

## 100 - COMPARISON OF THE LEVEL OF STRESS OF PRACTITIONERS AND NON-PRACTITIONERS MILITARY POLICIES OF PHYSICAL EXERCISES OF THE OF PATOS – PB CITY

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doi:10.16887/89.a1.100

### INTRODUCTION

Stress is a bodily reaction that triggers various responses, whether environmental, physical or social.<sup>1</sup> It can have a positive effect, which contributes to productivity and creativity, or it can also have the opposite effect where mental energy, work capacity decrease.<sup>2</sup>

Stressors are characterized by a situation, fact or context that is of threatening understanding and requires a response from the individual, such a threat can be deduced consciously or unconsciously.<sup>3</sup> Stressful situations are determined as General Adaptation Syndrome, and are divided into three phases: alert, resistance and exhaustion.<sup>4</sup>

Stress is characterized by being a very present factor in the work place, requiring more and more researches so that one can know more about the topic, with the aim of tracing preventive strategies.<sup>5</sup>

Organizational and Work Psychology has come up with several studies related to health, where one of the main focuses is stress. Thus, it was possible to observe the relations of emotional and physiological dysfunctions arising from the professional environment and its consequences for man.<sup>6</sup>

In all organizations of all kinds of hierarchy it is normal that there is some type of occupational stress. With the police no different, on the contrary, the area is recognized to be more stressful than any other occupation. Understanding the stress of cops and how they deal is of great importance.<sup>7</sup>

Studies in the United States have shown that stress not only lowers operational performance, but can also mean increasing the threat of various health-related factors, psychological, emotional, and family conflict.<sup>8</sup>

This study aims to compare the levels of stress of the military police of the city of Patos-PB, seeking a distinction between police practitioners and non-practitioners of physical exercises. Identify the effects that the practice of physical exercise has under stress, since it is a fatality detected in the midst of society daily and that can cause negative modifications physically, mentally, within the family and in the work itself.

### METHODOLOGICAL PROCEDURES

Search type survey consisting of the collection of quantifiable data, which will be examined to discern association patterns, obtaining information about the prevalence, distribution and interrelationship of variables within a population. It is a quantitative research that has the function of transforming data as opinions and information into numbers, to classify and analyze using statistical techniques as percentage, average standard deviation, has a descriptive purpose, with a non-probabilistic and intentional sample 9, composed by military police of the city of Patos - PB.

The investigated population was comprised of 60 military police of the city of Patos - PB, who are subdivided into G1 (physical exercise group), and G2 (non - physical exercise group), regardless of age and time of service. The military police were chosen in a random manner on the established date of the distribution of the Free and Informed Term TCLE that will be directed to them for signature.

A semi - structured socioeconomic questionnaire was used, and the Lipp – ISSL 10 Adult Stress Symptom Inventory, which evaluates whether or not there is stress, as well as its level, through a three - phase model called alert, resistance and exhaustion .

A meeting was held with the person in charge of the military police company of the city of Patos - PB, where the interest and purpose of the research was exposed, and requesting the authorization through a consent term for the data collection of the research. Then there was a meeting with the participants to clarify how the study would be and to propose their voluntary participation. Data were collected on random days between August and September 2018.

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

### RESULTS

Sixty police officers were interviewed, six women and 54 men, subdivided into physical (active) and non-physical exercise (sedentary) practitioners, where each group contains 30 individuals. In the active group, 3 women and 27 men participated; the mean age was  $40.33 \pm 9.55$ . In the sedentary group, 3 women and 27 men participated, with a mean age of  $44.46 \pm 8.70$ .

As can be seen in Table 1, there are no differences of great significance in the socioeconomic scope of the two groups studied when compared.

Table 1: Socioeconomic Characteristics

AGE	SEEDS		ACTIVE	
	FEMALE	MALE	FEMALE	MALE
GENRE	03	27	03	27
INCOME	+ 1 SALARY		+ 1 SALARY	
RESIDENTS	1 a 3 PERSONS	4 a 6 PERSONS	1 a 3 PERSONS	4 a 6 PERSONS
RESIDENCE	URBAN AREA	COUNTRYSIDE	URBAN AREA	COUNTRYSIDE
SCHOOLING	FUNDAMENTAL	MEDIUM	SUPERIOR	FUNDAMENTAL
MARITAL STATUS	MARRIED	SEPARATE	SINGLE	MARRIED

However, when we compare the groups taking into account the phases in which each subject interviewed is, we see a difference of great proportions. Of the 30 sedentary subjects interviewed, 15 are in Phase II or Resistance Phase (fight) of the test, where the symptoms they had felt in the last month should be signaled. The most marked symptoms of these individuals were: Problems with memory, forgetfulness; Generalized malaise, with no specific cause; Tingling in the extremities (feet or hands); Constant physical wear sensation; Change of appetite; High blood pressure (high blood pressure); Constant Tiredness; Occurrence of prolonged gastritis (burning in the stomach, heartburn); Dizziness, feeling of floating; Excessive emotional sensitivity, emotional about anything; Doubts about himself; Constant thinking about a single subject; Excessive irritability.

