

84 - PERCEIVED STRESS BY ACTIVE AND SEDENTARY CALL CENTER ATTENDANTS, PARTICIPANT AND NOT PARTICIPANT IN A LABOR GYMNASTICS PROGRAM

SUSANA SOUZA; CAROLINE DI BERNARDI LUFT;
RICARDO BRANDT; DR. ALEXANDRO ANDRADE
Laboratório de Psicologia do Esporte e do Exercício -LAPE.
Universidade do Estado de Santa Catarina UDESC
Centro de Educação Física, Fisioterapia e Desportos- CEFID
Florianópolis, SC. Brasil

INTRODUCTION

The work market is passing for great transformations, an increase of the psychological and emotional demands in the activities, as well as of the occupations in the sectors of services, together with a visible growth of unemployment. This is the scene where the Consumer Care Offices (Call Centers) appear and develop themselves (MARMOT e WILKINSON *apud* LUCAS, 2003).

The great demand of work imposed to the Call Center attendant can be seen as a stressful agent. The term stressfull defines the event or stimulus that provokes or leads to stress.

The term stress was used initially in the health area to assign the general and unspecified outcome of the organism to a stressful agent or situation. Lately, the term passed to be used to represent the stress outcome as well the stressful situation (MARGIS et. al. 2003). In this research, stress is appraised as a negative outcome to a stressful agent.

Some studies (ANDRADE, 2001; ATLANTIS et. al. 2004) have demonstrated that the active life-style is associated to lower levels of stress and better quality of life. It has been demonstrated that the regular physical activity practice can assist in the stress reduction, as well as preventing psychosomatic illnesses, providing a better work quality.

Labor gymnastics has being pointed as one of the solutions to brighten up stress, as a form of physical activity that acts in a preventive and therapeutical form carrying specific physical exercises in the work place (POLITO e BERGMASCHI, 2002).

Although the importance of the physical activity and the labor gymnastics is recognized, some studies (MARÓSTICA, 2002; GLINA e ROCHA, 2003) showed that workers are more exposed to a sedentary life-style and high stress levels.

Hence, is important to investigate: Which is the level of perceived stress of active and sedentary, participant and not participant Call Center attendants of one program of labor gymnastics?

METHOD

This research is characterized as "Field Descriptive" (RUDIO, 1992). The population was composed by 1268 attendants whose age range was between 18 and 47 years. The sample of this study was composed by 90 attendants, all females, with age ranging between 18 and 43 years (average = 24,1), all of them "Call Center" employees, with average time of service of 4,35 months. The work journey is six hours with two intervals of fifteen minutes.

The program of labor gymnastics offered by the company consists of exercises of low intensity, massage and allonge exercises, following the principles of the methodology proposed for the labor Gymnastics. The activities of the labor gymnastics are carried in the second break interval of the attendants and they last for 10 minutes.

A mixing questionnaire was used as instrument, adapted for Andrade (2001) called "Questionnaire of self-evaluation of the life-style, occurrence and control of stress". In this instrument the questionnaire of habitual physical activities, developed by Pâte and adapted by Nahas (2001), is enclosed, that allows to estimate the level of habitual physical activity. It is also enclosed, in this instrument, the Perceived Stress Scale developed by Cohen et al. (1983) adapted by Uruhary (1997), this scale is used to measure the index of perceived stress (ips). This way, the questionnaire investigated the following pursuings: participant characterization, physical activity, Labor gymnastics, perceived and self-evaluated stress. The participant and not participant attendants had been classified in accordance with their answer to questions related to the participation in the program of labor gymnastics (PLG).

The statistical treatment of the data was constituted by application of descriptive statistics to verify frequencies, percentages, means and standard deviation and by inference statistics to verify differences between the groups. The ordinal variables had been compared with the Mann Whitney test and the interval variables that follow a normal distribution had been compared by means of "t" test. The level of significance adopted was $p < 0,05$.

