

FREQUENCY OF USE OF AN ONSITE FITNESS CENTER
IN RELATION TO JOB SATISFACTION AND ABSENTEEISM

A THESIS

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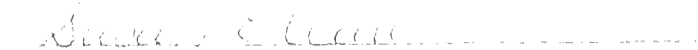
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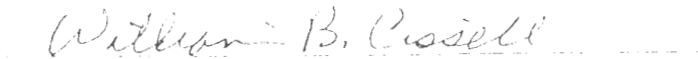
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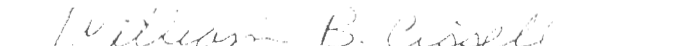

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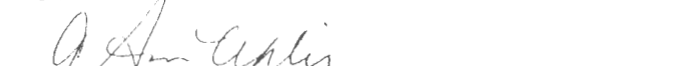

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Attempts to contain health care costs at the worksite have focused on health promotion as a possible solution. The study, conducted at the Xerox facility in Lewisville, Texas, examined utilization of an onsite fitness center in relation to job satisfaction and absenteeism. A secondary problem was to identify reasons for nonparticipation in fitness center activities among employees. Of 281 survey packets distributed, 72 sets of returned questionnaires were complete for analyses. Two instruments were used: the Job Descriptive Index (Smith et al., 1969) and the Employee Data Questionnaire, a tool developed by the researcher.

Significant correlations were found between the employees' self-reported levels of activity and satisfaction with work ($r=.3058$) and pay ($r=.3642$) as measured by the JDI. Reasons for nonparticipation included: prolonged work hours, fitness needs were met elsewhere, and lack of motivation. There was a nonsignificant negative correlation

between frequency of use of the fitness center and days missed because of illness.

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CHAPTER I
INTRODUCTION TO THE STUDY

The escalation of health care costs, the shift in emphasis of national health policy from treatment of illness to prevention, and the increased competition faced by American corporations in the international marketplace have provided the impetus for employers to take a more active role in protecting their most valuable resource: their employees (Pender, Smith, & Vernof, 1987). Not only do employers have an investment in their employee training costs, experience, and good will, but a healthy employee is more productive, has fewer accidents, takes fewer sickdays, and uses less health insurance benefits.

Health no longer can be considered the absence of disease. Health is a step-like continuum ranging from terminal illness and death to the highest peak of fitness (Bowne, 1981). Health promotion programs are designed to facilitate alterations of unhealthy behavior and to effect a change in life-style. At the present time, the workplace is undoubtedly the site where these programs will have the greatest impact on the adult population (O'Donnell & Ainsworth, 1984).

Motivation for initiating worksite health promotion includes such expectations as: reduced absenteeism, improved employee morale, and increased productivity (Conrad, 1987; Cunningham, 1982a); reduced medical and disability costs (Conrad, 1988; Gebhardt & Crump, 1990); facilitation of recruitment and retention of high quality employees (Chang & O'Boyle, 1989; Fielding, 1982); enhanced corporate image (Conrad, 1988); and improved employee attitudes to both job and employer (Walker & Evans, 1987). Specifically, proponents of physical fitness maintain that exercise and its subsequent effect on fitness have a positive effect on the level of employee job satisfaction (Hoffman & Hobson, 1984).

Many corporations have instituted worksite health promotion programs in an effort to combat rising health care costs and to improve productivity and morale. While employees want to contain health care costs also, they may wish to participate in worksite programs for personal reasons, such as to improve body image or to lower blood pressure (Chenoweth, 1986). Although recent surveys indicate that more Americans are exercising and taking steps to promote their health, the majority of the American workforce does not use onsite fitness facilities or health promotion programs (Chenoweth, 1989). Worksite programs typically attract only 15-20% of the workforce, with only

about 10% adhering to programs (Warner, Wickizer, Wolfe, Schildroth, & Samuelson, 1988).

Statement Of The Problem

The problem of the study was to examine job satisfaction and absenteeism in relation to utilization of an onsite fitness center. A secondary problem was to identify reasons for nonparticipation among employees. The study was conducted at a branch of Xerox Corporation which has a worksite health promotion program and onsite facility, and draws its employees from North Central Texas. The study took place during the second half of 1991.

Purpose Of The Study

The purpose of this study was to determine whether relationships existed between utilization of an onsite fitness center and each of the following: scores on the individual scales of the Job Descriptive Index (JDI), days absent due to illness, and responses to the Employee Data Questionnaire (EDQ). A second purpose was to identify employees' reasons for nonparticipation in fitness center activities.

Hypotheses

The following hypotheses were tested at the .01 level of significance:

1. There will be no significant relationship between the categorical frequency of use of the Fitness Center and the score on any of the scales of the JDI.
2. There will be no significant relationship between the categorical frequency of use of the Fitness Center and number of days absent in the last year due to illness.
3. There will be no significant relationship between the score on any of the scales of the JDI and self-reported categorical levels of activity.
4. There will be no significant relationship between the score on any of the scales of the JDI and perceived importance of the Fitness Center as a benefit.

Definition Of Terms

For the purposes of this study, the following terms are defined:

1. Xerox Corporation. A multinational manufacturer in document processing and insurance and other financial businesses (Hansen, 1991).
2. Job Satisfaction. "Persistent feelings toward discriminable aspects of the job situation" (Smith, Kendall,

& Hulin, 1969, p. 37), as measured by the Job Descriptive Index (JDI) with the Job in General (JIG) scale.

3. Onsite Fitness Center. A facility at the employees' worksite that contains, at a minimum, showers and lockers, and an exercise area and equipment. It may include additional facilities, such as a jogging track, swimming pool, and racquetball courts.

4. Worksite Health Promotion/Wellness. Any activities designed to facilitate behavioral and environmental adaptations that will improve the existing state of health of employees and their families (Brennan, 1981).

Limitations

The following limitations were acknowledged:

1. A sampling error may have occurred due to the exclusion of some employees in the company employee list provided.

2. Job satisfaction questions may have elicited a form of defensiveness that can bias answers in the direction of making workers appear on the whole to be more satisfied than they really are (U.S. Department of Labor, 1974).

3. Generalizability of the study results may be limited to the study population.

Delimitations

The following delimitations were acknowledged:

1. Measurement of job satisfaction was restricted to the results of data obtained from the JDI and JIG.
2. The population was delimited to employees of the Xerox Corporation in Lewisville, Texas.
3. The population sample was delimited to those participants who returned complete questionnaires.

Background/Significance

Much of the interest in worksite health promotion stems from the changing nature of illness, that is, from acute infectious diseases to chronic life-style related disorders (Rosen, 1984). If we choose to smoke, drink to excess, lead a sedentary life, and/or drive carelessly, we have made the principal causes of death, to a great extent, diseases of choice. Smoking, obesity, diet, hypertension, and lack of exercise are indeed controllable (Bowne, 1981). Modern technology has given us machines and increased leisure time. Concurrently, inactivity has become one of the major contributors to cardiovascular disease (Rhodes & Dunwoody, 1990). Industry already is paying a high price for inactivity in compensation, health insurance, and absenteeism (Duggar & Swengros, 1969). With business and industry paying a large portion (estimated at 30%) of the

American national health care bill, there is a built-in incentive for corporations to promote health and healthier workers (Conrad, 1987). Prevention of illness is the most effective way of dealing with rising health care costs (Bowne, 1981).

A study by Der-Karabetian and Gebharbp (1986) suggests that physically fit individuals benefit not only themselves, but also their employers. When employees come to work, they bring more than just a skill: they bring their "total persons" and their abilities to function, which are determined partially by their physical conditions. If employees do not feel good, their energy levels and morale may be low, which can have a negative effect. On the other hand, if employees are in good physical condition, they will feel good, have more energy, and feel more confident with their appearances as well as abilities.

As more individuals recognize the benefits of exercise, the ability to do so during the workday will become important. Thus, employee fitness centers will reflect the concern an organization has for its employees (Falkenberg, 1987). According to DeCarlo (1968), then supervisor of Xerox employee recreation program in Rochester, New York:

Like any other company, Xerox is people. It's future rests with them and it has a substantial investment in them. It simply can't afford to have key people fall

prey to disabling illnesses or worse....Any change of pace injected into an employee's routine contributes to his resilience, his freshness, his general fitness-- in short, to both his health and his job performance.

(pp. 33-34)

CHAPTER II
REVIEW OF THE LITERATURE

Although the physical fitness boom as we know it didn't begin until the 1960's, company recreation programs have existed since the 1800's. Early emphasis was on recreation, and programs frequently were designed as morale boosters. Corporate motives for such programs have changed over the years as have employees' expectations.

In general, the physical demands of work are now less than optimal for health. The skills necessary for many of today's trades and occupations are not as backbreaking as the ones of our predecessors, yet they are more demanding on the nervous system and the eyes. According to Marcus (1991),

Posture pays a heavy price for long hours of secretarial desk-sitting and computer operation. Department store sales staffs, as well as factory workers, become foot-weary from long hours of being on their feet. Nursing challenges the physical and psychological stamina of its practitioner. (p. A11)

In many industrial situations, apparently simple tasks become stressful because of too rapid a pace, interruptions,

conflicting demands or an inability to vary the pace of working (Warnecke, cited in Shephard, 1988, p. 1503).

By the 1970's, rising health care costs resulted in increasing economic concerns. A growing body of research has documented the contribution of lifestyle and behavior to morbidity and premature mortality. Together, these provided the impetus for wellness programs. Such programs have focused on lifestyle factors related to identifiable health risks. Lifestyle factors are determined by behavior and can be controlled only by its modification (Ainsworth, 1984). Predisposing risk factors, such as high cholesterol, hypertension, obesity, diabetes, smoking, substance abuse, stress, exposure to toxic substances, and lack of exercise, are responsible for much of the illness in our society. Conscious changes in health habits, at any age, can lead to significant reduction in many of these major health risk factors, thereby underscoring the importance of health education, self-responsibility, and behavioral and environmental changes in preventing physical and emotional illness (Rosen, 1984).

Several studies have been conducted that demonstrate the value of physical activity as a means of combatting many of our present health hazards. Worksite health promotion programs have proven to be an extremely effective way to manage employee health care and disability costs.

