154 - EFFECTS OF A PROGRAM OF MUSCULAÇÃO IN POLICE WITH DISABILITIES PHYSICS NO PARADESPORTO TIRO THE TARGET.

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Introduction / Rationale

The history of shooting the target for people with special needs was formally introduced in 1954, in Gillette State Hospital, in St. Paul, in the state of Minnesota. The site was originally used a track of 15m in length for shots with caliber 0.22, constructed and financed by post # 5 of the American Legion in St. Paul. (Adams, 1985).

Ernie Davies was practicing the method of shooting and loved this sport, was when a car accident he suffered an injury in the cord, which was paraplegic. In light of that accident and making the most loved and understood, Ernie Davies founded a group to shoot the air and set the rules for competition between airdromes with special needs. He chose for the purpose of the rifles mark Daisy, moved to the spring and plunger, as was lower risk for participants. The shooting competitions of the target in both individual bases about as a team are still somewhat evolved at the national level. (Adams, 1985)

The target shooting with the gun in the air before accurately weighed between 3 to 3.5 kg currently the carabineer weighs 4.5 kg, while the pistol weighs 1.070 g, and the competition can be held in two categories: sitting or standing. (Adams, 1985) .

This burden for the poor whose physical difficulties and limitations are inherent to his clinical picture, and many of the practitioners use the wheel chair as a means of locomotion, which causes loss of their balance, it is recommended the completion of a work force of senior members, in order to provide improvements such as: increased muscle mass and strength; strengthening of tendons and ligaments; caused by the loss of muscle mass due to age; increased bone density; increased metabolic rate; reduction of body fat; improving the metabolism of glucose; reduced blood pressure; reduction of cholesterol and other blood fats; improving the appearance; improving posture; reduction of injuries; improving the psychological welfare.

The weight training is a type of exercise resisted, with varying load, size, time of contraction and speed controllable. Thus can be applied in the manner Isometric (sustained contraction), isokinetic (with constant angular velocity) or isotonic (alternation of concentric contractions and eccentric's), or continuous intervals, mild or intense, with resources aerobic or anaerobic. This possibility of control of so many variables makes bodybuilding physical activity is highly versatile that can be used for different purposes (KAMEL, 2004).

The overload offered by Shooting in Adapted senior members of the person with disability calls for the same work and have a state of good physical conditioning, and it can provide a bodybuilding doing a program directed to the gain of force that reflector in practice this modality. (Adams, 1985)

In the face of physical qualities required by Shooting Adapted as strength, precision and posture arise from the inquiry as the weight training can help acquisition of muscle strength of senior members and how this acquisition may reflect the performance of practitioners of this modality. So racemes aims of this research to Prescription and implementation of a program of weight training for athletes of the Mato Grosso do Sul Military Police, from the target shooting adapted to gain in muscle strength of senior members and verification of possible improvement in relations with body positioning and performance in practice this modality.

The choice of the subject is given to the fact this mode is not practiced in the State of Mato Grosso do Sul and also by the possibility of this study to become an instrument of encouragement and knowledge of a practice of physical activity for people with disability. In bodybuilding there are various types of requirements and training, where numbers and shapes are taken into physiological considerations of each individual. The process of adaptation must be taken into consideration not to cause or a type of permanent injury or pain in the individual practitioner of this kind of physical activity. (KAMEL, 2004)

The training of force consists of a method of training that involves the voluntary action skeletal muscle against some form of external resistance, which can be provided by the body, free weights or machines. The muscle strength can be defined as the maximum amount of force that a muscle or muscle group can generate a pattern of specific movement, and is considered a physical capacity important for the fitness not only for athletes but also for individuals not athletes (KAMEL , 2004).

Some Benefits of the work force, according to Lorete (2007), in the fields physiological, mechanical and the level engines are directly related to the shooting sports Adapted as: regulation of muscle tone; Improving respiratory functions; Reduction of tension in the spine; improvement in the balance and postural correction and favors the acquisition of technical and sporting general physical development among others.

