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Employee fitness programs: A study of the benefits for corporate industry

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Employee fitness programs: A study of the benefits for corporate industry

Abstract

Historically great amounts of energy have been channeled into the education of minds to perform with maximum effort and efficiency. Often these energy expenditures concentrated on singular cognitive processes in order to develop the intellect, and, in doing so, neglected other parts of the whole self. As the concept of the whole or total self became more accepted, educational programs expanded to include a wider variety of curricula: humanities, arts, career education, psychological education, and physical education as well as the traditional "3 r's". Perhaps because of American society's emphasis on graduation (regardless of level) as an end (rather than a continuation, or even a beginning), the carryover of the idea of a total person tends to drop on a priority list. Goals in life are geared towards career and financial gains, and often become synonymous with success.

EMPLOYEE FITNESS PROGRAMS: A STUDY OF
THE BENEFITS FOR CORPORATE INDUSTRY

A Research Paper

Presented to

The Department of School Administration
and Personnel Services
University of Northern Iowa

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Education

by

Jeanne Carlson Duffy

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Entitled: EMPLOYEE FITNESS PROGRAMS: A STUDY OF THE BENEFITS
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CHAPTER 1

Introduction

Historically great amounts of energy have been channeled into the education of minds to perform with maximum effort and efficiency. Often these energy expenditures concentrated on singular cognitive processes in order to develop the intellect, and, in doing so, neglected other parts of the whole self. As the concept of the whole or total self became more accepted, educational programs expanded to include a wider variety of curricula: humanities, arts, career education, psychological education, and physical education as well as the traditional "3 r's". Perhaps because of American society's emphasis on graduation (regardless of level) as an end (rather than a continuation, or even a beginning), the carryover of the idea of a total person tends to drop on a priority list. Goals in life are geared towards career and financial gains, and often become synonymous with success.

The world of work (especially "big business" corporate structures) has placed extreme and intense demands on people at every level. Management, only recently, has tuned in to the emotional strains, physical inactivity, and stress patterns common to many American societal and career structures. American society has recognized the need for and/or right of youth to develop a vigorous and healthy activity program (shown by state physical education requirements), yet, in the past, has failed to follow through on that belief at an adult level. Employers currently are striving to guide employees in techniques that provide optimal career development,

primarily because management has realized that a productive worker is a healthy worker - physically, mentally, emotionally. The relationship among these aspects is intricate and intertwined, and so, perhaps, interdependent.

Statement of the Problem

The intention of the study is to determine whether an employee fitness program can be used as an effective tool for managing stress, and therefore become a benefit for both employees and for corporate industry. This investigation will focus on the relationship involving the use of physical self (via vigorous physical activity) to improve the psychological working self, by the alleviation of stress. For the purpose of the study, employee turnover, absenteeism, and productivity have been selected as measurements of stress. More specifically, the study will view the effects of an employee fitness program on employee turnover rates, absenteeism rates, and aspects of productivity.

Theoretically, decision makers in contemporary society recognize a relationship between physical and mental health, although, at times, the explanation of this relationship resembles the question, "Which came first: the chick or the egg?" A healthy physical self is usually a boost to a healthy psychological self, but also a positive psychological self is often a facilitator for the care of the physical self. The study will attempt to focus on the route from physical to psychological - the use of exercise to decrease anxiety and discontent, and therefore to increase personal productivity.

Established research has recognized the value of vigorous exercise in terms of physical benefits in extremely specific physiological and med-

ical quantities. Findings regarding psychological benefits have tended to be less specific. Determining that regular aerobic exercise can decrease levels of anxiety would certainly add to the specificity of stress management research.

Significance of the Study

When the limits of adaptation are exceeded, stress dominates. The resulting costs of stress are overwhelming, not only to individual effectiveness, but to group processes. These costs are apparent in today's society as aggression, disease, decreased efficiency and production, and unrest. Stress is a non-discriminatory, multicultural, non-sexist phenomenon which occurs in all subgroups and at all levels of society.

The very nature of today's society makes the elimination of stress unfeasible. Therefore, the ability to cope with stress becomes a "proactive" priority item. If specific stress management techniques can be identified as reducing the components of stress, then individuals in society will have available, preventative measures to utilize for handling stress.

CHAPTER 2

Review of Related Literature

The physiological benefits of regular, vigorous exercise have long been touted, originally in an aesthetic sense, more recently in a longevity sense. Morse and Furst (1979) have presented a compiled list, from exercise physiology research studies, of the physiological rewards of exercise done over a period of months or more. In broad categories these rewards include:

- improved cardiovascular/pulmonary efficiency
- improved digestion
- increased muscle strength and flexibility
- greater stamina (endurance)

These physiological gains are a two-for-the-price-of-one incentive.

