

83 - STRESS BETWEEN PRACTICING AND NON-PRACTICAL TRANSIT AGENTS OF PHYSICAL EXERCISES

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INTRODUCTION

Research that investigated the issue of traffic and related professionals discuss the urban mobility crisis, especially in large centers (SCARINGELLA, 2001), identify the presence of verbal and physical aggression affecting the mental health of traffic agents (LANCMAN et al., 2007), as well as morbidity due to accidents and violence that victimize public security agents (SOUZA; MINAYO, 2005).

Stress is characterized by being a very present factor in the workplace, requiring more and more research to be aware of the deeper topic, in order to outline preventive strategies. (BLACK; STONE, 2014).

Stressors are characterized by a situation, fact, or context that is threateningly understood and requires an individual's response, such a threat can be consciously or unconsciously deduced. (MARRAS; VELOSO, 2012). Stressful situations are determined as General Adaptation Syndrome, and are divided into three phases: alertness, resistance and exhaustion. (SELYE, 1951).

For Braga (2008), the manifestation of stress in individuals happens in several different contexts, including the work environment, which is the focus of this study. Stress is intensified by cumulative and persistent factors that must be assessed so that there is an accurate diagnosis of the individual's stress level, which too much can lead to physical, behavioral and psychological symptoms. It may be associated with other problems such as anxiety, depression and Burnout syndrome. Dislike for the work environment, socioeconomic status of employees, lack of control over work, unworthy support and social recognition of their practices are determinant factors for the manifestation of stress (FREITAS et al., 2014).

The organism always tries to adapt to the stressful event by using large amounts of adaptive energy. (LIPP, GUEVARA, 1994). Is it possible to compare stress levels in practicing and non-practicing traffic agents?

This work is justified by the need to expose the benefits that physical exercise has under stress, since it is a fatality detected in the midst of society daily and can cause negative changes physically, mentally, in the family and in the home itself. job. It is also very important for the population suffering from this disease, to know that the practice of physical exercise can interfere with the stress factor. Important for traffic agents as well as workers, regardless of area or position, as it is occupational stress.

The general objective of this study was to compare the level of stress between practicing and non-practicing traffic agents of the Patos - PB Traffic and Transport Superintendence, and its specific objectives were: to identify the stress level with its causes and reactions. sedentary traffic officers; to analyze if the environment and the way of work influence the stress level of the traffic agents and to associate the stress manifestation between the practicing and non-practicing traffic agents of the city of Patos – PB, information socio demographic data of the studied sample.

METHODOLOGICAL PROCEDURES

This is a descriptive cross-sectional study, which consisted of collecting quantifiable data, consisting of two stages, the first sociodemographic and work perception data and the second of a Lipp ISS test, which were examined to discern patterns. association, obtaining information on the prevalence, distribution and interrelation of variables within a population. (FIGUEIREDO, 2004), and quantitative that had the function of transforming data such as opinions and information into numbers, to classify and analyze using descriptive statistics techniques as simple frequency and percentage (PRODANOV; FREITAS, 2013), had a descriptive objective, with a non - probabilistic and intentional sample, composed by traffic agents from the city of Patos - PB.

The population investigated was comprised of 35 traffic agents from the city of Patos - PB, which is subdivided into G1 (physical exercise group n = 22), and in G2 (non-physical exercise group n = 13). took into account age and length of service. The traffic agents were randomly chosen on the established date of distribution of the Free and Informed Consent Form (ICF), which was directed to them for signature.

A socio demographic questionnaire and work perception data were used, as well as the LIPP ISS (Stress Symptom Inventory) test, which assessed whether or not there is stress, as well as its level, using a three-phase model called alertness, resistance and exhaustion, pointing to the predominance of physical or psychological symptoms, or both.

A meeting was held with the head of the Traffic Superintendence of the city of Patos - PB, where the interest and purpose of the research was exposed, and authorization was requested through a consent form for the collection of research data. Then there was a meeting with the participants to clarify how the study went and to know if they agreed to participate voluntarily. Data collection was done on random days in September and October 2019.

The collected data were analyzed using Microsoft Excel. Data were evaluated by quantitative analysis, verifying the benefits of physical activity in relation to stress. Descriptive analyzes will be performed as mean and standard deviation.

