmability are used to establish rigor.

Credibility is similar to the experimental researcher's concept of internal validity or the truth value (Lincoln & Guba, 1985). Credibility demonstrates "...that the inquiry was conducted in such a manner as to ensure that the subject was accurately identified and described" (Marshall & Rossman, 1989, p. 145). Qualitative researchers ask the question, "Do the measures used by the researcher yield data reflecting the truth?" (Polit & Hungler, 1989, p. 249). The use of triangulation lends credibility to the data. "Triangulation refers to the use of multiple referents to draw conclusions about what constitutes the truth" (Polit & Hungler, 1989, p. 249). Pragmatic validation, or data source triangulation, was achieved in this study by obtaining information from one participant, then verifying the data by asking other participants about the same content. Therefore, "the standard, or the rules for establishing the standard, is developed against which information is compared" (Morse, 1989, p. 159). Data was collected until the information gained from the participants became redundant. At this point, the categories of information were considered saturated, and data collection was concluded.

In naturalistic inquiry, the issue of external validity, or generalizability, is better described as transferability. Transferability is "an empirical matter, depending on the degree of similarity between sending and receiving contexts. Transferability inferences cannot be made by an investigator who knows only the sending context" (Lincoln & Guba, 1985, p. 297). Naturalistic inquiry discoveries are usually not generalizable to other settings and contexts. However, the investigator

> cannot specify the external validity of an inquiry; he or she can provide only the thick description necessary to enable someone interested in making a transfer to reach a conclusion about whether transfer can be contemplated as a possibility....It is his or her responsibility to provide the data base that makes transferability judgements possible on the part of potential appliers. (Lincoln & Guba, 1985, p. 316)

The participant selection, the setting of a college campus, and the specific constructs of the types of programs investigated help to make the results of this study transferable to another context if the applier believes the context is sufficiently similar. The investigator attempted to provide sufficient thick description so that a potential applier can determine if the results of this study are transferable.

Dependability is an appropriate criterion in naturalistic inquiry, as opposed to reliability. Replication is usually not an issue for the naturalistic inquirer. "The inquirer may often be more interested in differences than similarities" (Guba, 1978, p. 70). Dependability infers that if an inquiry audit were performed, the researcher would have demonstrated a fair

representation of the topic being investigated and that the findings and interpretations were accurate and supported by the data.

The investigator's concern for objectivity, or neutrality, is evidenced by striving for confirmability, which is the "agreement among a variety of information sources" (Guba, 1978, p. 17). During the data collection, categorical information was obtained from a participant and that data was confirmed by cross-examination and data source triangulation with other participants. In the interest of neutrality and objectivity, the investigator conducted the interviews acting only as the transducer in the process. The conclusions of this study came from the data, not the investigator.

Participants

Naturalistic inquiry techniques require that participants be chosen because they have the expertise of being a participant in a particular setting, because they can communicate detailed information about their experiences, and because they fit the needs of the study (Morse, 1989). Spradley (1979) identified the essential qualities of a good informant as having thorough enculturation, current involvement in a program, and adequate time to interview. Therefore, a purposeful sample (Morse, 1989) of participants from the Montana State University Wellness Program was selected from a list of current participants provided by the Wellness Office staff. To be considered as a candidate for the study, a participant was required to have participated for a minimum of one school year in one or more of the following program

offerings; health screens, nutrition programs, and physical activity classes. The participants were identified by the Wellness Office staff as knowledgeable based on their duration of program involvement, adherence to the programs, or atypical experiences which would lend a broad range of concepts to the development of the phenomenon.

There are no universal guidelines regarding the number of participants required to validate a naturalistic research study. Data is collected until enough information is gathered to provide a clear understanding of the situation. Thus, enough cases were included to identify outliers and incorporate their meanings into the results of the investigation. Typically, interviews continue until the categories in question become saturated, meaning that the information becomes redundant. Therefore, no specific number was set for the sample size prior to the beginning of the study. During the study, interviews were conducted with 19 of the current participants in the Wellness Program.

Two participants were initially interviewed as pilot interviews. Both yielded descriptive data and the data were included in the final analysis. As the interviews progressed and more specific categorical information was sought, new participants were contacted and interviewed. Three participants were recommended by participants who had been previously interviewed. Of the 20 potential informants contacted by the investigator, 19 agreed to be interviewed and their data were included in the final analysis.

Subjects' Rights

Researchers are obligated to protect the rights of the participants, including anonymity, confidentiality, fair treatment, and privacy (Polit & Hungler, 1989). The primary ethical concern during interviewing "is that of beneficence, which encompasses the maxim of 'above all, do no harm'" (Polit & Hungler, 1989, p. 23).