Not only are these results medically healthful in themselves, but they increase the body's ability to deal with stressors: physical, intellectual, emotional. Kremer and Owen (1979) would agree with them that exercise has a "dual role in stress". Exercise is, in itself, a physical stressor, and the development of its appropriate function becomes a way to cope with stress. In this way, the body is permitted to utilize its "fight or flight" response. Morse and Furst (1979) also included subject-reported qualitative benefits of an exercise program:

- better overall physical appearance as a result of either weight loss or gain
- decreased appetite
- improved complexion, probably as a result of better circulation
- better posture

- a better attitude and frame of mind
- feelings of euphoria, tranquility, and relaxation
- subsequent muscle relaxation

Harper (1978) reported improvements in "energy, sleep, physical and mental alertness, sexual appreciation, attitudes, friendships, muscle tone, sense of accomplishment, ability to cope with stress, endurance, ability to relax, confidence, feeling of well-being, capacity for work, and value for health" (p.<77) for counseling students participating in a 14-week aerobic (jogging) exercise program. Morgan (1970) reported that depression and variables such as age, body weight, percent body fat, grip strength, and physical working capacity are not significantly related in "normal males". However, that same study found a significant ($p .01$) reduction in depression in subjects who were depressed prior to the six-week exercise program. Also, the normal (nondepressed) males concluded that they "felt better" at the end of the exercise program, although this feeling was not measured by a change in depression. Pollock (1979) concurred that endurance (aerobic) exercise not only benefits cardiovascular-respiratory fitness, physique (posture, composition, appearance), motor function (strength, endurance, flexibility, power, agility, and balance), but is linked with the physiological factors such as depression and anxiety.

It appears difficult to speak of the advantages of a regular exercise program in an either-or framework regarding physical benefits vs. psychological benefits. There is enough overlap to arouse questions such as, "Do the physical benefits promote the physiological benefits, or do the psychological benefits enhance the physiological receptiveness to exercise?" Nevertheless, the implications of the effects of vigorous

exercise upon psychological well-being have greatly influenced recommendations for stress management techniques as the recognition of the stressors in today's society expands.

In a variety of settings and at a variety of levels, organizational management is opening its eyes to the complexities of coping with stressful situations. Society's technological pool of information has grown in depth, as well as breadth, to complement a striving for excellence and efficiency. However, as this concern for technology branched, it was often at the expense of the concern for "social inputs and human assets" (Kets de Vries, 1979). The causes of human stress were further delineated into four areas:

Physical causes of stress: cold, heat, noise, long hours, shift work, repetitive work, hazardous work, piece quotas, changing technology.

Organizational causes of stress: authority hierarchies, departmentalization, goals, control, work flow, role ambiguity.

Interpersonal processes causes of stress: lack of cohesive support group, over or under participation in decision making, level of responsibility for people.

Career time line causes of stress: entry, mid-career (or mid-life) crisis, retirement, career change (pp. 5-10).

Girdano and Everly (1979) identified sources of stress as 1) adaptation, 2) frustration (overcrowding, discrimination, socioeconomic factors, and bureaucracies), 3) overload, and 4) deprivation (boredom and loneliness).

Moving from cause to effect in a study of stress, Skinner (1980) presented six areas of potential problems, all of which are considered effects/costs of stress:

Subjective effects: anxiety, aggression, apathy, boredom, fatigue, depression, frustration, irritability, tension, and loneliness.

Behavioral effects: excessive eating or loss of appetite, drug dependency, impulsiveness, accident proneness, excessive

drinking or smoking, excitability, impaired speech, trembling.

Cognitive effects: inability to make decisions and concentrate, forgetfulness, mental blocks.

Physiological effects: increased blood glucose levels, increased heart rate and blood pressure, increased blood and urine catecholamines and corticosteroids, dryness of mouth, sweating, dilation of pupils, difficulty breathing, hot and cold spells, "a lump in the throat", numbness and tingling in parts of the limbs.

Health effects: asthma, amenorrhoea, chest and back pains, coronary heart disease, faintness and dizziness, dyspepsia, frequent urination, migraine, neuroses, insomnia, skin rash, loss of sexual interest, and weakness.

Organizational effects: absenteeism, poor productivity, high accident and labor turnover rates, antagonism at work, job dissatisfaction (pp. 15-20).

Kremer and Owen (1979) specifically pinpointed some of the results of stress as: muscle tension, back/shoulder/neck pain, insomnia, fatigue, boredom, depression, listlessness, under or overeating, excess drinking/drugs, diarrhea, constipation, heart palpitations and irritability.

The resultant effects of stress are not only devastation to an individual, but project far beyond any one being to influence myriad combinations of people and structures. When the limits of humans to adapt are exceeded, stress results. Toffler (1970) called this "Future Shock" and this propagation of stress has become evident in the form of stress reactions: "chronic diseases, coronary disease, substandard work capacities, job inefficiencies, absenteeism, decreased morale, and increased labor unrest" (Kets de Vries, 1979).

The financial, as well as psychological, costs of stress are overwhelming. Conrad (1979) presented awesome figures:

"heart disease alone (which exercise helps prevent) takes 52 million workdays. Recruiting costs to replace disabled and deceased victims exceed \$700 million per year. Even

back pain, often a result of overstrained and underused muscles, tolls \$1 billion in output loss plus \$250 million in Workman's Compensation claims. The more subtle costs of chronic illness and fatigue, resulting in sluggish recoveries and injuries, are also significant" (p. 30).

In Chicago, a teachers association stress survey reported 56.6% of 5,500 respondents (out of 22,000 surveyed) claiming physical and/or mental illness as a direct result of their job (Walsh, 1979). In a lump sum figure, American industry loses an estimated \$25 billion a year due to employees' premature deaths - and billions more from reduced productivity due to sickness and disability. The National Safety Council estimates that industry loses \$1 billion in production and service from back injuries/aches alone, not to mention \$225 million in worker's compensation (Young, 1981).