The other 15 sedentary individuals interviewed are in Phase III or Exhaustion phase (exhaustion) of the test, where the symptoms they had felt in the last three months should be signaled. The most marked symptoms of these individuals were: Sexual Difficulties; Tingling in the extremities (hands and feet); Insomnia; Nerve tics; Confirmed arterial hypertension; Extreme change of appetite; Tachycardia (fast heart beat); Frequent dizziness; Impossibility to Work; Nightmares; Sensation of incompetence in all areas; Will to run away from everything; Apathy, willpower, depression or prolonged anger; Excessive tiredness; Constant thinking about the same subject; Irritability with no apparent cause; Daily anxiety or anxiety; Emotional hypersensitivity; Loss of sense of humor.

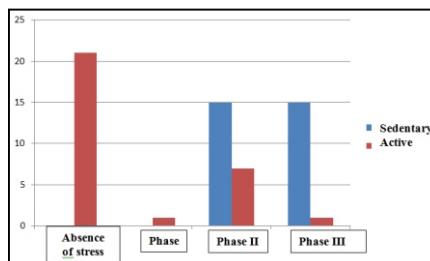
No sedentary individuals interviewed fit into Phase I or Alert Phase (alarm), as no sedentary individual from this research found to be absent from stress, ie.

Of the 30 active subjects interviewed, 21 are absent from stress because there is no symptom in any of the phases or there are not enough symptoms to be defined at some stage.

Only one active research individual is in Phase I or Alert Phase (alarm), in which the symptoms experienced in the last 24 hours must be identified. The marked symptoms were: dry mouth; Increased sweating (too much sweating); Muscle tension (back, neck, shoulder pain); Gripping the jaw / grinding of teeth, or gnawing nails or pen tip; Insomnia, difficulty sleeping; Sudden and transient hypertension (sudden and transient high blood pressure); Sudden excitement.

Another 7 active subjects are in Phase II or Phase of Resistance (fight), where they should be signaled the symptoms they had felt in the last month. The most marked symptoms of these individuals were: Problems with memory, forgetfulness; Generalized malaise, with no specific cause; Constant physical wear sensation; Change of appetite; Appearance of dermatological problems (skin); High blood pressure (high blood pressure); Constant Tiredness; Dizziness, feeling of floating; Excessive emotional sensitivity, emotional about anything; Doubts about himself; Constant thinking about a single subject; Excessive irritability; Decreased libido (decreased sexual desire).

Only one active participant of the research is in Phase III or Exhaustion phase (exhaustion), where the symptoms present in the last 3 months should be signaled, the symptoms indicated were: Frequent diarrhea; Prolonged dermatological problems (skin); Extreme change of appetite; Impossibility to work; Feeling of incompetence in all areas; Will to run away from everything; Apathy, willpower, depression or prolonged anger; Excessive tiredness; Constant thinking about the same subject; Irritability with no apparent cause; Anxiety or daily anxiety. As shown in Chart 1.Graph 1: Comparison of number of active and sedentary individuals present in each phase:



## DISCUSIÓN

Los resultados encontrados en esta investigación corroboran con investigaciones de Andrade en 2012 donde hubo comparación del estrés entre practicantes y no practicantes de actividad física, y notablemente el nivel de estrés entre los no practicantes es más elevado comparado con los practicantes, en distintas profesiones como bancarios, policías militares e incluso estudiantes adolescentes.<sup>11</sup>

Un estudio, realizado en 2014, con 181 gestores públicos de las secretarías de estado de Minas Gerais presentó prevalencia de inactividad física, siendo más frecuentes en los participantes clasificados con algún nivel de estrés, y relación entre la práctica de actividades físicas y la ausencia de estrés. Datos que se asemejan al del presente estudio.<sup>12</sup>

El estrés de un modo general acarrea en perjuicio para la calidad de vida y la productividad del hombre, por tener un efecto facilitador en el desarrollo de muchas enfermedades, tales como hipertensión, infarto, artritis, asma y problemas dermatológicos, especialmente si los agentes estresores fueron constantes y no controladas.<sup>13</sup>

Prado, Silva y Vargas, constataron en su trabajo un gran número de sujetos en niveles por debajo de los recomendados de actividades físicas, así como el porcentaje elevado de sujetos con estrés. El estrés puede ser uno de los mayores factores de riesgo para la salud y la calidad de vida de los trabajadores.<sup>14</sup> Además de los riesgos que sedentarismo detrás, como el desencadenamiento de enfermedades cardiovasculares, el estrés puede ser uno de los mayores factores de riesgo para la salud y calidad de vida de los trabajadores.

