

97 - ASSESSMENT OF THE IMPACT ON THE IMPLEMENTATION OF A WORKPLACE EXERCISE PROGRAM: AN EXPERIENCE AT THE CENTRO UNIVERSITÁRIO FEEVALE-CAMPUS I

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INTRODUCTION

Changes which occurred in the modern world have affected men as social beings even modifying their value as productive beings and the satisfaction level obtained through the tasks they perform. Since the invention of the wheel, the conquest of space, and the technological innovations, the insertion and maintenance of the working men in the work market have been modified as their "life style has changed substantially from the agricultural to the industrial era [...] The industrial automation, the computer technology have frequently disregarded the most intense physical activities" (MILITÃO, 2001, p. 21). Men are both agents and aims of the technological conquests as they create, change and implement new concepts and values in the same proportion that they are affected by such factors, as well as the environment around them, including the working one. On one hand, the advances of the modern world brought positive changes in our lives, adding up more comfort, promptness and quickness while performing any tasks. However, on the other hand, they may also cause harm to mental, physical and spiritual health mainly when they are used equivocally and in excess.

At work, one of the tools to promote quality of life is to introduce workplace exercises. In conceptual terms, workplace exercise is planned and applied during working hours. In order to value and encourage physical activities as a way to promote health and professional performance, considering that "[...] by reducing sedentary occupation, controlling stress and improving quality of life, improvement in professional, personal, and social performances will happen naturally" (Lima, 2005, p.8). Implementing the workplace exercise is essential to value the employees' quality of life and to put some energy in the company by relating it with the management new concepts. Considering the increasing concern by the companies with their employees' health, it becomes necessary to spread knowledge and results obtained by the workplace exercise programs. Thus, it is possible to socialize knowledge leading it to entrepreneurs to make them aware and sensibilized to the importance of valuing their employees by offering them projects, which will allow better quality of life at work. Whereas, it is fundamental to mention that in the academic ambience there is still too much work to do in that sense, imposing some new programs with different visions, consolidating more and more the practice of workplace exercises and the work rendered by a physical education professional.

Considering this scenario which values the quality of life increasingly at work or in DLAs (Daily Life Activities), this article aims to report the experience and the outcomes related to the introduction of the Workplace Exercise Program at the *Campus I, Centro Universitário Feevale*, in addition to understand the changes perceived by the people involved, to verify the results referring to the reduction of pain and discomfort among the practitioners, as well as to assess if this practice has some influence on the adoption of a healthy life style.

METHODOLOGY

This study was characterized as an *ex-post-facto* one with an analysis and discussion involving data based on qualitative and quantitative researches. This *ex-post-facto* research is the one that refers to "from what is done afterwards" (CAUDURO, 2004, p. 22). Through the database analysis of the workplace exercise program in *Feevale*, the impacts on the practitioners' quality of life were identified considering the pain/discomfort indices, the practice of physical exercises and care taken with health habits, as well as the satisfaction indices related to the project, thus characterizing the data collection as quantitative. To assess the localization and intensity of pain/discomfort of the participants before and after their participation in the program, the Corlett and Bishop diagram was applied (1976).

The qualitative approach was used for questions aiming at a more extensive study of the theme and the search for answers through interviews with the employees and practice observations. For this part of the study, nine individuals, who were participating in the program, were interviewed. Data triangular phase was characterized as being theoretical, resourceable and reflexive, relating and interpreting all references and materials available.

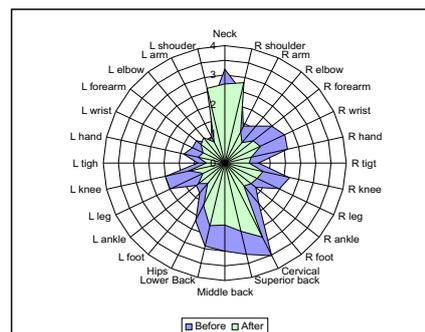
RESULTS AND DISCUSSION ANALYSIS

During data quantitative analysis, the information obtained through the project database was tabulated - characterizing the secondary data collection. According to Prodanov (2006) secondary data are the ones which already exist (database, newspapers, magazines, medical records...). Sampling involved 59 individuals who answered the assessment questionnaire applied every six months of activity.

