# 138 - AERIAL SILK ACROBATICS, INTERFERENCE OF ITS PRACTICE IN THE CONTROL OF EMOTIONAL STRESS.

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#### INTRODUCTION:

The practice of AERIAL SILK ACROBATICS (ASA) has been observed in different areas beyond the traditional circus canvases and has been applied in a recreational, educational and professional (BATISTA, 2003 apud BORTOLETO, CALÇA, 2007). How has plasticity and beauty attracts many fans and also carrying out several studies (BORTOLETO, CALÇA, 2007). According to these same authors, the ASA can be defined as a mode that allows the practitioner views using a cloth, with which it performs tricks, pictures, falls, movement, acrobatics without locks and to make direct contact with the ground and lasting. It takes strength and field body to rise to the tissue (BATISTA, 2003; SERRA, 2006 apud BORTOLETO, CALÇA, 2007).

The word stress derives from Latin, and man, it means how and with what intensity the external environment influences your body and mind (PEREIRA, 2002; BOTSARISi, 2003 apud LIMA, 2005). Hans Selye (1965), Austrian physician and researcher, discovered that different stressors generated an adaptation of the body, modifying the structure and chemical composition of the body. He called this phenomenon the General Adaptation Syndrome (GAS) concluded that stress should not be regarded as negative, when there is a certain level, it regulates the body leading to better performance (FIAMONCINI, FIAMONCINI, 2003), guaranteeing survival and quality of life (LIMA, 2005). Stress occurs in three phases: Phase alert or alarm when the stressor is perceived by the individual becoming into an automatic defense of the body; Phase of Resistance, when the stressor is still present for longer, the tension builds and the reaction can be channeled to a specific organ or system; Phase Exhaustion, stress becomes too intense and surpasses the adaptive reserves (Lima 2005).

Botsaris (2003) cited by Lee (2005) considers stress a contemporary epidemic and a public health problem worldwide, and according to Amaral (2003), we can tackle it in two ways: as a threat or challenge. The important thing is to create physical, mental and emotional return for the body homeostasis (Carmella, 2004 apud LIMA, 2005). According to Lima (2005), Stress prepares the body for physical action with the release of endorphins, neurotransmitters and hormones that trigger energy production that will be used for an action in the fight or flight. Therefore, we have used the exercise in the treatment of stress, depression and anxiety. Studies relating physical activity with mental health makes evident the importance and necessity of the contribution of physical education professional mental health team seeking a full service (TAKEDA, STEFANELLI, 2006).

This activity for its beauty and plasticity by using a large muscle work and also have an expressive body awareness (BORTOLETO, CALÇA, 2006), has been spread out in different spaces. And because it requires courage and attitude, the practice of this activity seems to contribute to the decreased levels of emotional stress, as well as coping with phobias. Thus, this study is justified because the TA is a practice that has been widely used outside the circus as an alternative physical activity (BORTOLETO, CALÇA, 2006) and the lack of research proving that this practice can be used to control the emotional stress as well as being an area of concern for the physical education that is not being considered for health care services

It was intended to investigate and evaluate students and teachers of both sexes in Acrobatics Airlines during activity with regard to their profiles and relationship with levels of emotional stress and mood. It was intended to describe the sociodemographic profile of the practitioners of ASA, verify and assess the association of his practice in the control of emotional stress by identifying changes in self-esteem and depressive symptoms.

#### METHODOLOGY:

The study was conducted in four distinct spaces Aerial Acrobatics located in Rio de Janeiro, in the neighborhoods of Botafogo, Jardim Botanico and Barra da Tijuca. The sample consisted of 20 subjects who were engaged in this activity between 03 months to 02 years, 16 females and 04 males. The participants were members of the middle class, including teachers, students and employees of the formal area. This study followed the Guidelines for Research Using Human Subjects, Resolution 196/96 of the National Health Council, 10/10/1996. Primary data were collected through questionnaires, guided by a script composed of closed and open questions concerning the reason for choosing this activity and sought objective, subjective evaluation of levels of emotional stress before and after performing the activity, the perception by its practitioners the influence of such activity in reducing the symptoms mentioned. Were also used to test the subjects during activities in order to verify the stress levels and moods. We were helped with a psychology expert who participated in the analysis of inventories of test responses of study participants. 02 questionnaires were distributed and 01 test for each respondent, with the following objectives: Questionnaire 1 - Personal Data, Questionnaire 2 - Activity Data: consists of information directly related to the activity and the influence of ASA on stress levels of respondents. Test - Preliminary Assessment of Stress Level (Resumed) (LIPP, 2000): in order to assess the level of stress. The payoff resulted in a sample of only 20 interviews. Although the conclusions obtained by analyzing a test sample are in need of greater statistical power to allow projections, interesting results were obtained and allowed to assume a relationship between TA and practice of stress management, and establish a profile of practicing this activity. The data were analyzed based on the percentage analysis.