The project was submitted to the Research Ethics Committee of the University Center - UNIFIP and approved with opinion number 3.605.901, respecting Resolution No. 466/2012 of the National Health Council, which deals with research involving human beings, where all the principles and ethical care were respected (CONEP, 2016).

RESULTS

Thirty-five traffic officers were interviewed, 29 men and 6 women aged between 31 and 46 years. They were divided into two groups G1 n = 22 exercise group and G2 n = 13 exercise group. G1 was composed of 5 women and 17 men who practice and G2 was 1 woman and 12 men who did not exercise.

Of the 35 subjects interviewed, 16 did not fit in any phase characterized by absence of stress, 12 belonging to the practicing group and 4 from the non-practicing group. Looking at graph 1, one non-practitioner is at the alert level, 8 practitioners and 7 non-practitioners are at non-resistance level and 2 practitioners and 1 non-practitioner at the exhaustion level.

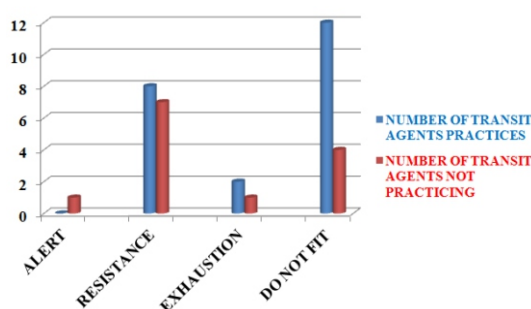
When analyzing both groups and comparing stress levels, there is a marked difference, the non-practicing subject who is on the alert level has marked the following symptoms in the last 24 hours: dry mouth, knot or stomach pain, increased sweating, muscle tension, insomnia, wheezing, change in appetite, sudden enthusiasm, and sudden desire to start new projects. No active subjects fit this level.

When comparing in the resistance phase, 8 subjects from G1 and 7 from G2 are at this level, the most common symptoms in the last month were: memory problems, generalized malaise, without specific cause, tingling in the extremities, sensation of constant physical exhaustion, high blood pressure, constant tiredness, constant thinking about one subject and excessive irritability.

In the exhaustion phase, 2 subjects from G1 and 1 from G2 are at this level, the most common symptoms in the last 3 months were: insomnia, nervous tics, confirmed arterial hypertension, frequent dizziness, desire to escape from everything, apathy desire to do nothing, prolonged depression or anger, constant thinking about the same subject, distress or daily anxiety.

16 subjects do not fit in any of the phases or there are not enough symptoms to be defined in any phase, 12 being from G1 and 4 from G2.

Graph 1 Comparison of number of active and sedentary individuals present in each phase:



DISCUSSION

The results found in this research corroborate Bonez's research; Dal Moro and Sehnem (2013); Manosso et al. (2014); Araújo et al. (2017); Meadow; Vargas and Silva (2017); Santos; Almeida and Anacleto (2018); Sampaio; Freitas, Kemp (2012); Dantas et al. (2010); Costa et al. (2007); Rossetti et al. (2008).

In the study by Bonez; Dal Moro and Sehnem (2013), aiming to describe the variables that interfere with the mental health of prison officers, interviewed 19 agents aged between 22 and 69 years, the instruments used were Beck Scales, ISSL. The scores reveal that none of the subjects have depression or hopelessness, 94.73% do not fit in any phase and 5.27% are in the phase of resistance or mild degree.

In the study by Manosso et al. (2014), In order to compare the stress and lifestyle levels of occupational gymnastics practitioners and non-practitioners in 228 employees of a company, of both sexes, who were divided into two groups G1 = 114 occupational gymnastics practitioners and G2 = 114 non-practitioners, used the Lipp Stress Symptom Inventory (ISSL) and Nahas Lifestyle Profile (PEVI).

They identified that the non-gymnastics group presented high levels of stress, it was indicated in PEVI that the gymnastics group pointed out better lifestyle indices, demonstrating that people who practice exercise tend to be less stressed and therefore have a lifestyle style. Healthier, than non-practitioners.

Meadow; Vargas e Silva (2017), aiming to identify stress, stressors and risk factors in bus drivers, through the Lipp Stress Symptom Inventory (ISSL) and the International Physical Activity Questionnaire (IPAQ - 8.0) in a sample of 322 male drivers with a mean age of 37.16 ± 8.79 years. The scores identified that 77.02% of the study subjects had low levels of physical activity. Among the participants, 46.89% had stress. Of the subjects who presented some degree of stress, 3.97% were in the alert phase, 88.74% in the resistance phase, 1.99% in near exhaustion and 5.29% in exhaustion. Such scores resemble the present studies.