Changing View of Health

Traditionally, the health delivery system has been illness oriented, that is, it has focused on treating the disease after it has occurred (Bowne, 1981). The American medical system that emerged in the 1900s was based on the assumption that health depended on control of disease. Disease could be controlled best by practitioners who had an understanding of the anatomy, physiology, and pathology of the human body and who applied this knowledge in medical intervention. This approach also determined the direction of medical education and research, and the result was a system that was oriented almost exclusively toward treatment of illness. Physicians were assumed to be responsible for the health of their patients. The world's best medical resources were at the disposal of the physicians, when and if they needed them. Consequently, Americans grew indifferent about personal behavior as a principal determinant of health. Individuals no longer were held responsible for their health (Ainsworth, 1984). According to DeVal (cited in Brennan, 1985),

People take health for granted and rely on the doctor to cure them once sick....This places them in a posture of dependence upon a superb health care system despite the fact that most illness today is within our own

capacity to control. People can and should take responsibility for themselves and avoid illness.

(p. 210)

By mid-century, the acute infectious diseases were under control thanks to antibiotics. Then came the next wave, the chronic diseases: heart disease, cancer, and stroke. There are no miracle cures for these diseases. They are largely the results of an individual's lifestyle, and are determined by nutrition; physical fitness; handling of stress; choice of environment; and use of alcohol, tobacco, and drugs (Ainsworth, 1984). The trend of events in the national health care economy over the past four decades has made it clear: we can't go on eating, drinking, smoking, working, driving, and worrying ourselves into ill health, and then pay the health care system to repair the damage (Cunningham, 1982b). The principle underlying all the new ideas and programs having to do with health is simple. Individuals' dispositions and behaviors determine the condition of their cardiovascular and gastrointestinal systems, not the other way around (Cunningham, 1982b).

There has been a dominant perspective in the medical world that individual lifestyle factors have a major impact on health and disease. The philosophy of the Prudential Insurance Company of America is that prevention of illness, instead of treating disease after it has occurred, is the

most effective way of dealing with rising health care costs (cited in Bowne, 1981). "The next great improvement in this nation's health will not come from the research laboratory, but rather through lifestyle modification" (Bowne, 1981, p. 212). This approach requires a change of emphasis, focusing on the more positive aspects of health maintenance and wellness. According to Bowne (1981), "This approach has a great advantage. It places principal responsibility for good health where it belongs, on each individual" (p. 210). By establishing an onsite fitness center, Prudential provided an opportunity not only to improve the health and morale of employees, but also to create an awareness that they were responsible to a great degree for their own state of health.

History of Recreation and Health Promotion Programs

The growth of worksite health promotion programs has resulted partially from the idea that an organization should take some responsibility for the welfare of its most valuable resource, the worker (Pender et al., 1987). This is not an entirely new concept.

Employee recreation programs have been a part of company life in the United States since the 1800s (Wanzel, 1974). The earliest provision of recreation by an industry in the United States was that of the Peacedale Manufacturing

Company of Peacedale, Rhode Island in 1854. By 1868, the Young Men's Christian Association had become interested in providing industrial workers with recreation. The Metropolitan Life Insurance Company, New York City, has the first employee recreation program on record, established in 1894. In 1895, Oneida Limited, Oneida, New York, opened a nine-hole golf course for its employees (Neer, 1957).

In the late 19th century, Patterson, founder of National Cash Register (NCR), instituted a physical fitness program (cited in "National Cash Register," 1980). Following business reverses in the late 1890s, Patterson was influenced by a number of celebrated health faddists. He was convinced by a doctor that his employees' productivity would increase if he encouraged daily exercise. Patterson determined that faulty workmanship was due to his employees' shabby environment and poor health habits, and that a more robust worker was ipso facto a more productive worker. He subsequently launched a series of health improvement regimens for all employees. He initiated two daily 10-minute exercise breaks for all employees (10 a.m. and 3 p.m). He also instituted a session of light exercise and dance for the women workers for 10 minutes before lunch everyday, believing that their circulation was apt to be sluggish from sitting at their work benches all day. He formed company athletic and bicycle clubs, and set up an

entire room at headquarters as a corporate gymnasium complete with rowing machine (cited in "National Cash Register," 1980). In 1904, Patterson turned over his estate to his employees for picnic purposes (cited in Duggar & Swengros, 1969).

Activity in industrial recreation increased with the turn of the century. In the early 1900s, many companies sponsored baseball or football teams. Industrial leagues provided spectator opportunities for the employees. Some of these teams were as good as professional teams of that era, such as the Acme Packing Company, which spun off the Green Bay Packers; and the A. E. Staley Manufacturing Company, which spun off the Chicago Bears (Duggar & Swengros, 1969). The Carnegie Steel Corporation established a company recreation center in 1912, and by 1920 had provided 5 centers, 12 athletic fields, and 15 playgrounds, all well equipped. In 1912, the Goodyear Company of Akron, Ohio had a seven story building used entirely for recreational purposes (Wanzel, 1974). A 1913 survey of 51 companies, conducted by the United States Bureau of Labor Statistics, revealed that 56% of the companies studied sponsored recreation activity and considered recreation to be an important employee need (cited in Neer, 1957, p. 80).

The post-World War I depression curtailed the activities of many companies. However, industrial

recreation activities survived and rebounded with a flourish following the depression years (Neer, 1957).

With World War II, softball diamonds and intramural bowling leagues proliferated, ostensibly to "...relieve the tensions of long hours and crash schedules" (cited in "Employees at Play," 1964, p. 98). The trend swerved away from varsity competition involving only a handful of workers and many spectators toward wide participation by employees and their families. Industrial recreation grew steadily following World War II.

In the 1950s, organization-sponsored wellness programs usually consisted of sports and recreation. Company softball, soccer, and bowling teams practiced regularly and competed in intramural leagues. Program costs were low and corporate goals modest. Employers felt that a small investment in administrative time and equipment costs might help boost morale and inspire esprit de corps (Feuer, 1985).

Also common in the 1950s were health screening; employee assistance; and health education programs that promoted positive management and labor relations, and assistance to employees with personal problems (e.g., alcohol). These programs were supported by industrial health and safety advocates. Although they furnished educational materials to employees, they usually did not provide time, space, or a change of worksite routine, nor

did they reflect a genuine commitment from top management (Gebhardt & Crump, 1990).

Labor-saving developments have contributed to a society that has become sedentary in nature. There has been a marked decrease in physical fitness concurrent with a reduction in the requirements for physical activity in modern living. America has seen an increase in death and disability from cardiovascular disease. As early as 1966, Allen noted that the maximum oxygen intake of "heavy workers" was no larger than that of the population in general (cited in Shephard, 1988).

In many physically demanding jobs, the physical demands are irregular and do not last for a time period adequate to maintain or increase the employee's level of fitness. The aerobic capacity for a worker in a physically demanding job has been shown to be below the level required to perform critical job tasks and has been linked to less than optimum working level. The result is a decrease in productivity and an increase in injuries (Gebhardt & Crump, 1990).

According to Levy (1980), as late as the 1960s, the company gym, if it existed at all, was exclusively an executive perquisite. By the early 1970s, it was becoming increasingly apparent that the white-collar worker should be taking part in some form of physical activity as a preventive measure against various health problems (Wanzel,

1974). According to Staley, "White collar workers, unfortunately, can be almost as sedentary as the aged. More than twice the exertion of the typical white-collar job is required when shower-bathing at home" (cited in Wanzel, 1974, p. 35).

Worksite health promotion, or activities that promote self-care through healthy behaviors and wise use of the medical system, emerged as a manifestation of the growing national interest in disease prevention and health promotion (Conrad, 1987; Pfeiffer, 1989). Management embraced the notion that a regular regimen of supervised exercise can help to improve health, to cut absenteeism, to increase productivity, and even to aid recruitment (Levy, 1980). In the 1970s, formalized physical fitness programs and corporate athletic facilities began to appear and included jogging tracks, swimming pools, gymnasiums, and locker rooms. Worksite health promotion as a widespread corporate phenomenon developed largely outside of the medical care system with little participation by physicians (Conrad, 1987).

Many companies that originally developed an employee wellness program did so with little cost benefit data to support their decisions. Rather, the initiation of many programs was based on a "sense" that these programs were beneficial and demonstrated a commitment to improving the

wellbeing of company employees and the company's image (Rentmeester, 1984). According to philosopher Immanuel Kant, "It is often necessary to make a decision on the basis of knowledge sufficient for action--but insufficient to satisfy the intellect" (cited in Rosen, 1984, p. 8).

Control Data Corporation began a health promotion program (Stay Well) in 1980, which has been directed not only at the state of employees' health but also at productivity, absenteeism, turnover, and employee morale. Stay Well's approach to employee benefits is based on promoting good health and good health habits rather than subsidizing the costs of illness-related care (cited in Naditch, 1981).

In 1982, AT&T initiated a comprehensive health promotion program, the Total Life Concept (TLC), which was designed to create a work environment supportive of positive health practices. This effort was based on the belief that a healthy organization requires healthy employees, and that merely urging employees to take more responsibility for their health and providing the opportunity for them to do so would not be effective without a supportive corporate culture. Management was active in promoting such health education modules as fitness, reduction of backache, weight control, stress management, smoking cessation, cholesterol reduction, cancer screening, nutrition, and interpersonal

communication (Spilman, Goetz, Schultz, Bellingham, & Johnson, 1986).

