An analytical Study of effects of six weeks tug of war training on physical fitness of school judo players

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Abstract

Judo, one of the best universal sports in the world, is a thrilling competitive sport similar to wrestling, but unlike wrestling, competitors wear thick jackets called judo dress. The judo dress allows different tactical approaches for the judo athlete when associated with the fight.Tug of war this may have been originally a ritual or a religious contest there is no exact time or place to describe the source of the tug of war game. The competition of dragging on the cable creates from the first rites and rituals.Samples of the study were formulated based on simple random sampling. The samples were collected from the judo training center run by BNB College Digras Dist.Yavatmal Maharashtra. School level under seventeen years' judo players under six-weeks of tug of war training showing the sample of the study, Boys and girls under seventeen years of the total.The study has focused on the experimental design with the help of T-test. Samples of a study were formulated based on simple random sampling. Judo players under six weeks of tug of war training, the finding of study indicate that in case of 50M dash, standing broad jump, pushups and sit ups there is impact of tug of war training on judo training center school level boys. In girls 50M Dash run, pushups and sit ups impact was not find, but on standing broad jump there is an impact of tug of war training on judo training center school level girls.

KEYWORDS: Analytical- using analysis, Training effects, physical fitness, and tug of war school level judo players.

Introduction:

Judo, one of the bestuniversal sports in the world, is athrillingcompetitive sport similar to wrestling, but unlike wrestling, competitors wear thick jackets called judogis or judo dress. The judo dress allows different tactical approaches for the judo athlete when associated with the fight. By and large, judo has an additional technical orientation as a result of this change. However, judo competitors rely heavily on strength and conditioning to confirm their success. Each judo coach must be aware of this situation and will carefully strive to train strength and coaching coaches to develop a suitable platform for their judo players.

Tug of war this may have been originally a ritual or a religious contest there is no exact time or place to describe the source of the tug of war game. The competition of dragging on the cable creates from the first rites and rituals. The indication comes from countries such as Egypt, India and, Myanmar.

Two teams of eight, whose total mass must not exceed a maximum weight determined for the class, line up at the end of a rope of about 11 centimeters (4.3 inches) in circumference. The rope is marked with a "middle line" and two marks located

4 meters (13 feet) on each side of the median line. Teams start with the middle line of the rope directly above a marked line on the ground and, once the fight starts, try to pull the other team so that the mark on the nearest rope his opponent crosses the center. Line, or the opponents commit a foul. Lowering one's elbow below the knee during a shot, called "locking," is a foul, like touching the ground for an extended period. The rope needsto go below the arms; actions such as pulling the rope over the shoulders may be considered a foul. These rubrics apply in extremely organized competitions such as the every Championship. However, in small or informal entertainment competitions, the rules are frequentlyrandomlyunderstood and shadowed. Acompetition may eye a ditch in anunbiased zone, usually of mud or softened ground, which eliminates players who cross the zone or fall into it.Apart from the raw muscle power wanted for tug of war, it is also a technical sport. The collaboration of team members play an equally significant role in conquest, if not more, than their physical strength. To attain this, anindividual called a "chauffeur" is used to match the team's joint gripcontrol. He changesactive and depressedsubsequent to his team dragging on the rope, giving orders to them when to pull and when to rest (called "hanging"). If he spots the opponents trying to pull his team away, he gives a "hang" command, each member will dig into the grass with his/her boots and movement of the rope is limited. Once the rivals are played out, he calls "pull" and steadily waves his hat or handkerchief for his team to pull together. Gradually but confidently, the other team is enforced into capitulation by a huge pull. Additionalinfluence that distresses the game that is little known are the players' weights. The weightiersomebody is, the additional immobileresistance their feet have to the crushed, and if there isn't enough friction and they weigh too little, even if he/she is draggingverysolid, the power won't go hooked on the rope. Their feet will simply slide along the ground if their opponent(s) have better static friction with the ground. In general, as long as one team has enough static friction and can pull hard enough to overcome the static friction of their opponent(s), that team can easily win the match.

According to MAJ Tanja C. Roy , SP USA “Total force fitness” is a state in which the individual, family, and organization can sustain optimal wellbeing and performance under all conditions. Physical ability, andsignificant component of entire force fitness, is the amount of physical training required to achieve a physical work capacity. Due to the austere environments and high physical work capacity required for mission tasks, military service members must sustain a more advanced level of physical fitness than the civilian population. Towardencounter these high stresses, physical fitness training must be split into four components: endurance, mobility, strength, and flexibility. Both aerobic and anaerobic training need to be utilized. The four components of physical fitness exercisepositive performance testing and injury surveillance/prevention must be well understood and included as part of all military physical fitness programs to ensure our service members are prepared to meet the physical demands of the mission without incurring injury.