En el estudio comparativo de Portela y Bughay, tanto el nivel de estrés de los policías militares sedentarios, como el nivel de estrés de los policías militares activos / practicantes de actividad física, fueron clasificados como elevados si evaluamos por la puntuación alcanzada, pero el grupo de los activos obtuvo niveles menores comparados a los sedentarios, pudiéndose decir que los activos se evalúan menos estresados, indicando que la actividad física puede tener efecto positivo en el control del estrés.<sup>15</sup>

Algunos autores describen los beneficios de la actividad física para la disminución de los niveles de estrés, como en el trabajo de Nunomura, Teixeira y Caruso que mostraron que la actividad física disminuyó el nivel de estrés y aumentó la calidad de vida sin alterar las características de personalidad de sedentarios después de ingresar en alguna modalidad.<sup>16</sup>

Higa concluyó en su trabajo que la actividad física fue eficiente para la disminución de los niveles de estrés. El efecto de la práctica de actividad física para reducir el nivel de estrés es agudo, pues la diferencia significativa con el grupo sedentario sólo es evidenciada después del entrenamiento, por lo tanto, se identifica la eficacia de un plan de entrenamiento de una modalidad deportiva para la salud mejora de la calidad de vida del individuo.<sup>17</sup>

## CONCLUSIÓN

A través de los datos adquiridos podemos verificar que grupo de policías militares no practicantes de ejercicios físicos presentes en ese estudio se encuentran con fuertes signos de síntomas de estrés, mientras que el grupo de policías militares practicantes de ejercicios físicos, en gran parte, se encuentran libres de estrés. Concluyendo así que el ejercicio físico ejerce una fuerte influencia bajo el control del estrés.

Como hemos visto en extractos citados en el trabajo el control del estrés por medio de ejercicios físicos, acarrea en beneficios para el individuo, como un buen desempeño en el trabajo, buenas relaciones personales y en el ámbito familiar, sin contar en la ausencia de varias enfermedades mentales y corporales. Y en este caso, colaborando no sólo en la profesión policial, sino también en cualquier otra profesión que genere estrés.

Se espera que con la conclusión de ese trabajo, medidas adecuadas en cuanto a la salud física y mental de los policías militares de la ciudad de Patos - PB sean tomadas. No sólo en el caso de aquellos que obtuvieron resultados negativos de acuerdo con la investigación, pero para todos. Y que sirva de ejemplo y como base para demás profesiones.

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#### COMPARISON OF THE LEVEL OF STRESS OF PRACTITIONERS AND NON-PRACTITIONERS MILITARY POLICIES OF PHYSICAL EXERCISES OF THE OF PATOS – PB CITY

Occupational stress is considered one of the most frequent mental and behavioral disorders in the population. The regular practice of physical exercise is a non-drug option for the treatment and prevention of stress and other mental disorders. The aims to compare the manifestation of stress among military police officers who practice and don't practice physical exercises in the Patos-PB city. It's a field research, Survey, with a quantitative approach, a descriptive purpose, a non-probabilistic and intentional sample. Sample whit 60 policemen of the Patos - PB city, into sedentary and active people. The instrument used be a semi structured socioeconomic questionnaire and the Inventory of Stress Symptoms for Adults of Lipp (ISSL). The data was analyzed through Microsoft Excel. Of the 30 sedentary subjects, 15 are in the Resistance Phase, 15 sedentary individuals in the Exhaustion Phase. Of the 30 active subjects, 21 are absent from stress, only 1 active individual is in the Alert Phase, another 7 active subjects are in the Resistance Phase and only 1 individual in Phase III. The groups of militaries non – practicing physical exercise have symptoms of stress, while the groups of military policemen practicing physical are largely free of stress. Therefore, physical exercise exerts a strong influence on the control of stress.

Key words: Stress. Policemen. Physical exercise.