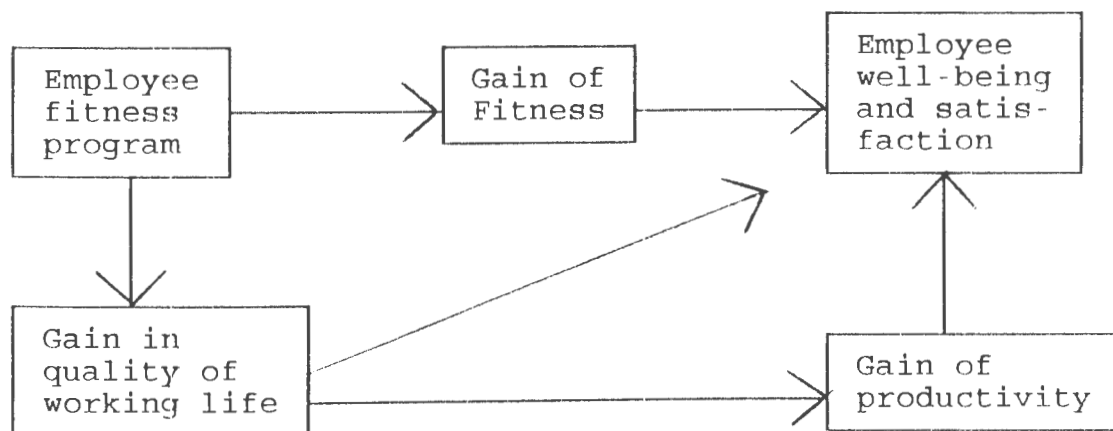
Rationale For Worksite Health Promotion

Whether prompted by a desire to improve the welfare of workers or the need to control costs, most corporate officers have recognized the importance of addressing health matters (Barker, 1987). Whether looking at human productivity and its meaning in terms of job satisfaction for the employees or profitability for the company, the idea of conducting health promotion at the workplace has captured the imagination of many health educators and corporate policy makers. Corporate executives and managers are attracted by the broad claims made for worksite health promotion, which include: improving employees' health and fitness; decreasing turnover; reducing health and Workers' Compensation costs; lessening strain and tension; and improving employee mental alertness, morale, and job satisfaction (Chang & O'Boyle, 1989; Conrad, 1988; Walker & Evans, 1987).

It is easier to measure savings from reduced health care costs and decreased turnover than it is to try to measure gains from changes in psychosocial factors surrounding an individual's employment. While the exact

cause(s) for an increase in job satisfaction are unclear, a proposed mechanism is presented in Figure 1.

Figure 1. Possible mechanisms for a change of job satisfaction through an employee fitness programme.



Note. From "Physical activity and alienation in the work-place" by M. H. Cox, R. J. Shephard, and P. Corey, 1987, Journal of Sports Medicine and Physical Fitness, 27, 429-436. Copyright 1987 by Edizione Minerva Medica. Reprinted by permission. (See Appendix A)

In an attempt to identify and lessen employee health risks before serious problems develop, health promotion programs integrate exercise, education and peer support, and usually are offered free or at low cost to employees (Chang & O'Boyle, 1989). Corporations have become aware that to pay a key employee a salary of \$50,000 or more per year is a sound investment only when that employee is productive,

happy in work, and healthy enough to maintain a high level of performance until retirement (Der-Karabetian & Gebharbp, 1986).

Companies will recognize that physical and mental health are prerequisites for peak performance. Therefore, health promotion programs coupled with more participative management will create an optimal environment for increased productivity and enhanced quality of worklife (Chen, 1989).

There are many reasons why the workplace is seen as an ideal setting for health promotion activities. The worksite provides ease of access to a sizeable group of people, and employees constitute a captive audience. Employees spend 30% of their day at the worksite. The worksite is convenient and accessible, reducing the barriers of time, travel, and cost. The workplace has access to an already existing, well established communication network. There is an existing organizational structure for coordinating the development and operation of programs (Ainsworth, 1984). An employee health department and health staff may be available on site.

The workplace provides a stable population over time that frequently is necessary to provide significant behavioral change (Ainsworth, 1984) and provides excellent opportunities for followup. Large populations

within companies permit concurrent operation of multiple programs and evaluation components (Rosen, 1984).

The work setting and its management permit excellent opportunities for developing motivational programs and incentive strategies by providing environmental control (corporate culture) for enhancing health and promoting continual practice of healthy lifestyles (Rosen, 1984). Sponsorship by the employer gives the program a high level of perceived quality. Encouragement to participate by management is a strong motivational factor for employees to enroll and to continue in the program (Ainsworth, 1984). The worksite also is an excellent site for implementation of risk-factor reduction (Fielding & Piserchia, 1989).

Peer support and peer pressure can have beneficial effects (Warner et al., 1988). Worksite programs may raise the level of discourse and concern about health matters when employees begin to "talk health" with each other (Conrad, 1987). Peer pressure is a powerful motivator. The problem with one-time programs is that, when the programs end, the peers disappear and so does the motivation. In contrast, company health promotion programs provide more than just a few weeks or months of intense diet and smoking cessation classes, and then "goodbye and good luck". Unlike one-time programs, company programs provide continuity in education,

fitness, and support activities. The peer pressure at work lasts (Cunningham, 1982b).

The symbolic effect of offering a worksite wellness program should not be underestimated. These programs are often among the most visible and popular employee benefits. The mere existence of a program may be interpreted by employees as tangible evidence that the company cares about the health of the workers and, therefore, may affect job satisfaction, loyalty, and morale indirectly (Conrad, 1987, 1988).

The dollar savings inferred from the implementation of health promotion programs have been the primary focus for selling such programs to management. Early initiative to implement health promotion at the worksite was based largely on the assumption that such initiative would lead ultimately to financial savings. This assumption was based on the premise that, by changing individual employee behavior (such as reducing the incidence of smoking), the risk of disease and death associated with these factors also would be reduced. An extension of that assumption was the further assumption that such risk reduction ultimately would lead to savings in the area of health care costs, absenteeism, turnover, and productivity (Opatz, Chenoweth, & Kamen, 1990).

According to Opatz and associates (1990), economic impact can be defined by two methods: (a) cost-benefit analysis, the process of assigning a dollar value to all of the costs associated with the program, and assigning a dollar value to all the benefits that accrue as a result of the program; and (b) cost-effectiveness analysis, the determination of the dollar value of all the costs of the program, and the subsequent measurement of the benefits that accrue in terms of some nonmonetary unit (such as extended life, quality of life, and reduced risk factors). Cost-effectiveness analysis generally is used to compare different strategies for achieving a specific goal.

Most of the research to date has focused on four different areas: risk reduction/behavior change, health (medical) care costs, absenteeism, and productivity. This is discussed in the literature as follows.

Risk Reduction/Behavior Change.

Substantial evidence exists that health promotion programs have an impact on risk reduction and behavioral change within employee groups. Such findings have been documented by evaluations of the health promotion programs at Control Data, Johnson & Johnson, Blue Cross/Blue Shield (Indiana), Canada Life Insurance Company, and NASA (Opatz et al., 1990).

An organized physical activity program was initiated at NASA Headquarters in Washington, DC in 1968 to assess the feasibility of such a program and to identify the factors that influenced joining, adherence to, and effectiveness of the program. Of 998 federal employees (males, ages 35-55) who were eligible, 237 utilized the program. Mean attendance rate was 1.3 days/week. At the program's conclusion, a self-administered questionnaire was used to determine whether participants believed the program had affected work, health status, habits, and/or behavior. Participants reported that they could work harder mentally and physically, enjoyed their jobs more, and found their normal work routine less boring. Other reported changes were greater stamina and energy, and reduced weight. Employees also reported less strain and tension (Durbeck et al., 1972).

Heinzelman and Bagley (1970) demonstrated that physical activity influenced the participants' attitudes, habits, and general self-images. These resulted in better work performance; more positive attitudes toward work; and general effects on health such as feeling better, having increased stamina, losing weight, and experiencing a greater ability to cope with stress and tension.

Health (Medical) Care Costs.

Cost-benefit studies measuring medical care cost savings suggest positive benefits of health promotion to the employer. Substantial evidence suggests that risks are related to health care costs, and that health promotion can reduce those risks. Studies have shown that health care utilization and their related costs are substantially less for health promotion participants than for nonparticipants over the short term (Opatz, et al., 1990).

The Adolph Coors Company (cited in Caudron, 1990), initiated its wellness program in the early 1980s. It estimates the wellness program saves the company at least \$19 million annually by decreasing medical costs, reducing sick leave and increasing productivity. For every dollar spent on wellness, Coors has seen a return of \$6.15.

Because of this program and other cost-containment efforts, such as managed care programs, Coor's health care costs rose only 5.9% between 1988 and 1989. During that time, most companies were fighting increases of more than 18%. Coor's cost for substance abuse treatment actually decreased during the same time period. "If employees don't have to go out of their way to get fit, they're more likely to give it a try" (Morton, cited in Caudron, 1990, p. 57).

Frito Lay and the Dallas (Texas) Citizen's Council sponsored a survey involving 27 Dallas-area companies. The

survey examined health-care strategies among Dallas-area companies. According to Beeby, President of Plano-based Frito Lay, "A positive prevention-oriented health promotion program can significantly cut costs, reduce accidents, lower absenteeism, and improve productivity and morale (cited in Menzies, 1990, p. B1). In 1989, Johnson & Johnson saved \$378 per employee by lowering absenteeism and by slowing the rise in the company's health care expenses (cited in Templin, 1990, p. B1).

In 1979, Mesa built a first-class fitness facility in Amarillo, Texas. The facility included a basketball court, racquetball courts, an indoor running track and weight rooms. As a result of the wellness program, Mesa has estimated its yearly savings to be \$1.6 million in health care costs from energy industry norms. Historically, Mesa's annual health care costs have been far lower than the national average. In 1988, for example, Mesa's (Undated, p. 6) health care costs per employee were nearly 60% lower than the national average (\$1,121 vs. \$2,750), and 68% lower than the energy industry average (\$1,121 vs. \$3,560).

Participants in Mesa's wellness program have reported lower medical claims. Mesa surveyed two groups of employees in its Operations headquarters: all those who exercised, and all those who did not over a 10-year period (1980 through 1989). The exercisers' average annual medical costs

were one half those of the nonexercisers (Mesa, Undated, p. 12).

Absenteeism

Absenteeism is difficult to assess, particularly at the higher end of the occupational scale. Up to 70 types of absenteeism have been described (e.g., certified absences, uncertified absences, Monday/Friday absences, and post-payday absences). Perhaps the most common form is an uncertified absence of 1-3 days, reflecting dissatisfaction with work or perception of poor health without any major organic illness (Shephard, 1988).