According to Paola S. Wood, DPhil *; Catharina C. Grant, PhD †; Peet J. du Toit, PhD ‡; Lizelle Fletcher, PhD. Study on the effect of mixed basic military training on the physical condition of male and female soldiers. Basic military mixed gender training (BMT) is adopted to integrate the South African soldier into the military. The objective of this study was to evaluate gender differences before, during (12 weeks) and after a mixed TMO course of 20 weeks and to determine if the TMO reduced these

differences significantly. Methods: A total of 186 soldiers (114 men: average age = 21.0 ± 1.1 years, 72 women: average age = 20.5 ± 1.2 years) completed the BMT course and all the anthropometric, physical fitness, explosive and grip measurements hand. The analysis of variance of repeated measures was used to model BMT data with the main effects for the gender comparison between men and women, and the main effect of time to evaluate the differences between weeks 1, 12 and 20 of BMT, as well as an interaction effect for the differences in changes in time for males and females. Alpha was set at $\alpha \leq 0.05$. Results: the male soldiers were significantly higher ($p < 0.001$) and obtained better scores in all the measurements at the beginning of the BMT; the differences ranged between 1.6% and 50% between genders. The differences were reduced by up to 18.5% in the aerobic, push-up, abdominal measurements and by 4.6% in the fitness test of the National Defense Force of South Africa. The differences in the power output and the grip strength of the hand remained unchanged. Conclusion: Large initial anthropometric and physical differences decreased, but were still obvious at the end of BMT. The BMT must close the physical gap between male and female soldiers to ensure that everyone can perform the same tasks. The application of minimum physical fitness requirements equal for acceptance in BMT; conditional acceptance in the army subject to the successful completion of a bridge course designed to improve physical fitness in people who do not meet the minimum physical fitness requirements for acceptance; and the development of a cyclic physical training program with different entry points, which depend on the initial physical performance at the beginning of the BMT, ensuring that adequate progression and overload for all soldiers are possible paths to explore to achieve this goal.

According to Xinyu Li's study on the origin, development and winning skills of Tug of War, Tug-of-war is for everyone happy of mass sports, which have a long history of development in the countries of the world, and now it is very popular. This article discusses the origin and development of tugboat warfare. Through the analysis of the stress distribution of athletes in the process of tug of war, it is noted that the victory in the tug of war is not only related to the size of the athletes, but also with the athletes on the direction. Of strength and ability. According to the theoretical analysis of the strength and friction of the athletes, we are more likely to win in the real battle.

The rope the game involves the use of a single equipment, namely a rope. There is a red mark in the middle of the rope. This red mark on the string must be perpendicular to the exact center of the ground before the start of the game. A white mark is made accurately 13 feet from the red mark on equally sides of the rope. The game is won when any side with this white mark crosses the midpoint point. Teams According to the rules of tug of war, each team can welcome a maximum of 8 members. However, the combined weight of these members must not exceed the weight determined for the category concerned. Field and mark the game must be played on a flat and grassy parcel of land. A line called the centerline is marked on the playing area and the string is placed so that its center mark aligns the marked center on the ground. On both sides of the rope, at a distance of 4 m from the center line, 2 additional marks must be made. This is the point wherever the primary member of each team will stand. How to play as mentioned earlier, the center of the string should be aligned with the marked center on the ground. As soon as the referee whistles, each team can start pulling the rope towards its territory.

The goal of the game is for each team to pull the rope with opposition team members by their side. As soon as the second mark on the rope at the center of the red mark crosses the center line, the team pulling the rope to their area wins. Competition Tug of war competition requires a judge. There are three different instructions that the judge gives to the players. The judge announces first "Pick up the rope", then "Take the string", then he tells the players to "shoot". Once the firing command is over, the teams start pulling the rope. If a member of the team falls, a warning is given to that member. Each team is allowed two warnings before being disqualified. Fouls There is a particular technique that must be applied when playing this game, otherwise there will be a foul that may result in disqualification. For example, lowering the elbow below the knee while pulling the rope is considered a mistake and is called "blocking". Touching the ground for a longer period is also considered a fault. Sports training is based on systematic facts and principles. A systematic program adapted to the achievement of high performance must first be developed on the basis of which a sports training is planned. It is always evaluated, planned, organized and implemented by a coach.

Objective of Study:

1. To find out the physical fitness component of school level judo players both boys and girls
   Separately.
2. To give six week tug of war training programto school level judo players.
3. To measure the physical fitness component of school level judo players both boys and girls
Separately after the training program.
4. To find out the differences between pre training and post training physical fitness of school level
Judo players.

