



## EVALUATION OF A PROGRAM OF LABOR GYMNASTICS IN A COMPANY IN THE MUNICIPALITY OF ITAPECERICA DA SERRA-SP

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### ARTICLE INFO

#### Article History:

Received 17<sup>th</sup> January, 2018  
Received in revised form  
20<sup>th</sup> February, 2018  
Accepted 19<sup>th</sup> March, 2018  
Published online 30<sup>th</sup> April, 2018

#### Key Words:

Labor gymnastics;  
Quality of life;  
Health promotion;  
Company.

### ABSTRACT

This research aimed to discuss the meanings and effects of work gymnastics on the life of the employees of a company in the state of São Paulo, Brazil. The methodology followed a qualitative-quantitative approach, raising the perception of 114 participants through a questionnaire with closed and open questions. The sample involved employees from all sectors of the company present in the class in which data collection was performed. The results showed that the participants generally showed improvement in the level of stress (81%), in the relationship with colleagues (88%), in the willingness to work (87%) and in the postural condition (79%). Although they attest to the benefits and improvements as a result of this practice, many (54%) can not do physical activities outside the company. As main suggestions for improvement of the program, they suggest more classes with massage (43%) and stretching (40%), which harmonizes with the need for physical and mental relaxation that they emphasize. We conclude that the gymnastics of work is a factor of extreme relevance for the promotion of the health of the professional in the company.

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**Citation:** Bruna Roberta Barbosa Arruda and Cristina Zukowsky-Tavares, 2018. "Evaluation of a program of labor gymnastics in a company in the municipality of itapecerica da serra-sp", *International Journal of Development Research*, 8, (04), 20152-20156.

### INTRODUCTION

Labor gymnastics; quality of life; health promotion; company.  
The genesis of this research is related to the work practice of one of the researchers in the corporate environment, where she coexists with employees of companies to promote with them the awareness of the quality of life and health promotion in this environment. This research took into consideration the business organizations and their concern for the well-being and health of the employee, implementing programs that stimulate a more active life and adoption of healthy habits, thus increasing the possibility of quality of life and general well-being of the professionals in service. This research topic was selected based on the reading of different investigations in the area of health and quality of life, specifically with regard to work gymnastics in the corporate environment, and in this specific aspect there is a marked need for discussion expansion. Since gymnastics is an important tool for the promotion of the health and quality of life of the employee in

service, we believe that this research assumes a considerable social relevance. It was hypothesized that a worker satisfied with his or her social, psychological and physiological development may be better qualified as a whole to solve different professional and personal dilemmas imposed on him if only he has at first instance the specific competence and field of activity. We had as a research problem the discussion of meanings, benefits and impressions about work gymnastics from the perspective of the subjects involved, reflecting on aspects of quality of life in the corporate environment and aiming to analyze meanings, impressions and effects of work gymnastics from the perspective of participating professionals.

#### Incursions in history and delimitation of concepts

The first labor gymnastics record (GL) dates back to 1925 in Poland, when it was called gymnastics. In 1928 it had its first implantation in Japan with workers of a mail that practiced preparatory work gymnastics. "On November 1, 1928, in commemoration of the inauguration of Emperor Hirohito, the practice of Radio Taissô (gymnastics by radio), adopted by companies, services and schools was regulated in Japan"

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(Lima, 2008, p. 24). We should also mention countries such as Belgium and France, which have a history of pioneering the adoption of work-related gymnastics (Sampaio and Oliveira, 2008). According to Figueiredo and Alvão (2008), labor gymnastics was introduced in Brazil in 1969 at Ishibrás in Rio de Janeiro, but from the 1990s it resurfaced with full force in several regions of the country. Workplace gymnastics can be defined as planned activity and applied in the workplace during work hours. As the moment when workout is performed, your goals change. The preparation takes place in the first hours of work, aiming the preparation, heating and stretching of the musculature, to avoid muscular strains and occupational diseases. Compensatory work gymnastics is performed during the working hours and aims to prevent fatigue, being more recommended for those who perform repetitive movements, activities with muscular overload or when work is stressful. Finally, the relaxant happens at the end of the day and is better suited for those who attend the public, in order to overcome the accumulated tensions (Mendes; Leite, 2008). In Lima's expression (2008, p. 28), the concept of work gymnastics expands to "a set of physical practices elaborated from professional activities carried out during the working day in order to compensate the structures most used at work, relaxing and toning them, and enable those that are not required."