A health promotion program that reduces participants' absenteeism might do so for three reasons: reduced frequency of sickness and resulting improvement in well-being, increased loyalty or sense of responsibility to the employer, and desire to take part in daily health promotion activities (O'Donnell, 1984).

Theoretically, healthier employees should have fewer days lost from work through sickness. Exercise has been shown to have a positive effect on reducing absenteeism at the worksite. In 1989, the Association for Fitness in Business (AFB), undertook a review of evaluations of some of the most noted worksite health promotion programs. Fourteen of the approximately 20 studies reviewed by AFB reported

changes in actual absenteeism days in their findings. Virtually all of these studies focused on the impact of exercise on absenteeism rather than on broad health promotion. These studies consistently showed one to two fewer days absent per year among program participants (cited in Opatz et al., 1990).

In 1977, Prudential Insurance Company of America (cited in Bowne, 1981) moved to new headquarters. The new facility included a quarter mile jogging track, two small gyms, and two exercise platforms. During the year of July 2, 1979, through June 27, 1980, the home staff of 1,386 employees averaged 8.6 disability days per employee. One hundred twenty-one participants in the program were randomly picked from the low, fair, good, and high levels of fitness categories (based on time on treadmill required to raise the heart to 80% of maximum predicted rate). Combining males and females in the low fitness category, they had exactly the same average number of disability days per employee (8.6 days) as the entire Home Office. Those in the fair fitness category had only 4.1 days. Those in the good fitness category had 1.6 days, and those in the high fitness group had no days of absence because of sickness (cited in Bowne, 1981).

Johnson & Johnson conducted a study of its health promotion program. Employees who participated in the

company's wellness activities took fewer sick days, found their jobs more satisfying, and handled stress better than the nonparticipants (cited in Tuhy, 1981).

Responses to an employee fitness program were examined in a study of two large assurance companies in Toronto. Volunteers (male and female) were recruited from a test company and a closely matched, control company. Over the first 6 months of an employee fitness program, high adherents to the program showed a substantial reduction of absenteeism and turnover relative to poor adherents in the same company and to employees in a control company (Cox, Shephard, & Corey, 1981).

A comparison of overall company statistics for 1977-78 and 1978-79 suggests the possibility that the programs also may have had a beneficial effect upon the work attendance of nonparticipants through a general improvement of company morale (Song, Shephard, & Cox, 1982). Cox and associates reported that instituting an employee fitness program reduced absenteeism by 42% among high adherent employees (cited in Pender et al., 1987).

Productivity

Productivity may be defined as what a person produces while at work. This can be both physical and mental output. Substantial evidence suggests that the physical fitness

component of health promotion has an impact on improving worker productivity (generally measured in cost-effectiveness rather than cost-benefit terms).

American business' share of the country's health care bill has climbed 10-20% per year recently, and will reach 40% of the total in 1993 (AFB, Undated). This is the single most important reason for America's decline in the international marketplace. Americans simply cannot compete with companies from other countries whose health care bills are half the amount ours have reached.

Research shows that fit and healthy employees obtain higher performance ratings than those in lower fitness categories. Research evidence suggests that individuals who are fit have fewer injuries, can perform at higher levels on their jobs, and return to their jobs quicker following a time-loss injury than do less fit individuals (Opatz et al., 1990).

Studies measuring psychological change as a benefit of worksite health promotion also demonstrate positive benefits on worker productivity. Studies of programs related to Employee Assistance Programs (EAPs), stress management, and other mental health programs associated with health promotion demonstrate the benefit of early intervention on productivity and psychological health. These programs also

appear to help protect the company from diminished worker productivity in the future (Opatz et al., 1990).

Two and one-half years after Prudential (cited in Bowne, 1981) installed a fitness center at its new headquarters, 160 participants had been in the program long enough for at least one complete annual re-evaluation. A random sample of 66 responses from those participants yielded the following: 51.7% felt they were more productive as a result of the program, 75.8% felt better physically, 66.2% felt better mentally, and 59.1% felt better emotionally. The majority felt that the fitness program was having a positive effect on their health (cited in Bowne, 1981).

The relationship between exercise adherence and job performance was investigated over a 6-month period among a group of white-collar workers. Bernacki and Baun (1984) found a strong association ($z = 2.47$, $p < .01$) between the proportion of individuals with above average performance and adherence to a fitness program.

One year after AT&T implemented the Total Life Concept program, the company evaluated its effects on employee health status, on health related attitudes and behaviors, and on employee attitudes toward the company and their work. These variables had been measured prior to implementation of the program. Findings showed that employees who

participated in the health promotion modules certainly felt that they were more productive and energetic, and that their quality of work life had improved as a result of those programs (Spilman et al., 1986).

Turnover is another area often cited as a measure of the impact of worksite health promotion programs. Tenneco studied the differences in turnover experience for participants and nonparticipants of its fitness program. The study demonstrated that exercisers are high performers. The researchers inferred that having an active fitness program can help a company selectively attract and hold high performance employees (Tsai, Baun, & Bernacki, 1987). In two Toronto Companies (cited in Cox et al., 1987), high adherents to the program showed a decrease of absenteeism with a very low turnover rate (1.8% versus the anticipated 18%).

Current State of Employee Health Promotion Programs

There are a number of factors that influence employees to join and to adhere to company sponsored health promotion activities. These factors include, but are not limited to: program activities, program leadership, workload, social support, fees, convenience, corporate attitudes, and time. While this paper has concerned itself with facilities which have onsite fitness centers, many companies sponsor offsite

exercise programs and/or may conduct onsite health promotion activities unrelated to physical fitness per se (e.g., cholesterol checks, seminars). Recently reported statistics for U. S. companies, which do not always differentiate between different types of health promotion activities, will be provided in this section.

There is much debate as to what constitutes a "wellness" program. Many types of organizational endeavors are branded as wellness programs; everything from blood pressure monitoring projects, to weight loss contests, to monetary incentives for smokers to kick the habit. Important components of health promotion programs will be presented in this section also.

Existing Sites/Participation Rates

According to Karch (cited in Gebhardt & Crump, 1990), 2.5% of companies with 250 or more employees had formally organized programs in 1979. That number rose to 32.4% in 1985. Conrad (cited in Gebhardt & Crump, 1990), reported that there were approximately 50,000 companies (with 100 or more employees) providing some type of employer-sponsored health promotion program in 1987. A 1987 survey conducted by the U. S. Department of Health and Human Services (cited in Pfeiffer, 1989) indicated that, across the nation, over 66% of companies with 50 or more employees had offered at

least one health promotion activity in the past 12 months. Feineman (1990) reported that at least 2000 companies have on-site exercise facilities.

According to Song (cited in Shephard, 1988), no more than 20% of a company's employees is likely to be recruited to an exercise class. Only half of those will attend regularly. Participation in worksite fitness programs usually ranges from 15% to 30% for white-collar workers (Conrad, cited in Gebhardt & Crump, 1990); although, occasionally, there may be a rate as high as 50% (Tampson, cited in Gebhardt & Crump, 1990).

The participation rate at Saatchi & Saatchi Advertising is very high. According to Mack, President and CEO, "Ninety percent of our employees are involved in one way or another" (cited in Weinstein, 1989, p. 22).

Components of Health Promotion Programs

Wellness, as defined at the University of Wisconsin, Stevens Point, is an active process through which individuals become aware of and make choices toward a more successful existence (cited in Hettler, 1984). Wellness is not simply the absence of symptoms, but positive wellbeing, the kind of robustness that comprehends respect for the body and appreciation of its worth (Cunningham, 1982b).

Health promotion begins with people who are basically healthy, and seeks development of community and individual measures which can help them develop lifestyles to maintain and enhance their state of wellbeing (Chenoweth, 1989). According to Cunningham (1982b), lifestyle can be defined as behavior specifically related to health. It could be argued that all behavior is related specifically to health in one way or another, but the context suggests concern especially for such directly relevant components of lifestyle as diet, exercise, and smoking and drinking habits. Cunningham (1982b) also noted that "lifestyle" includes attitudes toward family, responsibilities, work, recreation, and the world in general.

Wellness programs should track the risk factors to which a company's employees are exposed, such as stress and physical demands, and shape the programs' components around them (Feinemen, 1990). One example of this would be providing daily warmup sessions to minimize back strain (Chenoweth, 1989).

According to Conrad (1988), worksite health promotion differs from the traditional occupational health mission in that wellness programs are interested in general health promotion among employees, rather than focusing on health protection (i.e., preventing occupational disease or ensuring safe working conditions). Health education

motivates individuals to assume greater personal responsibility for maintaining their health, and it provides them with knowledge needed to make informed decisions (Brennan, 1982).

Components of health promotion programs vary from company to company. According to Higgins (1986), comprehensive wellness programs will offer most or all of the following services: (a) screening services aimed at detecting asymptomatic and early stage disease, and unhealthy lifestyle habits; (b) individual counseling to inform employees of the results of screening, to provide health education, and to plan individual wellness programs based on employee needs; (c) specific interventions (eg., smoking cessation, weight control, and stress management) to provide health education and encourage behavioral change to reduce behavior-related risks; (d) health education to increase participants' knowledge of behavioral and lifestyle-related risks and how to reduce those risks; (e) fitness programs to increase the level of physical activity and fitness of participants; and (f) monitoring and feedback to assess the individual's progress and provide continued guidance.

Bowne (1981) stated that there are two essential ingredients for successful fitness programs. The first, an absolute necessity, is that a full-time, trained physical

fitness coordinator provides the organization, the variety, the stimulation, and the motivation necessary for the program to stay viable. The second is that the top officers who approve the budget have a strong commitment to the fitness program. Needless to say, it is also a great help if the medical director is a believer and an active enthusiastic participant.

Wellness has been a priority at Adolph Coors company. Coors includes its commitment to wellness in the company values statement. The following phrase was added in 1986: "We...encourage wellness in body, mind and spirit for all employees" (cited in Caudron, 1990, p. 57).

Summary

We live in an era in which, for the most part, an employee's ability to think and create is far more valuable than his/her capacity for hard physical labor. After centuries of physical struggle, we have earned the right to sit down on the job. The shift from lumberjacking to pencil pushing has contributed to a society that has become sedentary in nature (Cummings, 1984). Modern technology has reduced the requirements for physical activity, leading to an increase in death and disability from cardiovascular diseases (Wanzel, 1974). The bulk of the United States has literally inherited the "bulk" (Cummings, 1984). Making

exercise facilities available at the worksite can help to counteract this.