The rights of the participants in this study were protected in the following ways: (a) participation was voluntary, (b) a thorough explanation of procedures and objectives of the study was reviewed with each participant, (c) each participant was informed that he or she could terminate the interview at any point, (d) interview questions were asked in a sensitive manner so as not to cause emotional distress, and (e) an informed consent was presented to and signed by each participant prior to the interview.

Procedures

Participants were solicited by telephone from a list of Montana State University Employee Wellness Program participants provided by the Wellness Office staff. All but one of the program participants contacted agreed to participate in the study, and the interviews were scheduled. As the interviews progressed, additional participants were selected to fill in "thin" areas of information, or to further investigate negative cases. Thin areas were those categories that infrequently appeared during the interviews, indicating a need for further investigation. Any issue that was mentioned by a participant that

was contrary to the information from previous discussions was also further investigated. Data collection continued until all categories under investigation had been saturated, no further negative cases were found, and no further data source triangulation was necessary.

The interviews were semi-structured or focused, meaning that the interviews began with a set of broad, open-ended, descriptive questions relating to the objectives of the study. An interview guide was used only as a topical checklist and as a reminder to cover all categories. Because new concepts and topics emerged with many of the participants, additional questions were added to the categories for further inquiry with the next participants.

Since discovery is the purpose of naturalistic inquiry, data collection was structured to encourage variation in concepts. The questions encouraged conversation as opposed to "yes" or "no" answers (Morse, 1989; Polit & Hungler, 1989; Spradley,1980). For example, "Tell me what personal benefits, if any, you have experienced by participating in the health screening," elicited more description than asking for a response to a checklist of possible benefits such as, "Did you know whether your cholesterol was high prior to the health screening"? This mode of questioning also allows the answers to be taintless, eliciting the most candid responses.

The baseline questions were constructed based on program variables identified by the Wellness Program staff and concepts derived from the literature. All questions were organized into general categories, and the

baseline questions in each category were asked of every participant. However, additional questions emerged from the pilot interviews and subsequent interviews and were asked of the participants in upcoming interviews. Some questions were revised and expanded based on the data obtained from preceding participants. "Both questions and answers must be discovered from informants" (Spradley, 1979, p. 84).

Once the participants were selected, the interviews were conducted and recorded on audio tape. Each interview lasted between 60 and 90 minutes. During and after each interview, field notes were recorded to expand on the information gained, data were analyzed, and questions were refined before proceeding to the next interview. Nineteen interviews were completed in 14 weeks. After the data collection was completed and all tapes transcribed verbatim, the text-based data was analyzed using the software program The Ethnograph (Seidel, Kjolseth, & Seymour, 1988). The program was loaned to the investigator for the duration of the study by the Center for Adult Learning Research, Montana State University, Bozeman. The interview responses were coded and prepared for computer analysis.

Developmental Research Sequence

Data collection and analysis for this naturalistic inquiry followed Spradley's Developmental Research Sequence. The creation of the domain and taxonomic analyses allowed the investigator to discover information and analyze the data from the interviews.

"Domains are the first and most important unit of analysis in ethnographic research" (Spradley, 1979, p. 100). A domain is a category that includes other categories, with the first element being a cover term. Domains are the broad picture and include cover terms and semantic relationships. The cover term awareness is a category and includes other categories such as: "my cholesterol numbers," "nutrition information," "exercises I didn't know before," and "feeling better balanced." Semantic relationships are two categories linked together, such as a blood pressure test and a type of screening. "In a domain the semantic relationship links a cover term to all the included terms in its set" of topics being studied (Spradley, 1979, p. 101). For example, participants identified the included terms "going to noon aerobics," "knowing my cholesterol level," and "spending time with friends in the program" with the cover term levels of satisfaction in the domain of personal benefits.

The taxonomic analysis revealed the internal structure of the domains. The taxonomy is an in-depth analysis of the domains and allows for discovery of similarities among terms (Spradley, 1979). A componential analysis, the process of searching for attributes that signal differences, was also part of the analysis.

As the process continued themes evolved. The more frequently and the more in-depth the participants mentioned a semantic relationship, the more it was valued and the stronger the theme. The researcher wove the themes into an integrated whole, and this whole became the results of the

study (Spradley, 1979). The values of the individuals as well as the group were extrapolated from the results of the study.