## DATAANALYSIS:

The ASA visited schools are in districts whose administrative regions (AR's) have a higher incidence of female residents (55%) and where 76% of the population aged 20 years. Are regions with the Human Development Index less than 0.92, a rate considered high (SERVIÇO BRASILEIRO DE APOIO ÀS MICRO E PEQUENAS EMPRESAS - SEBRAE, 2009). Practitioners of ASA participants, 80% (16) were female, aged between 18 and 33 years. Among the practitioners were male, 100% aged between 22 and 25 years. Overwhelmingly, respondents were unmarried and without children, all had completed high school, and 90% were enrolled or have completed a degree. Of the total respondents, 15% had or were taking graduate courses, being all female. Only 20% were only studying, while the remaining 80% were in the labor market. Most male respondents (50%) worked and studied, while that of females (44%) only worked. Of the respondents who were still studying nearly 60% had their studies funded by parents, while among females, this percentage was 78%. About 70% of male respondents

who were still studying, attending a public university. As for respondents who worked, most stated income between 01 and 03 minimum wages. The males had higher average wages to females, and 67% reported income between 04 and 10 minimum wages. Based on the data presented, we can then characterize the practitioners of ASA the schools visited, as young middleclass, mostly female, unmarried and without children with good education and entered the labor market. Overall, 65% of the practitioners of AT respondents chose this activity to be different, for developing a body expression and constitute a challenge to be overcome. The beauty of the activity was also a strong motivation, basically for female practitioners. Also in general, the goal of practitioners of the ASA was focused on carrying out a physical activity. These results agree with those described by Bortoleto e Calca (2007) about the growing interest by the activity of their plasticity and beauty, and an alternative physical activity. Close to 100% of respondents said they achieved the expected goals. An important point concerned the relatively short time to achieve the intended goals. More than half of female practitioners and 100% of males obtained satisfactory results for them between 3 and 6 months of practice activity. Sought a relationship between a shorter time to obtain results and eventual practice of other physical activities, which would have important role in this performance. The group interviewed was practically divided between those who practiced a different physical activity beyond the ASA and who did not, with a slight superiority for the latter class. The results achieved with this activity contrasts with the little practice time reported by some subjects in this research were explained in studies of Oliveira (2006) for this activity requires the use of Technical Imagination. Faced with questions about the perception of their stress levels, 45% of those surveyed reported suffering from some level of stress, and this percentage was slightly higher in female practitioners. The differences found in gender showed a higher level of stress for the women interviewed, which can be justified by the demands and social conditions that lead them to expend more effort to the demands of everyday life, both in the family, as in the work. Several activities were listed as a way to relax, involving not only physical activities, but also, do nothing. In relation to physical activity were related acrobatics, running, stretching and dance. Create physical, mental and emotional return for the body homeostasis would be needed (Carmella, 2004 apud LIMA, 2005).

Asked whether the activity of ASA exerted influence on stress levels, the vast majority responded affirmatively, with no differences among the practitioners of male or female. Among the reasons identified by respondents to the influence of stress in their states, highlights the need for concentration and connecting the physical with the emotional during the activity, which results in a moment of pleasure, happiness and even pride at the results. These results were explained in various studies such as Fleury (2002), which states that an athlete should be able to imagine yourself succeeding, to control their thoughts, to be able to manage stress and to establish realistic goals. In effect declared by the activity of ASA respondents about their physical and emotional states before and after physical activity, we observed that 70% of respondents reported some level of fatigue, stress or anxiety before activity. After practice, yet only 5% indicated some fatigue. The vast majority (80%) reported feeling calm. This evidence can be explained in studies by Ribeiro (1988) cited by Lee (2005) on the production, through physical activities, in both physical and psychological benefits. Adding studies by Cooper (1982) and Oliveira (1996) cited by Godoy (2002), when the body is tense or stressed, he is prepared for movement and spent this energy decreases the tension generated by this stress. These results were also met the study by Albrecht (1988) cited by Lee (2005) on the effects of stress on the body. The heart rate increases to a greater blood supply to tissues. The muscles become more tonics. The liver glycogen is converted into glucose, which together with the oxygen produced by an increase in respiratory rate, produces more energy.