Considering the sampling characterization, 56% were female (33) and 44% male (27). All of them have been participating in the workplace exercise sessions for six months and they revealed to be satisfied with the results obtained. In relation to the project assessment, the collaborators evaluate them positively. Among the 59 individuals, 42 (20%) classify them as *very good* and 18 (30%) as *good*. Regarding the workplace exercise classes, data show that collaborators also consider them positive, 37 persons out of 59 (62%) attribute a *very good* grade and 23 (38%) consider them *good*. Whereas for the participation in the project activities, 32 persons out of 59 (54%) reveal it is *very good*, 26 (43%) *good* and only 2 (3%) declare it *fair*. After the implementation of the Workplace Exercise Program, 15 (25%) were not practicing any kind of physical activity and 19 (32%) have been practicing exercises, if we consider the ones who already practice some kind of activity with the ones who have just started exercising, 30 individuals (50,8%) are involved in physical exercises.

In relation to the results on the alternations of health habits, 15 individuals out of 49 (31%) have not felt any change, while 34 (69%) revealed there has been some changes in their health habits, which means a significant improvement. Surprisingly, however, from a total of 59 individuals (97%) 57 felt an improvement in their well-being due to the activities of the workplace exercise program. Only 2 participants (3%) declared they have not perceived any well-being sensation after adhering to the project.

Below, Corlett's diagram is presented comparing before (March/2007)



and after the implementation of the workplace exercise program (August/2007). According to Iida (2000), pain/discomfort in Corbett's scale is classified in the following parameters: from 0 to 3- light pain; from 3 to 6- moderate pain; from 6 to 9- severe pain. In relation to complaints of discomfort and pain, major indication of pain in the neck, cervical, and back (lower, medium, and upper), as well as in the knees, both sides and in lower level. Through *test t*, it is concluded that there was a significant reduction in discomfort/pain ($p < 0,01$) showing some evidence of the benefits brought by the workplace exercises.

Results from the interviews obtained during the process of data analysis and discussion were divided into five categories: workplace exercise perception, pain before practicing, relationship with colleagues, encouraging workplace exercise, colleagues' comments. Following, the analysis and discussion for each category.

Workplace Exercise Perception

In this category, the collaborators' opinions are organized according to the implementation of the workplace exercises. They recognize how important it is to adhere to the program and the benefits obtained by the work break related to relaxation:

"[...] when we do the exercise, we rest, you know, when we are working with no break time, without relaxing during work. I think we perform less, you know, and with the exercise it doesn't happen, we do it, give it a break, we relax a little and loosen up a bit. Then we do better, you know, in our work. I think we feel lighter with less back pain."(E1).

The intervention of workplace exercise in the life of collaborators who were participating in the program was expressive as it is shown when they identify the changes which have occurred.

"[...] it has influenced on the productivity, I felt more relaxed, I produced more [...]" (E1).

"You know when there is a rusty part and then you apply some oil, that's how I was, man, I would do it like that, I couldn't move my leg. It's amazing; it seems that everything became stiff and dry. The same thing for two rusty parts, you are going to twist them and you can't, but then you put some oil and it...like that. Now, thanks God, I don't know why everything is ok, I am doing everything well, I am doing everything" (E2).

Finally, others have pointed out the positive results obtained not only at work, but also in the remedial treatment:

"So, there was a softening effect on the stretching, something like that, isn't it [...], as I went to the physiotherapist, I started with physiotherapy, it was always the same thing over and over, they wouldn't give us any stretching, only some little shocks. Then I gave up and after, when the professor started with the workplace exercises" (E3).

"[...] the exercises showed me that it was possible to change this situation, and I started to stretch at home, to go to the academy and I got better"(E5).

It is possible to say that the collaborators are not only being affected by results produced by the program, but also committed and concern with the continuity of their participation.

Pain before practice

While analyzing these category results, it is necessary to be attentive to the idea that pain is an individual experience which may happen many times during life, signaling that there was an unbalance in the structure and functioning of the body.

The interviewees are capable of giving details about the pain they felt by pointing out where it occurred.

"Here, on my shoulder, in the cervical, in the vertebrae because I suffer from hernia (L5 and L3), here on the buttocks, on the leg, muscle pain, on the calf and thighs, the internal part down here, and cramps"(E2).

Another interviewee, in addition to saying where it hurts, refers to the type of pain" (E5).

"[...] very acute back pain" [...]" (E5).

Pain intensity is demonstrated by interviewees 6 and 9:

"[...] I would feel it on the arms, back, and shoulders. It hurts a lot, mainly around the arms, when I move my arms a lot" (E6).