CHAPTER FOUR

FINDINGS

> When you get depressed about the job, one of the positive things you can think about is that because of the wellness program, it's still a good reason to be here. I personally would not take time out of my life to play racquetball otherwise. (MSU Employee Wellness Participant)

Introduction

This study uncovered peoples' satisfaction with an employee wellness program. It was a case study in which the design was a natural construct to discover wellness participants' beliefs about the program. The content analysis of the interviews provided a better understanding of the reasons that participants first joined the campus wellness program, the benefits they experienced, and ultimately their satisfaction with and adherence to the program.

Reasons participants joined and stayed involved in wellness activities varied widely yet exhibited common themes. Some individuals valued most the psychological rewards. "I like the workout; it's such a positive mental exercise." Others believed that the physical improvements made it worth the time invested. "Well, I certainly think that I controlled my weight better than I would normally." The commonality among the participants' comments was

that the program met their expectations, and their perceived benefits were associated with their reasons for participation.

Participants appeared to be both internally and externally motivated to join and participate in the wellness activities. These employees had been participating for one to five years in an attempt to have some "control over their bodies" and "control over their health," indicating that they were internally motivated. Some individuals only subscribed to a wellness behavior, such as exercising, if there were external incentives such as a regular class schedule and socialization with others. Some participants joined because of the effects of "powerful others"; their physician, spouse, supervisor, or co-workers. These theoretical dimensions identified the source of reinforcements for health-related behaviors and can be identified by the types of comments made by the participants. An internally motivated participant made the comment, "I exercise frequently. Not exercising twice a day upsets my psyche more than my knees!" Externality is the belief that most happenings are a matter of chance, and the individual is not likely to be motivated to make changes without an external impetus. One participant appeared to be externally motivated when she said, "I probably should control my weight better, but I just have such a hard time finding time to exercise. Most of my family is overweight anyway." One individual who initiated behavior change because of the influence of a powerful other stated, "The doctor told me that I had to exercise more than three days per week to improve my cholesterol; so I am."

Participants

Nineteen participants from the Montana State University Employee Wellness Program provided rich descriptions of their experiences and their perceived benefits from participation in the program. All participants were involved or had been recently involved in one or more educational, physical activity, or health screening programs. The sample included 11 female and 8 male participants ranging from 25 to 66 years of age (M =45.0). One participant was a psychologist, six held faculty or administrative positions, and ten were classified employees holding clerical or support positions. One participant was a retired faculty member, and one was the spouse of an employee. The length of time of participation in the program ranged from 1 to 5 years (M = 3.24).

Participants were contacted for an interview after being identified by the wellness office staff as "participants who could communicate their experiences." The interviews lasted from 45 to 90 minutes each, and participants responded to open-ended questions about their reasons for taking part in the programs and the benefits of participation as they experienced them. The text based data was analyzed using the software program The Ethnograph (Seidel, Kjolseth, & Seymour, 1988).

Interview data was gathered from the 19 participants. Two participants were reluctant to reveal much information, particularly in the early part of the interviews. They had many contradictory responses and did not mention as many significant benefits as the other participants had mentioned. One, a

52-year-old woman, was quite colorful and seemed to get a great deal of pleasure out of being contrary during the interview. She attempted to stump the investigator throughout the interview. However, later in the interview she became more trusting of the investigator and began talking about her health concerns and her perceived benefits. The other participant responded in an analytical tone because he had written a doctoral dissertation on the campus wellness program. He had a tendency to speak about the issues from the standpoint of "what's in the literature" as opposed to speaking about his own perceptions and experiences.

Types of Programs

Most participants had taken more than one type of activity class. Eight individuals participated in the aerobics classes, six took a weight training class, five participated in the stationary biking class, five took the basic exercise, and four joined water aerobics. Other activity classes which participants attended included racquetball, volleyball, yoga, Tai Chi, and aerobic walking.

Individuals participated in the following educational programs: smoking cessation (1); cooking class (1); consultation with the campus nurse practitioner (1); consultation with the wellness program physician (5); and consultation with the nutritionist (7). Most participants had done at least one health screening including cholesterol screening (13), the Lifestyle Management Report (10), the mammogram (4), glucose screening (2), and

body fat testing (1). Eight of the participants interviewed had been to a campus health fair and reported that they became more aware of their current health status from the objective test results and from the facts they received from health fair staff. They also indicated having been motivated by the experience to subscribe to more health-enhancing behaviors.