RESULTS

All the attendants participant of the research are female, average age 24,1 years (+43 -18/s=6,0), stature mean 163 cm (+175 -148/s=6,2) and weight mean of 58,9 kg (+87 -43/s=9,4). When applied "t"test, was verified that in relation to age, weight and stature, the active and sedentary, participant and not participant of the labor gymnastics are homogeneous in relation to these variables. The mean time of service of the attendants is 4,35 months (+20 -1/s=4,6).

The majority of the attendants is sedentary. It was verified that 70% of the active (n=21) and 57.1% (n=32) of the sedentary ones participate of the PLG (table 1).

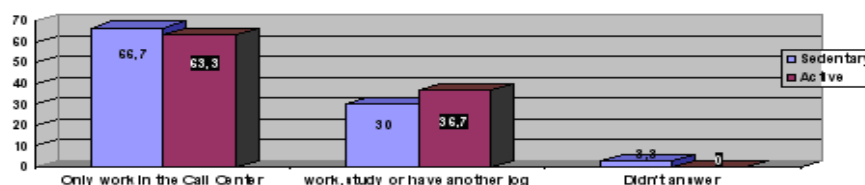
Table 1. Active and Sedentary attendants participation in the program of labor gymnastics.

	Participant	Not participant	Total
Sedentary	32 (57,1%)	24 (42,9%)	56 (100%)
Active	21 (70%)	9 (30%)	30 (100%)

Analyzing the daily activities, it was evidenced that 59 of the attendants (67,8%) only work in the Call Center, however, it was verified that 28 of them (32,2%) both work and study or attend to another job.

Relating the life-style to the daily activities was observed that the majority of the active attendants works, studies or has another job, while among the sedentary ones, the majority only works in the Call Center (figure 1).

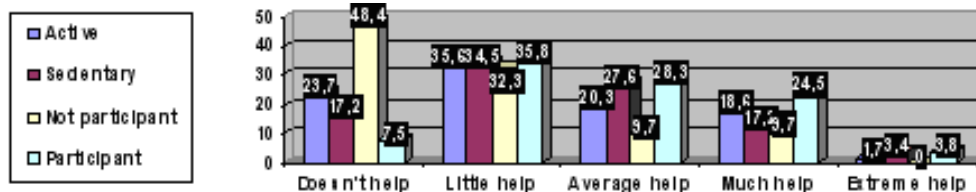
Figure 1: Daily activities of the attendants in relation to the life-style.



Among the reasons that harm the practice of physical activity, the time lack was pointed by the attendants (n=32 - 35.6%), being that 19 of them (21,1%) had cited that no specific reason harms the practice of physical activity; the others had told other reasons as fatigue and lack of incentive.

Evaluating the labor gymnastics contribution to the control and combat to stress, the majority of the sedentary and the not participant attendants had said that the labor gymnastics not helps or just a little. The majority of the active and the participants considers that the labor gymnastics helps a lot in the control and combat of stress (figure 2).

Figure 2: Importance of the labor gymnastics in the control and combat to stress.



In relation to the place most appropriate for the practice of labor gymnastics, 40 attendants (40,4%) had suggested to make it the outdoors and 34 (37,8%) prefer a specific room for the practice. In relation to the schedule of the practice of the labor gymnastics, the attendants suggest a specific schedule, not using the space of the snack, because they consider that the labor gymnastics would have to be carried through in the working time. The biggest claim and the main reason to not participate of the labor gymnastics pointed by the attendants were that the practice was done in the schedule of the snack and was obligatory, what made them not have the will to participate.

When relating the participation in the labor gymnastics with the index of perceived stress, as much the participants (ips = 31,43) how much the not participant ones (isp = 31,45) had presented a similar index. The active attendants had presented one isp mean (31,6/s=4,68) similar to that demonstrated for the sedentary ones (31,22/s=5,16). Analyzing isp and the level of stress self-evaluated by the attendants participants of this research, it was verified that the majority classifies with high stress.

It was evidenced that the self-evaluated stress differs from perceived stress (ips), because the attendants who had presented an medium level of stress had indicated lower means of ips in comparison to that who had self-evaluated with none stress (figure 3 and 4).

