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Staff Survey

Exercise as an Individual Practice, Scope, and Need in an Academic Environment

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Background

Many health experts support the hypothesis that chronic negative lifestyles are the leading cause of illness today. Industries' acute awareness of this predicament has caused them to seek strategies to help preserve their most important asset, the employee (Baun & Baun, 1984). This is sound business practice. Poor health of American employees is costly. In 1977, American business and industry lost an estimated \$25 billion in premature deaths and \$3 billion in illness of employees. Heart attacks alone caused a loss of 132 million workdays. It costs a company \$500,000 to replace a key executive of age 50 earning \$100,000 per year. The average firm faces an annual increase of 12 to 14% in health care costs. Poor fitness, identified as the culprit, has raised costs which in turn have decreased industrial profits. Insurance represents the single largest growing cost factor in corporations (Maryk, 1982).

Other areas of poor health besides heart attacks are also taking a toll in costs. Workmen's compensation for low back pain costs employers approximately \$250 million annually. A Pacific Mutual Life study estimated an annual \$30 million cost due to poor nutrition. Alcoholic employees experience twice the rate of absenteeism compared to other employees. According to the National Interagency Council on Smoking and Health, the average one-pack-per-day smoker may cost his/her employer more than \$600 per year in otherwise avoidable costs (Teague & Mobily, 1982).

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In fact, the desk and swivel chair have proven to be the most serious health hazards for many office workers. This sedentary working condition produces unpleasant and even serious effects, such as weight problems, back ailments, cardiovascular disorders, high blood pressure, and even premature aging. Absenteeism, loss in productivity, reduced morale, and increased workers compensation are only a few of the resulting costs related to poor health (Villeneuve, Weeks & Schwied, 1983).

In the literature, most material concentrated on the corporate level response in regard to fitness for their employees, the programs which were set up, the facilities which were developed, and the evidence that our highly technological society provides for less and less physical activity and exercise. We did not find any literature that dealt with an equally sedentary group, the staff of colleges and universities and their needs and practices for exercise outside of the work environment.

A Survey

An educational institution should be concerned about the health and welfare of its staff. These people must be at their best to motivate students each day. Because of this concern, we at the University of Minnesota Technical College, Waseca, Minnesota surveyed the administration, faculty, and civil service support staff as to their practices in regard to exercise to find out what types of exercise programs have been implemented by employees where there has been no university policy for a wellness program. No part-time employees were surveyed.

A 20 item questionnaire was developed to investigate the scope of time committed to exercise; the form or type of exercise performed; the facilities and equipment available; the effect on reduced stress of job demands; and the possibility of reduced medical costs. Each survey question was answered by circling

the appropriate response. Selected questions included space for written comments by the respondent.

The questionnaire was mailed to all **full-time** people included on the college mailing list provided by the University Relations Department. Approximately two weeks after the original mailing, a reminder request was sent to all personnel. Four weeks after the reminder request was sent, responses on the returned questionnaire were tallied and analyzed.

Results and Discussion

Questionnaires were mailed to 121 full-time faculty, civil service staff, and administrators. The total number of responses was 86 (71%) of which 29 were faculty (76%); 45 civil service (67%); and 12 administration (75%). Because of the nature of the personal questions involved, the questionnaires were returned with no names. Therefore, we were unable to contact people individually to increase the number of responses as suggested by a second follow-up questionnaire according to the survey technique suggested by Dillman (1978).

Of the 86 persons responding to the questionnaire 81 (94%) felt exercise was important and 77 of 79 (97%) responses felt exercise was important for their well being. Of the respondents 15 (17%) are presently employed in a physical type job and 71 (83%) are employed at a desk job. Because of the high percentage of employees employed at an occupation where there was no or little physical activity involved, it was particularly interesting to note what their patterns and habits were to involve physical activity into their daily lives. Seven (8%) belong to a health club or recreational club and 75 (92%) have no affiliation with an organized club. An interesting and positive response came from 78 (91%) in that they participated in some form of exercise.

Twenty-eight (35%) exercised daily, 9 (11%) exercised every other day, 20 (25%) exercised 3 times per week, 17 (21%) exercised 2 times per week, and the other 7 (9%) did not fall into any of the aforementioned categories. When asked how much time was spent in each exercise session, the response was 15 for 15 minutes (19%), 28 for 30 minutes (35%), 20 for 45 minutes (25%) and 18 for 1 hour (21%). The 30 and 45-minute session seemed to achieve what is recommended by many authorities as the suggested times per exercise to be used.

The responses to the types of exercise people participated in varied. Some did a variety of 2 or 3 types of exercises per week to vary their wellness program. These were the major activities: walking 44 (54%), aerobics 25 (31%), biking 23 (28%), swimming 14 (17%), jogging 12 (15%), tennis 8 (10%), weight lifting 6 (7%), and golf 4 (5%). Other activities such as volleyball, softball, cross-country skiing, exercise trail, horseback riding, basketball, bowling and down-hill skiing were mentioned as other types of single responses in conjunction with the major activities.

