The Effect of Training on Physical and Physiological Abilities and Their Relationship to Skill Performance among Junior Football Players

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ABSTRACT:
The purpose of the present study was to assess the football ability among the Before test junior player’s boys and after test junior player’s boys. In order to collect data for the study, there was a need for certain reliable and objectives test of the football ability. The investigator was of the opinion that one test of football ability was sufficient to achieve the purpose of the study. The investigator felt that performance in test may be influenced by a particular body type or characteristic of the selected subjects. Therefore, the investigator decided to administer. A total of forty boys of 18 to 22 years age standard from different football teams were selected for this study. All the subjects were divided into two different groups having twenty subjects in each group i.e., experimental and control group. These exercises were performed for 60 min in a day and for 5days/week. Pre and post test data were collected before and after eight weeks of training. Before the collection of data the subject were explained the objectives of the study and methodology of each test. The study presents a t-test and graphical representation of the results.

Keywords: Exercises; football; performance test; Pre and post test data; t-test; and training

INTRODUCTION:
The study is to analyze the effect of training on physical and psychological abilities and their relation to skill performance among junior football players. The Objective of this study is to investigate the distance traveled by a football player with or without ball. The study to examine the modern techniques used in football and review of football sport, which may help to understand the implication of the game.

We all know about football. Kicking a ball with the foot is what we refer football game. Nowadays football is one of the most popular sports in the world. "Soccer" is the other name of football. It has a long history. Ancient people started to play first football. During the 20th century various types of football are getting more popular like rugby, American football, Canadian football etc. We all know various forms of football are identified in history. Basically football is played by two teams. Each team consists of 11 players and extra players are waiting outside the line if any player injured or depends on coach's decisions to change the players. By scoring goals or points is the result of this game. Two teams try to goal their opposite components. In that case players only use their feet or body without using hands to play this game. Players are being required to move the ball by kicking, passing and carrying. There are many roles to play in this game. Players are must abide this role (Walvin, J. (2014)). They cannot hit any players. The total time of this game is 90 minutes, with the most scored team considered as a winner.
“I prefer to win titles with the team ahead of individual awards or scoring more goals than anyone else. I'm more worried about being a good person than being the best football player in the world. When all this is over, what are you left with? When I retire, I hope I am remembered for being a decent guy by Lionel Messi”

“People who work together will win, whether it be against complex football defenses, or the problems of modern society by Vince Lombardi”

A game played by two teams of 11 players each on a rectangular, 100-yard-long field with goal lines and goalposts at either end, the object being to gain possession of a ball and advance it in running or passing plays across the opponent's goal line or kick it through the air between the opponent's goalposts.

SELECTION OF SAMPLE:
In the present study, total 40 students are included 20 members from government and 20 members from Junior Players.

Figure 1: Research Design
Figure 2: Flow diagram of the study process, indicating patient selection.

### ‘t’-Test

**Group Statistics**

<table>
<thead>
<tr>
<th>School</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
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<tbody>
<tr>
<td>No. of football</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Match</td>
<td></td>
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<td>Before Test Junior Players</td>
<td>20</td>
<td>15.6500</td>
<td>1.49649</td>
<td>.33462</td>
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<tr>
<td>After Test Junior Players</td>
<td>20</td>
<td>12.2000</td>
<td>2.16673</td>
<td>.48450</td>
</tr>
</tbody>
</table>

**SELECTION OF VARIABLES:**

Since the purpose of the study was to compare the football ability among Government and Junior Players boys, the collection of data was subjected to the t-ratio test of analysis for significance of difference. The calculated t-value is compared with the table value at 42 degrees of freedom at 0.05 level of confidence, which was given by Clarke. The readings of government and Junior Players boys were presented, graphically, to clarity the interpretation in table. The means of government high school boys, the standard deviation standard error and that of the private school boys were shown in table.

The findings of this study indicated that there is a significance difference at 0.05 levels between football ability among Government school boys and private school boys. So it was concluded that Government school boys have a better football ability than the Junior Players boys. The calculated t-ratio was lower than the table value hence the insignificant difference exists among Government high school boys and Junior Players boys.
Players boys on the selected variable of football ability.

**SELECTION OF TOOLS OF MEASUREMENTS:**

A total of forty boys with an age group of 18 to 30 years from different schools of Gwalior were selected for this study. All the subjects were divided into two different groups having twenty subjects in each group i.e., experimental and control group. The experimental group underwent the summer training programme for eight weeks, fivedays per week and a session on each day with 60min duration, while the control group was not exposed to any type of training. Subjects were randomly assigned to groups before administration of training program. Training was administered at the gymnasium of Osmania University. In morning session. Subjects were regular throughout the coaching camp so they could learn fundamentals of Football skills. The footballing ability of subjects was measured with the help of football Wall Football Test. Training session starts with warm up for conditioned there reflexes. After that various types of drills for improving the football ability and other fundamental skills of Football administered throughout the eight weeks. These exercises were performed for 60 min in a day and for 5days/week. Pre and post test data were collected before and after eight weeks of training. Before the collection of data the subject were explained the objectives of the study and methodology of each test.

In order to measure Football football ability of the subjects, voleyball wall football test was used for the purpose of this study. Equipment required to perform this test were football attack, a wall space 10 feet high and 10 feet in length, a stop watch, score sheets, a 1 inch net line marked on the wall 5 feet above and parallel to floor, a starting line drawn on the floor 6 and ½ feet from the base of the wall and parallel to the starting line.