Hypotheses:

It is hypotheses that the practice of six weeks training of tug of war will significantly improve the physical fitness of school level judo players in relation to cardiovascular fitness, Explosive Strength, Balance and Agility.

Significance of the study:

1. The finding of the study will add to the quantum of knowledge in physical education, especially
in the area of physical fitness in school judo players.
2. The study will enlighten the importance of practicing Tug of war on healthy livings
3. Through this study people will become more aware of the importance of practice of Tug of war
in order to keep their physical fitness
4. This study is try to investigate the impact and effectiveness of Tug of war training
5. This study may helpful for the better awareness of health
6. This study will bring the sense of awareness about the Practice of Tug of war.
7. A lot of researches has been done already in this field.
8. Research regarding the effect of Tug of war training on this particular group of school level Players have not yet been conducted.

Limitations:

The following are the limitations of this study:

1. The hereditary, culture and environmental factors, which will influence the criterion variables
are recognized as limitation.
2. Previous Practice of sports or other physical fitness activities are not taken into consideration
3. The subjects living conditions, diet, lifestyle, climatic condition, personnel habits, emotional
Status, psychological imbalance, family problems and motivational factors were not taken into
Consideration for this study.

Delimitation

The study is delimited to the following aspects:
1. The study restricted to 15boys and 15 girls randomlyselected from judo center run by BNB College Digras Dist.Yavatmal Maharashtra.
2. The physical fitness variables is restricted to cardiovascular fitness, Explosive Power, Balance and Agility.
3. The age of the subjects range from under seventeen years.
4. Selectedjudo players is administrated in the selected subjects.

Method of the study:

Samples of the study were formulated based on simple random sampling. The samples were collected from the judo training center run by BNB College Digras Dist.Yavatmal Maharashtra. School level under seventeen years'judo players under six-weeks of tug of war training showing the sample of the study, Boys and girls under seventeen years of the total. (N-15)
Research Tools are used the present study under investigation selected physical fitness test used to Check Physical Fitness.
1.50-meter dash, 2. Standing broad jump, 3. Pushups (in 30 sec), 4. Sit-ups (in 30 sec)

All the 30 subjects school level judo players were given six week tug of the war training program. Physical fitness test was measured and recorded. They were given 2 hours of judo game practice for six weeks. Where are they emphasizing on the technique and skill of the game and effort boost performance? The practice was normal type under sports coaching supervision. After the period of six-week training, the subjects were again given administrator five tests of physical fitness and measure were recorded.

Design of the Study:

The study has focused on the following experimental design with the help of T-test. The result has been shown following table. Samples of a study were formulated based on simple random sampling.Samples were collected from the judo training center run by BNB College Digras Dist.Yavatmal Maharashtra. School level under seventeen years school level judo players under six weeks of tug of war training showing the sample of the study, Boys under seventeen years of the total (N-15) and Girls under seventeen years of the total (N-15)
Research Tools are used the present study under investigation selected the following physical fitness test performed are Test Used to Check Physical Fitness.
1.50-meter dash, 2. Standing broad jump, 3. Pushups (in 30 sec), 4. Sit-ups (in 30 sec)

Table A: Effect of Tug of War Training on Physical Fitness of BNB college judo center boys.

SN.	Variable	After training		Before training		T
		Mean	SD	Mean	SD	
01	50 Meter Dash	5.982	0.392	6.852	0.294	2.3691
02	Standing Broad Jump	2.1963	0.0361	2.2346	0.0394	0.5961
03	Push ups	27.62	1.39	25.83	1.28	3.5196
04	Sit ups	16.94	1.14	14396	1.34	3.4132

As per the above table show that in case of 50 M dash run, standing board jump, pushups and sit ups there are significant impact of training.

Table B: Effect of Tug of War Training on Physical Fitness of BNB college judo center girls

SN.	Variable	After training		Before training		T
		Mean	SD	Mean	SD	
01	50 Meter Dash	8.980	0.214	8.982	0.247	0.5585
02	Standing Broad Jump	1.9542	0.0397	1.4591	0.0473	2.1649
03	Push ups	13.94	1.39	12.98	5.39	0.5398
04	Sit ups	11.87	1.09	12.88	1.42	2.026

As per the above table show that in case of 50 M dash run, pushups and sit ups there are no significance impact of training but on standing board jump there are significant impact of training.

Conclusion:

The finding of study indicate that in case of 50M dash, standing broad jump, pushups and sit ups there is impact of tug of war training on BNB college judo training center school level boys. In girls 50M Dash run, pushups and sit ups impact was not find, but on standing broad jump there is an impact of tug of war training on BNB college judo training center school level girls.

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