n performing the analysis of tests Preliminary Assessment of Stress (LIPP) arrived at the following evidence. The instrument for Preliminary Assessment of Stress (LIPP, 2001) found that 45% of subjects remained at the same stage of stress fields demonstrating a physical and emotional balance. Of this total, just over 30% (three), were in the alarm phase where the stressor is perceived by activating defense mechanisms leaving the body in a state of readiness, breaking homeostasis. About 70% (nine) were in the resistance phase is characterized by the accumulation of stress when the stressor is still acting. No individual was not identified at the stage of exhaustion. Of the remaining 55%, 91% (10) showed a level of physical stress during the alarm phase and mental endurance, suggesting the body in balance. These results indicate a need for attention to these individuals that are not exceeded the reserve characteristic of the adaptive phase of exhaustion. Only 0.9% (01 subject) of this group was the physically and mentally resistance phase in the exhaustion phase, suggesting a complete breakdown of homeostasis. It is worth noting two cases in particular, where the score level indicated by the test of physical and mental extremely opposite, where the physical and emotional wear has not shown he was almost at the stage of exhaustion, despite having declared themselves without stress. Reported that stretching techniques used both as the actual act of rest to relax. This finding may suggest several hypotheses, including that the symptoms of mental stress were not being perceived by these subjects, or that the achievement of ASA associated with other physical activities reported by them would be minimizing the symptoms of physical exhaustion. The latter hypothesis corroborated by what was searched for and Fiamoncini Fiamoncini (2003) that would be important to incorporate habits and attitudes with unexpected events, physical exercise and relaxation to improve the quality of life by preventing the stress becomes excessive.

#### CONCLUSIONS:

The data, despite the small sample, are suggestive that the practice of TA in this sample can reduce stress levels. This influence can be explained by the great need for concentration, body language, feelings and physical-emotional connection during the activity. Thus obtained are moments of pleasure and pride to the results, increasing self-esteem and improving the attitude of facing difficulties. The results of the influence of TA before and immediately after their practice on the physical and emotional states were obtained by perception, not having been assessed by tests, it is recommended that assessment for a forthcoming study.

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# AERIAL SILK ACROBATICS, INTERFERENCE OF ITS PRACTICE IN THE CONTROL OF EMOTIONAL STRESS. SUMMARY:

It is known that physical activity produces both physical and psychological benefits may be used as an adjuvant in the control or treatment of symptoms of emotional stress, since practiced correctly. Nowadays stress is considered one of the major problems that cause disease and can now be considered a public health problem. Aerial Silk Acrobatics is an activity that by having great beauty and plasticity, and provide a working muscle and flexibility so valued by its practitioners, has been spread in different places outside of circus. Practitioners often have great satisfaction and motivation in the face of challenges, seeking to overcome them with great commitment and persistence. This study aims to investigate the possible influence of the practice of this activity in controlling symptoms of emotional distress in an adult population. To this end, a descriptive survey was developed and implemented qualitative and quantitative approaches into four spaces Aerial Silk Acrobatics located in Rio de Janeiro (capital). The results from the analysis of percentage, this sample suggest a positive indication as to influence the practice of Aerial Silk Acrobatics in controlling symptoms of emotional stress.

