INTRODUCTION

At the beginning of this study gymnastic labor (instructed corporal exercise) was seen as an activity until then realized only in gymnastic academies, health clubs, military institutions and schools. Today it is part of the labor process, and in some way, related to the need by capital to maintain the most suitable conditions for production. Many authors explain that the use of exercise programs in factories is influenced by “new” forms of organization of the labor process, principally by the so-called “Toyoto” model. It was with these ideas and questions that the process was analyzed and questions that the analysis was conducted.

We found during the study that labor gymnastics can constitute what Covre (1983, 1990, 1996) called: a technology that organizes labor. In the process of the investigation, our concerns took another course and we sought to understand the perception of workers and their possible effects on the true dimensions of the program’s consequences for the labor process. Thus, we asked, what practice is this? What does it do for people and the internal labor process?

Some authors justify that factory gymnastics programs are a form of “leisure activity” or even a way to improve workers’ “health”. We had many doubts that we sought to clarify with the collection of empiric data, in a concrete reality. The situation is quite confusing. For this reason we selected an electrical motor factory of a large company in Santa Catarina State, Brazil, and the workers who were willing to be part of the research group. There were 118 workers who responded, most of them were younger than 35. We observed that the work activities demanded considerable strength for the handling of the motors and that the few respondents who were older than 35 worked in furnance maintenance. The predominant tasks were the assembling of electrical motors. This involves manual labor in complex routines that required considerable attention and concentration.

We emphasize the specific need, in this type of assemblage activity, for precision of movement in a short space of time. The workers are required to produce a given quantity of pieces in a brief period of time and without mistakes. This implies repetition, in combination with the demand for intense productivity, with perfection and without errors.

The gymnastics program executed is organized by the Industrial Social Service (SESI) entity. It is called Gymnastics at the Company and is considered “a product”. It has been implemented for nearly 10 years in many regions of Brazil. SESI sought to stimulate employees to create a program to maintain health, by means of the organization of the production process. The gymnasiums opened to employees, and all the workers, were the impetus of the execution of this program.

To properly plan the corporal exercise, the proponents of the program needed to conduct a diagnosis of the movements that the workers conduct daily. Once this was completed, they selected exercises that could promote the movement of those parts of the body that are not solicited in that kind of work. This is known as compensatory gymnastics. The exercises for preparatory gymnastics (another classification) seek to activate the entire body in order to prepare it for the day’s activities. SESI of Minas Gerais was responsible for establishing a model for the program in Brazil and became a reference for ISO 9000. It created a software program with corporal exercises, of the compensatory type, which are linked to the body’s organic functioning. The program is sold to companies throughout Brazil. These practices are exercise sessions with duration of 12 minutes, which are conducted at two different moments during each work shift, in the case of the factory studied.

TECHNOLOGY THAT ORGANIZES WORK THROUGH THE BODY THAT PRODUCES AND ALSO PLAYS

In the assembly of electrical motors the workers have their entire body in uninterrupted contraction, because of the general force and tension required by these movements and because of the need to produce a given quantity of pieces per day. Therefore, it was not by chance that the majority of those interviewed stated that such a situation was the principal reason, as well as a lack of time and money, that they do not participate in leisure activities that take place in the city, outside of working hours.

Muscles are responsible for sustaining and moving the body. Command of the muscles is the responsibility of impulses originated in the nervous system, according to Schmolinsky (1962). To contract the muscles, we need these impulses and the more impulses that arrive to the muscles in less time, the faster and stronger are the contractions that will generate force. These impulses come from two regions of the brain: the pyramidal and the extrapyramidal, according to Schmolinsky. The impulses that come from the pyramidal tract are conscious and voluntary responses. Those that come from the extrapyramidal tract (and from certain complementary tracts) are the automatic stimuli (walking, for example). In static movements, it is possible to produce a maximum contraction, or that it, use maximum muscle tension. However, this maximum condition does not allow a sufficient supply of nutrients and oxygen to the muscles. The metabolic residues are eliminated inefficiently and heat is also not eliminated. To maintain the muscular contraction, the nervous system does not interrupt the transmission of the impulses. This causes fatigue and tiredness.

It is of course possible to conduct a movement either to acquire strength, as in an exercise, or to assemble a motor. The organic process is the same. Concerning the physiological processes, it is known that for the physical capacities of strength and
force, necessary for this type of work, to be at their maximum potential, some essential requirements must be met, because the movements of the body absorb these influences and can generate good or bad performance.

Fatigue and tiredness can occur in the realization of dynamic movement, but if we conduct these exercises with little repetition and in a short period of time (the twelve minutes of the gymnastics program meets this criteria) this probably will not happen; because this form of corporal exercise compresses the muscle fibers by extension and contraction. For this reason, this contraction compresses the blood that goes to the veins, the pressure is reduced and the blood is able to irrigate the tissue once again. The blood circulation is also improved, thanks to a true vascular massage: the nutrients and oxygen arrive with less difficulty and also provide relief to the nervous system, because the impulses are attenuated.

Now the problem of a muscle that is always contracted and tense is that, in addition to consuming a lot of energy to maintain this condition, there is a shortening in the length of its fibers which limits its potential. The shortened muscles do not have as much energy, because they cannot elongate and this is a solicitation of contraction, which the volume contracted is greater as is the strength produced. Thus, the body involved in production lacks the stimulus of the body that plays, since it is through this dimension that these factors are present (in the stretching, encouraged by the instructed relaxation). It is known that the useful body, or that which produces, contemplates the functional dimension; it is that which is steered by (Rodrigues, 1991). However, we see that this same body that produces (reduced to the biological) also thinks, feels and plays, it simply needs to be solicited and taught to do so. It also feels emotion, paraphrasing the author named above, it is necessary to consider that “feeling emotion” is also a learned process and knowing how to identify it, is a process of apprehension of knowledge of human beings.