The training of isometric serious work with the weight in order to provide an overhead muscle with constant speed. (OLIVEIRA, 2007). According Fleck and Kraemer (1999) to isometric refers to the muscular action during which no change occurs in the length of the muscle. In this search to isometric is used in the training of the subjects to reduce fluctuations occurring during the practice of shooting the target Adapted .

Athletes with physical disabilities are classified in each modality sports through the functional classification. This system aims to classify the athletes with different disabilities in the same functional profile for the competition. Its goal ensure that the conquest of a medal by an athlete is the result of their training, experience, motivation and not due to benefits obtained by the type or level of their disability. (SOUTO and LIMA, 2004)

Methodology

This study had the participation of seven male subjects, practitioners of shooting adapted to the target, the Military Police of Mato Grosso do Sul have been away from their services to the community due to some kind of accident at work or out of this that resulted in a permanent disability.

The instruments used for the tests were: Dynamometric Mark GRIP - D TAKEI PHYSICAL FITNESS TEST (manual pressure) right arm and left; Tape metric Make-SAMMY MEDICAL ANDROPOMÉTRICA STARRETT 2M (circumference of the arm) Contrite and relaxed; Polar Make-A3 HEART (Frequency heart); Apparatus of pressure cardiac Make-PREMIUM. This study is characterized by a descriptive approach of stamp qualitative and quantitative, where the results were analyzed by frequency and presented through graphics.

Procedures

Before starting the program of weight training the athletes went through an assessment where they were assessed the following data: Blood pressure, Circumference of the arm (Relaxed and Contrite with a tape measure), cardiac Frequency (polar) and the Pressure manual (Dynamometer). Then the collections of these data was developed a training program to gain in muscle strength, respecting the limitations of each individual their access to equipment and possibilities of use, and, most importantly, the steps of the process of adaptation of bodybuilding. Parallel to this assessment conducted by the researcher, the athletes currently training in their stands of shooting wrote down in your chips sight of the number of shots made and the bands corresponding to the target upon.

Analysis and Discussion of Results

Analyzing the data by frequency it was found that the participants of the research showed increase in average values for all variables in the assessment Post intervention.

Evaluation	Force of pressure manual		Circumference arms contracted		Circumference arms relaxed	
	Left	Right	Left	Right	Left	Right
Pré	39,47	35,29	32,01	32,22	29,35	29,97
Post	40,54	37,33	33,5	33,67	31,07	30,72

Legend: FPM-Force of pressure manual;
CBC-Circumference arms contracted;
CBR-Circumference arms relaxed

Analyzing the average values obtained in the power of pressure manual law pre (35.29) and after (37.33) intervention it was found that there was an increase after the implementation of the program of bodybuilding. Already in the strength of pressure manual left there was a smaller increase. Initially in the pre assessment they had an index of greater power in this hand. It noted that the atletas were al.

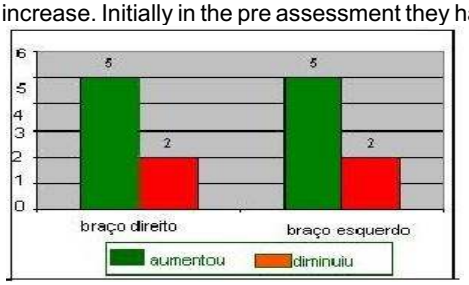

Chart 1-Evolution of force to pressure the manual right arm and left pre - and post-intervention.

The right arm (33.67) and the left (33.5) contracted had an increase and almost similar after the intervention of the program. There is also that in the pre they had a greater difference between them (Left 32.01 and law 32.22). This difference in the values which show increased in the CBC, is the increase in muscle mass that is directly related to the acquisition of virtue.

According Lorete (2007) parallel to force other systems are benefiting from the gain such as the tendons and ligaments, which in Shooting Adapted are burdened by the weight of the weapon.