Figure 3: Level of self-evaluated stress related to the life-style and the participation in the labor gymnastics.

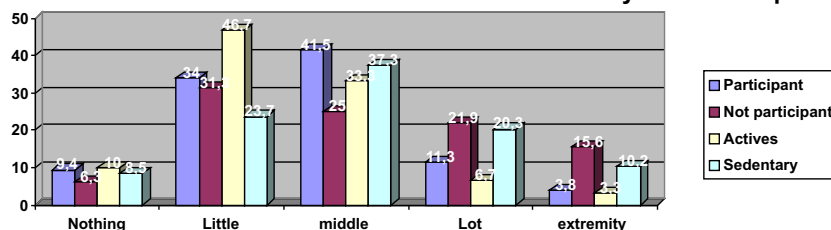
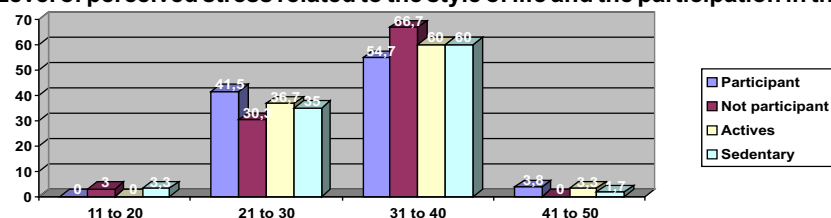


Figure 4: Level of perceived stress related to the style of life and the participation in the labor gymnastics.



In relation to self-evaluated stress, the participants of the PLG and the active classify themselves with less stress, while that the not participant of the PLG and sedentary ones classify themselves with higher levels of stress. In ips, this data is not confirmed, what leads to believe that as much practises of a physical activity how much the participation in the PLG induces the practitioner to self-evaluate with less stress, or can also suggest that not practicing physical activity and labor gymnastics self-evaluate themselves with greater stress for feeling culprits for not practising physical activity, that currently is considered essential in the stress reduction.

DISCUSSÃO

Although there is a conscience of the population about the importance of the physical activity in the reduction of stress, this study pointed that the majority of the attendants do not practise exercises due to lack of time, however was verified that the attendants that only work in the Call Center are more sedentary than the ones that work and study or until possess another job, not being clearly if the lack of time harms the adoption of an active life-style. The domestic activities of each attendant, what can have influenced in this result, had not been investigated in this study. Therefore, in a study carried through by Kenney apud Lipp (2003) had evidenced that young women (18 29 years) and middle age (30 to 45 years) are more stressed due to multiple day, therefore work outside and in house, has children and many are still responsible for aged parents and with familiar and professional problems.

In relation to the participation in the labor gymnastics, the majority of the attendants participates of the lessons. Although this practice is seen as obligatory, many of them oppose to participate because of the schedule imposition, because the labor gymnastics in this company is carried through in the interval, schedule that would have to be of snack, being considered of this form as improper for the attendants. Veiga (2001) when studying workers in their environment of work evidenced that amongst the favorable situations of work, it is included Labor Gymnastics, but being applied in agreement to the laws proposals for the Ministry of Work. The case of the "Call Centers", the effective time of work does not have to exceed the maximum limit of five hours, also must have, at the very least, a pause of ten minutes for each fifty minutes worked, not deduced in the normal day of work. This way, the schedule which the labor gymnastics is carried through in this company is not in accordance with the norms established by the Ministry of Work.

The participants of the PLG demonstrate a more positive perception in relation to the effect of regular practice of labor gymnastics, indicating that the participation can develop the interest and increase the knowledge of the benefits of the regular practice or that the participation is tied with the conscience of the attendants in relation to the benefits of the practice.

The evaluation that the attendants make of the labor gymnastics is positive, however some factors pointed for the

results of this study as the schedule and the place of practises had demonstrated that the proposal of the offered program of labor gymnastics must be modied and until reformulated in order to fulfill the necessities perceived by the attendants.