The results of a review study conducted in the Scielo and Pubmed databases with time cut between the years 2003 and 2013 from the search terms "workers' health", "workplace" and "work gymnastics" the results suggest that workout may be a potential form of intervention to minimize health problems in the workplace. Even so, the study reports the lack of research that evidences the effect of GL and points to the need for other studies, in different workplaces and in different populations of professionals (Serra *et al*, 2014).

Considering the previous definitions, as well as the readings on the subject, can still be considered a "physical activity performed during the workday, with compensatory exercises to the repetitive movements, the absence of movements, or the uncomfortable positions taken during the period of work" (Figueiredo; Alvão, 2008, p.69). The work gymnastics as physical activity seeks in its objectives the improvement of the quality of life from the empowerment of capacities like balance, flexibility or strength (Bañuelos, 1996). The benefits of gymnastics are physical, psychological and social for the worker and there are many advantages to the company, such as effective improvements in working environment, healthy and happy interpersonal relationships, which help the employee to produce more and better. The main points noted with work-related gymnastics are the decreases in the occurrence of work-related absences due to medical reasons and also the decrease in work-related accidents (Bañuelos, 1996; Lima, 2008; Mendes and Leite, 2008; Lisboa *et al* 2016). In the expression of Goedert and Machado (2007), in the midst of all the changes that occur in the market, high competitiveness and pressures for good results cause organizations to look for programs that keep employees motivated in the work environment. Another point that deserves to be highlighted is that most of the companies seek to implement Labor Gymnastics and Ergonomics, investing in the quality of life of their professionals in a more economical, efficient and less traumatic way. Health projects and quality of life in the company are now one of the main actions aimed at the prevention of problems arising from the exercise of work that,

under inadequate conditions, can cause, due to excessive work rhythm, great evils to employees' health (Sampaio, Oliveira, 2008).

### **In this way it is also important to note that**

In addition to recovering and / or maintaining the range of movement that people naturally possess, it offers a new space for quality of life, health and leisure, because it is performed spontaneously and creatively by the worker in the environment and work schedule. Therefore, GL's objectives are the prevention and rehabilitation of the diseases that repetitive, monotonous and stressful work can cause to workers (Mendes e Leite, 2008, p.3). Studies discuss that Individuals who practice gymnastics can present greater regularity in the weekly practice of physical activity in leisure. However, when investigating 2225 industrial workers in Rio Grande do Sul, 39.5% of them had an interest in physical activity in leisure activities and 38.8% had physical activities at least once or twice a week. Thus, we found that less than 40% actually practice physical activity and this can be done only once a week. Among these workers, less than 50% were enrolled in GL, with a greater number of women and a higher educational level (Rossato *et al*, 2013). It is observed that more and more the relevance of studies that establish an interface between the practice of GL in the company and the investment of the professional in a healthier lifestyle.

## **MATERIALS AND METHODS**

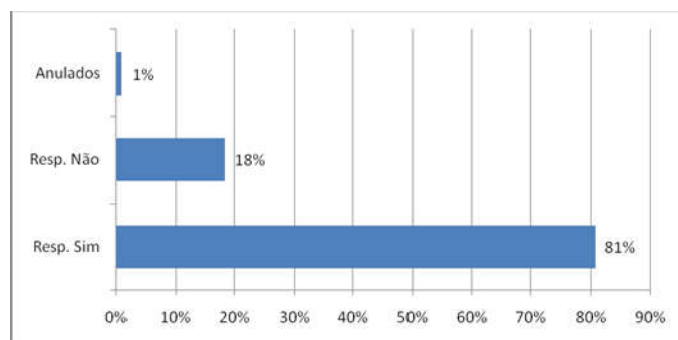
It was a qualitative - quantitative questionnaire whose data collection instrument was a questionnaire containing 10 questions, 2 of which were open and 8 were closed, with a central focus on recording the participants' views and opinions on the meaning attributed to work gymnastics in the work environment, its benefits and suggestions for the improvement of the program. There was in the research a special care with the ethical issues involved in works of this nature and all participants were previously informed about the intentions of the investigation, understanding that everyone could participate freely, having their identities preserved. Each collaborator who agreed to participate in the investigation signed the Free and Informed Consent Form. We also request the permission of the company as a whole by means of a Letter of Presentation and Acceptance that was signed by the administrative manager of the selected company. We first performed a pre-test with seven employees from different sectors, shifts and academic training of the female and male sexes. The questionnaires were applied to employees of the morning, afternoon, evening and intermediate sectors of the warehouse, shipment, laboratory, factory, administrative, cleaning and maintenance sectors. Checking the effectiveness of the pre-test the research had its beginning. 114 forms were used with the research questionnaire, and the employees themselves brought their pens. This was the total number of subjects who agreed to participate in the study. The questionnaire was applied in the company's cafeteria at the time of the labor gymnastics class. The application of this questionnaire was given by one of the researchers, who provided the instructions for its correct completion. The analysis of the empirical data was carried out by means of statistical treatment of the closed questions and analysis of the discourse and construction of categories of analysis in the open answers. The objective data was analyzed using the Microsoft Office Excel 2007 program.