In this sense we imagine that, since expressing emotions (happiness) is permitted during gymnastic exercises, greater relaxation becomes indirectly possible in the dynamic of the activity. The body that is playing thus combines the polarity of tiredness and pleasure while involved in the relations experienced at work. The tiredness caused by producing electrical motors is forgotten by the happiness and the pleasure of the moment of gymnastics, because of the contact between the workers and the games they play. In practice, the body that plays is present without eliminating the body that produces. In this situation this body is no longer producing individually, because the workers are organized in production cells, they produce in a team, or in group; although there is almost no contact between them. On the other hand, in the practice of gymnastics there are other live bodies - playing. Many of the workers interviewed said that, although they work at the same place and often alongside each other, assembling motors, before the existence of the gymnastics they did not know each other.

The affirmation that there is greater contact between them reveals that this practice is in fact contributing to the idea (by the impression that it gives) that there is a type of sociability that is not objectified in the internal labor relations. We had the impression that, at this company, there is contact among the workers, or that is, humans are not objectified, in that they are considered a family. We found that company managers had an explicit interest in constantly maintaining friendly relations among the workers. Nevertheless, Marcuse (1964), sustained by Freud's studies, maintained that two principles govern the polarity between pain (that exhaustion that causes tiredness) and pleasure. One is the principle of reality (of performance) and the principle of pleasure, whose connection when alternated, in synthesis, can mobilize our energy for work with less pain and in this way consolidate a physiological equilibrium and the stability of the body that produces. It is worth saying, that it is not a more human sociabilization that is present, but it is a type of contact that inhibits the expression, by other means, of this polarity as a social product, considering that all of this takes place in the work environment.

There is a clear solicitation of the principle of performance of the body in this program which also has moments of stimulus to pleasure through gymnastics. Could it be that the program seeks to assure, as Marcuse (1981) identified, excellent conditions for productivity and to anesthetize the senses to a life of pleasure outside of work? In these conditions, because the human being is absorbed by the factory ground, we still have to conduct so many other activities to maintain their life, they do not even have a little time or disposition to do anything but that which is related to work. Most of those interviewed maintain that “when I get home, the exhaustion prevents me from doing anything” It is known that the chronometry of time into hours is an imposition of the demands for the organization of work from the point of view of economic references (Cunha, 1987). Therefore, leisure activities cannot be subordinated to this measurement and cannot serve an economic or functional purpose (purely organic).

**FINAL CONSIDERATIONS**

It can be concluded that this technology exceeds that of microelectronics, given the presence of a character that, in addition to instituting one more illusion in the life of workers, embodies subtle dimensions from the point of view of the relationship between body and mind and in its ideological character, because it concentrates the focus on the subjectivity of human beings. It should be said, they exercise the body and control the mind to achieve greater productivity at lower cost. These workers live for the Factory, and in it, subtly; there is a stimulating and productive mood in the internal work environment created by this technology, which encompasses the relationship between the body that produces while it also plays in the concrete body, which is the same. Therefore, leisure must be offered at a time of its own, outside of working hours, in order to truly promote development of human being.

REFERENCES


Taubaté: Vogal, 1996.


http://www.cds.usp.br/nupaf.html

11- One of the ideas promoted by the company is that they form a family.

12- This study appears to us sufficiently rich to later deepen it in relation to the biological and the social, perhaps from a perspective more centered on psychoanalysis.

13- It would be the calming of a possible revolt from this condition of extreme exhaustion. For example, with the political struggle for reduction of the work shift. The critical awareness of this is a consequence of the intensification of labor. But this requires time outside the Factory. An amount of available time that is sufficient to happen; because this form of corporal exercise compresses the muscle fibers by extension and contraction. For this reason, this contraction compresses the blood that goes to the veins, the pressure is reduced and the blood is able to irrigate the tissue once again. The blood circulation is also improved, thanks to a true vascular massage: the nutrients and oxygen arrive with less difficulty and also provide relief to the nervous system, because the impulses are attenuated.
El objeto de esta investigación es un programa de gimnasia cuya problemática llama la atención por decir respecto a cuestionamientos sobre una ejecucitación corporal orientada que se realiza en el tiempo de trabajo. Estos análisis están subsidiados en datos conseguidos por medio de entrevistas, observaciones e varios otros tipos de instrumentos, y también en un abordaje teórico que sustenta la elaboración de la categoría empírica: gimnasia laboral como tecnología organizadora del trabajo, y no práctica de ocio. Esa práctica se constituye en una tecnología cuando ella se da por la subjetividad en el físico que controla los seres humanos. Ésta práctica se dice constituyendo como una tecnología al fundamentarse, y controlar, por la subjetividad, los seres humanos. Se orienta por lo lúdico y busca el equilibrio orgánico. De esta manera se establece una armonía entre el equilibrio fisiológico y la capacidad de producir más y mejor. Sin embargo, el lo que nos de ocio el espacio entre el trabajo, lo que se establece una conjugación de la división corporal del trabajo y no práctica de ocio. Este hecho se trae consigo la idea que, por ser una práctica corporal, se está ejercitando ocio. Por consiguiente, es fundamental explicar que ocio, a pesar de que es un concepto que no se puede entender como un ocio laboral, por lo que no debe ser explicado por sentimientos, sensaciones (dolor o placer), sino por el tipo de social relationship that is established in the activity involved. Key words Labor gymnastics Technology to organize labor Labor x leisure.