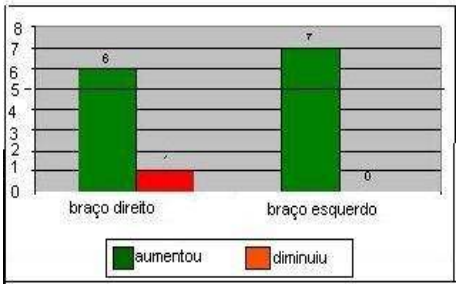

Chart 2-Evolution of the circumference of the right arm and left contracted, pre and post intervention

There was an increase in the circumference of the right arm relaxed. Already the left arm presented an increase in its circumference.

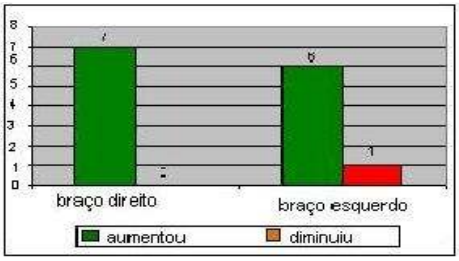

Chart 3- Evolution of the circumference of the right arm and left relaxed, pre and post intervention.

The chart below shows a small figure in all subjects in the first month (March) training compared to the second month (April). Inside the bodybuilding call this initial period of adjustment phase of which is the stage where the body is adapting to the new demands and requirements driven. According Kamel (2004), this period is important not to cause injury and any kind of permanent injury or pain in the individual practitioner. In this period is common occur worsening in the performance of tasks for the next stage this framework be reversed. After this phase is observed an increase in the index of adjustments that associated with the increase in strength and consequent stability of the body and posture.

In the third month (May), period of competition of athletes, it was not possible within the systematic monitoring that so far was being followed by their drills inconstant and intermingled with trips to competition. Another fact that should be highlighted

and linked to the index of adjustments occurred in the target 10, to be assigned to the isometric training that helps in the reduction of oscillations which are common in Shooting Adapted occur.

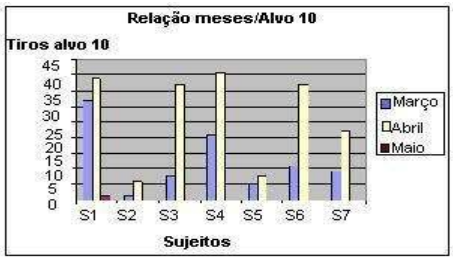

Chart 4-relation between time of training and adjustments in the target 10.

FINAL CONSIDERATIONS

All these aspects are very important and represent only a few of the many points that need to be considered and analyzed in the practices of a sport adapted.

It was evident the purchase of power through a program of weight training, but extending this to gain other balls out of the sport, we achieve two essential that surround especially the disabled who use the wheel chair which are: independence and autonomy. In these cases the strength and the physical activity itself, are factors crucial to the independence of effective and that is the autonomy enjoyed by a good health.

When speak health believe in the limitation that disability brings to the individual and, as a result of it, other problems as decreased bone density, obesity and the trend accumulation of fat, commitment in posture and self esteem damaged.

We represent the salvation of humanity, but we are professionals who know that through small works such as this will contribute to a population and the sport adapted.

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EFFECTS OF A PROGRAM OF MUSCULAÇÃO IN POLICE WITH DISABILITIES PHYSICS NO PARADESPORTO TIRO THE TARGET.

