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**The Role of Employers' Demographic and Socio-Economical Characteristics in  
their Decision to Introduce Sports Programs in their Companies**

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## **The Role of Employers' Demographic and Socio-Economical Characteristics in their Decision to Introduce Sports Programs in their Companies**

### **Abstract**

The purpose of this study is to determine the role of the employer's demographic and socio-economic characteristics in his/her decision to introduce and organize sports programmes in their companies. The sample of this research consisted of more than one hundred employers employing more than thirty workers each, in the districts of Rodopi, Kozani, and Thessaloniki. A survey was conducted in which the employers were asked to provide information and statistical data about the people working in their companies, as well as their own opinion concerning the introduction of sports at work. In addition, their demographic and socio-economic characteristics were recorded. The results indicated that the employers with a higher level of education make use of sports programmes in their companies more often, compared to those with a lower level of education. Sex, age and salary of employers did not affect the frequency of sports programmes at work. The employers claim that the introduction of sports activities in their companies helped reduce the appearance of illnesses and employees' absence from work due to health reasons, and the number of accidents at work. Consequently, it contributed to the increase in production, creativity and team spirit among the employees, while raising their morale, and self-confidence. Moreover, it brought about a rise in profits and improved the image of the company offering such programmes. A research focus on the legal status, organization and establishment of sports activities at work could provide valuable information on whether health and safety measures are applied according to the provisions of the law.

**Keywords:** sports activities at work, employers, sports, health, productivity, health and safety measures at work.

## **The Role of Employers' Demographic and Socio-Economical Characteristics in their Decision to Introduce Sports Programs in their Companies**

### **Introduction**

The consequences of low productivity among workers on their company in addition to the national economy of the USA (Pfeiffer, 1998), posed a major problem for company managers, who came to the conclusion that an increase in productivity cannot be achieved without the introduction of new incentives for their employees. One of the incentives was the establishment of sports programs, aimed at the increase in the employees' effectiveness (Bates, McClusky, Bernard & Gieske, 1998).

The first companies offering sports activities to their employees appeared in the USA in late sixties (Shephard, 1986). Baun & Baun (1984), report that more than 50,000 American companies offer sports activities to their employees and there are more than 3,000 consultants active in this field. The employers focus was to improve their employees' state of health, which in turn would reduce expenses and the increase profits for their companies (Wanzel, 1994). The improvement of the employees' health through the establishment of sports programs resulted in profits that were sometimes bigger than expected (Cardinal, Cardinal, Drabbs, Krause, Maddalozzo, Martin, Melville & Singleton, 1998). The productivity of workers increased while, the expenses for medical care were reduced. In addition, the relationship between the employer and the employees improved. Consequently there were fewer strikes and accidents at work, faster recuperation of sick employees, and product and service improvement (Kaman, 1987).

Although at the beginning these programs were only a privilege for high-ranking employees, the employers soon realized that the introduction of sports facilities for all workers would result in an increase of production and reduce expenses (Blair, Pirerchia, Wilbur & Crowder, 1986). According to Bertera (1990a), in companies that have adopted sports programs, employees are up to 18% less frequently absent from work. According to Pfeiffer (1998), employees who participate in such programs are more favorable towards their employers and high-ranking employees. Shephard (1989) also claimed that participation in these programs improves the image of the companies, which made use of them, thus creating a greater demand for them by job seekers.

Shephard (1986) also stresses the productivity of companies, which adopted sports programs increased by 7%. According to Danielson & Danielson, (1982), and Shephard, (1986), every dollar spent on sports programs for the employees by their

company, resulted in a profit of up to \$5. The employees of those companies, too, profited by participating in the sports programs. More precisely, there were fewer cases of heart diseases, high and low blood pressure as well as obesity, and cholesterol problems were reduced (Bertera, 1991). There was also less tension and stress, compared to employees who did not participate in sports programs (Bertera, 1990b). Moreover, they tended to consume less alcohol and smoked less, while hypertension at work declined (Meyers & Donham, 1982).

Sports programs gave companies better results when they were included in a broader scheme, which focused on the benefits of employees (Kronenfeld, Jackson, Blair, Davis, Gimarc, Salisbury, Maysey & McGee, 1987). In other words, it was shown that sports programs combined with seminars concerning health matters, smoking and healthy diets, can result in positive behavior changes and healthier lifestyle (Kronenfeld et al., 1987). Moreover, another very important consequence of the introduction of sports programs at work was that employees adopted healthier living habits, and adopted a “for-life” participation in similar activities, which they later passed on to their children and families (Blair, Tritsch & Kutsch, 1987).