The active have a bigger participation in the PLG than the sedentary ones, suggesting a bigger conscience of the active about the importance of regular practice of physical activities.

The active and sedentary attendants had presented ips similar, as well as the participants and not participant of the PLG. It was verified differences between the level of self-evaluated stress. This data suggest that the perception of the active and of the participants about the labor gymnastics is more positive, due to regular practice of physical activity as well as the participation in the labor gymnastics.

Atlantis et al. (2004) verified that a structuralized program of physical activity with duration of 24 weeks provoked stress reduction and the increase of the productivity of 3800 employees of a casino. The depression indices had also reduced after the intervention.

Perhaps, the attendants have not adopted an active style of life the time enough to provoke significant reductions in the level of perceived stress, therefore in the study of Atlantis et al. (2004) had been verified the effect of 2 years of practice of physical exercise.

Andrade (2001) ponders the question alerting that the active life-style is not related only to the practice of physical activity, but also says respect to a set of healthful habits related to the quality of life and also the familiar conditions of habitation, income and relations. This way, it is considered that perhaps the attendants do not have a life-style that favours the reduction of stress, being harmed for their conditions of feeding, income, transport and family.

CONCLUSION

It was concluded that the participants and the active self-evaluate less stressed than they are and that the not participant ones self-evaluate themselves more stressed than they are. These results suggest that the knowledge of the benefits of the physical activity and the labor gymnastics in the control and the combat to stress makes that the not practicing and sedentary ones, to feeling culprits for not practising leading them to self-evaluate negatively. The opposite can also occur, making that the active and practitioners of labor gymnastics self-evaluate themselves with less stress of they really present.

It is suggested that stress can be influenced by diverse variables, either in the physical, psychological and social scope. Probably, the stress of the attendants is influenced by many other variables, as much of the environment, how much of their personality. The practice of physical activity, is only one of the things that can be made in the reduction of stress, however, is not by itself a guarantee of success. According to Andrade (2001), the personal description, history and the changes in the health habitsn as feeding and rest, are so important as the practice of regular physical activity.

It is concluded that this Call Center company did not present to its employee options of labor gymnastics programs, neither places nor good schedules for the practises. This way, it is perceived the necessity for a conscientious and democratic enterprise politic regarding to the choice and participation in a physical activity program. It is suggested that the company should stimulate the employees to acquire the habit of the regular physical activity, as well as practising, and not for the obligatoriness. Thus, it is perceived the necessity of one conscientious and democratic enterprise politics as well to the choice and the participation of the program of physical activity.

REFERÊNCIAS

- ANDRADE, Alexandro. *Ocorrência e Controle Subjetivo do "stress" na percepção de Bancários Ativos e Sedentários; A importância do Sujeito na relação "Atividade Física e Saúde"*. Florianópolis, 2001. 280p. Tese Doutorado em Engenharia, (curso de Pós-Graduação em Engenharia de Produção) Universidade Federal de Santa Catarina.
- ATLANTIS, E; CHOW, C-M; KIRBY, A; SINGH, M.F. An effective exercise-based intervention for improving mental health and quality of life measures: a randomized controlled trial. *Preventive Medicine*, v.39, p. 424-434, 2004.
- LIPP, Marilda Emmanuel. (organizadora) *Mecanismos Neuropsicofisiológicos do Stress: Teoria e Aplicações Clínicas*. São Paulo, Casa do Psicólogo 2003.
- LUCCAS, Paulo. *Evolução história do trabalho I e II*. Disponível em www.xadrezeduca.com.br, acessado em 20/09/03.
- MANUAL DE PROCEDIMENTOS PARA OS SERVIÇOS DE SAÚDE, *Doenças Relacionadas ao trabalho*. Brasília Ministério da Saúde 2001.
- MARÓSTICA, D. Adriano. *Percepção de Bancários Sobre a Ginástica Laboral e a LER/DORT: Análise Crítica*. Monografia de Bacharelado em Fisioterapia na Universidade do Estado de Santa Catarina. Florianópolis 2002.
- POLITO, Eliane. , BERGAMASCHI, Elaine Cristina. *Ginástica Laboral teoria e prática*. Rio de Janeiro, Sprint, 2001.
- RUDIO, Franz Vitor. *Introdução ao projeto de pesquisa científica*. Petrópolis; Vozes, 1992.
- URURAHY, G. *Como tornar-se um bom estressado*. Gilberto Ururahy, Eric Albert. Rio de Janeiro: Ed. Salamandra, 1997.
- VEIGA, K.T. Ana. *Influência de um Programa de Ginástica Laboral sobre o Nível de "stress" e Dor Percebidos*. Monografia de Bacharelado em Educação Física da Universidade do Estado de Santa Catarina. Florianópolis 2001.