One common concern found in the health promotion literature is that instructor-led activity classes may encourage participants to become dependent on the class or the instructor and that this may inhibit the development of independent activity behaviors. However, in addition to the classes, most of the participants did some form of individual or group activity on their own. Two participants walked, four ran, five used the stationary cycles, two played handball, two played racquetball, one cross-country skied, and one was a hiker. Indeed, one participant dropped out of her walking class and explained, "I liked the class a lot, and I never finished it because I enjoyed the walking so much that I did it on my own."

Reasons Participants Joined

A recurrent theme that evolved from the interviews was that the participants originally joined some component of the wellness program because they expected the program to fulfill their needs and wishes. Their expectations of achieving positive changes in their physical and psychological self focused most frequently on health problems or health concerns, body weight issues, and physical fitness benefits. They also joined due to the

influence of powerful others, convenience and financial benefits, diversity, and social support. Participants stated that the satisfaction they experienced was their reason for continued participation in classes and adherence to health-enhancing behaviors.

Health Problems and Concerns

Ten participants joined expecting to maintain their health, improve the status of their health, or prevent further health problems from occurring. They also expressed a desire to have some control over avoiding a catastrophic health problem. These individuals could be described as being internally motivated to subscribe to healthy behaviors: "If I take care of myself, I can stay healthy."

Two of the ten individuals discovered a health risk during health screening at a wellness fair and have made lifestyle changes to improve their health status and to decrease their risk of future health problems. A 37-year-old male explained, "My health concerns originated from several different sources. Originally from the first health fair that my wife and I went through two years ago, I discovered that I had some cholesterol problems. I didn't do too much changing then. I made some diet changes through the nutritionist in the wellness program....But then I had a cousin in his late fifties who died of a heart problem. It was recommended then that I get an EKG. From the information on my tests and blood screens done through the wellness program, I've been steadily increasing on the favorable things." The second individual was a 35-year-old woman who was surprised to find that

her cholesterol was high "because I am a vegetarian." She has taken steps to reduce her cholesterol level.

Another man recalled the reason he joined the program, "I had a back injury. After I saw the doctor, I went to the physical therapist. Later he said to either keep seeing him or enroll in this program. I wasn't sure I needed to because I thought I was fairly active. But I enrolled and the instructor put me in the adult fitness program for people in a risk category. She wouldn't let me quit....Eventually I felt better. The instructor had goals written out, and it took me about three months to get to that point. I never told her that. I must have been somewhat out of condition to take that long."

A 66-year-old participant explained that he joined because of a health problem. "Well, I was sort of pushed into it. I had been using a bike at home. Then in the fall of 1988, I had a heart attack and that really pushed me to have something more structured. At home I ride the bike when I get around to it. When you are enrolled in a class and you have to do it three times a week, it really makes a difference."

Joining because of an injury, one faculty member said, "I usually run on my own during the lunch hour. I use the indoor facilities for running. A little over a year ago I pulled an Achilles tendon, so I laid off running and started using the stationary bike and the weight room."

Another faculty member spoke of his need for wellness and fitness because of a serious health problem: "I found out I have a rare genetic disease, and one of the side effects of the disease is joint problems. I used

to run every noon, but I can't run anymore so I ride the bike or climb the stairs. I probably shouldn't be doing the stairs. I probably should be in the water aerobics, but I haven't taken the time and effort to get into it yet."

Regarding a mammogram which was provided through the wellness program, a secretary described her reasons for taking part in the programs offered. "I was anxious to have the test because I do have the cystic disease and I wanted to have it checked, so that was a big benefit to me. I got it free, and I didn't have to pay for it." She had also just registered for a smoking cessation clinic as her most recent program activity. She had obvious expectations of the course leading to future good health: "I attended the wellness classes, then if I do quit smoking from this class, it's obviously going to make me healthier and maybe there won't be any problems down the road."

Another participant indicated that the wellness program was there for his wife when she experienced a health problem. "My wife has taken advantage of the Wellness Program classes over the long haul. Before that she ran. Several years ago she was in citizen races, and she had a good time. Then at 47 or so, a congenital deformity bothered her for the first time, and she had to have surgery. Since then she can participate in water aerobics. It really changed the whole family. The water aerobics has done her a lot of good although some of the maneuvers bother her. She does well."

One woman talked about her fear of "getting heart disease" because of her family history. "I think the main thing is, in my dad's family there's a real history of heart problems. All of them have high blood pressure and high cholesterol, and it really makes me feel good when I go to the doctor and my heart rate is really low and my blood pressure is low, my cholesterol is excellent, and I'd like to keep that up! I think, 'Why not keep that up?'"