The results of stress have hit society in a vulnerable area--the pocketbook. In terms of dollars, insurance claims and time, organizational structures are reassessing priorities and discovering that employee productivity is not a separate entity from employee health, and is, often, a direct result. The deceptively obvious implication for organizations' decision makers is to provide employees with information and assistance regarding methods of managing stress situations.

Current literature has supplied us with an abundance of "stress management" techniques from a diverse assortment of disciplines and theoretical backgrounds. Interestingly, despite quite varied viewpoints, stress management consultants generally include vigorous physical exercise as a strategy aimed at changing a person's physical condition in order to increase tolerance to stress (Brown and Carlton, 1980; Conrad, 1979; Fimian, 1980; Girdano and Everly, 1979; Harper, 1978; Kets de Vries, 1979; Kremer and Owen, 1979; Moe, 1979; Newman and Beehr, 1979; Pagel and Price, 1980; Pollock, 1979; Skinner, 1980; Smith and Kline, 1980; Sparks, 1979; and Young, 1981).

Research specifically pointed to areas that respond to aerobic exercise: tension, anxiety, depression, tiredness, obesity, general health, appetite, posture, productivity, self concept, and confidence (Harper, 1978). McAfee (1979) reemphasized the relationship between human psyche and physical health when he stated, "The traditional symptoms of headache, fever, pain, ulcers, high blood pressure, and fatigue may well have their origins in the ability of the individual to cope with life and comfortably resolve daily stress situations" (p. 294). Dr. E. Philip Nuernberger, director of the Center for Stress Management and Research in Honesdale, Pennsylvania agreed: "70 to 80% of our diseases are psychosomatic, and directly related to chronic stress and emotional factors. We must think in terms of prevention instead of treatment; in terms of training instead of therapy" ("Teaching Employees to be Fit," Training, 1979, p. 30). Important to the argument for stress management training is the reduction of deaths from the United States' number one killer: "Vigorous physical activity is vital to the reduction of risk factors for coronary heart disease, such as high blood lipids (cholesterol), obesity, hypertension, and blood glucose levels" (Pollock, 1979, p. 215).

Employers are beginning to apply research findings dealing with stress to proactive/preventative employee stress management programs. The reasoning is pragmatic and healthful - for both labor and management. Including aerobic exercise in a stress management program potentially rewards employees with better health and increased self-respect, and endows management with fit, alert employees who live longer more productive lives.

In 1968, taking the lead from Soviet studies on economic benefits from organized exercise, the National Aeronautics and Space Administra-

tion began an experiment which involved 259 men between 35 and 55 years of age. NASA provided a 3-times-per-week exercise program for one year, and at the end of the year polled the subjects and gave them a physical exam. Almost 95% of the subjects reported feeling better, having a more positive work attitude and improving job performance (Young, 1981). In 1972, a study of more than 800 employees of the New York State Education and Civil Service Departments in Albany found, at the end of one year, that mean sick-leave hours for one sample group were 46.5. This differs significantly from hours reported for all other New York State employees in the same year, reported at 73.5. Participants also experienced reductions in serum cholesterol, body weight, tobacco consumption, and blood pressure (Young, 1981).

Despite abundant philosophical stress management advice, it appears that stress research is still relatively scarce, considering that a basic element of modern society may be stress. Newman and Beehr (1979) have implored industrial/organizational psychologists to become more involved, especially regarding the validation of the effects of stress management programs and/or specific techniques of those programs. Part of the ambiguity of stress management research seems to be the tendency to lump together results of stress management programs regardless of the fact that several, individual, and unique techniques may have been utilized: behavior modification, relaxation techniques, cognitive restructuring, and meditation as well as aerobic exercise. This has been due to the "recipe approach" to stress management - combining a variety of ingredients (strategies) in order to produce a palatable mixture.

Much of the stress management implementation has been within corporate structures where funding is obtainable, compared to the lack of

dollars available for research and/or program actualization in public education. This willingness of corporate industry to investigate and initiate has caused some problems of its own for both management and labor. Large companies are usually stronger in the implementation phase than the followup/evaluative phase. Industry is very hesitant about presenting a paternalistic, even "Big Brother", image over its employees; and employees may be reluctant to commit themselves to a long term program that implies a lifetime career with no option to switch allegiances (Young, 1981). The problem is double edged in that management must tread softly when assessing long term employee participation in a stress management program; yet management is criticized for neglecting relevant employee/program evaluations and suggestions.

Kets de Vries (1979) described current stress management research as being at either extreme of a focus spectrum. At one end of the spectrum, research has zeroed in on work situations and has not dealt with illness and psychiatry. Influences other than job environment have been excluded, which is unfortunate since isolated job variables are insufficient to explain human reactions to stress. "Job satisfaction studies" have been guilty of vagueness, contradiction, and redundancy as a result. At the other extreme, Kets de Vries (1979) observed that research deemphasized work environments so that broad "social-psychiatric" studies could cite the importance of "personality factors, cultural variables, genetic predispositions, and non-work environment" and yet these conclusions were also unsatisfactory.