Twenty-four (30%) felt their place of employment encourages their participation in an exercise program and 57 (70%) felt it was not encouraged. An even higher percent 67 (83%) were not encouraged by their supervisor or employer to exercise on a regular basis. Many employees will not become involved unless they receive encouragement from their supervisors. So if a respected supervisor becomes involved, that person opens the door to many who otherwise would have hesitated (Villeneuve, Weeks & Schwied, 1983). Although the facilities are minimal in size, a swimming pool, gymnasium, universal gym, tennis courts, free weights, and an exercise trail are available to all staff for their use. Forty-five (56%) felt the college has sufficient facilities and equipment for exercise. However, working men and women feel the responsibility to pursue family interests and obligations immediately after work. Once there, they find it very difficult to leave again for any kind of activity. Given the opportunity to exercise on-site, many previously unmotivated employees suddenly find it convenient to exercise before work, at noon, or after work (Villeneuve, Weeks & Schwied, 1983).

Perhaps the most important undertaking for the individual professional is the realization of personal susceptibility to stress and of the stress producing situation associated with work (Grossman & Heywood, 1982). Many times advancement up the career ladder means greater exposure to stresses and strains. Bitterness, alienation and low job performance often lead to dissatisfaction and eventual burnout (Grossman & Heywood, 1982). It is common knowledge that physical activity plays a significant role in stress reduction. People who exercise regularly tend to feel better about themselves and to develop positive attitudes about the necessity for physical activity. At the same time, it is not realistic to assume that physical activity is everyone's answer to coping with stress. Passive activities also can lower blood pressure, relax the nervous system, and help reduce stress. Hobbies and craft activities have always been encouraged as means of melding one's satisfaction of accomplishment with a relaxing leisure pursuit. Other approaches to dealing with stress, those of mind-directed states such as biofeedback, autogenic training, and meditation also aim to promote relaxation (Cleaver & Eisenhart, 1982).

In response to the exercise program the individual has set up for themselves, 37 (46%) felt their program has reduced stress while on their job and 44 (54%) felt that it had not. Other questions asked that perhaps might be somewhat influential along this line were: Has your exercise program helped you maintain a more positive attitude while on your job? Fifty-seven (70%) said yes, 24 (30%) said no; Do you feel because of your exercising you have more energy to complete your job? Sixty-one (75%) said yes, 20 (25%) said no; Has exercise improved your social ability? Thirty-nine (48%) said yes, 43 (52%) said no; and because of

exercising, are you able to meet new people and make new friends easier? Thirty-five (43%) said yes, 46 (57%) said no.

In the literature read, results of employee exercise programs have reported benefits of insurance discounts and lower health care claims (Crossley & Hudson, 1983). Statistics for businesses and educational institutions are no less dramatic. Employee health costs may represent as much as 25% of an educational institution's payroll (Wendling, 1985). Americans currently spend more for health care than one either national defense or social security. It seems impossible to imagine, but everyday we spend \$1 billion — not necessarily keeping ourselves healthy — but on health. If we continue as we are, we will spend twice as much in 1990. New York Telephone estimates annual savings of more than \$2 million in reduced absenteeism and lowered medical costs, just from a stop-smoking program. Massachusetts Mutual Life Insurance Company has found that a wellness program for hypertension reduced hospital stays among participants by 10% (Kilpatrick, 1984). Keelor states that with age, sick hours increased for the nonexercisers and decreased for the exercisers. Health claim reimbursements were much higher in both male and female nonexercising groups. Although absenteeism and medical test results reflect only 1983 data, the strong trends suggest that completion of more studies over several years will provide justification for health and fitness programs within the business sphere (1985). Response to the question, has exercise on a regular basis reduced medical costs for you, 50% said yes.

In response to the question, what is your primary reason for exercising, the major two responses were for weight control and to stay in shape.

Discussion

Colleges and universities are in a strong position to provide quality wellness programming with an excellent network for adult health promotion education being provided by business and industry. McLeod suggests wellness programs should cover three areas including identifying the health needs of employees, which include collecting medical claim information and assessing employees' health risk factors, living habits and attitudes; developing a program to meet those needs; and evaluating the program's results (McLeod, 1986).

After having surveyed this college as to individual practices in exercise plus taking into account the 35 full-time staff who did not respond and the 4 staff who felt exercise was not important in our daily lives, it is our hope we can promote and encourage these people to participate in an individual or group health awareness program as well as keep those individuals who are already participating to continue. Because of the availability of the fitness facilities at no cost to the employee at the University of Minnesota Technical College, Waseca to use them, it will be our challenge to encourage even more participation.