PERCEIVED STRESS BY ACTIVE AND SEDENTARY CALL CENTER ATTENDANTS, PARTICIPANT AND NOT PARTICIPANT IN A LABOR GYMNASTICS PROGRAM ABSTRACT

The objective of this study was to analyze the level of perceived stress in call center attendants, active, sedentary, participant and not participant of Call Center of a program of Labor Gymnastics (PLG). The sample was constituted by 90 attendants of Call Center. The instrument used was the questionnaire of self-evaluation of life style, occurrence and control of stress developed by Andrade (2001) in which are included the questionnaire of habitual physical activities of Pâte, adapted by Nahas (2001), to verify the level of physical activity and the Perceived Stress Scale of Cohen et al. (1983) adapted by Uruahy (1997) to verify the index of perceived stress (ips). The data were treated by descriptive statistics (mean, standard deviation, frequency, percentage) and by inference (Mann-Whitney and "t" test). The results indicated that the active attendants participate more of the PLG and present one ips similar to the one showed by the sedentary ones. The participants of the PLG had not demonstrated differences in the ips when compared with the not participant ones. It is suggested that the PLG participation and the physical activity practice lead the attendants to self-evaluated herself less stressed. It was concluded that the labor gymnastics and the life style are related to a better self-evaluation of stress. It is suggested that as much the methodology of the program how much the enterprise attitude related to the physical activity in this company must be reformulated, adapting it to the reality of the employees.

Key-words: stress, labor gymnastics, physical activity.

STRESS PERÇU DANS LES PRÉPOSÉS DE CALL CENTER, ACTIF, SÉDENTAIRE, LE PARTICIPANT ET PAS LE PARTICIPANT DU CALL CENTER D'UN PROGRAMME DE LA GYMNASTIQUE DE TRAVAIL

RÉSUMÉ

L'objectif de cette étude était d'analyser le niveau de le stress perçu dans les préposés de Call Center, actif, sédentaire, le participant et pas le participant du Call Center d'un programme de la gymnastique de travail (PGL). L'échantillon a été constitué par 90 préposés. L'instrument utilisé était le questionnaire d'évaluation du style de vie, de l'occurrence et de la commande de le stress développés par Andrade (2001) l'où sont inclus le questionnaire des activités physiques habituelles de Pâte, adaptées par Nahas (2001), pour vérifier le niveau de l'activité physique et l'escalade de stress perçue de Cohen et autres (1983) adaptés par Uruhari (1997) pour vérifier l'index de l'stress perçu (ISP). Les données ont été traitées avec le statistique descriptif (moyen, la fréquence, le pourcentage) et par inférence (Mann-Whitney et essai d'"t"). Les résultats ont indiqué que les préposés actifs participent davantage du PLG et présentent un IPS de semblable montré par le sédentaire. Les participants du PLG n'avaient pas démontré des différences en IPS en comparaison avec pas le participant ceux. On le suggère que la participations dans PLG et la pratique d'activité physique a fait les préposés à faire l'évaluation d'eux mêmes avec moins de stress. On l'a conclu que la gymnastique de travail et le style de vie sont liés à une meilleure évaluation d'stress. On le suggère que la méthodologie du programme et l'attitude d'entreprise related à l'activité physique à cette compagnie doit être reformulée, l'adaptant à la réalité des employés.