The results were less spectacular in companies that forced their employees to participate in sports programs. This is mainly true of Japan, where participation is mandatory (Shephard, 1989). In developed western countries, the participation of employees in sports programs is voluntary, and they can decide for themselves whether they want to exercise either during their break (e.g. lunch-break) or after they have finished work (Rost, Connel, Schechtman, Barzilai & Fisher, 1990).

Nowadays, the number of employers introducing sports programs for their employees are rising (Blair et al., 1986). The governments of developed countries have shown their support for such programs by providing tax exemption for the companies that make use of them or by organizing campaigns pointing out the necessity of exercise for people of both sexes and all ages (Shephard, 1992). The American government believes that the participation of employees in sports programs at work can contribute to the reduction in the number of deaths due to heart attacks (Blair, Booth, Gyarfas, Iwane, Marti, Matsudo, Morrow, Noakes & Shephard, 1996). The European Sports Committee have decided on a campaign, which would stress the benefits of exercising for health, thus motivating companies to introduce sports programs for their employees (The Council of Europe’s Work on Sport, 1990).

Nevertheless, such programs are either inadequate or non-existing in Greece, although there are laws dealing with health matters at work (Gougou, 1995). So It appears as a necessity that better organized sports programs at work be introduced in order to be more beneficial for workers. (Gougou, 1995).

### **Problem Definition**

The purpose of this study is to record the opinions and the profile of Greek employers concerning the establishment of sports programs at work. It is intended to help the improvement of the health condition of Greek workers, which would result in production increase, longevity, satisfaction from work, fewer accidents, reduction of prevention and cure costs, while at the same time providing and preserving high standards in health and exercising services. The purpose of this study is also to record any form of exercise at work, in order to examine if it satisfies the needs of the employees, and whether the existing programs have the expected results as far as the health condition of the employees and the company's profits are concerned.

## **Methodology**

### **Research Sample**

The sample used in the research consisted of 100 employers active in the areas of Rodopi, Kozani and Thessaloniki, who employed more than 30 workers. They were asked to give information and statistical data concerning their employees as well their opinions on the use of sports programs at work. The characteristics of the sample (i.e. employers) are shown in Table 1.

**Table 1.** Descriptive data of the employers' sample with connection to their sex and age.

<b>SEX</b>	<b>N</b>	<b>AGE</b>	<b>AGE</b>	<b>AGE</b>	<b>AGE</b>	<b>AGE</b>
		18-25	26-35	36-45	46-55	56-65
<b>MEN</b>	82	8%	10%	22%	22%	20%
<b>WOMEN</b>	18	2%	0%	6%	10%	0%
<b>TOTAL</b>	100	10%	10%	28%	32%	20%

### **Procedure**

The employers were given a questionnaire. At first, a pilot procedure was conducted among 30 employers in order to anticipate any possible problems in the comprehension of the questions. Thus, it was possible to avoid any methodological mistakes and also to make sure that there were no questions left unanswered by the employers.

The aim of the questionnaire was to collect data such as a) the demographic data of the employers in order to determine their socio-economic profile, b) the frequency of illnesses and accidents, c) the number of days of absenteeism due to illness, d) the kind of illnesses, e) the medical expenses, f) the cost resulting from the employees' absence from work, g) the existence of any sports programs and h) the employers opinion concerning the way such programs should function.

The internal consistency of the items of the questionnaire was tested using Crombach's alpha reliability coefficient. The final alpha coefficients ranged from .73 to .93, where an alpha coefficient of .70 is generally regarded as the minimum acceptable value.