**RESULTS AND DISCUSSION**

We analyzed the responses of 114 research participants of both sexes, being 40% male, 58% female and 2% without specific identification. The mean age of the sample was 25 years for males and 30 years for females. Among the respondents who identified their training in the questionnaire, it was found that most of the employees (68%) finished high school, followed by 18% with elementary education and only 5% with higher education. These professionals worked in the morning (37%), late (35%), night (14%), intermediate (11%) and 3% did not respond. The largest number of collaborators in this research worked in the industrial plant (68%), 13% in the laboratory, 7% in the administrative sector, 4% in cleaning, 3% in maintenance and 5% did not inform the work sector. Most of the participants performed compensatory gymnastics, which occurred in the middle of the work (30%). When asked if they felt motivated to take part in the work-related gymnastics classes in the company, the subjects were practically unanimous (96%) when affirming that they felt motivated and 88% emphasized that the relationship with their work colleagues improved with the accomplishment of physical activities together. In this way, the company's workforce collaborated to intensify the ties of interpersonal relationship between employees, making the work environment more pleasant and welcoming, which can affect not only the professional's quality of life but also the productivity of the company, as it ensures João Ricardo Oliveira in his book on the practice of labor gymnastics:

Work gymnastics, which aims to promote health and improve working conditions, in addition to biopsychosocial preparation of the participants, contributes directly or indirectly to the improvement of the interpersonal relationship, not to mention the reduction of work accidents, and the reduction of injuries by repetitive efforts and, consequently, increasing productivity with quality (Oliveira, 2008, p.47).

In the opinion of 81% of the research subjects, labor gymnastics collaborated with the improvement of problems related to stress at work (Figure 1).

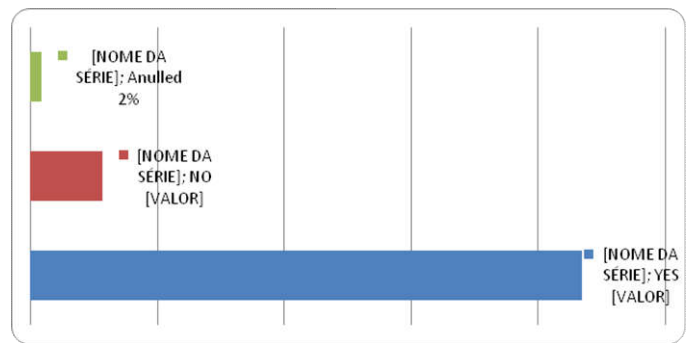


Anulled: 1% / NO 18% / YES 81%.

**Figure 1. Contribution of work gymnastics to reduce stress at work**

Bearing in mind the problems caused by the sedentary lifestyle, studies infer that GL programs become essential so that we can maintain the well-being of the workers, bringing to everyone better accommodation and comfort so that the levels of stress and occupational diseases can be reduced (Serra *et al.* 2014). From the perspective of the participants, labor gymnastics collaborated (Figure 2) with an improvement in the willingness to work (87%). This statement is confirmed in

Table 1 below when they note that the disposition and motivation for work are the main benefits provided by it.



**Figure 2. Contribution of work gymnastics to work at work**

Regarding the improvement in the postural condition due to the workforce, 79% of the employees also point out that there were contributions in this direction. Prior to engaging in workplace work-related activities at the company, 49 percent of employees did not engage in physical activity, and when asked in the survey in this regard, the percentage of employees who do not do activities outside the business environment has increased. 46% of participants who did physical activities outside the company before work gymnastics fell during the data collection period to 39%. We can infer from this negative picture that although participants value and attest to the benefits of gymnastics in the workplace, they still can not extend this value to everyday habits. Most of those surveyed (95%) believe that workout can provide benefits for their personal and professional lives. When they were invited to describe in detail the main benefit, the research subjects expressed with great emphasis (45.7%) the relaxation. The excess of activities and work unleashed by the frantic rush of competitiveness, survival and capital accumulation in the contemporary world makes the worker yearn for a moment of relaxation for the body and also for the mind:

Muscle relaxation is related to stress, this, in turn, is often unavoidable and carries as a physical and mental strain. Our body receives stimuli of all forms, generating a generalized reaction. Some people feel affected in a way detrimental to health, decreasing their condition in relaxing the body after the end of a stressful time. As stated by several scholars, "body, mind and spirit" are inseparable and, even with the advancement of medicine, the influence of emotional health on physical health is increasingly common (Lima, 2008, p. 154).