Fear of Fat

Participants reported that the wellness program gave them an opportunity to exercise on a regular basis and learn more about nutrition, therefore helping them to control their weight. Sixteen of the nineteen participants mentioned "weight control" as a reason for joining and continuing to participate in the program. However, an interesting theme evolved from the data: a number of participants were excessively occupied with the status of their weight and their appearance. Many participants joined the activity programs because of "fear of gaining weight" or the "paranoia of getting too fat." This finding supports similar views in the literature in which the authors described America's obsession with the desire to be thin. Although the participants exhibited internality by taking action to avoid gaining weight, they had a strong sense that weight gain was a matter of chance, and that they were destined to be fat.

The participants seemed to be driven by a "fear of fatness" of the physical self, but the need for a psychological benefit, peace of mind, was also desired. Were the participants exhibiting fanatical behaviors possibly

harming themselves instead of improving their wellness? Two participants reported that they "skip lunch to exercise at noon" and sometimes do not eat all day. One, a 25-year-old woman, explained her situation: "My husband thinks I'm obsessed. Some days he gets real worried about me being anorexic. Everyone's always said that because I'm so skinny, I don't have anything to worry about. I thought that would be true if I exercised all my life. But then your body changes, and pretty soon you start putting on the pounds. Sometimes I do have to watch myself because I'm always in a rush in the mornings and I am really terrible about taking time to eat. With the wellness programs at noon, sometimes I go and then come back to an office with people waiting for me. All of a sudden it's 4 o'clock and I haven't eaten all day. I know that's not good, but I can go all day without eating and not notice it. Some days I've played racquetball at noon, and then go home at 4 o'clock and run three or four miles without having eaten. That's why my husband really keeps an eye on me."

The other participant, a 40-year-old male, said, "I like to eat, and I'm concerned about weight control. If I don't run [at noon], I end up eating lunch. One of those things I have to do with all these employers coming into our interview rooms down here is to take them to lunch. Typically, I do not eat lunch; it's probably not healthy, but I don't eat anything in the afternoons unless it's popcorn. Going to lunch I just feel stuffy all afternoon. But then I probably eat too much at the evening meal which is the worst. I need to start looking at that probably a little bit more and have an apple, yogurt, or

popcorn or something in the afternoon. My dad's in pretty good shape and he controls his weight pretty good." In an attempt to clarify the intent of the participants' discussions, they were asked, "Do you feel paranoid about weight gain?" The standard answer was "yes."

A 45-year-old man said that he exercises both at noon and at 5 o'clock every day. When asked why he exercised so frequently, he replied, "My vanity is probably stronger than I realize! I like to keep a 32-inch waist and I like to be able to wear my clothes throughout the year. Not exercising twice a day upsets me more in my psyche than in my knees. I've got this phobia that I'm going to be this 300 pound person and it's waiting to come out." A female participant explained her fear of becoming overweight. "Well, I've always had a paranoia about being fat, and so I won't let that happen. I think a lot of people, as long as they are thin, never worry about it. All of a sudden, they've had one or two children, and they've got all this weight. They don't know how to take it off and regulate it. That's one thing I've always tried to make a point of is that I want to regulate it, keep it under control, and know how to do that before I start having a harder time keeping it off."

One woman initially joined the program with the expectation of weight control. She was fearful that she was destined to be fat because she had a family history of obesity. She explained, "I know my future holds an increase of weight if I don't do something about it. I've been fighting it all along."

Another woman talked about joining the program for weight control and about the pressure she gets from her husband. "See, my husband tells me, he'll tease me, that he doesn't want a fat wife, you know? But he said he'd never worry about it because I wouldn't allow myself to get fat for him. I mean, I like to look nice for him, but I do it for myself more than that."

A 53-year-old woman talked at length about her distress over her weight problem. She attributed the excess weight gain to having a hysterectomy, quitting smoking, loving to eat, and not exercising as much as she needs to. "In 1980 I quit smoking and had a total hysterectomy. Even though I never exercised then, I weighed 140 pounds, and now I weigh about 190. I had always maintained about 140 pounds. I just eat more than I should at a meal. I never ate desserts when I smoked, and now I do. I'm not as active now either. I've had trouble making the class lately because of work, and I don't want to walk alone! I like to chat. I get to groaning and moaning because I'm so overweight. I like to have a good time." She spoke of other health problems and how she believed those problems attributed to her inability to lose weight. "As far as losing any weight from attending aerobics, no! But I do eat less when I get home after I've exercised."

The 25-year-old female participant concluded, "One of my motivations is that I have a real fear of having my first kid or something and then having an uncontrollable weight problem and not being able to take it off. I think I'd rather have the fear and have some motivation."