It appears that before individual factors and techniques of stress management can be combined, additional research is needed regarding the effects of specific stress management techniques upon specific factors of stress.

CHAPTER 3

Design of the Study and Presentation of the Data

The design of the study required the collection of data which presented the effects of an employee fitness program on employee turn-over rates, absenteeism, and productivity. Periodical sources proved valuable, but limited in terms of quantity, so a questionnaire was developed to increase the number of corporate employee programs cited. A copy of the cover letter and questionnaire is included as Appendix A. The addresses of one hundred nineteen corporate sources were obtained in several ways: from the Administrative Managerial Society Des Moines Chapter (AMS), from metropolitan phone books, from periodical references, from personal contacts and from the American Association of Fitness Directors in Business and Industry. (AAFDBI).

The questionnaire was intended for corporations with employee fitness programs. However, a listing of such corporations was unavailable for this research. Therefore the selected mailings were not as fruitful, since not all businesses contacted had fitness programs. Thirty-eight corporations (approximately 32%) responded to the questionnaire. Of these, fourteen replied that they do not offer any type of employee fitness program. The twenty-four respondents who offer fitness programs provided the descriptive information summarized by Tables 1 through 8.

Table 1
Number of Workers Employed

| Category | Number of Companies Within this Range |
|------------------|--|
| less than 500 | 8 |
| 501 - 1,000 | 4 |
| 1,001 - 5,000 | 7 |
| 5,001 - 10,000 | 1 |
| 10,001 - 15,000 | 2 |
| more than 15,000 | 2 (1 - 120,000 1 - 200,000) |

Table 2

Per Cent of Male and Female Participants
in Corporate Fitness Programs

| Participation | Number of Companies Within This Range | |
|---------------|---------------------------------------|--------|
| | Male | Female |
| 0 - 10% | 6 | 6 |
| 11 - 20% | 3 | 2 |
| 21 - 30% | 1 | 2 |
| 31 - 40% | 5 | 1 |
| 41 - 50% | 1 | 2 |
| 51 - 60% | | |
| 61 - 70% | | |
| 71 - 80% | | 2 |
| 81 - 90% | | 1 |
| 91 - 100% | 1 | 1 |

Three companies combined male and female participation:
10%, 13%, and 17% were their reports.

Four compaines did not respond to the question.

Table 3
Implementation Date of Fitness Program

| Year | Number of Companies Starting Program |
|-------------|--------------------------------------|
| 1970 | 2 |
| 1975 | 1 |
| 1978 | 3 |
| 1979 | 5 |
| 1980 | 2 |
| 1981 | 6 |
| 1982 | 2 |
| no response | 3 |

Table 4
Origin of Program

| Recommendation | Number of Companies |
|----------------|---|
| Management | 14 |
| Employee | 4 |
| Consultant | 2 |
| Other | 4 (Medical Director - 2 Health Department- 1 Faculty - 1) |

Table 5
Program Incentives

| Incentive | Number of Respondents |
|--|-----------------------|
| free or reduced membership at health club/gym | 6 |
| "bonus" hours | 1 |
| monetary and/or material rewards | 4 |
| other | 8* |

*Examples of other incentives were: cardiac rehabilitation, mileage awards, free medical checkups, free or reduced tuition, on-site facilities, rebates, health/fitness classes

Table 6
Types of Programs Offered

| Offering | Number of Respondents |
|---|-----------------------|
| intramural activities | 9 |
| health club/gym memberships for employees | 9 |
| noon hour fitness programs | 8 |
| other | 18* |

*Most of the other offerings were grouped in the areas of on-site recreational/fitness facilities and health or wellness classes.

Table 7
Results of Fitness Program

| Measurement of Stress | Result |
|------------------------|--|
| employee turnover rate | <p>_____ increased? by what percent? _____</p> <p> <u> 1 </u> decreased? by what percent? _____</p> <p> <u> 5 </u> no change</p> <p>(One company reported a 25% increase in customers for their health club business.)</p> |
| production | <p> <u> 1 </u> increased? by what percent? _____</p> <p>_____ decreased? by what percent? _____</p> <p> <u> 4 </u> no change</p> |
| employee absenteeism | <p>_____ increased? by what percent? _____</p> <p> <u> 1 </u> decreased? by what percent? _____</p> <p> <u> 6 </u> no change*</p> |

*One of the "no change" responses was regarding a program offered for "executives only".

Seventeen of the twenty-four corporations reporting stated that no data was available for the categories of Table 7.

Table 8
Future Plans for Program

| Proposed Plan | * Respondents |
|------------------------|---------------|
| continue program as is | 10 |
| expand the program | 14 |
| reduce the program | 0 |

Most of the companies responding employed 5,000 or fewer workers. Male workers' participation appeared grouped in the 0-10% and the 31-40% categories. Female participation in fitness programs was reported, most often in the 0-10% category. Fifteen of the twenty-four company programs have been implemented since 1979, and most programs (14 of 24) were initiated through management recommendation.

All companies reported an attempt to provide a variety of employee choices within their fitness programs. No companies indicated plans for program reduction. Ten plan to continue "as is" and fourteen plan to expand their programs.