ABSTRACT

The history of shooting the target for people with disabilities was formally introduced in 1954, in Gillette State Hospital, in St. Paul, in the state of Minnesota. (Adams, 1985). The physical qualities required in shooting adapted as strength, precision, attitude, are essential for success in this mode. Before this comes the inquiry of how the bodybuilding can contribute to a work of muscle strength in the performance of senior members of this modality. The purpose of this research was prescribe and implement a program of weight training for athletes of the Mato Grosso do Sul Military Police, adapted for target shooting to gain in muscle strength of senior members, and establish relationships with potential improvement in performance and body positioning them in practice this sport. The instruments used for the tests were: Dynamometer; Tape metric; Polar; The sample has been subjected to seven males, the Mato Grosso do Sul Military Police have been away from their services to the community due to accidents at work or outside this bringing them as a permanent physical disabilities. This study characterizes itself as a search for descriptive approach of stamp qualitative and quantitative. The data were analyzed by frequency for graphic

presentation. Analyzing the average values for all variables, it was found that all achieved an increase in its measures after the intervention of the program of bodybuilding. In relation to the number of shots on target 10, the subject of the research showed better performance in the month of April after the period of adjustment and maintenance of the training program. In March they had more adjustments among the targets 9 and 7. Through these findings, it was noted that the program of weight training, especially, the type isometric contributed in the reduction of oscillations occurring during the practice of shooting the target improving their performance, represented by adjustments in the Target 10.

KEYWORDS: Physical Disabilities; Bodybuilding; Shooting adapted.

EFFETS D'UN PROGRAMME DE MUSCULAÇÃO DANS LES COMMISSARIATS DE POLICE AYANT UN HAN DICAP PHYSIQUE AUCUNE PARADESPORTO TIRO LA CIBLE.

RESUMÉ

L'histoire de la cible de tir pour les personnes handicapées a été officiellement mis en place en 1954, dans Gillette State Hospital, à St. Paul, dans l'État du Minnesota. (Adams, 1985). Les qualités physiques requises dans le tournage adapté comme force, de précision, de l'attitude, sont essentielles pour le succès de ce mode. Avant que ces données proviennent de l'enquête de la manière dont la musculation peut contribuer à un travail de la force musculaire dans la performance des hauts fonctionnaires de cette modalité. Le but de cette recherche était prescrire et d'appliquer un programme de musculation pour les athlètes du Mato Grosso do Sul, la police militaire, a été adapté pour le tir à la cible à gagner en force musculaire des membres de haut niveau, et d'établir des relations avec un potentiel d'amélioration des performances et leur corps positionnement Dans la pratique de ce sport. Les instruments utilisés pour les tests sont les suivantes: Dynamometer; Ruban métrique; Polar; L'échantillon a été soumis à sept hommes, le Mato Grosso do Sul, la police militaire ont été éloignés de leurs services à la communauté en raison d'accidents du travail ou en dehors de ce pour les rapprocher Comme les handicaps physiques permanents. Cette étude se caractérise comme une recherche d'approche descriptive du cachet qualitatif et quantitatif. Les données ont été analysées par la fréquence de présentation graphique. Analyser les valeurs moyennes pour toutes les variables, il a été constaté que tous obtenu une augmentation de ses mesures après l'intervention du programme de musculation. En ce qui concerne le nombre de coups sur la cible 10, l'objet de la recherche a montré une meilleure performance au cours du mois d'avril, après la période d'ajustement et de la maintenance du programme de formation. En mars, elles avaient plus d'ajustements entre les objectifs 9 et 7. Grâce à ces constatations, il a été noté que le programme de formation de poids, en particulier, le type isométrique contribué à la réduction des oscillations survenant lors de la pratique de la prise de vue l'objectif d'améliorer leur rendement, représentés par des ajustements de la cible 10.

MOTS CLÉS: incapacités physiques; Culturisme; Tir adaptés.

EFECTOS DE UN PROGRAMA DE MUSCULAÇÃO EN LAS COMISARIAS DE POLICÍA CON DISCAPACIDAD FISICA NO PARADESPORTO TIRO LA META.