"[...] the muscle is atrophied [...] it hurts on the shoulders, legs, and arms mainly in the joints, you know, in the forearm, in the knee and in the calf and a lot on the back" (E9).

Some collaborators are aware that repetitive movements may cause pain. Together with excessive strength and bad posture and some other factors, "start to affect the structure integrity originating pain and functional incapacity, sometimes irreversible" (COUTO, 1991, apud CAÑETE, 1999, p. 70). Interviewee 4 describes his work activity and pain sensation with repetitive effort:

"[...] it seems that we feel pain because we work in maintenance and you know, we are always hammering or going up and down the stairs, opening some hole, everything, at least I think, everything becomes repetitive [...]"(E4).

It was verified that most collaborators are aware of their pain, identifying and detailing it. Such complains are important as they represent a break up in the well-being situation linked to the idea the employee has when considering his health and quality of life. In the implementation of a workplace exercise program, it is important to make an inventory of the worker's characteristics which exist where the practice is being held, the work conditions, the difficulties faced by the practitioners and the companies to obtain an actual effectivity (KONRATH, 2006).

Relationship with colleagues

When we talk about physical exercise, we always think about physical benefits which it may bring to us. During the workplace exercises, a daily social interaction is established setting a date with health and joining people" (LIMA, 2003, p.43), therefore, involving physical, emotional, and psychosocial benefits.

From the contact established with the interviewees, it is observed that some have understood that the adherence to the program has given them a better opportunity to interact with colleagues which results in relaxation and leisure situations:

"[...] integration has happened [...]. So, the exercises really helped and so there is relaxation. Normally, people are a little bit tense, you know, performing their tasks, focusing on their work and the physical exercise allows not only the exercise, [...] some help with it: in the leisure area and it gives the opportunity for some relaxation moments"(E5).

"There was always that one that we didn't have much contact with [...] and know we get in touch with everybody"(E3).

With their participation in physical activities, the employees are not only practicing exercises, but also establishing new relationships with others, creating an atmosphere with more acquaintances and closeness. Considering the workplace exercise as a tool for management, Guiseline (2006, p.128) comments that "the capacity to interact harmoniously and balanced with the other members of the team determines the level of relationship which is established in professional ambiance, particularly at work."

"Among the people in maintenance, where we do it, yes, because we became closer, because we were not much close, but we got closer because of the plays, our people from safety, not so much, I can say that I am the one who gets more involved"(E3).

Besides, most of the interviewees felt some improvement in the relationship among colleagues after the implementation of the workplace exercise program at the *Campus I- Feevale*.

Encouraging workplace exercise

We understand that the moment of the workplace exercise is not restricted to the application of exercises, but also and mainly to encourage people to adopt healthy food habits and physical activities among others, as "individuals who are more logically aware become more responsible and free, autonomous in creativity and certainly more capable of deciding and being committed with their actions and decisions" (CAN-ETE, 1996, p. 186). Thus, in this category, it is possible to observe what happens among the collaborators:

"I think it also stimulates me as it used to do, the workplace exercise does not stimulate just me but all the people, because there are people that have never practiced any physical activity, and started doing some stretching and saw the results [...]. So, it encourages and cheers me up for other activities" (E1).

"[...] exercises opened for me, like we say, opened my eyes so I could do other activities; [...] the way I run [...] stretch well" (E5).

"It made me work out down there" (E2).

Another collaborator was encouraged in such a way that he took the advantage of a daily situation of locomotion, to and from work in order to walk and by doing that he changed his routine and life style:

"[...] when the workplace exercise started I got excited, I would even go home on foot" (E3).

Practicing sport was the option of another practitioner:

"[...] yes, there is soccer, there is some activity, I feel like doing some exercise" (E4).

Another interviewee also confirmed the need to continue with the program, pointing out that the benefits accomplished by his colleagues make them stimulate the participation of other employees and collaborators to come to the workplace exercise classes:

"[...] there is Mr... who is older, [...] he is an icon, and he is always feeling well. He must be 70 years old; he is always capable, always feeling well. Man, he really comes, nobody needs to remember, and he comes to tell everybody: Hey, the exercises will start in a few moments, don't forget, let's go" (E4).

It is known that goals are achieved gradually, especially when there must be some changes in people's behavior. Therefore, it is very important to maintain the program not only to reach the objectives but also to broaden the scope of the program, encouraging the participation of everybody.