Specifics regarding changes in employee turnover rates, production and absenteeism were few. Five respondents reported "no change" in turnover rates, four reported "no change" in production and six reported "no change" in absences. One company indicated a decrease in both turnover rate and absenteeism and an increase in production. Seventeen corporations wrote that no figures were available which dealt with the effects of an employee fitness program on turnover rate, production and absenteeism.

CHAPTER 4

Program Illustrations

The curriculums, or offerings, of the twenty-two employee fitness programs reporting varied enormously. These variations ranged from intramural programs and noon hour aerobic dance to on-site fitness facilities complemented by "wellness" classes. No two programs were identical, and the combinations of activities provided were often appealing and well-balanced. *Examples of selected employee fitness programs are provided.*

Bankers Life

Bankers Life, in Des Moines, Iowa, employs approximately 3,000 workers. Their employee program dates back to the implementation of bowling leagues in the 1960's. Since then, the intramural program has expanded to include bowling, basketball, softball, tennis and golf. With the exception of golf, intramurals are provided free of charge to workers and participation has increased steadily. Presently Bankers Life offers an on-site gymnasium, weight room and running track to employees. Additionally, they rent gym facilities at Drake University for employee use.

To update and expand their offerings, Bankers Life has recently established a Wellness Committee to assess employee needs and priorities regarding wellness. The results of their first Employee Wellness Survey is included as Appendix B. Bankers Life hopes these results will be valuable in the expansion of their on-site program.

International Business Machines (IBM)

The International Business Machines (IBM) Corporation offers an employee "health education program" to its 200,000 employees, through community health resources such as YMCA's, hospitals, and voluntary health agencies. Because IBM branch offices number in the hundreds and are so widely dispersed throughout the country, management felt community expertise would reach the most personnel (Employee Health and Fitness, 1982, p. 3). In 1981, IBM offered eight comprehensive courses (from two to twelve weeks in length) to employees, spouses, dependent children over 14 years of age, retirees and their spouses. The courses were Exercise, Smoking Cessation, Stress Management, Weight Management, Healthy Back, *First Aid, CPR and Obstructed Airway Maneuver and Driver Improvement*. "Mini" courses for an hour and a half were offered in these areas also, plus Health and Nutrition and Risk Factors Management. Any course offered by IBM is free of charge for employees. Over 40,000 persons enrolled in over 2,000 courses during 1981.

IBM offers a Voluntary Health Screening Examination Program for employees who are 35 and older. Major IBM locations at thirty sites offer recreational/ fitness facilities for employees and their families.

Mercy Medical Center

Mercy Medical Center, Des Moines, Iowa, reported 50% male employee participation (200 of 400 workers) and 75% female participation (1,200 of 1,600 workers) in their comprehensive fitness program. Their offering was impressive:

intramural activities
 health club/gym memberships for employees
 noon hour fitness programs
 specific courses (examples: Nutrition, Self-Responsibility,
 Assertiveness, Stop Smoking)

Two factors made this program especially unique. First, employees pay for membership into this program, so, interestingly, the only incentive is better health. Second, because of Mercy's community function, and commitment, this program is available to the general public. This program originated in 1979.

Union Carbide

The Health Promotion and Fitness Program of Union Carbide Corporation in Danbury, Connecticut published a newsletter for employees, complete with program offerings. The program is based in the company's Medical Department, and offers rebates upon successful achievement of set goals. Beginning its third year, the Fall 1982 Program listing includes a variety of classes at free or minimal cost:

| | |
|--------------------------|-----------------------------|
| Aerobics in Motion | Stress Management |
| Cross Country Skiing | Walk/Jog class |
| Healthy Back | The New Nutrition |
| No Butts About It | Ways to Quit Smoking |
| Not Another Diet | Basics of Cross Country |
| Nutrition/Blood Pressure | Skiing |
| Control | How to be Assertive Without |
| Nutrition Education | Being Aggressive |
| Pacewalking Club | |

The newsletter also included Health Promotion Services available to employees any time:

| | |
|-----------------------------|--------------------------|
| Blood Pressure Checks | Nutrition Counseling |
| Exercise Counseling | Pedometers |
| The Carbide Fitness Trail | Psychological Counseling |
| Group/Walk/Jog | Running Club |
| Health Breaks | Tours of Exercise Trails |
| Health Education Literature | Weigh-In |
| Health and Fitness Magazine | |

To complete the reference listing, the newsletter also provided the organizational names and numbers of community support groups, which specialize in areas of wellness. Other articles touched on program philosophy and objectives, fitness hints, nutrition and health promotion newsmakers.

CHAPTER 5

Summary, Discussion and Recommendations

The majority of corporations that responded employed less than 5,000 workers (19 of 24 or 79%). Most of the figures for male employees centered in the 0 - 10% participation category and the 31 - 40% participation category while female participation was reported most often in the 0 - 10% category. Specific comments from corporations regarding employee participation indicated consistent growth. Fifteen of the twenty-four company programs have been initiated since 1979 and so are relatively new. The majority of the fitness programs (14 of 24 or 58%) were recommended for implementation by management.

Every responding corporation reported an attempt to offer a variety of choices through their employee fitness program. A fairly even distribution was observed in the types of programs offered and the offerings ranged from low-key partial subsidization of "Y" memberships to on-site free of charge cardiac rehabilitation. Not one corporation indicated plans to reduce their program. At present, ten are continuing "as is" and fourteen have plans to expand their employee fitness programs.