Santos; Almeida and Anacleto (2018), aiming to identify the level of stress and quality of life in practicing and non-practicing university students, applied a socio demographic questionnaire, IPAQ, ISSL and lastly WHOQOL-BREF, in a sample of 34 subjects of both sexes aged 18 to 22 years. It was pointed out that in the exercise group 52.94% did not fit in any phase of symptoms and among those who did not exercise 52.94% were in the resistance phase.

The aforementioned study corroborates the present study, as 34.28% of exercise practitioners do not fit in any phase and 69.23% of non-exercise practitioners have some symptom of stress.

Dantas et al. (2010), aiming to verify the stress levels in military police officers, in 38 subjects of both genders, applied the Lipp Adult Stress Symptom Inventory (ISSL). The scores indicated that 55.3% had no stress and 44.7% had some stress symptom, and 3.17% were in the alert phase, 12.70% in resistance, 1.59% in near exhaustion. And 1.59% in exhaustion. The scores found are similar to the present study.

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Sampaio; Freitas and Kemp (2012), aiming to identify the relationship between perception of occupational stressors and quality of work life of traffic agents, applied the Stress Symptoms Inventory (Lipp, 2000) and the quality of life questionnaire in the study. Walton's work on 56 traffic officers of both sexes. The scores indicate that 45.5% do not fit in any phase and 34.4% have some stress symptom, of which 92.3% are in the resistance phase and 7.7% in the exhaustion phase.

In the study by Costa et al. (2007), when investigating the stress levels of military police officers in 264 subjects through the Lipp Adult Stress Symptom Inventory and a semi-structured questionnaire, it was identified that 62.1% did not perform regular physical activity. Regarding the LIPP 52.6% of the police did not fit in any phase and 47.4% had some symptoms of stress, and 3.4% were in the alert phase, 39.8% in the resistance phase, 3.8% in the near-exhaustion phase and 0.4% in the exhaustion phase.

Rossetti et al. (2008), investigating the stress levels of 250 federal police servants of both sexes aged between 20 and 64 years, identified that 61.6% do not fit in any phase of stress, 2.4% are in the alert phase, 32.4% are in resistance, 3.2% are in near exhaustion and 0.4% are in exhaustion. Therefore, the importance of the application and precision of the ISSL is evidenced, which allowed an accurate assessment of the existence of stress symptoms and the levels in which they are found.

CONCLUSION

The present study had its objectives achieved since when comparing the results found in the two groups, we saw that in the G1 exercise practitioner group there is a prevalence of the exercise practitioners not fitting in any phase of stress symptoms, in relation to the G2 non-exercise group. Practitioner, we found that most are in the resistance phase.

As it is shown in the literature that the practice of physical exercise plays an essential role in the prevention and treatment of physical and psychological diseases, this study confirms that the practice of physical exercise is linked to lower stress levels in traffic agents.

Considering that the sample of the present study was composed of only 35 traffic agents, it is suggested that further studies be conducted to confirm the importance of the effects of physical exercise on stress levels, not only in traffic agents, but in general population.