Changing in colleagues

The workplace exercise is a change factor in relation to the companies as well as to the program participants. When the practitioners feel the beneficial results offered by the physical activity, they become agents of change for their behavior and their colleagues' behavior (KONRATH, 2006). According to the collaborators, we consider the changes detected in the others as something positive:

"[...] it is Mr. [...] at the beginning, he could do half of the exercises, today he can do some [...] At this point, it is not that he hasn't made any comments, but the guy can feel that he is doing better" (E3).

In addition to these changes, there has been a slight change in the participants' behavior emphasizing the participation of interviewee 8, a very shy person who started working with the group and practicing the activities proposed, demonstrating that by maintaining the program, significant differences could happen in their personal conduct. This collaborator revealed that:

"It is like this guy, a very quiet, timid person but when you ask him, he also likes to have a massage" (E8).

While referring to this category, Cañete (1996, p. 76) comments that "the effects attribute to this practice are much variable, from individual to individual, according to his/her specific personality characteristics, social and cultural status, etc". Thus, a workplace exercise program well advised and extensive in ethical values has all the requirements to benefit individuals and organizations, as it is an educational practice focusing on the individual development in all aspects.

FINAL CONSIDERATIONS

The *Centro Universitário Feevale* was the first to introduce the workplace exercise in 1978, in Brazil. However, it started to offer the possibility for its collaborators to practice physical exercises at work only 7 years ago. It is observed that the work performed was well received by the group which has evaluated the classes and the project as satisfactory. It has also been demonstrated by the attendance and by the participation in the activities developed. There is an understanding on the importance of the workplace exercise for health and recognition of the benefits it provides.

Referring to the pain and discomfort indices before and after the participation in the program, the indices were lower in practically all the body parts. In this context, it is relevant to consider that an exercise program also promotes an improvement in body awareness which tends to have influence on postures, gestures and movements adopted in someone's daily life and work also implying a holistic health improvement.

The practice of workplace exercises has influenced in a positive way the adoption of a healthier life style as many collaborators started to practice some type of physical activity after the program started. So, these individuals gave an important step to change their life style due to the incorporation of exercises in their daily life. It became evident when the collaborators requested the continuation of the program, even when there were no classes.

The data analyzed lead to the success of the experience at the *Centro Universitário Feevale*, spreading the benefits of the workplace exercises and the work performed by the group of professional joining the project. It can be stated that the impact on the implementation of this program is positive and satisfactory which certainly values more and more the institution as the pioneer in the country, demonstrating concern with the indissociability between teaching, research, and extension programs. In addition to the contributions for the improvement of the workers' quality of life and for the community development in which it is inserted, *Feevale's image* is strengthened through the social responsibility developed within its community. It is an experience to be followed.

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ASSESSMENT OF THE IMPACT ON THE IMPLEMENTATION OF A WORKPLACE EXERCISE PROGRAM: AN EXPERIENCE AT THE CENTRO UNIVERSITÁRIO FEEVALE-CAMPUS I
ABSTRACT

Quality of life at work has never been so mentioned and discussed as it is nowadays. More and more, organizations are looking for new approaches and programs which may promote the physical and psychosocial well-being. Considering that workplace exercise is one of the tools to implement quality of life at work, the outcomes of the research regarding the introduction of these exercises at the *Centro Universitário Feevale*(RS) are presented. An *ex-post-facto* study was conducted through data analysis and discussion based on quantitative and qualitative research. Results indicated that the referred program had a positive impact on promoting the collaborators' quality of life, mainly in respect to the change of life and health habits, and essentially in promoting well-being which was evidenced in 97% of the sampling. There was some interference in the adoption of exercise daily practice, some changes in the relationship among the work teams and a reduction in the pain/discomfort indices. Outcomes for the institution open the way to social responsibility in relation to the institution internal community as one of the best ways to promote the collaborators' quality of life as well as the corporate image.

Key words: workplace exercise; implementation impacts, changes in life style.