Specific results indicating changes in employee turnover rates, production and absenteeism were scarce. Five corporations reported "no change" in turnover rates, four reported "no change" in production and six reported "no change" in absences. One company reported a decrease in both turnover rate and absenteeism and an increase in production, but no statistics or percentages were supplied in these categories. Seventeen corporations stated that no data was available to present any effects of

a fitness program on employee turnover rates, production or absenteeism.

It appeared that corporations which offered employee fitness programs recognize worth in those programs, as evidenced by the plans for expansion. While statistical proof (in terms of turnover rates, absenteeism and productivity) was sparse, corporate enthusiasm for the programs was definite and consistent. Worker attendance at offered classes, subjective employee feelings of betterment, positive feedback from fitness program participants and growth in participant numbers were cited as reasons for program support and/or expansion. One company reported that their employee turnover rate is at an all-time low, but also noted that the present economy keeps workers from relocation readily.

The size of a company was not a hinderance in either the implementation or the success of an employee fitness program. Program offerings were available to males and females, but males seemed more apt to take part in the programs based on participation percentages. Since most of the programs were relatively new, the absence of statistics was usually based on a lack of time to collect data.

The response of corporate industry to employee needs and the corresponding concerns for stress management was encouraging. In fact, the majority of programs were created as the result of management recommendation. This same managerial ability to respond could lead to an increased effort in encouraging female employees to participate in fitness programs.

Management concern for accountability is responsible for another recommendation. Implementation of programs seems to be a definite strength, but follow-up has not yet attained the same quality level. The suggestion that could promote accurate and promotional support for fitness programs is to create job positions and support for such research. Justification

for the birth of such research positions is economic as well as altruistic. This type of data accumulation could possibly require additional staff and/or training.

A final and, perhaps, most significant recommendation would deal with the need for longitudinal research in the area of assessment of the values of an employee fitness program. As indicated in the survey responses, most of the employee fitness programs are in the adolescent stage - characterized by rapid growth, exploration and branching, the excitement of "newness" and myriad questions. Longitudinal studies, which could extend indefinitely, might supply the necessary data to insure the continuation and expansion of employee fitness programs.

Obviously, longitudinal studies could add to the economic appeal of fitness programs. Such studies could also serve in the formation of specific evaluative techniques, both objective and subjective, for the programs. These evaluations, in turn, could prove valuable in answering the following questions:

- Does the program encourage employee participation at all levels:
(Example: Do clerical workers participate in similar percentages to upper level management?)
- Do incentives encourage participation or is self-motivation (wellness) enough?
- Is the employee fitness program useful as a technique of stress management:
 - subjectively (attitudes, opinions, wellness values, feelings)?
 - objectively (measureable aerobic improvement or anxiety reduction)?

Clearly, present society recognizes stress and respects wellness productivity. Understanding the relationships between stress, health and success would require the organized observation of how each component can affect the others. By systematically collecting information regarding

stress management techniques (specifically employee fitness programs) corporate society has the opportunity to further develop rationale for such programs. This organized research would also encourage the development of a tremendous natural resource - the potential of a more healthy, productive and aware worker.

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APPENDIX A

August 15, 1982

Dear Employee Fitness Program Coordinator,

I am a graduate student at the University of Northern Iowa in Cedar Falls, working toward a Master's Degree in Education through the Department of School Administration and Personnel Services.

I am researching the relationship between physical health and emotional health. I am exploring the possibility that a physically healthy employee is also healthy mentally - and therefore is a higher quality employee.

I am most appreciative of your help and consideration for the enclosed questionnaire. Thank you for your time and assistance.

Sincerely,

Jeanne Duffy

7. What results have been observed since the implementation of your fitness program?

Has employee turnover rate _____ increased? by what percent? _____
_____ decreased? by what percent? _____
_____ no change

Has production _____ increased? by what percent? _____
_____ decreased? by what percent? _____
_____ no change

Has employee absenteeism _____ increased? by what percent? _____
_____ decreased? by what percent? _____
_____ no change

8. What are the future plans for your employee fitness program?

_____ continue as is; _____ expand the program; _____ reduce the program

9. Please feel free to make any additional comments.

THANK YOU!

APPENDIX B

BANKERS LIFE
EMPLOYEE WELLNESS SURVEY

1873 Replies

A. GENERAL INFORMATION

| | | | | | |
|---------------|-------------------------|---------------------------------|----------------------------|---------------|--------------|
| 1) Age Range: | <u>Number</u> | <u>%</u> | | <u>Number</u> | <u>%</u> |
| a) Under 20 | 98 | 5.6 | d) 40 -49 | 218 | 12.4 |
| b) 20 - 29 | 894 | 50.7 | e) 50 -59 | 59 | 3.3 |
| c) 30 - 39 | 464 | 26.3 | f) 60 & Over | 31 | 1.7 |
| 2) Sex. | M <u>404</u> | <u>22.1%</u> | F | <u>1428</u> | <u>77.9%</u> |
| 3. Job Level: | a) Officer <u>137</u> , | b) Other Co. Title <u>489</u> , | c) Non-Titled <u>1,195</u> | | |