Insurance companies, private health care providers and other consultants, and businesses with successful wellness programs have begun marketing their own package programs. For example, Control Data Corporation, Minneapolis, Minnesota, and Johnson & Johnson, New Brunswick, New Jersey, both offer programs under such brand names as "Staywell" and "Live for Life" (Ritchey, 1985). We challenge the University of Minnesota, Waseca as well as other educational institutions to investigate these programs with the idea that they become a resource and/or facility available for wellness to the public and staff at a much lower charge or no charge at all for the program.

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HARMON/STORBY EXERCISE SURVEY

Please Circle Answers:

1. Is exercise important to you?
a) yes b) no
2. Do you feel exercise is important for your well being?
a) yes b) no
3. Does UMW encourage participation in an exercise program?
a) yes b) no
4. Does your director or supervisor encourage you to exercise on a regular basis?
a) yes b) no
5. Do you do some form of exercise?
a) yes b) no
6. How much time do you devote to exercise per week?
a) daily b) every other day c) 3 x's a week
d) 2 x's a week e) Other (specify) _____

7. How many minutes per day or per each time do you exercise?
a) 15 minutes b) 30 minutes c) 45 minutes d) 60 minutes
e) more than 60 minutes
 8. What is the most common form of exercise program you participate in?
a) jogging b) swimming c) biking d) walking
e) tennis f) golf g) other (please list) _____
 9. Has the percentage of your leisure activity increased over the past 5 years?
a) yes b) no
 10. Does UMW have sufficient facilities and equipment for exercise?
a) yes b) no
 11. Has an exercise program helped you maintain a more positive attitude while on the job?
a) yes b) no
 12. Do you belong to a health club or recreational club?
a) yes b) no
 13. Do you feel because of your exercising that you have more money to complete your job?
a) yes b) no
 14. Has exercise on a regular basis reduced medical costs for you?
a) yes b) no
 15. Has exercise increased opportunity for advancement either within or outside UMW?
a) yes b) no
 16. Has exercise improved your social ability?
a) yes b) no
 17. Are you able to meet new people and make new friends easier?
a) yes b) no
 18. Are you presently involved in a physical type job, or is it a desk job?
a) yes b) no
 19. Has your exercise program reduced stress on the job?
a) yes b) no
 20. If you do exercise, what is your primary reason for exercising?
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Tutorial Program Evaluation

Used for Indonesian Adult Education Masters Students

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Background

In 1979 Washington State University (WSU) signed an agreement with the U.S. Agency for International Development (AID) and the government of Indonesia. Thirty-eight faculty members from six Eastern Island universities enrolled in graduate programs at WSU as a part of that project.

Some of these Indonesians encountered serious academic problems at WSU. The Indonesian students and their advisors both identified limited English comprehension as a major problem. Student records indicated that many of the Indonesians had TOEFL Test exam scores ranging from 460 to 497. The WSU Graduate School normally requires a TOEFL score of 525 to 550 for foreign students, but made an exception to the requirements in order to expedite WSU's commitment to the Indonesian project.

Communication with the Indonesian students was especially difficult for advisors who had not previously worked with international students. The Indonesian students, enrolled in 15 to 18 hours of graduate level science courses, were expected to perform at the same level as American students. However, the major constraints to effective performance under these circumstances were (1) limited English ability plus (2) inadequate training in math and science for graduate work in the U.S.

Some Indonesian students who were accepted provisionally to graduate programs in horticulture, soils, animal sciences and agronomy, had difficulty meeting the departments' requirements. The students' formal applications to those departments were turned down due to low TOEFL Scores.

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Under these circumstances nine Indonesian students applied for admission to the Master of Adult and Continuing Education Program (MACE), a joint program between the College of Agriculture and Home Economics and the College of Education. The MACE Program is designed to accommodate students with a variety of backgrounds and academic interests. Of the nine students who transferred from other WSU departments none had previous experience in adult education. However, MACE Program faculty felt these students showed academic promise and demonstrated a commitment to work for a U.S. graduate degree.

The Indonesian students' initial difficulties at WSU were not unique. According to Lee (1980) the major adjustment problems faced by International students at U.S. universities are (1) lack of proficiency in English, (2) problems caused by differences in the educational system, (3) problems related to the complexity of the situation in terms of the number of adjustments required and the time allowed for making them, (4) problems of legal impediments to study abroad, (5) problems of academic performance, (6) problems of inadequate resources, and (7) problems of social adjustment.

Earl Leng (1980) of the University of Nebraska reported that when training international students in the U.S. a student-oriented program is more likely to produce satisfactory results than is an attempt to structure rigid, institutional frameworks that a student may or may not fit into.

The MACE Program faculty decided to create a support system that would help the Indonesian students attain academic success at WSU. The central focus of this support system was the development and refinement of a tutorial program.

Purpose

A study was undertaken to document the development and refinement of the tutorial program