Health care costs have continued to rise, and American business has been asked to assume a greater share of those costs. The focus has become centered on strategies to contain those costs at the worksite. Long before fiscal cost containment efforts were initiated, companies began to implement worksite fitness programs for their employees. These programs, generally developed as a demonstration of company support for an improved quality of life for the employee, seemed to create healthier, more productive employees as well. These original support programs evolved into enlarged health promotion programs, and documentation of their effectiveness became an area of interest for industry leaders. Cost-benefit and cost-effectiveness studies began to appear in the literature, and the outcomes documented in these studies were generally positive. Worksite health promotion was proposed thereafter as a solution to increased health care costs, and many American companies have created such programs as a result.

Worksite health promotion is a "win-win" situation. Employers benefit from improved public relations and reduced employee rehabilitative and replacement costs, and employees benefit from the healthier and more satisfying lifestyle

that ensues, as well as from the knowledge that employers have taken an interest in their welfare (Brennan, 1981).

The workplace is potentially the most accessible and economical site for efficient delivery of health promotion programs. Most employees spend nearly 30% of their waking hours at the worksite (Brennan, 1982). Elimination of the barriers of having to make one more stop before returning home, and the additional time and costs for travel to an offsite facility, is an incentive toward incorporating regular participation in fitness activities (Brennan, 1982).

As stated by Brennan (1982), peer pressure can exert a positive influence toward helping employees make desirable lifestyle changes. After all, once recognized as a successful participant in a smoking cessation, weight reduction, or fitness program, who would want to be seen by one's peers as reverting to old illness-producing behavior patterns? Business is in an ideal position to serve as a catalyst for changes in health and lifestyle. Corporate motives for health promotion programs might be summarized best by the following statement by Smith of Kimberly-Clark (cited in Higgins & Philips, 1979):

Kimberly-Clark has a substantial investment in its employees. To us, it is simply good business sense to keep them feeling well, which not only keeps them on the job but even helps them do a better job. If our

program is successful, we can look forward to increased productivity. Also, we may have found a partial solution to the continually mounting costs of direct medical care. (p. 54)

CHAPTER III

METHODOLOGY

In this chapter, the methodology of this research study is discussed in relation to its population, procedures used, instruments used to measure the variables, and procedures used to collect the data. In addition, descriptive and/or statistical techniques that were be used to treat the data are indicated.

Population

Xerox Corporation in Lewisville, Texas, was the site for the study (see Appendix B). A list of all Dallas/Fort Worth metroplex employees of Xerox was given to the researcher. Names of employees designated as working at the Lewisville site were compiled into a list. Each employee was assigned a number. There was a total of 389 employees. Ten employees were randomly selected for participation in a pilot test, and these employees were excluded from the final study group. All 379 remaining employees were included in the final study.

This Xerox site manufactures facsimile machines and copiers. Personnel include administrative assistants,

warehouse personnel, technical personnel, engineer/design personnel, customer support personnel, and managers.

Procedures

A survey packet was prepared for each of the 379 employees to be included in the final study. The packets were delivered through interoffice mail. Survey packets included: a cover letter written by the researcher (see Appendix C), a cover letter written by the Supervisor of the Xerox Fitness Center (see appendix D), the Employee Data Questionnaire (see appendix E), the Job Descriptive Index including the Job In General (see Appendix F), and a return envelope addressed to the onsite Fitness Center. Each return envelope was coded with the number assigned to an employee. All of the survey packets were delivered to Xerox on the morning of Wednesday, October 2, 1991. The mailroom attendant indicated that many of the employees who had packets were no longer with Xerox or were at another Xerox site. The researcher returned in the afternoon and picked up 54 packets that were undeliverable. On October 11th, and on November 1st, a total of 44 additional undeliverable packets were picked up by the researcher. The mailroom attendant indicated that possibly there were more employees who were no longer at that Xerox site, and that their packets may have been discarded at individual mailstations.

Therefore, although a total of 281 survey packets were distributed, it cannot be established that all of these were received by the addressees.

Participants were instructed to return completed surveys by October 17th. By this date, 74 sets of surveys had been returned to the Director of the Fitness Center and had been picked up by the researcher. On October 18th, followup letters (see Appendix G) were delivered to all nonrespondents. Completed surveys were accepted through Friday, November 1, 1991. Twenty-seven additional completed surveys were returned by that date. Of the estimated 281 survey packets which were distributed, a total of 101 (40%) were returned; however, only 72 were complete. Therefore, the sample consisted of 72 respondents (approximately 26% of the population).

Instrumentation

The first of two instruments used to collect data for this study was the revised version of the Job Descriptive Index (JDI) with Job in General (JIG) scale (Smith, Kendall, & Hulin, 1969). The second instrument was the Employee Data Questionnaire developed by the researcher for the purposes of this study.

The JDI, a tool to measure employee job satisfaction, originally was published by Smith and associates in 1969. A

rigorous revision of the JDI, using item-response theory as well as traditional psychometric methods, was completed in 1985. A few items were replaced by others, which proved to be more discriminating, particularly in nonmanufacturing situations. A Job In General (JIG) scale was added to both the original and revised versions. It permits an overall evaluation of satisfaction with the job as a whole. The JIG has been validated only when administered immediately following an administration of an entire JDI. (Copyright for both the JDI and JIG are held by Bowling Green State University. Tests, or written permission to reproduce them, can be purchased from the Department of Psychology, Bowling Green State University, Bowling Green, Ohio 43403-0228.)

The JDI originated in the Cornell Studies of Job Satisfaction (cited in Smith et al., 1969). The JDI is a self-administered checklist designed to measure five separate components of job satisfaction operationally. Each of these components was the construct for an individual scale. The constructs can be defined generally as satisfaction with each of the following:

1. Work on Present Job. Tasks related to present job responsibilities.
2. Present Pay. Remuneration for work performed.
3. Opportunities for Promotion. Recognition of quality of work through increase in rank, responsibilities, and/or pay.

4. Supervision. The act of having one's work or performance directed and/or inspected.

5. Co-workers (People). Persons with whom one comes in contact on the job other than supervisors.

The instrument consists of 72 items in total: 18 items in each of the work, supervision, and coworkers scales; and 9 each in the pay and promotion scales. Each scale consists of a group of adjectives or descriptive phrases. The respondent is instructed to consider the adjective/phrase with respect to the designated job component. If the item applies to the respondent's job, the respondent is asked to write a "Y" beside the item. If the item does not apply, an "N" is written. If the respondent cannot decide about an item, a "?" is written. This procedure continues through all five subscales.

Whereas the JDI measures satisfaction with individual aspects of a job as separate components, the JIG measures satisfaction with the job as a whole. The JIG follows the same format as the JDI, and consists of 18 items. Scoring for all the scales is as follows: "Y" (Yes) to a positive item = 3 points; "N" (No) to a negative item = 3 points; "?" to any item = 1 point; omission of an item = 1 point; "Y" (Yes) to a negative item = 0 points; and "N" (No) to a positive item = 0 points. Each of the 18-item scales has a possible score of three points per item. The value of

the items on the 9-item scales are doubled, so that a score of six points per item is possible. A separate score is computed for each scale. The maximum possible score for each scale is 54. A higher score indicates a greater degree of satisfaction than does a lower score.

Smith and associates (cited in Mitchell, 1985) reported an average corrected reliability coefficient for the five original JDI scales of .79 for split-half estimates of internal consistency. Higher internal consistency reliabilities were found for each of the scales individually: work (.84), pay (.80), promotion (.86), supervision (.87), and co-workers (.88). No additional measures of reliability were reported for the revised version of the JDI. Content, construct, discriminant and convergent validity have been established repeatedly for the JDI (Smith et al., 1969; Smith et al., cited in Mitchell, 1985). No reliability or validity measures were reported for the JIG.

The Employee Data Questionnaire (EDQ), was developed by this researcher to identify the subjects' demographic characteristics, to provide self-reports regarding utilization of and attitudes toward the onsite Fitness Center, and to collect data regarding self-reported number of days absent due to illness. During the development of this instrument, the EDQ was presented to four fitness

center directors at different corporations in the Dallas metropolitan area. Comments and suggestions were incorporated during revisions of the instrument to ensure that questions were presented clearly and that the data requested would be of relevance to a center director in program evaluation.

The EDQ consists of 17 items. Fourteen were developed by the researcher, three were added by Xerox to assist them in evaluating their program. Responses to the items added by Xerox (items 11, 12, and 17) were not included in analyses for this study, but are presented in Appendix H.

Treatment of Data

Each completed, returned JDI and JIG were hand scored. Numerical scores for each scale were calculated by the methods prescribed by authors of the instrument. The EDQ also was hand scored. Frequency distributions were generated to describe all variables. Data were analyzed using the point biserial correlation, and results were tested at the .01 level of significance.

CHAPTER IV
PRESENTATION OF THE DATA

The purpose of this study was to determine if relationships existed between utilization of an onsite fitness center and each of the following: scores on the individual scales of the JDI and on the JIG, days absent due to illness, and responses to the Employee Data Questionnaire (EDQ). The study also identified employees' reasons for nonparticipation in fitness center activities.

The JDI measured satisfaction with the following individual job components: work, pay, promotion, supervision, and coworkers. The JIG measured overall satisfaction. The EDQ identified subjects' demographic characteristics and collected employees' self-reported data regarding utilization of and attitudes toward the onsite Xerox Fitness Center. The EDQ also collected data regarding: self-reported number of days absent due to illness.