B. CURRENT KNOWLEDGE AND AWARENESS

| | | <u>Number</u> | <u>%</u> |
|---|-------------|---------------|--------------|
| 1. The importance of health to me is: | Very Little | 1 4 | .2 |
| | | 2 6 | .3 |
| | | 3 120 | 6.5 |
| | | 4 435 | 23.3 |
| | A lot | 5 <u>1298</u> | <u>69.7</u> |
| | TOTAL | <u>1863</u> | <u>100.0</u> |
| 2. What I know about Health Lifestyle is: | Very Little | 1 302 | 16.2 |
| | | 2 272 | 14.6 |
| | | 3 718 | 38.6 |
| | | 4 468 | 25.2 |
| | A lot | 5 <u>100</u> | <u>5.4</u> |
| | TOTAL | <u>1860</u> | <u>100.0</u> |
| 3. What I know about Stress is: | Very Little | 1 161 | 8.6 |
| | | 2 311 | 16.6 |
| | | 3 818 | 43.8 |
| | | 4 425 | 22.8 |
| | A lot | 5 <u>153</u> | <u>8.2</u> |
| | TOTAL | <u>1868</u> | <u>100.0</u> |
| 4. What I know about Stress Management: | Very Little | 1 454 | 24.3 |
| | | 2 553 | 29.6 |
| | | 3 625 | 33.5 |
| | | 4 191 | 10.2 |
| | A lot | 5 <u>44</u> | <u>2.4</u> |
| | TOTAL | <u>1867</u> | <u>100.0</u> |
| 5. What I know about Biofeedback is: | Very Little | 1 797 | 42.7 |
| | | 2 549 | 29.4 |
| | | 3 364 | 19.5 |
| | | 4 119 | 6.4 |
| | A lot | 5 <u>37</u> | <u>2.0</u> |
| | TOTAL | <u>1866</u> | <u>100.0</u> |

B. CURRENT KNOWLEDGE AND AWARENESS (Con't)

| | | | Number | % |
|---|-------------|-------|--------|------|
| 6. What I know about Relaxation Techniques is: | Very Little | 1 | 490 | 26.3 |
| | | 2 | 615 | 33.0 |
| | | 3 | 497 | 26.6 |
| | | 4 | 194 | 10.4 |
| | | A lot | 69 | 3.7 |
| | | TOTAL | | 1865 |
| 7. What I know about Nutrition is: | Very Little | 1 | 37 | 2.0 |
| | | 2 | 152 | 8.1 |
| | | 3 | 723 | 38.7 |
| | | 4 | 706 | 37.7 |
| | | A lot | 252 | 13.5 |
| | | TOTAL | | 1870 |
| 8. What I know about Physical Fitness is | Very Little | 1 | 21 | 1.1 |
| | | 2 | 101 | 5.4 |
| | | 3 | 751 | 40.3 |
| | | 4 | 717 | 38.5 |
| | | A lot | 273 | 14.7 |
| | | TOTAL | | 1863 |
| 9. My motivation to make healthy changes in my life is: | Very Little | 1 | 39 | 2.1 |
| | | 2 | 90 | 4.8 |
| | | 3 | 581 | 31.2 |
| | | 4 | 661 | 35.5 |
| | | A lot | 489 | 26.3 |
| | | TOTAL | | 1860 |
| 10. The prospect of me <u>actually</u> making changes is: | Very Little | 1 | 46 | 2.5 |
| | | 2 | 157 | 8.5 |
| | | 3 | 660 | 35.5 |
| | | 4 | 683 | 36.8 |
| | | A lot | 311 | 16.7 |
| | | TOTAL | | 1857 |

C. CURRENT LIFE STYLE

| | | | | | | |
|--|-----|------------|--------------|----|-------------|--------------|
| 1. Do you smoke: | Yes | <u>509</u> | <u>27.2%</u> | No | <u>1360</u> | <u>72.8%</u> |
| 2. Do you feel that you are 20 lb. or more over your ideal weight? | | | | | | |
| | Yes | <u>646</u> | <u>34.6%</u> | No | <u>1222</u> | <u>65.4%</u> |

C. CURRENT LIFE STYLE (con't)

| | | <u>Number</u> | <u>%</u> |
|---|-----------------|---------------|----------|
| 3) Check if you regularly use the following: | | | |
| a) At least two caffeine drinks per day. | | 1248 | 76.6 |
| b) More than two alcoholic drinks per day. | | 76 | 4.7 |
| c) Tranquilizers | | 36 | 2.2 |
| d) Pain Medication | | 123 | 7.5 |
| e) Medication for any cardiovascular problems | | 50 | 3.1 |
| f) Sleeping pills | | 12 | .7 |
| g) Diet pills | | 84 | 5.2 |
| | TOTAL | 1629 | 100.0 |
| 4) How stressful do you consider your life: | Not stressful | 1 43 | 2.3 |
| | | 2 206 | 11.0 |
| | | 3 760 | 40.8 |
| | | 4 629 | 33.7 |
| | Very stressful | 5 227 | 12.2 |
| | TOTAL | 1865 | 100.0 |
| 5) What is the quality of your life: | meaningless | 1 7 | .4 |
| | | 2 56 | 3.1 |
| | | 3 412 | 22.6 |
| | | 4 780 | 42.7 |
| | full of meaning | 5 568 | 31.2 |
| | TOTAL | 1823 | 100.0 |