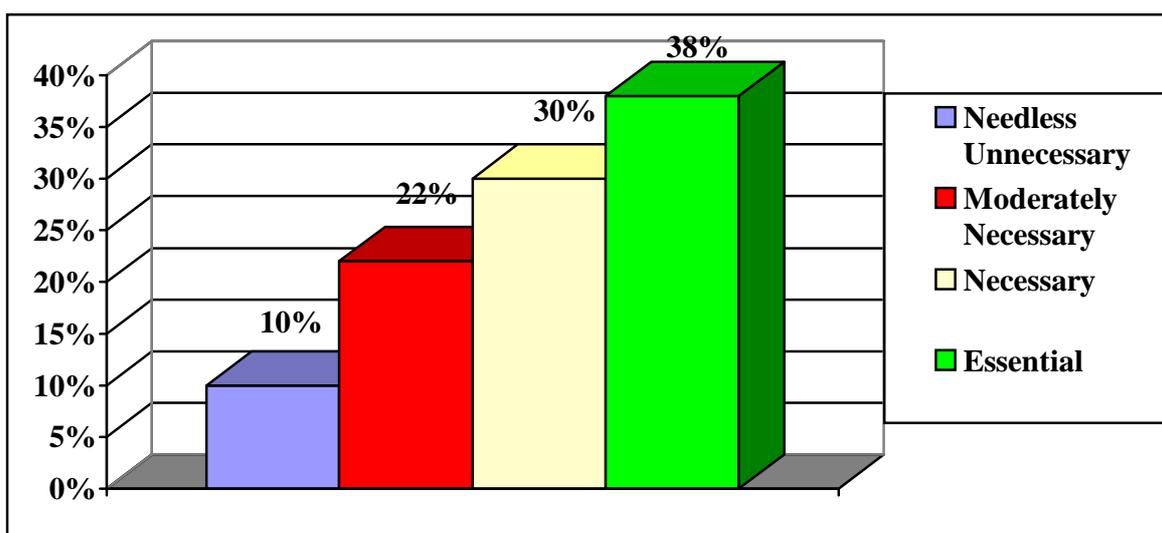
The data analysis was carried out in the statistical program SPSS 8 for Windows, using the following methods: T-TEST Independent samples, for the comparison between the average values of two samples, and in order to find out if there was a statistically significant difference. One-way analysis (Anova) and Scheffe tests were conducted in order to locate any differences in the levels of the examined factors. Crosstabs and Chi-square indexes, for the location of any possible connection among the variables, as well as for the discovery of any statistically significant differences among them. Moreover, Frequency-analysis was conducted to check the frequency of the appearance of data, and Descriptive-statistics for the quantitative analysis of the variables.

### **Results**

The availability of sports programs at work was not in any way connected to the gender or age of the employer ( $\chi^2=0.11$ ,  $p>0.05$ ; and  $\chi^2=3.555$ ,  $p>0.05$ ). However, the level of education played an important role ( $F_{5,94}=1.29$ ,  $p>0.001$ ). In order to check the latter, the Scheffe post-hoc was employed and some statistically significant differences were revealed: high-school graduates ( $M=1.13$ ,  $SD\pm 0.35$ ) and Lyceum graduates ( $M=1.66$ ,  $SD\pm 0.48$ ) made use of sports programs in their companies less frequently than the employers with post-graduate degrees ( $M=1.95$ ,  $SD\pm 0.22$ ). The latter appeared to support the use of sports programs at work through participation.

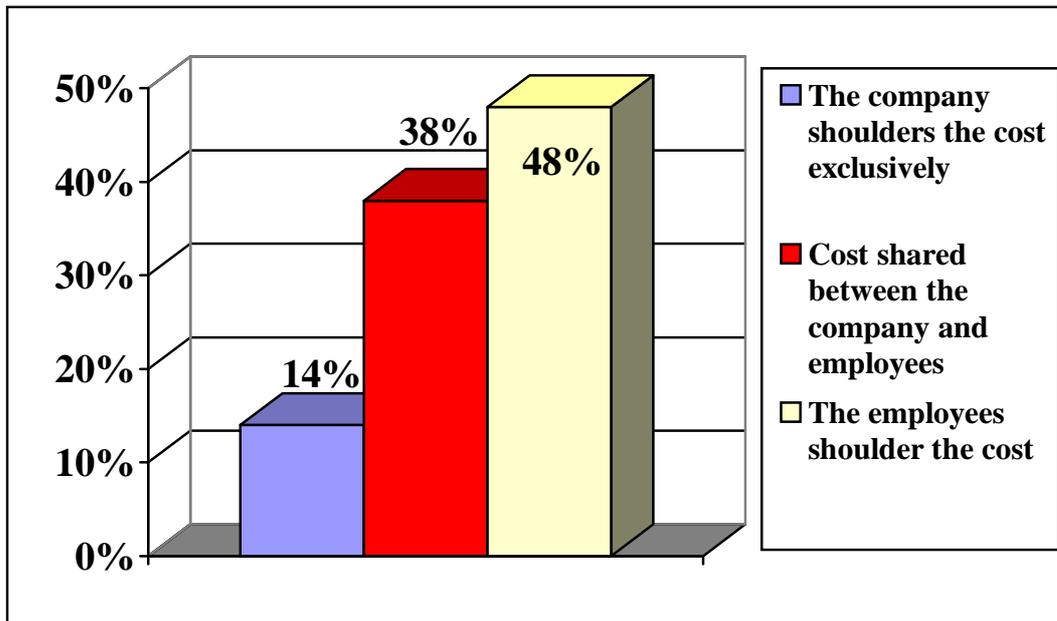
According to employers the most frequent health problems faced by the employees, testified by the companies' physician, are heart diseases (35%), blood pressure (38%) and cholesterol (32%), while more than 65% have problems with their back or neck. In addition, 27% suffer from migraines while another 22% have problems with sleep. Finally, there are cases of asthma (18%), chronic bronchitis (16%) as well as knee and wrist aches (22%).