Profile of Participants

Of a population of 281 Xerox employees, 101 employees returned questionnaires. However, only 72 of the returned

questionnaires were complete for inclusion in the analyses. Four respondents "skipped" entire pages of the JDI. Five respondents returned only one of the two questionnaires. Twenty sets of questionnaires were ineligible because they were incomplete. Of the 72 sample subjects, 39 were male and 33 were female. Eight of the subjects had never been married, 49 were currently married, 13 were divorced, 1 was separated, and 1 was widowed. Demographic data describing subjects ages, length of time in current positions, length of time with Xerox, and days missed due to their own illnesses in the past year are summarized in Table 1. The majority of the subjects were older than 35 years of age ($\underline{n}=60$), had been with the company more than 8 years ($\underline{n}=55$), and had missed fewer than 3 days of work in the past year due to their own illnesses ($\underline{n}=58$). One half had been in their current positions less than five years.

Respondents were asked to indicate the highest level of education each had completed. As is shown Table 2, 51.4% of the sample had earned college degrees, and of these, 27% were master's degrees.

Table 1
Respondents' Age, Length of Time in Position and with
Company, Days Missed

Variable	Range	<u>M</u>	<u>SD</u>
Age (yrs.)	25-63	43.93	9.21
Years in this position	1-20	5.88	4.84
Years with this company	2-29	14.26	7.42
Days missed due to own illness	0-30	1.77	16.61

Respondents were asked to indicate their position within the company. As can be seen on Table 3, more than 45% of the sample was in administrative/managerial positions. Those responding to the "other" category gave the following as their positions: receptionist, security, office worker, and outdoor maintenance. One respondent failed to identify his/her position.

Respondents were asked to describe their activity levels. Results are presented in Table 4. Seventy-five percent described themselves as moderately active or active, and 8.3% described themselves as very active.

Table 2

Respondents' Levels of Education

Level of Education	#	%
High school or equivalent	9	12.5
Technical school	7	9.7
Some college	19	26.4
Bachelor's degree	27	37.5
Master's degree	10	13.9
Doctoral degree	0	0.0
Other	0	0.0
Total	<u>72</u>	<u>100.0</u>

Table 5 indicates the respondents' frequencies of use of the onsite Fitness Center. Almost 60% reported that they never used the Center. However, of those who did use the Center, more than half used it on an average of three or more times per week.

Table 3

Respondents' Positions in Xerox Corporation

Position	#	%
Administrative Assistant	9	12.5
Manager	24	33.3
Warehouse	0	0.0
Technical	10	13.9
Engineer/Design	6	8.3
Customer Support	18	25.0
Other	5	6.9
Total	<u>72</u>	<u>99.9</u>

Note. Total does not equal 100% due to rounding.

Table 4

Respondents' Levels of Activity

Level	#	%
Inactive	12	16.7
Moderately active	32	44.4
Active	22	30.6
Very active	6	8.3
Total	<u>72</u>	<u>100.0</u>

Table 5

Respondents' Frequencies of Use of the Fitness Center

Frequency	#	%
I never use the Fitness Center	43	59.7
I use the Fitness Center only once or twice a month	4	5.6
I use the fitness Center on average of 2 or 3 times per week	9	12.5
I use the Fitness Center on average of 3 or more times per week	16	22.2
Total	<u>72</u>	<u>100.0</u>

Respondents were asked "If the Fitness Center was established when you applied for work at this corporation, was its presence influential in your decision to accept employment?" Only five respondents answered "yes" to this question. When respondents were asked if any of their family members used the facility regularly, 71 said "no". One respondent said "yes", but failed to indicate how many dependents used the facility.

Respondents were asked to rate the Fitness Center as a benefit (see Table 6). The Center was an important benefit

to 73.6% of the respondents and, of these, more than one third indicated that it is a "very important" benefit.

Table 6

Respondents' Ratings of Fitness Center as a Benefit

Rating	#	%
Very important	19	26.4
Important	34	47.2
Neutral	12	16.7
Unimportant	5	6.9
Very unimportant	2	2.8
Total	<u>72</u>	<u>100.0</u>

Findings

One of the purposes of the study was to identify employees' reasons for not using the Fitness Center. Twenty-eight of the respondents had used the Fitness Center during the period 3 months prior to the study; 44 had not. Reasons for not using the fitness Center are presented in Table 7. The two most commonly selected reasons cited for not using the Center were that employees' needs were met elsewhere, and prolonged work hours.

Table 7

Respondents' Reasons for Nonparticipation

Reasons	#	%
Disinterest	7	9.7
Prolonged work hours	14	19.4
Lack of child care	2	2.8
Fitness needs are met elsewhere	15	20.8
Desired equipment not available	1	1.4
Total	<u>39</u>	<u>53.1</u>

Note. Totals do not equal 72 (100.0%) because respondents could indicate more than one reason or no reason.

Participants also were asked to identify medical and other reasons for not using the Fitness Center. The following medical reasons were given: handicapped, hernia; blood pressure, osteoporosis, very overweight, hypertension, and had to have knee operation. Other reasons given for not using the Fitness Center included: travel related reasons, location, lack of access into building, cost/fees for using the facility, need to get dressed twice a day, children's activities, other commitments, no motivation, too busy/not enough time, and exercise in other ways/at other times.

Scores for the JDI and the JIG were calculated. Results are presented in Table 8. Respondents indicated the greatest satisfaction with their jobs in general, supervision, and coworkers; and least satisfaction with possibilities for promotion.

Table 8

Respondent's Scores on the JDI Scales and the JIG

Scales	Range	<u>M</u>	<u>SD</u>
JDI Subscales			
Work	6 - 54	35.01	9.52
Pay	0 - 54	32.42	15.70
Promotion	0 - 54	15.29	15.96
Supervision	6 - 54	40.82	13.65
Coworker	13 - 54	38.81	11.32
JIG	8 - 54	41.24	10.32

Correlations were calculated between each of the scales of the JDI and JIG and each of the following: frequency of use of the Fitness Center, activity level, and rating of the Center as a benefit. As shown in Table 9, there was a

significant correlation between Activity Level and the "work" and the "pay" scales of the JDI.

Table 9

Correlations Between Frequency of Use of Fitness Center and JDI and JIG; Activity Levels in Relation to JDI and JIG; and Rating of Center as a Benefit in Relation to JDI and JIG

Scale	Frequency of Use	Activity Level	Rating
	r	r	r
Work	-0.0244	0.3058*	-0.1560
Pay	0.2599	0.3642*	-0.1521
Promotion	0.1875	0.2281	-0.2163
Supervision	-0.2418	0.1323	-0.0511
Coworker	-0.0413	0.1102	-0.0411
Job	-0.1574	0.2614	-0.0738

* Indicates significant correlation at the .01 level.

In addition, the point biserial correlation coefficient was calculated between the frequency of use of the Fitness

Center and number of days absent in the last year due to own illness. A nonsignificant negative correlation was found ($\underline{r} = -0.0941$).

Chapter V
SUMMARY, DISCUSSION, IMPLICATIONS
CONCLUSIONS, AND RECOMMENDATIONS

In this chapter, a summary of the study is provided with discussion and implications from the findings. Conclusions and recommendations are presented.

Summary

As indicated in the literature reviewed, the loss of key executives and subsequent costs for replacement and retraining, increases in lost working days due to general lack of physical fitness, and reductions in productivity have been costly to corporate America. Corporate health promotion programs promote wellness as a means of reducing known risk factors, illness, medical costs, absenteeism, and turnover. They have been shown to increase productivity and job satisfaction, improve morale and attitudes toward both job and employer, and recruit and retain employees. Health promotion programs bring together employees from different departments throughout the company, resulting in a camaraderie that pays off in smooth interpersonal relationships and highly effective on-the-job performance.

The problem of the study was to examine job satisfaction and absenteeism in relation to utilization of an onsite fitness center. A secondary problem was to identify reasons for nonparticipation in fitness center activities among employees.

The purpose of the study was to determine whether relationships existed between utilization of an onsite fitness center and each of the scores on the individual scales of the Job Descriptive Index (JDI) and Job in General (JIG), days absent due to illness, and responses to the Employee Data Questionnaire (EDQ). A second purpose was to identify employees' reasons for nonparticipation in fitness center activities.

The study was conducted at a branch of Xerox Corporation in Lewisville, Texas, which has a worksite health promotion program and onsite fitness facility. The study took place in the second half of 1991. All employees at this site were eligible for participation. Ten employees were randomly selected for a pilot test and subsequently excluded from the final study group ($N=379$). Survey packets were distributed through the company mail system, returns were sent to the Fitness Center and picked up by the researcher.

Two instruments were used. The first instrument was the revised version of the JDI developed by Smith and

associates (1969). This version contains the JIG, a subscale which measures overall job satisfaction. The JDI is a self-administered checklist measuring the following: work, present pay, opportunities for promotion, supervision, and coworkers. The second instrument, the (EDQ), developed by this researcher, was used to identify subjects' demographic characteristics, to provide self-reports about use of and attitudes toward the Fitness Center, and number of days absent due to own illness. The EDQ also collected data requested by Xerox to help them to evaluate their facility. These questions and their responses can be found in Appendix H.

Numerical scores were calculated for the JDI and JIG by methods prescribed by the authors. The EDQ was hand scored. Descriptive statistics were generated for all variables. The point biserial correlation was used to treat the data.

Discussion

Seventy-two of the returned responses were eligible for analysis. Thirty-nine of the employees were male, 33 female. Eight of the respondents had never been married, 49 currently were married, 13 divorced, 1 separated, and 1 widowed. Mean age of respondents was 43.93 years. Mean length of time in current position was 5.88 years; mean length of time with Xerox was 14.26 years. During the year

prior to the study, mean days missed due to respondents own illness was 1.77. Respondents were employed in the following positions: administrative assistants, manager, technical, engineer/design, customer support, receptionist, security, office worker, and outdoor maintenance. More than half (51.4%) had completed a bachelor's or master's degree. Twelve respondents described themselves as inactive, 32 described themselves as moderately active, 22 as active, and 6 as very active.

Forty-three respondents indicated they never used the Fitness Center, four indicated they used the Fitness Center only once or twice a month, 9 used the center on average of 2 or 3 times per week, and 16 used the center on average 3 or more times per week. Only five respondents said the presence of the Fitness Center was influential in deciding to accept employment at their corporation.

Nineteen respondents rated the Fitness Center as "very important" as a benefit. Thirty-four rated it as "important", 12 as "neutral", 5 as "unimportant", and 2 as "very unimportant".