D. ATTITUDES TOWARD HEALTH CONTROL

| | | <u>Number</u> | <u>%</u> |
|---|-------------------|---------------|----------|
| 1) If I take care of myself, I can avoid illness. | strongly disagree | 1 0 | 0 |
| | | 2 56 | 3.1 |
| | | 3 375 | 20.4 |
| | | 4 751 | 40.8 |
| | strongly agree | 5 657 | 35.7 |
| | TOTAL | 1839 | 100.0 |
| 2) Whenever I get sick, it is because of something I have done or not done. | strongly disagree | 1 244 | 13.3 |
| | | 2 468 | 25.6 |
| | | 3 657 | 36.0 |
| | | 4 340 | 18.6 |
| | strongly agree | 5 119 | 6.5 |
| | TOTAL | 1828 | 100.0 |
| 3) Good health is largely a matter of good fortune | strongly disagree | 1 652 | 35.2 |
| | | 2 605 | 32.7 |
| | | 3 395 | 21.4 |
| | | 4 130 | 7.0 |
| | strongly agree | 5 69 | 3.7 |
| | TOTAL | 1851 | 100.0 |

D. ATTITUDES TOWARD HEALTH CONTROL (Con't)

| | | strongly disagree | Number | % |
|---|-------------------|-------------------|--------|-------|
| 4) No matter what I do, if I am going to get sick, I will get sick. | strongly disagree | 1 | 515 | 27.7 |
| | | 2 | 632 | 34.0 |
| | | 3 | 482 | 26.0 |
| | | 4 | 143 | 7.7 |
| | strongly agree | 5 | 85 | 4.6 |
| | TOTAL | | 1857 | 100.0 |
| 5) Most people do not realize the extent to which their illnesses are controlled by accidental happenings. | strongly disagree | 1 | 179 | 10.0 |
| | | 2 | 376 | 21.0 |
| | | 3 | 876 | 49.0 |
| | | 4 | 264 | 14.8 |
| | strongly agree | 5 | 92 | 5.2 |
| | TOTAL | | 1787 | 100.0 |
| 6) I can only do what my doctor tells me to do. | strongly disagree | 1 | 739 | 40.0 |
| | | 2 | 639 | 34.6 |
| | | 3 | 342 | 18.5 |
| | | 4 | 84 | 4.5 |
| | strongly agree | 5 | 45 | 2.4 |
| | TOTAL | | 1849 | 100.0 |
| 7) There are so many strange diseases around that you can never know how or when you might pick one up. | strongly disagree | 1 | 274 | 14.7 |
| | | 2 | 490 | 26.4 |
| | | 3 | 607 | 32.7 |
| | | 4 | 303 | 16.3 |
| | strongly agree | 5 | 183 | 9.9 |
| | TOTAL | | 1857 | 100.0 |
| 8) When I feel ill, I know it's because I have not been getting the proper exercise, eating right, or managing my stress. | strongly disagree | 1 | 109 | 5.9 |
| | | 2 | 301 | 16.2 |
| | | 3 | 613 | 33.0 |
| | | 4 | 568 | 30.7 |
| | strongly agree | 5 | 264 | 14.2 |
| | TOTAL | | 1855 | 100.0 |
| 9) People who never get sick are just plain lucky. | strongly disagree | 1 | 673 | 36.2 |
| | | 2 | 575 | 31.0 |
| | | 3 | 370 | 19.8 |
| | | 4 | 145 | 7.7 |
| | strongly agree | 5 | 98 | 5.3 |
| | TOTAL | | 1861 | 100.0 |

D. ATTITUDES TOWARD HEALTH CONTROL (Con't)

| | | <u>Number</u> | <u>%</u> |
|--|-------------------|---------------|----------|
| 10) People's ill health results from their own carelessness. | strongly disagree | 1 180 | 9.7 |
| | | 2 417 | 22.4 |
| | | 3 744 | 40.0 |
| | | 4 418 | 22.5 |
| | strongly agree | 5 100 | 5.4 |
| | TOTAL | 1859 | 100.0 |
| 11) I am directly responsible for my own health. | strongly disagree | 1 25 | 1.3 |
| | | 2 54 | 2.9 |
| | | 3 426 | 22.9 |
| | | 4 681 | 36.8 |
| | strongly agree | 5 671 | 36.1 |
| | TOTAL | 1857 | 100.0 |

E. DESIRE FOR IMPROVEMENT

(Activities and Programs desired by employees)

| | <u>Number</u> | <u>%</u> |
|--|---------------|----------|
| 1. General Educational Health Seminars | 761 | 40.6 |
| 2. Individual health evaluations | 377 | 20.1 |
| 3. Physical fitness instruction | 1068 | 57.0 |
| 4. Stress Management | 1263 | 67.4 |
| 5. Nutritional instruction | 825 | 44.0 |
| 6. Weight Control | 1034 | 55.2 |
| 7. Interpersonal skills | 521 | 27.8 |
| 8. Smoking cessation | 215 | 11.5 |
| 9. Alcoholism counseling | 25 | 1.3 |
| 10. Pain management | 284 | 15.2 |