**KEYWORD:** Aerial Silk Acrobatics, Stress.

#### TISSU ACROBATIQUE, PERTURBATIONS DE LA PRATIQUE DANS LA LUTTE DE STRESS EMOTIONNEL. RÉSUMÉ:

Il est connu que l'activité physique produit des bienfaits physiques et psychologiques peuvent être utilisés comme adjuvant dans le contrôle ou le traitement des symptômes de stress émotionnel, puisque pratiquée correctement. Aujourd'hui, le stress est considéré comme l'un des principaux problèmes qui causent la maladie et peut maintenant être considéré comme un problème de santé publique. Tissu Acrobatique est une activité qui en ayant une grande beauté et de la plasticité, et de fournir un muscle de travail et la flexibilité si précieux par ses praticiens, a été répartie en différents endroits en dehors du cirque. Les praticiens ont souvent une grande satisfaction et la motivation face à des défis, en cherchant à les surmonter avec détermination et persévérance. Cette étude vise à étudier l'influence possible de la pratique de cette activité dans le contrôle des symptômes de détresse émotionnelle dans une population adulte. À cette fin, une enquête descriptive a été élaboré et mis en œuvre des approches qualitative et quantitative en quatre espaces d'Tissu Acrobatique situé à Rio de Janeiro (capital). Les résultats de l'analyse de pourcentage, cet échantillon suggérer une indication positive quant à l'influence de la pratique d'Tissu Acrobatique pour contrôler les symptômes de stress émotionnel.

MOTS-CLES: Acrobaties tissu, stress.

#### ACROBACIA EM TELA, INTERFERÊNCIA DE LA PRÁCTICA EN EL CONTROL DEL ESTRÉS EMOCIONAL. RESÚMEN:

Sabemos que la actividad física aporta beneficios físicos y psicológicos y puede ser utilizada como complemento en el control o tratamiento de síntomas de estrés emocional y los estados depresivos, siempre que se practiquen correctamente. Hoy día el estrés es considerado como uno de los principales problemas que causan distintas molestias y pueden considerase un problema de salud pública. Acrobacias en tela consisten actividades de gran belleza y plasticidad, que además de propiciar un trabajo muscular y de flexibilidad tan valorado por sus practicantes, se ha extendido en diferentes sitios fuera del ambiente circense. Los practicantes de la tela acrobática a menudo demuestran una gran satisfacción y motivación en superar de los retos, con gran dedicación y persistencia. Este estudio tiene por objeto investigar la posible influencia de la práctica de esta actividad en el control de los síntomas de estrés emocional en una población adulta. Con este objetivo, hemos desarrollado una investigación con enfoque descriptivo, llevada a cabo mediante un foco cualitativo y cuantitativo aplicado en cuatro centros de Acrobacia Aérea ubicados en la ciudad de Río de Janeiro. El análisis de los resultados de esta investigación, suponen una indicación positiva de la influencia de la práctica de acrobacia de tela en el control de los síntomas de angustia emocional. Palabra clave: Acrobacia en Tela, Síndrome de Estrés, Sobre Entrenamiento.

## TECIDO ACROBÁTICO, INTERFERÊNCIA DA SUA PRÁTICA NO CONTROLE DO ESTRESSE EMOCIONAL. RESUMO:

É sabido que a atividade física produz benefícios tanto físicos quanto psicológicos podendo ser utilizada como coadjuvante no controle ou tratamento dos sintomas de estresse emocional, desde que praticada de maneira correta. Nos dias atuais o estresse é considerado um dos grandes problemas causadores de patologias e já pode ser considerado um problema de Saúde Pública. O Tecido Acrobático é uma atividade que por possuir grande beleza e plasticidade, além de oferecer um trabalho muscular e de flexibilidade tão apreciado por seus praticantes, vem se disseminando em diferentes espaços fora do ambiente circense. Os praticantes costumam demonstrar grande satisfação e motivação diante dos desafios, procurando superá-los com grande empenho e persistência. Este estudo tem como objetivo investigar a possível influência da prática dessa atividade no controle dos sintomas de estresse emocional em uma população adulta. Com este intuito, foi elaborada uma pesquisa descritiva e aplicada com abordagens qualitativa e quantitativa em quatro Espaços de Acrobacia Aérea localizadas na cidade do Rio de Janeiro (capital). Os resultados obtidos a partir da análise percentual, nessa amostra, sugerem uma indicação positiva quanto a influência da prática do Tecido Acrobático no controle de sintomas de estresse emocional.

PALAVRA-CHAVE: Tecido Acrobático, Estresse.