Twenty-eight respondents had used the Fitness Center during the 3 months prior to the study, 44 had not. Reasons for nonparticipation included: disinterest, prolonged work hours, lack of child care and desired equipment not

available. In addition, 20.8% responded that their fitness needs were met elsewhere.

Medical reasons for nonparticipation included: handicapped, hernia, blood pressure, osteoporosis, very overweight, hypertension, and knee operation. Additional reasons for nonparticipation are presented in Chapter IV.

The higher the score on the JDI, the higher the degree of satisfaction. Scores can range from 0-54. Mean score for the JIG was 41.24. Mean scores for the subscales of the JDI indicated that respondents were most satisfied with job supervision. They were least satisfied with opportunities for promotion. The supervision scale of the JDI had a mean score of 40.82. Mean score for opportunity for promotion was 15.29.

Implications of the Findings

There was no significant correlation between frequency of use of the Fitness Center and any of the scales of the JDI. There was a weak negative correlation ($r = -0.0941$) between number of days absent in last year due to illness and frequency of use of the Fitness Center. As frequency of use of the Fitness Center increased, days absent decreased. This correlation was not significant; however, these relationships warrant further investigation.

Although there was a significant correlation between level of activity and the "work" ($r=.3058$) and the "pay" ($r=.3642$) scales of the JDI, both correlations were very weak ($p \geq .3017$). Since only 9% ($r^2=.09$) of the variability in scores can be explained, these relationships warrant further study. There was no significant correlation between perceived importance of the Fitness Center as a benefit and any of the scales of the JDI.

Although 58.7% ($n=43$) of the respondents indicated they never used the Fitness Center, 73.6% ($n=53$) rated it as "very important" or "important" as a benefit. As reported in the review of the literature, worksite wellness programs often are among the most visible and popular employee benefits. The existence of a program may be seen by employees as proof that the employer cares about them even if they choose not to participate.

There is discussion in the literature regarding cost-effectiveness of employee wellness programs. Indeed, if one wanted to measure the effects of such programs on the lifespan of an individual, one would have to wait until the individual's death. According to Wood, "If you want conclusive evidence of its effect on longevity, you will have to wait the lifetime of a person who practices it" (cited in Tuhy, 1981, p. 88).

The researcher was interested in whether relationships existed between use of the Fitness Center and number of days absent due to participants' own illness. Of particular interest were absences of short duration due to no apparent organic cause, perhaps stemming from a general lack of wellbeing or a desire for a mental health day. While the mean number of days absent due to illness was 1.77, one respondent missed 30 days due to surgery. Only four employees missed more than 5 days in the previous year.

Conclusions

The following were tested at the .01 level of significance:

Hypothesis 1. There will be no significant relationship between categorical frequency of use of the Fitness Center and the score on any of the scales of the JDI. Not rejected.

Hypothesis 2. There will be no significant relationship between categorical frequency of use of the Fitness Center and number of days absent in the last year due to illness. Not rejected.

Hypothesis 3. There will be no significant relationship between the score on any of the scales of the JDI and self-reported levels of activity. Rejected.

Hypothesis 4. There will be no significant relationship between the score on any of the scales of the JDI and perceived importance of the Fitness Center as a benefit. Not rejected.

Recommendations

As a result of this study, the following recommendations are suggested:

1. It is recommended that future questionnaires being designed to measure short term absences be constructed so as to exclude lengthy absences from work due to serious health problems and/or surgery.

2. It is recommended that future research to evaluate changes in lifestyle delimit from study possible participants who already have established healthy lifestyle practices.

3. It is recommended that future researchers recognize that cost savings in the short-run may be offset by future expenses for extended retirement benefits (eg., pensions, medical benefits) for wellness participants who live longer because of their healthy lifestyles. This would be a necessary area of future study; however, it may take some years for sufficient data to be available for analyses.

4. It is recommended that future researchers consider purchasing the right to reproduce the JDI and incorporating

this tool into a booklet with any other additional questionnaires they may choose to use.

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APPENDICES

APPENDIX A

Request and Permission to Reprint Figure

10517 Countess Dr.
Dallas, TX 75229
USA
March 19, 1992

R. J. Shephard
Dept. of Physical Education
University of Toronto
Toronto, ON M5S1A1

Dear Mr. Shephard:

I am a master's degree student in the Health Studies program at Texas Woman's University, in Denton Tx., USA. My thesis topic is the relationship between use of an employee fitness center and job satisfaction, absenteeism and other factors. I read with interest the article you co-authored which was titled: "Physical activity and alienation in the work-place". This article appeared in the Journal of Sports Medicine, vol. 27, 1987.

I am writing in regards to Fig. 2, which appears on page 435 of this article: Possible mechanisms for a change of job satisfaction through an employee fitness programme. I am requesting permission to reproduce this figure in my thesis. I would acknowledge the source of the figure.

Thank you for your consideration.

Sincerely,

Chris DeMeo



School of Physical and Health Education

University of Toronto

March 25th, 1992.

Dear Ms. Meo,

Thank you for your letter of March 19th. I am very happy to agree to your use of the Figure from my article, as requested.

With best wishes for the completion of your thesis,

Yours sincerely,

A handwritten signature in cursive script that reads "Roy J. Shephard".

Roy J. Shephard, M.D., Ph.D., D.P.E.
(Professor of Applied Physiology)

Ms. Chris Meo,
10517, Countess Drive,
Dallas,
TX 75229,
USA.

APPENDIX B

Permission to Conduct Study

TEXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON
DEPARTMENT OF HEALTH STUDIES
College of Health Sciences, P.O. Box 22808 Denton, Texas 76204 817/895-2560



Mr. Jeff Kolberg
Xerox Corporation
P. O. Box 660512
Dallas, TX 75266

Dear Mr. Kolberg:

Thank you for talking with me about the study I will be conducting in order to complete my master's in Health Studies at Texas Woman's University.

I have enclosed a copy of my prospectus and the questionnaires I plan to use to collect data and measure job satisfaction. The Employee Data Questionnaire may be modified to include additional questions. Employees participating in the study will remain anonymous. There are no identified or potential risks to participants.

Should Xerox agree to participate in the study the corporation's responsibilities would be to:

1. Assist in the selection of 5-10 employees for the pilot test of the Employee Data Questionnaire (EDQ).
2. Assist in the selection of a random sample of employees (300) or agree to survey of entire employee population at survey site.
3. Allow for distribution and collection of questionnaires at the worksite.

The responsibilities of the researcher would be to:

1. Furnish the questionnaires.
2. Provide a copy of the analyzed data to the Director of the Fitness Center and the Director of Human Resources or any other company designate.

I hope that after reviewing the enclosed information you will decide to participate in the study. If you choose to participate, please sign at the bottom of this letter to indicate your approval.

The signature on the following line indicates a commitment of the company to participate in the study, Frequency of Use Of An Onsite Fitness Center In Relation To Job Satisfaction, to be conducted during the second half of 1991. The study will be conducted by Christine DeMeco and data collected will be reported in her master's thesis.

In the section below, please cross out one of the options so that the statement indicates your preference:

The company (may, ~~may not~~) be identified in the final report.

The name(s) of consultative/administrative personnel in the company (may, ~~may not~~) be identified in the final report.

Signature

Jeff Kelly

Title

Mgr. Support Serv.

Date

9/26/91

Thank you.

Sincerely,

Christine DeMeco

APPENDIX C

Researcher's Cover Letter to Xerox Employees

TEXAS WOMAN'S UNIVERSITY

DENTON DALLAS HOUSTON

DEPARTMENT OF HEALTH STUDIES

College of Health Sciences, P.O. Box 22808 Denton, Texas 76204 817/698-2860



Dear Employee:

I am a master's candidate in the Department of Health Studies at Texas Woman's University. I am conducting research concerning use of an onsite physical fitness facility and job satisfaction.

You are being asked to complete two questionnaires which should take no longer than 10 minutes of your time. There are no risks to you. Participation is strictly voluntary and anonymous. You can be certain your results will be held confidential. Potential benefits to you may include increased insight in relation to your own sense of job satisfaction.

I hope that you will take a few moments and return the completed questionnaires to the mailroom by the 17th of Oct. Your individual input is valuable to the study.

Thank you.

Sincerely,

Chris DeMeo

APPENDIX D

Xerox's Cover Letter to Employees

XEROX Internal Memo

To:
All Xerox-Lewisville Employees

From:
Faye Anderson
Supervisor,
Xerographic Services
R380 - LV125
8*736-2404 / 214-420-2404

Subject:
TWU Survey

Date:
September 27, 1991

This packet contains a survey conducted by a student at Texas Woman's University. We have given Chris DeMeo permission to use our company in her research. In addition to her original questions, we have added a few questions of our own to help us make the Fitness Center a better place for you. Please take a few minutes to answer these questions. This is a purely voluntary study and your answers will be strictly anonymous. No correlation will be made between names of participants and their answers. Thank you very much for your time.

Authorizing Signatures:



Rhea L. Cox
Fitness Center Manager



Faye Anderson
Xerographic & Fitness Supervisor

APPENDIX E

Job Descriptive Index (JDI) and Job in General (JIG)

THE JOB DESCRIPTIVE INDEX

(REVISED)

Company _____

City _____

Please fill in the above
blanks and then turn the
page

Code No. _____

© Bowling Green State University, (JDI), 1975, 1985
© Bowling Green State University, (JIG), 1982, 1985

Think of the work you do at present. How well does each of the following words or phrases describe your work? In the blank beside each word below, write

__ Y __ for "Yes" if it describes your work

__ N __ for "No" if it does NOT describe it

__ ? __ if you cannot decide

.....