REFERENCES

- ARAÚJO, R. et al. Nível de ansiedade em jovens adultos praticantes de exercício físico na cidade de Rio Pomba – MG. *Revista Científica Fagoc Multidisciplinar* – V.2, - 2017.
- BRAGA, Clarissa Daguer. As novas tecnologias de gestão e suas decorrências: as tensões no trabalho e o estresse ocupacional na função gerencial. 2008. 134f. Dissertação (Mestrado em Administração) – Universidade Federal de Minas Gerais, Centro de Pós-Graduação e Pesquisas em Administração, Belo Horizonte
- BONEZ, A.; DAL MORO, E.; SEHNEM, S. B. Saúde mental de agentes penitenciários de um presídio catarinense. *Rev. Psicol.* Nº 31, v. 74, p. 507-517, jul./set 2013.
- COSTA, M. et al. Estresse: diagnóstico dos policiais militares em uma cidade brasileira. *Estresse: diagnóstico dos policiais militares em uma cidade brasileira. Rev Panam Salud Publica.* V. 21, Nº4, p. 217–22. 2007.
- DANTAS, M. A. et al. Avaliação de estresse em policiais militares. *Psicologia: Teoria e Prática*, v. 12, Nº 3, pp. 66-77, Universidade Presbiteriana Mackenzie São Paulo, 2010.
- FIGUEIREDO, N. M. A. D. Método e metodologia na pesquisa científica. São Paulo: Difusão, 2004.
- FREITAS, A.R., CAMESECA, E.C., PAIVA, B.S.R. Impacto de um programa de atividade física sobre ansiedade, depressão, estresse ocupacional e síndrome de Burnout dos profissionais de enfermagem no trabalho. *Ver. LatinoamEnferm.* 2014;22(2):332-6.
- LANCMAN, S.; SZNELWAR, L. I.; UCHIDA, S.; TUACEK, T. A. O trabalho na rua e a exposição à violência no trabalho: um estudo com agentes de trânsito. *Interface*, v. 11 n. 21, p. 79-92, 2007.
- LIPP, M. E. N.; GUEVARA, A. J. H. Validação empírica do Inventário de Sintomas de Stress (ISS). *Estudos de Psicologia*, v. 11, n. 3, p. 43-49, 1994.
- MARRAS, J. P.; VELOSO, H. M. Estresse ocupacional. Rio de Janeiro: Elsevier, 2012.
- PRADO, R. L.; VARGAS, M. M.; SILVA, M. H. S. Estresse e atividade física em motoristas de ônibus urbano em uma capital do nordeste do Brasil. *Revista interfaces científicas - saúde e ambiente Aracaju.* v.5, n.3, p.37 – 46, jun. 2017.
- PRETO, V.A.; PEDRÃO, L. J. A percepção de enfermeiros de Unidades de Terapia Intensiva sobre o estresse em seu local de trabalho. *Revista de enfermagem UFPE on line*, v. 8, n. 9, p. 2998-3007, 2014.
- PRODANOV, C. C.; FREITAS, E. C. *Metodologia do Trabalho Científico: Métodos e Técnicas da Pesquisa e do Trabalho Acadêmico-2ª Edição.* Editora Feevale, 2013.
- MANOSSO, M.; et al. Comparação dos níveis de estresse e estilo de vida entre praticantes e não praticantes de ginástica laboral. *R. Bras. Ci. e Mov.* Nº 22, v. 2. p. 65-71., 2014.
- ROSSETTI, M. O. et al. O inventário de sintomas de stress para adultos de lipp (ISSL) em servidores da polícia Federal de São Paulo. *Revista brasileira de terapias cognitivas*, V.4, Nº 2, 2008.
- SAMPAIO, R. F. V.; FREITAS, C.; KEMP, M. N. Estressores Ocupacionais e Qualidade de Vida no Trabalho de Agentes de Trânsito. *Pesquisas e Práticas Psicossociais.* V. 7, Nº 1, São João del-Rei, Jan/Jun 2012.
- SANTOS, T. S.; ALMEIDA, R. L.; ANACLETO, G. M. C. Nível de estresse e qualidade de vida em universitários praticantes e não praticantes de esporte. *Revista Científica UMC Edição Especial PIBIC*, outubro 2018.
- SCARINGELLA, R. S. A Crise da Mobilidade Urbana em São Paulo. São Paulo, *Perspec.* V. 15, n. 1, p. 55-59, 2005
- SELYE, H. The general-adaptation-syndrome. *Annual Review of Medicine*, v. 2, n. 1, p. 327-342, 1951.
- SOUZA, E. R. & Minayo, M. C. S. Policial, risco como profissão: morbimortalidade vinculada ao trabalho. *Ciência e saúde coletiva*, v.10, n.4, p. 917-928, 2005.

STRESS BETWEEN PRACTICING AND NON-PRACTICAL TRANSIT AGENTS OF PHYSICAL EXERCISES.

Nowadays stress has become more and more present in workplaces, due to such phenomenon, this study aims to compare the level of stress between practicing and non-practicing traffic agents of the Traffic and Patos - PB Transport Superintendence. -PB. The sample consisted of 35 subjects of both sexes aged 31 to 46 years divided into two groups G1 = 22 exerciser and G2 = 13 non-exerciser. The instruments used were: a socio demographic questionnaire and job perception data and the LIPP (ISS test). The results indicate that 54.54% of the subjects belonging to G1 do not fit in any phase, being

characterized by the absence of stress; in relation to G2 it can be observed that 69.23% of the subjects had some stress symptom. As evidenced in the literature that the practice of physical exercise plays an essential role in the prevention and treatment of physical and psychological diseases, this study confirms that the practice of physical exercise is linked to lower stress rates in traffic agents.