**Table 1. Main benefit of work gymnastics from the perspective of the participants in research**

Profit	Percentage
Relaxation	45,7
Provision and motivation for work	19,6
Health and quality of life	12,1
Body posture	11,2
Interaction with pars	3,7
Incentive to the practice of physical activities	1,8
Relaxation and humor	1,8
Self Esteem and Good Mental Stability	1,8
Ergonomics	0,9
Anulled	0,9

The disposition and motivation for the work follow the relaxation as the main benefit of the gymnastics from the perspective of the participants. It is interesting to note that the

company's investment in the well-being of its employees through these actions results in improvement of the productivity of each sector and also the disposition and attitude of the professional in his work environment. It is in this direction that Dias (1994, quoted by Martins, Duarte, 2000) points out that labor gymnastics reduces the number of work-related accidents, prevents muscular fatigue, corrects postural defects, increases disposition and motivation when starting work and return to it and promotes greater interaction in the work environment as a whole. An essay produced from a review of the literature in the databases Scielo, Google Academica and Lilacs and some books in the period between 2000 and 2013 analyzed the relationship between work gymnastics and the quality of life of the worker. The results indicated that GL in the literature has been associated with one of the intervention measures to combat physical and emotional disturbances in worker health. There was scientific evidence that the inclusion of constant physical activity in the organizational environment elevates the workers to a climate of motivation, personal and social satisfaction, besides generating the necessary physical condition for the development of the tasks with greater efficiency and quality (Lisbôa et al, 2016).

In commenting briefly on what they represent, what the meaning of work-life gymnastics in their lives, the participants emphasized in order of importance the following words and expressions: benefit to health (65%), relaxation (25%) and integration with colleagues 10%).

The subjects also opined in the election of the type of activity that they appreciated most and that also collaborated with their general well-being (Table 2). In harmony with the main benefit of work-related gymnastics in their work environment already described by the respondents as relaxation, they continue to affirm the importance of this result for their life by preferentially choosing massage (53.8%) as the most appreciated activity for your well being. In this direction, Valquíria Lima discusses that "massage becomes an important tool in the application of work gymnastics because it is a prophylactic and therapeutic treatment, combating and preventing bad postures, fatigue and muscular pain, stress, anxiety among others" (Lima, 2008, p.229).

**Table 2. Types of activities most appreciated and that contributed to the well-being of participants in research**

Activities	Percentage
Massage	53,8
Stretching	36,4
Relaxation	6,7
Walking	4,8
Activities with a lot of body movement	0,96
Anulled	3,8

### Final Considerations

The participants of this research were 114 professionals from a company in the municipality of Itapecerica da Serra-SP. The ethical care was considered obtaining the authorization of the company for the study and of each participant through the Term of Free and Informed Consent. These employees were distributed almost equally among men and women between the ages of 25 and 30, respectively, with a majority of high school students (68%). From the results discussed and analyzed, it was possible to conclude that the participants generally

showed improvement in the relationship with their colleagues (88%), in relation to the stress level (81%), the willingness to work (87%), and the condition postural (79%). Most of the investigated ones also emphasize that there are benefits in the labor gymnastics (95%) and that the main one of them is the relaxation (45,7%). Despite highlighting all the benefits and improvements experienced in a workplace workout program in the company, most participants (54%) of the research still can not meet the challenge of performing physical activities outside the work environment. Work gymnastics in the conception of the participants has meant the improvement of the interpersonal relationship, and its main benefit is to relax, triggering concrete effects in the improvement of health, through the investment in the style and quality of life of the worker. Taking advantage of the impressions described in the optics of the subjects researched, we suggest the expansion of labor gymnastics programs and, if possible, highlighting activities with massage and stretching that contribute to the physical and psychological relaxation of the workers. Being properly introduced and monitored, GL can be the starting point to awaken changes in the worker's lifestyle, increasing not only the profitability of the company, but above all by giving a higher quality to the personal and professional life of those who participate. We conclude with this investigation that the work gymnastics is an element of extreme relevance for the promotion of employee health in the company and we suggest new studies that focus on the evaluation of its effects.

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