#### COMPARAISON DU NIVEAU DE STRESS DES POLITIQUES MILITAIRES PRATIQUES ET NON PRATIQUES DES EXERCICES PHYSIQUES DE LA VILLE PATOS - PB

Le stress professionnel est considéré comme l'un des troubles mentaux et comportementaux les plus fréquents dans la population. L'exercice physique régulier est une option non médicamenteuse pour le traitement et la prévention du stress et d'autres troubles mentaux. L'objectif était de comparer la manifestation de stress chez les officiers de police militaire qui pratiquaient et pratiquaient des exercices physiques dans la ville de Patos-PB. Enquête de terrain, Enquête, approche quantitative, objectif descriptif, échantillon non probabiliste et intentionnel. Échantillon de 60 policiers militaires de la ville de Patos - PB, entre sédentaires et actifs. L'instrument utilisé était un questionnaire socio-économique semi-structuré et l'inventaire des symptômes de stress chez l'adulte (Lipp), Lipp Adult. Les données collectées ont été analysées à l'aide de Microsoft Excel. Sur les 30 sujets sédentaires, 15 sont en phase de résistance, 15 sédentaires en phase d'épuisement. Sur les 30 sujets actifs, 21 sont absents du stress, un seul actif est en phase d'alerte, 7 autres sujets en phase de résistance et un seul en phase III. Le groupe d'officiers de la police militaire qui ne pratiquent pas d'exercices physiques présente des symptômes de stress, car le

groupe d'officiers de la police militaire pratiquant des exercices physiques est en grande partie exempt de stress. En concluant que l'exercice physique exerce une forte influence sous le contrôle du stress.

Mots clés: stress. Cops. Exercice physique.

#### COMPARATIVO DEL NIVEL DE ESTRÉS DE LOS POLICIALES MILITARES PRACTICANTES Y NO PRACTICANTES DE EJERCICIOS FÍSICOS DE LA CIUDAD DE PATOS - PB

El estrés ocupacional es considerado uno de los trastornos mentales y comporta mentales más frecuentes en la población. La práctica regular de ejercicios físicos es una opción no medicamentosa al tratamiento y prevención del estrés y otros trastornos mentales. El objetivo fue comparar la manifestación de estrés entre policías militares practicantes y no practicantes de ejercicios físicos de la ciudad de Patos-PB. Investigación de campo, encuesta, de enfoque cuantitativo, objetivo descriptivo, muestra no probabilística e intencional. Muestra de 60 policías militares de la ciudad de Patos - PB, entre sedentarios y activos. El instrumento utilizado fue un cuestionario semi estructurado socioeconómico y el Inventario de Síntomas de estrés para adultos de Lipp (ISSL). Los datos recopilados se analizaron a través de Microsoft Excel. De los 30 sujetos sedentarios, 15 están en la Fase de Resistencia, 15 individuos sedentarios en la Fase de Extracción. De los 30 sujetos activos, 21 están ausentes de estrés, sólo 1 individuo activo está en la Fase de Alerta, otros 7 sujetos activos están en la Fase de Resistencia y sólo 1 individuo en la Fase III. El grupo de policías militares no practicantes de ejercicios físicos está con síntomas de estrés, ya el grupo de policías militares practicantes de ejercicios físicos, en gran parte está libre de estrés. Concluyendo que el ejercicio físico ejerce una fuerte influencia bajo el control del estrés.

Palabras clave: Estrés. La policía. Ejercicio físico.

#### COMPARATIVO DO NÍVEL DE ESTRESSE DOS POLICIAIS MILITARES PRATICANTES E NÃO PRATICANTES DE EXERCÍCIOS FÍSICOS DA CIDADE DE PATOS – PB

O estresse ocupacional é considerado um dos distúrbios mentais e comportamentais mais frequentes na população. A prática regular de exercícios físicos é uma opção não medicamentosa ao tratamento e prevenção do estresse e outros transtornos mentais. O objetivo foi comparar a manifestação de estresse entre policiais militares praticantes e não praticantes de exercícios físicos da cidade de Patos-PB. Pesquisa de campo, Survey, de abordagem quantitativa, objetivo descritivo, amostra não probabilística e intencional. Amostra de 60 policiais militares da cidade de Patos – PB, entre sedentários e ativos. O instrumento utilizado foi um questionário semiestruturado sócio econômico e o Inventário de Sintomas de Estresse para Adultos de Lipp (ISSL). Os dados coletados foram analisados por meio do Microsoft Excel. Dos 30 sujeitos sedentários, 15 estão na Fase de Resistência, 15 indivíduos sedentários na Fase de Exaustão. Dos 30 sujeitos ativos, 21 estão ausentes de estresse, apenas 1 indivíduo ativo está na Fase de Alerta, outros 7 sujeitos ativos estão na Fase de Resistência e apenas 1 indivíduo na Fase III. O grupo de policiais militares não praticantes de exercícios físicos está com sintomas de estresse, já o grupo de policiais militares praticantes de exercícios físicos, em grande parte está livre de estresse. Concluindo que o exercício físico exerce forte influência sob o controle do estresse.

Palavras-chave: Estresse. Policiais. Exercício físico.