ÉVALUATION DES IMPACTS DE L'IMPLANTATION D'UN PROGRAMME DE GYMNASTIQUE DU TRAVAIL: L'EXPÉRIENCE AU CAMPUS I DU CENTRE UNIVERSITAIRE FEEVALE
RÉSUMÉ

Le thème qualité de vie au travail n'a jamais été si évidéncié et discuté que dans l'actualité. Les organisations cherchent de plus en plus des abordages et des programmes qui promeuvent le bien-être physique et psychosocial. Vu que la Gymnastique du Travail est un des outils pour la promotion de qualité de vie au travail, nous présentons les résultats de la recherche réalisée au Centre Universitaire Feevale (RS) en ce qui concerne l'implantation d'un programme de Gymnastique du Travail. L'étude s'est caractérisée comme *ex-post-facto*, avec analyse et discussion de données sous le paradigme quantitatif et qualitatif. Les résultats ont indiqué que le programa de gymnastique du travail a eu un impact positif dans la promotion de qualité de vie des colaboreurs, surtout en ce qui concerne les modifications d'habitudes de vie et de santé, e, fondamentalement, dans la promotion du bien-être fait référé par 97% de l'échantillon. Il s'est accompli une interférence par la pratique quotidienne d'exercices, par le changement des rapports entre les équipes de travail et diminution des indices de douleur / inconfort. Les résultats pour l'Institution indiquent le chemin de la responsabilité sociale avec la communauté interne de l'institution comme l'un des meilleurs moyens de promotion de la qualité de vie des colaboreurs, ainsi que de l'image de la corporation.

Mots-clés: Gymnastique du Travail, impacts de l'implantation, altération de style de vie.

AVALUACIÓN DE LOS IMPACTOS DE LA IMPLANTACIÓN DE UN PROGRAMA DE GIMNÁSTICA LABORAL: LA EXPERIENCIA EN EL CAMPUS I DEL CENTRO UNIVERSITARIO FEEVALE
RESUMO

El tema calidad de vida en el trabajo nunca fue tan evidenciado y discutido como en la actualidad. Cada vez más, las organizaciones están procurando abordajes y programas que promovían el bien estar físico y psicosocial. Tiendo en vista que la Gimnástica Laboral es una de las herramientas para la promoción de la calidad de vida en el trabajo, se presenta los resultados de una investigación realizada en el Centro Universitario Feevale (RS) en que se refiere la implantación de un programa de Gimnástica Laboral. El estudio se caracteriza como *ex-post-facto*, con analice y discusión de los datos bajo el paradigma cuantitativo y cualitativo. Los resultados indicaran que el programa de Gimnástica Laboral tuvo impacto positivo en la promoción de la calidad de vida de los colaboreadores, principalmente en lo que dice respecto en las mudanzas de hábitos de vida y de la salud y fundamentalmente, en la promoción del bien estar referido por 97% de la muestra. Ocurrió interferencia en la adopción de la práctica diaria de ejercicios, cambios en los relacionamientos entre los equipos de trabajo y la disminución de los índices de dolor y desconforto. Los resultados para la institución indican el camino de la responsabilidad social con la comunidad interna de la institución como un dos mejores medios de promoción de la calidad de vida de los colaboreadores, assim como, de la imagen corporativa.

Palabras-Claves: Gimnástica Laboral, impactos de la implantación, alteración de lo estilo de vida.

AVALIAÇÃO DOS IMPACTOS DA IMPLANTAÇÃO DE UM PROGRAMA DE GINÁSTICA LABORAL: A EXPERIÊNCIA NO CAMPUS I DO CENTRO UNIVERSITÁRIO FEEVALE
RESUMO

O tema qualidade de vida no trabalho nunca foi tão evidenciado e discutido como na atualidade. Cada vez mais, as organizações estão procurando abordagens e programas que promovam o bem estar físico e psicossocial. Tendo em vista que a Ginástica Laboral é uma das ferramentas para promoção da qualidade de vida no trabalho, apresenta-se os resultados de pesquisa realizada no Centro Universitário Feevale (RS) no que se refere à implantação de um programa de Ginástica Laboral. O estudo se caracterizou como *ex-post-facto*, com análise e discussão de dados sob o paradigma quantitativo e qualitativo. Os resultados indicaram que o programa de ginástica laboral teve impacto positivo na promoção da qualidade de vida dos colaboreadores, principalmente no que diz respeito à mudanças de hábitos de vida e de saúde e, fundamentalmente, na promoção do bem estar fato referido por 97% da amostra. Ocorreu interferência na adoção da prática diária de exercícios, mudança nos relacionamentos entre as equipes de trabalho e, diminuição dos índices de dor/desconforto. Os resultados para a instituição indicam o caminho da responsabilidade social com a comunidade interna da instituição como um dos melhores meios de promoção da qualidade de vida dos colaboreadores, assim como, da imagem corporativa.

Palavras-Chaves: Ginástica Laboral, impactos da implantação, alteração do estilo de vida.