RESUMEN

La historia de los disparos la meta para las personas con discapacidad se presentó oficialmente en 1954, en el Hospital Gillette Estado, en St. Paul, en el estado de Minnessota. (Adams, 1985). Las cualidades físicas necesarias en adaptarse como fuerza de tiro, precisión, actitud, son esenciales para el éxito en este modo. Antes de esto viene la investigación de la forma en que el culturismo puede contribuir a un trabajo de la fuerza muscular en el desempeño de altos cargos de esta modalidad. El propósito de esta investigación es establecer y poner en práctica un programa de formación para el peso de los atletas de la Policía Militar de Mato Grosso do Sul, adaptado para tiro al blanco para ganar en la fuerza muscular de los miembros superiores, y establecer relaciones con posibles mejoras en el rendimiento y la posición corporal En la práctica de este deporte. Los instrumentos utilizados para las pruebas fueron: Dinamômetro; Cinta métrica; Polar; La muestra ha sido sometido a siete hombres, la Policía Militar de Mato Grosso do Sul han estado alejados de sus servicios a la comunidad debido a los accidentes de trabajo o fuera de este con lo que Como una discapacidad física permanente. En este estudio se caracteriza a sí misma como la búsqueda de un enfoque descriptivo de sello cualitativo y cuantitativo. Los datos fueron analizados por la frecuencia de presentación gráfica. El análisis de los valores medios de todas las variables, se constató que todas las logrado un aumento de sus medidas después de la intervención del programa de musculación. En relación con el número de disparos sobre la meta 10, el tema de la investigación mostraron un mejor rendimiento en el mes de abril, tras el período de ajuste y mantenimiento del programa de capacitación. En marzo tenían más ajustes entre los objetivos 9 y 7. A través de estas conclusiones, se observó que el peso del programa de formación, en especial, el tipo isometria contribuido en la reducción de las oscilaciones se producen durante la práctica de tiro el objetivo de mejorar el rendimiento, representada por los ajustes en la Meta 10.

PALABRAS CLAVE: discapacidad física; Bodybuilding; Shooting adaptado

EFEITOS DE UM PROGRAMA DE MUSCULAÇÃO EM POLICIAIS COM DEFICIÊNCIA FISICA NO PARADESPORTO TIRO AO ALVO.

RESUMO

A história do tiro ao alvo para as pessoas com deficiência foi introduzida formalmente em 1954, no Hospital Estadual Gillette, em St. Paul, no Estado de Minnessota. (ADAMS, 1985). As qualidades físicas exigidas no tiro adaptado como força, precisão, postura, são imprescindíveis para o sucesso nessa modalidade. Diante disto surge à indagação de como a musculação pode contribuir com um trabalho de força muscular de membros superiores no desempenho desta modalidade. O objetivo desta pesquisa foi prescrever e aplicar um programa de musculação para atletas da Policia Militar de Mato Grosso do Sul de tiro ao alvo adaptado para ganho de força muscular de membros superiores, e estabelecer possíveis relações com a melhora no posicionamento corporal e desempenho deles na prática desse esporte. Os instrumentos utilizados para os testes foram: Dinamômetro; Fita métrica; Polar; A amostra constituiu-se de sete sujeitos do sexo masculino, da Policia Militar de Mato Grosso do Sul que foram afastados de seus serviços à comunidade devido a acidentes no trabalho ou fora deste trazendo-lhes como conseqüência uma deficiência física permanente. Este estudo caracteriza-se como uma pesquisa de abordagem descritiva, de cunho qualitativo, e quantitativo. Os dados foram analisados por freqüência para apresentação gráfica. Analisando os valores médios obtidos em todas as variáveis, verificou-se que todos obtiveram um aumento nas suas medidas após a intervenção do programa de musculação. Em relação ao número de tiros no Alvo 10, os sujeitos da pesquisa mostraram melhor desempenho no mês de abril após o período de adaptação e manutenção do programa de treinamento. No mês de março eles apresentaram mais acertos entre os alvos 9 e 7. Através destes resultados pôde-se observar que o programa de musculação, principalmente, do tipo isometria contribuiu na diminuição das oscilações ocorridas durante a prática de tiro ao alvo melhorando seu desempenho, representado pelos acertos no Alvo 10.

PALAVRAS-CHAVE: Deficiência Física; Musculação; Tiro adaptado.