About 85% of the employers claim that the absence of their employees from work due to health problems affects the company profits and reduces its productivity and competitiveness. Furthermore, it increases the expenses, as new employees are required in order to substitute for the sick ones. Nevertheless, only 38% of the employers believe that sports programs are indispensable to the improvement of the company profits. About 30% of the employers believe that the introduction of sports programs is simply necessary, whereas 22% consider them to be either moderately necessary (22%) or almost needless (10%) (Figure 1).



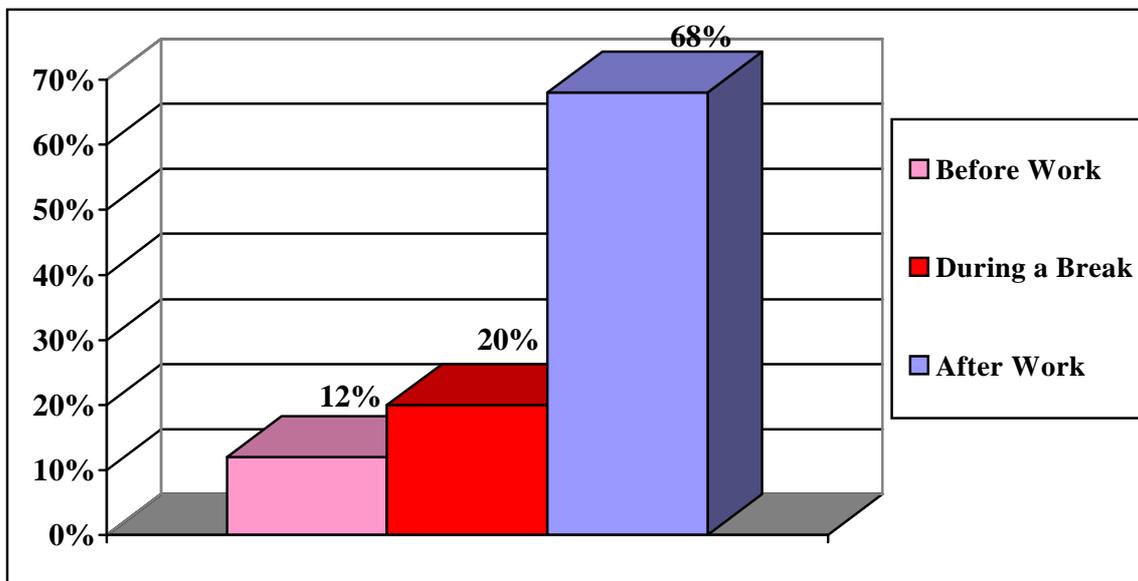
**Figure 1.** The employers' opinion concerning the usefulness of sports programs at worksite.

As for the expenses for sports programs, 14% of the employers believe that the company itself should finance them, while about 48% believe that they should be financed by the employees. Another 38% answered that both the company and the employees should cover the expenses (Figure 2).



**Figure 2.** The employers' preferences concerning the functioning of sports programs at worksite.

As far as the time such a program would take place is concerned, 68% of the employers think that it should take place after work, while 20% hold that the best time would be during a break. Finally, 12% claim that the employees should participate in sports programs before they start work (Figure 3).



**Figure 3.** The employees' preferences' concerning the application of sports programs with connection to working hours.

Despite the significant importance the employers attribute to their employees' health as well as to the increase in company productivity and profits, only 22% of them have established some kind of sports program at work, whereas 30% claim that such a matter is part of their company's future plans. The most frequent sports programs introduced in companies include aerobics (85%), stretching exercises (70%), weight lifting (63%), dance (45%) and basketball (32%). Also, 67% of the companies that have adopted sports programs at work have included in them some kind of outdoors-recreational activities.

### **Discussion and Conclusions**

The analysis of the results indicated no difference in the organization and functioning of sports programs at work as far as the employers' sex is concerned. So, it seems that both male and female employers share the same attitude towards the necessity, or otherwise, of such programs in their companies. The same can be said for the age of the employers, since there were no statistically significant differences. Perhaps, such sports programs should appear more frequently in companies run by younger employers, who would try to put into practice new theories aiming at bigger profits. Still, no such differences appeared in this research.