Keywords: Stress. Physical exercise. Sedentary.

STRESS ENTRE AGENTS DE TRANSIT PRATIQUES ET NON PRATIQUES

RESUME

De nos jours, le stress est devenu de plus en plus présent sur les lieux de travail, en raison de ce phénomène, cette étude a pour objectif de comparer le niveau de stress entre les agents de la circulation en activité et ceux qui ne le pratiquent Patos -PB. L'échantillon était composé de 35 sujets des deux sexes âgés de 31 à 46 ans répartis en deux groupes: G1 = 22 utilisateurs et G2 = 13 non-utilisateurs. Les instruments utilisés étaient: un questionnaire sociodémographique, des données sur la perception de l'emploi et le test Lipp ISS. Les résultats indiquent que 54,54% des sujets appartenant à G1 ne correspondent à aucune phase, étant caractérisée par l'absence de stress, par rapport à G2, on peut observer que 69,23% des sujets présentaient des symptômes de stress. Comme il est démontré dans la littérature que la pratique de l'exercice physique joue un rôle essentiel dans la prévention et le traitement des maladies physiques et psychologiques, cette étude confirme que la pratique de l'exercice physique est liée à des taux de stress plus faibles chez les agents de la circulation.

Mots-clés: Stress. Exercice physique. Mode de vie sédentaire.

ESTRÉS ENTRE AGENTES PRÁCTICOS Y DE TRANSITO NO PRÁCTICO

RESUMEN

Hoy en día, el estrés se ha vuelto cada vez más presente en los lugares de trabajo, debido a este fenómeno, este estudio tiene como objetivo comparar el nivel de estrés entre los agentes de tránsito practicantes y no practicantes de la Superintendencia de Patos - PB Traffic and Transport. - PB. La muestra consistió en 35 sujetos de ambos sexos de 31 a 46 años divididos en dos grupos G1 = 22 deportistas y G2 = 13 no deportistas. Los instrumentos utilizados fueron: un cuestionario socio demográfico y datos de percepción del trabajo y la prueba Lipp ISS. Los resultados indican que el 54.54% de los sujetos que pertenecen a G1 no encajan en ninguna fase, caracterizándose por la ausencia de estrés, en relación con G2 se puede observar que el 69.23% de los sujetos tenían algún síntoma de estrés. Como se evidencia en la literatura de que la práctica del ejercicio físico juega un papel esencial en la prevención y el tratamiento de enfermedades físicas y psicológicas, este estudio confirma que la práctica del ejercicio físico está vinculada a tasas de estrés más bajas en los agentes de tránsito.

Palabras clave: estrés. Ejercicio físico. Estilo de vida sedentario.

ESTRESSE ENTRE AGENTES DE TRÂNSITO PRATICANTES E NÃO PRATICANTES DE EXERCÍCIOS FÍSICOS

RESUMO

Atualmente o estresse tem se tornado cada vez mais presente em locais de trabalho, devido a tal fenômeno, o presente estudo tem como objetivo comparar o nível de estresse entre agentes de trânsito praticantes e não praticantes de exercícios físicos da Superintendência de Trânsito e Transportes de Patos-PB. A amostra foi composta por 35 sujeitos de ambos os sexos com idades entre 31 e 46 anos divididos em dois grupos G1=22 praticante de exercício e G2=13 não praticante de exercício. Os instrumentos utilizados foram: um questionário sociodemográfico e dados de percepção do trabalho e o teste de Lipp ISS. Os resultados apontam que 54,54% dos sujeitos pertencentes ao G1 não se enquadram em nenhuma fase, sendo caracterizado pela ausência de estresse, em relação ao G2 pode-se observar que 69,23% dos sujeitos apresentavam algum sintoma de estresse. Como comprovado na literatura que a prática de exercícios físicos tem papel imprescindível na prevenção e tratamento de doenças físicas e psicológicas, esse estudo ratifica que a prática de exercícios físicos está ligada a menores índices de estresse em agentes de transito.

Palavras-chave: Estresse. Exercício físico. Sedentarismo.