WORK ON PRESENT JOB

- __ __ Fascinating
- __ __ Routine
- __ __ Satisfying
- __ __ Boring
- __ __ Good
- __ __ Creative
- __ __ Respected
- __ __ Uncomfortable
- __ __ Pleasant
- __ __ Useful
- __ __ Tiring
- __ __ Healthful
- __ __ Challenging
- __ __ Too much to do
- __ __ Frustrating
- __ __ Simple
- __ __ Repetitive
- __ __ Gives sense of accomplishment

Go on to the next page

Think of the pay you get now. How well does each of the following words or phrases describe your present pay? In the blank beside each word or phrase below, write

 Y for "Yes" if it describes your pay

 N for "No" if it does NOT describe it

 ? if you cannot decide

PRESENT PAY

 Income adequate for normal expenses

 Fair

 Barely live on income

 Bad

 Income provides luxuries

 Insecure

 Less than I deserve

 Well paid

 Underpaid

Go on to the next page

Think of the opportunities for promotion that you have now. How well does each of the following words or phrases describe these? In the blank beside each word below, write

 Y for "Yes" if it describes your opportunities for promotion

 N for "No" if it does NOT describe them

 ? if you cannot decide

OPPORTUNITIES FOR PROMOTION

 . Good opportunities for promotion

 . Opportunities somewhat limited

 . Promotion on ability

 . Dead-end job

 . Good chance for promotion

 . Unfair promotion policy

 . Infrequent promotions

 . Regular promotions

 . Fairly good chance for promotion

Go on to the next page

Think of the kind of supervision that you get on your job. How well does each of the following words or phrases describe this? In the blank beside each word or phrase below, write

 Y for "Yes" if it describes the supervision you get on your job

 N for "No" if it does NOT describe it

 ? if you cannot decide

SUPERVISION

- Asks my advice
- Hard to please
- Impolite
- Praises good work
- Tactful
- Influential
- Up-to-date
- Doesn't supervise enough
- Has favorites
- Tells me where I stand
- Annoying
- Stubborn
- Knows job well
- Bad
- Intelligent
- Poor planner
- Around when needed
- Lazy

Go on to the next page

Think of the majority of the people that you work with now or the people you meet in connection with your work. How well does each of the following words or phrases describe these people? In the blank beside each word below, write

 Y for "Yes" if it describes the people
you work with

 N for "No" if it does NOT describe them

 ? if you cannot decide

.....

CO-WORKERS (PEOPLE)

- Stimulating
- Boring
- Slow
- Helpful
- Stupid
- Responsible
- Fast
- Intelligent
- Easy to make enemies
- Talk too much
- Smart
- Lazy
- Unpleasant
- Gossipy
- Active
- Narrow interests
- Loyal
- Stubborn

Go on to the next page

Think of your job in general. All in all, what is it like most of the time? In the blank beside each word below, write

___Y___ for "Yes" if it describes your job

___N___ for "No" if it does NOT describe it

___?___ if you cannot decide

JOB IN GENERAL

___ ___ Pleasant

___ ___ Bad

___ ___ Ideal

___ ___ Waste of time

___ ___ Good

___ ___ Undesirable

___ ___ Worthwhile

___ ___ Worse than most

___ ___ Acceptable

___ ___ Superior

___ ___ Better than most

___ ___ Disagreeable

___ ___ Makes me content

___ ___ Inadequate

___ ___ Excellent

___ ___ Rotten

___ ___ Enjoyable

___ ___ Poor

APPENDIX F
Employee Data Questionnaire

EMPLOYEE DATA QUESTIONNAIRE

DIRECTIONS: Please check or fill-in the appropriate answers to every item.

GENERAL INFORMATION

1. Age: _____

2. Gender: Male _____ Female _____

3. Marital status:
 Never married _____ Divorced _____ Widowed _____
 Married _____ Separated _____

4. Check the response most closely related to the highest level completed:
 High School or equivalent _____ Master's Degree _____
 Technical School _____ Doctoral Degree _____
 Some college _____ Other _____
 Bachelor's Degree _____

5. Position:
 Administrative Assistant _____ Technical _____
 Manager _____ Engineer/Design _____
 Warehouse _____ Customer Support _____
 Other _____ (please indicate):

6. Length of time in this position _____

7. Length of time with this company _____

8. Which best describes your activity level:

Inactive _____ Active _____
 Moderately active _____ Very active _____

9. Have you used the Fitness Center in the past three months?

Yes _____ No _____

If your answer is no, why not? Please check all that apply:

disinterest _____	fitness needs are met elsewhere _____
prolonged work hours _____	desired equipment is not available _____
lack of child care _____	other _____ (please indicate):
medical reasons _____ (please indicate):	_____
_____	_____
_____	_____

10. Please check your frequency of use:

I never use the Fitness Center _____
 I use the Fitness Center only once or twice a month _____
 I use the Fitness Center on average of 1 or 2 times
per week _____
 I use the Fitness Center on average of 3 or more times
per week _____

If you do use the Fitness Center

11. What hours do you use the facility?

Before work (a.m.) _____
 During your lunch break _____
 After work (p.m.) _____

12. What classes, programs, or seminars would you be interested in attending? (Include types of exercise classes, lectures, etc.)

13. If the Fitness Center was established when you applied for work at this corporation, was its presence influential in your decision to accept employment?

Yes ____ No ____

14. Do any of your family members or others use the facility regularly?

Yes ____ No ____

(If yes, how many dependents use the facility? _____)

15. How would you rate the Fitness Center as a benefit:

Very Important Important Neutral Unimportant Very Unimportant

16. How many days have you missed in the past year because of your own illness? _____

17. What changes, if any, would you like to see concerning the Fitness Center?

APPENDIX G

Followup Letter to Employees

TEXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON

DEPARTMENT OF HEALTH STUDIES
College of Health Sciences, P.O. Box 22808 Denton, Texas 76204 817/895-2860



October 18, 1991

Dear Employee:

Please consider taking a few minutes to complete the questionnaires you were sent recently concerning your use of the Fitness Center.

Each individual's input is important to the study. This is also an opportunity for you to let Xerox know how you feel about the fitness Center and any changes you would like to see.

If you need another questionnaire, please call Rhea Cox at ext. 3658. I will see that you receive another questionnaire.

Thank you.

Sincerely,

Chris DeMeo

APPENDIX H

Responses to Xerox's Questions on the EDQ

RESPONSES TO XEROX'S QUESTIONS ADDED TO THE EDQ

Questions 11, 12, and 17 were added to the EDQ for the benefit of Xerox Corporation. Responses to each of these questions are presented below. Responses were taken verbatim from questionnaires, and grouped to some extent to show similarities where apparent.

Question 11: What hours do you use the facility?

	<u>#</u>
Before work (a.m.)	3
During your lunch break?	21
After work (p.m.)	5

Question 12: What classes, programs, or seminars would you be interested in attending?

cancer screen; cancer prevention through food & environmental control

men's health

cholesterol test

nutrition(classes & lectures); nutrition - heart healthy menu planning; nutrition; weight control(diet); nutrition; weight loss lectures dealing with exercise; weight control & Proper dieting; health/diet seminar; nutrition; health/diet/conditioning lectures weight control through food balancing & exercise

"how about an exercise class for overweight people!"

"how about..." a weight program to build strength weightlifting(toning); weightlifting; weightlifting class

aerobics; aerobic exercise class; aerobic class; early morning or after work aerobic classes or bench; aerobics - step aerobics; stretching, light aerobics; stretch & tone or low impact classes after work (4:30 or so); low impact aerobics; if time permitted - exercise classes

more on controlling and dealing with stress; stress management; stress related; stress reduction

how to improve running style

anything for self-improvement

more knowledge about the equipment & what does each one do for the body, how does the machine work on each body part

abdominal improvement

detailed fitness instructions, plan, tailored to individual - written & documented show progress

how different kinds of exercise help my health(lectures & classes)
the proper way to exercise(classes)
exercise information for particular health problems/limitation, i.e. arthritis, joint injuries

becoming a personal trainer(requirements)

to strengthen lower back muscles

vitamins and mineral intake orally at different ages & results from out of balance and inbalance of these usages. Can you OD? Do you need certain ones at different ages? During different seasons?

CPR

not interested at this time

Question 17: What changes, if any, would you like to see concerning the Fitness Center?

more diet type program(the how to)

It's not big enough - need better/more treadmills & machines for lower part of the body. It is too small for exercise class - don't like working out in front of people on treadmills).

more room, lager lockers

full size lockers, less humid dressing area

more space, more treadmills, bike, etc.

A separate room for aerobics so weight trainers & classes don't bother each other

bigger!!

Larger space. more machines

Large, seats in ladies's locker rooms

better equipment

replace old treadmills with new treadmills

need more space

move closer to building, more free weights, replace older equipment with newer equipment. Get rid of older equipment that's not being used, at least the useless equipment, it makes the fitness Center look crowded

move to building 300 - where all the people are

where is it?

how much does it cost?

how can I pay for it?

It should be free like it was in 1987. The cost in wellbeing of the employees should offset the cost of the center.

what is offered?

aerobic or bench classes before or after work

more activities relating to fitness

indoor jogging track

steam sauna

a meditation room

jacuzzi

a facility for dealing with strained(tight) muscles(e.g. heat packs

pool

jacuzzi

putting green

more equipment
abdominal machines

need stomach cruncher machine

come around and personally sign up - aggressively

a variety of steps during aerobics

how about installing a swimming pool for water aerobics. this may seem like an outrageous request, but I understand other corporations' fitness centers(TI, EDS), have pools would like some benchmarking data on fitness center facilities provided by other companies

Thanks for the opportunity to in my 2(cents).

Row machines and all equipment working at once so that people don't have to wait for use of equipment. Stopped going because I had to wait to use equipment & couldn't conform to other schedule. It would happen during the course of a year and a half (that I participated), that only one of three possible equipment (of a type) would be in working condition.

find the time to use

OK as is

It's very good now. I plan to use this winter if my physical usage of my body decreases.

I used the Fitness Center several years ago & became a bit discouraged when I had to pay, I do not mind paying but my biggest activity is the Aerobics Class and I did not particularly care for the instructor. She seemed most interested in dance steps rather than a great aerobic workout. (Jumping jacks, etc. & just a good workout for the heart rate). To say the least I decided against the Fitness Center and joined a local health club.

more employees using it. Fully funded by the company.

more corporate support & recognition for a wellness operation that benefits the company as well as the employees

longer hours

personal training program

easier access; easier access to the basketball court
provide weightlifting instruction

classes before or after work instead of at lunch. Most of our
department works through lunch or only takes 30 min.

I like what you did! Congratulations

I think it is great