However, a big difference concerning the introduction of sports programs for the employees was evident in relevance to the employers' level of education. The employers with a post-graduate degree had significantly more positive opinions than the high-school degree holders. The latter utilized sports programs in their companies much more often, while such a thing was quite rare among employers with a high-school degree. It appears employers with post-graduate degrees are more aware of the significance of such programs and therefore, have been utilizing them in order to reduce the expenses and increase the profits of their companies. On the contrary, employers with a lower level of education find it hard to appreciate the significance of such programs and they hesitate to finance them, not being able to realize how they could prove profitable for their companies.

Moreover, as the analysis of the results indicates, the functioning and application of sports programs in companies can and does contribute to the reduction of the company's expenses. Subsequently, the employers providing their employees with such programs reported smaller expenses thanks to the smaller frequency of sick leave

compared to their colleagues with no sport programs in their companies. The analysis also indicates the participation of employees in the sports programs of their company helps maintain the production at acceptable levels thanks to less frequent and shorter sick leave in contrast with the companies that do not provide their employees with sports programs. Similarly, Siscovick, Laporte & Newman, (1985) Shephard, (1986) and Rost et al., (1990) have had the same results, as far as the connection between the application of sports programs at work and the reduction of expenses, as well as the increase in the employees' productivity are concerned. More precisely, Siscovick et al. (1985), reports that physical and recreational exercises at work are a major requirement for the improvement of physical condition and health, having a positive influence on the employees' performance and productivity. Shephard (1986), claims that every dollar spent on such activities, brings the company a profit of up to \$5. So, the promotion of sports programs in companies could be described as an intelligent company policy, aiming at the increase in profit and its employees' productivity.

The data analysis also concluded that the employers were divided in connection to the introduction of sports programs for the employees in their companies. This division was related to funding the programs. Only a small percentage of the employers believed that these programs should be completely financed by the company and take place on the company's premises. However, most of the employers believed that if they ever introduced sports facilities in their companies, they should be financed by both the employees and the company or even exclusively by the employees. So, the results indicated that the employers, especially those who are unaware of the profit increase resulting from the application of sports programs at work, do not wish to invest on them. Still, the employers who know that such an investment would contribute to the increase in their company's profit appear to be willing to provide the funds for the introduction of sports programs at work, without even forcing the employees to participate in them.

The analysis of the results also showed that the employers who are in favor of sports programs at work believe that their establishment may contribute to the reduction of sick-leaves, the prevention of accidents at work, the increase in the employees' productivity, their effectiveness and creativity at work, and improve the team spirit among them. Also, it could contribute to the increase in company profits, the employees' morale, their self-confidence, while at the same time it would help reduce stress at work. The employers who do not introduce sports programs believe that exercise and participation in such programs have only a minor or moderate effect on the above factors. This

different approach may be due to their unawareness of the beneficial results sports programs may have with connection to the above-mentioned factors. It is also possible that those employers with a negative attitude towards such programs simply try to find an excuse for not having introduced similar programs in their companies.

The employers' preferences concerning the time period in which sports programs should take place, were the following: only 12% of the employers think that the sports programs should take place before work, while 20% believe that they should take place during a break. The majority of employers (68%) think that the most suitable time is after work. An explanation for this result could be the fear that the participation of the employees in a sports program before or during the working hours could have a detrimental effect on their productivity.

The most preferred kinds of sports programs applied in Greek companies were focused on: aerobics/step aerobics 85%, physical exercises and stretching 70%, outdoor recreational activities 67%, dance 45%, basketball 32%, weight-lifting 63%. It should be noted here however, that the success of such programs is heavily depended on the cooperation among doctors, dieticians, gym instructors and employers.

In sum, the conclusion of this study depicts that: (1) employers with high level of education, utilize sports programs in their companies more often, compared to employers with a lower level of education. Sex, age and monthly income do not affect the presence of sports programs in companies; (2) Employers report that the application of sports programs in their companies leads to increase in company productivity and profits; (3) Employers believe that the application of sports programs in their companies contributes to the reduction of sick-leaves and accidents at work, to increase in productivity, effectiveness, and creativity. It also boosts the team spirit, raises the employees' morale, and improves their self-confidence. Moreover, it increases the company profits and improves its image; and (4) 12% of the employers believe that the sports programs should take place before work, 20% of the employers think that they should take place during a break, while 68% believe that the best time is after work.

It is suggested that future research may benefit from a longitudinal approach which would examine the direct and indirect effects of employees' health improvement on the company's finances. For example, fewer sick leaves, medical expenses due to illnesses and accidents at work; the increase in employees' productivity, effectiveness and creativity on a daily basis, as well as the reduction in recruiting and training costs.

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