Mots clés: stress, gymnastique de travail, activité physique

TENCION PERCEBIDA EM ASISTENTE DE CALL CENTER ACTIVO Y SEDENTARIO, EL PARTICIPANTE Y NO DEL PROGRAMA DE LA GINASTICA DE LO TRABAJO

RESUMEN

El objetivo de este estudio era analizar el nivel de la tensión percibido en trabajadores, sedentario, el participante y no los asistentes del participante del Call Center, activos y sedentarias del programa de la gimnasia de trabajo. El instrumento usado era el cuestionario de la auto-evaluación del estilo de la vida, de la ocurrencia y del control de la tensión desarrollados por Andrade (2001) en el cual se incluye el cuestionario de actividades físicas habituales de lo Pâte y es adaptado por Nahas (2001), para verificar lo nivel de la actividad física y a Escala de Stress Perceived de Cohen, de Karmack y de Mermbstein (1983) para verificar el índice de la tensión percibido (ITP). Los datos habían sido ocupados de la estadística descriptiva (línea de desvío media estándar, frecuencia, porcentaje) e inferencial (Mann-Whitney y la prueba "t"). Los resultados habían indicado que los asistentes activos participan la gimnasia de trabajo más que presentan una ITP similar a la que está las sedentarias. Los participantes del programa de la gimnasia de trabajo no habían demostrado diferencias en la ITP en comparación con no participante. Tanto el activo cuánto los participantes del programa de la gimnasia de trabajo habían presentado a una opinión mejor con respecto al efecto de la gimnasia de trabajo en la reducción y el control de la "tensión" en comparación con el grupo de sedentario y no el participante. Concluye que la gimnasia de trabajo y el estilo de la vida están relacionados con una automóvil-evaluación mejor de la tensión. Se sugiere que tanto la metodología del programa cuánto la actitud de la empresa con respecto a la actividad física en esta compañía debe ser reformulada, adaptando él él realidad de los empleados.

Palabras claves: tensión, gimnasia de trabajo, actividad física

STRESS PERCEBIDO POR ATENDENTES DE CALL CENTER ATIVAS E SEDENTÁRIAS, PARTICIPANTES E NÃO PARTICIPANTES DE UM PROGRAMA DE GINASTICA LABORAL

RESUMO

O objetivo deste estudo foi analisar o nível de stress percebido em trabalhadoras, atendentes de Call Center, ativas e sedentárias, participantes e não participantes do programa de Ginástica Laboral. A amostra foi constituída por 90 atendentes de Call Center. O instrumento utilizado foi o *questionário de auto-avaliação do estilo de vida, ocorrência e controle do stress* desenvolvido por Andrade (2001) no qual está incluído o *questionário de atividades físicas habituais* de Pâte e adaptado por Nahas (2001), para verificar o nível de atividade física e a *Escala de Stress Percebido* de Cohen, Karmack e Mermbstein (1983) para verificar o índice de stress percebido (isp). Os dados foram tratados com estatística descritiva (média desvio padrão, frequência, percentual) e inferencial (Mann-Whitney e teste "t"). Os resultados indicaram que as atendentes ativas participam mais da ginástica laboral e apresentam um isp semelhante ao das sedentárias. As participantes do programa de ginástica laboral não demonstraram diferenças no isp quando comparadas às não participantes. Tanto as ativas quanto as participantes do programa de ginástica laboral apresentaram uma melhor percepção a respeito dos efeitos da ginástica laboral na redução e controle do "stress" em comparação com grupo de sedentárias e de não participantes. Conclui-se que a ginástica laboral e o estilo de vida estão relacionados a uma melhor auto-avaliação do stress. Sugere-se que tanto a metodologia do programa quanto a atitude empresarial com relação à atividade física nesta empresa deve ser reformulada, adaptando-a a realidade dos funcionários.

Palavras chaves: stress, Ginástica Laboral, atividade física.