During performing the test player was stood behind the starting line, holding the football in one hand and the shuttlecock in the other. On the signal “ready go” the shuttlecock was served in a legal manner against the wall on or above the net line. The was played as many times as possible against the wall in thirty seconds. Three trials were given to each player and rest was given in between these trials. Only hits that placed the shuttlecock on or above the net line were considered good and awarded one point. After the shuttlecock has been served, the player may move up to the restraining line, if he wished. If the restraining line was crossed, the shuttle was still in play. If the attack was missed or went out of control, the player must retrieve it and continue by putting it back in play with a serve from behind the starting line. The core of the subject will be the number of legal hits made on or above the net line in the three trials.

It was evident from the results that eight weeks of training programme contribute significantly in the improvement of football football ability of skills among beginners as differences in the means exist between pre and post data as shown in figure 1. Above findings of the study is also in partial consonant with findings of Karen E. French et.al. (1996). Therefore, player that is supposed to start their carrier in Football can improve upon different Football skills by participated in the training programme at least for eight weeks. So, after
getting perfection on fundamental skills they can work upon various tactics and strategy.

SELECTION OF DATA:

The purpose of the present study was to assess the football ability among the before test junior players and after test junior players. In order to collect data for the study, there was a need for certain reliable and objectives test of the football ability. The investigator was of the opinion that one test of football ability was sufficient to achieve the purpose of the study. The investigator felt that performance in one type of footballing test may be influenced by a particular body type or characteristic of the selected subjects. Therefore, the investigator decided to administer.

Things to Be Analysed For Better Performance:

There are literally hundreds of training programs out there. While most of them are terrible, there are still a dozen or so that are all really good for helping you get faster and stronger for football. How do you choose? Well, if you're just starting out and are confused or you're a new coach who is suddenly in charge of 30 or more fourteen and fifteen year olds, go with the most simple formula possible:

Basic lifts + heavy weights = football strength and speed

Yes, once you get going, you should refine things, but at their base, all good programs focus on the big lifts (bench, incline, press, squat, deadlift, rows). There are variations on sets and reps, but in the beginning, even something as simple as 3 X 8 is better than 0 X 0. It's far from perfect, but it's better than nothing!

Planning

Once you do decide on a plan or at least an outline of a plan, stick to the damn thing. Rotating exercises is one thing. Completely changing your entire philosophy every other week is another. This might be the biggest mistake I see young football players and lifters make. They read an article and say, "Yes! This is exactly what I need!" Then two weeks later a new article comes out preaching the exact opposite of what the first said and again it's "just what I needed!" And on and on and on until a year goes by and you realize you've been training for 12 months without any progress.

Have an experienced lifter or coach help you tweak your workouts as you go, but stick to the overall plan for a while. Despite what some trainers or supplement companies will tell you, you're not going to gain 100 lbs on your bench in ten days.

PERFORMANCE EXERCISES FOR FOOTBALL:

Football is played in two main forms, firstly as a 90 minute game with a 15 minute half time rest period, or a more explosive 5 aside game. Being a sport that is constantly on the go, your fitness level and strength plays an important part in your game, however a high skill level on the ball and good knowledge of the game are also essential. Therefore, football training and football coaching need to be helping to target the right muscles for fitness. Football is a sport that requires a multitude of athletic abilities, aim to make improvements in the following to improve your game:

- Explosive acceleration and fast sprinting speed.
- Muscular endurance and strength in the lower body.
- Muscular balance and high levels of neuromuscular co-ordination.
- Body awareness and agility, the ability to know where your body is, and be able to move it.
- Discipline to take orders and decisions, as well as putting the team first.
- Good flexibility to avoid injury, football players are prone to poor hamstring flexibility.
- Correct balance between your quadriceps and hamstrings, as well as strength imbalances between your left and right leg.

Your fitness training should include speed work, endurance, strength training and of course drills designed to help you with your foot work.

**Drill 1: Dribble and run (Beginner)**

“Start on the touchline with a ball at your feet and get set to run across the width of the pitch. Dribble the ball as fast as you can until you are parallel to the centre spot, leave the ball there, run at 80 per cent speed to the opposing touchline, run back to the ball at the same pace and dribble it back to your starting position as fast as you can.

“Your rest time should be the time it takes to complete this cycle – so if it takes you 90 seconds there and back, take a 90-second break. Repeat this six times.”

![Figure 3: Dribble and run](image)

**Drill 2: Back and forth (Intermediate)**

“You need training partners and two balls for this. Start halfway between the centre spot and the goal-line, with one of your training partners positioned 10 yards behind the centre spot, a ball on the centre spot and the other in the middle of the goal holding a ball – they should be in a straight line. “From your starting position, sprint to the centre spot and pass the ball to your partner, sprint back past your starting position all the way to the goal-line where your other partner should throw the ball up to you for a header, before sprinting back to your starting point. “Take time to recover by swapping with one of your partners, taking up the job of passing or throwing up the ball for a header. Repeat the cycle until you have each completed six separate runs.”

**Drill 3: Getting around the pitch (Advanced)**

“Start at one corner flag and gently jog around the perimeter of the pitch until you’re back to your starting point. Now run at 70 per cent of your top speed to the halfway line, before slowing down to a jog for the rest of the lap. Once back at your starting point, run at 70 per cent for the full length of the pitch, slowing down to a jog at the opposing corner flag and making your way round to your starting point. Fitness permitting, you can
either repeat the first three steps or continue building up the distance covered in your sprints until you work your way up to being able to run around the pitch at 70 per cent in one go.”

**Vertical Power Jumps**

This activity develops power and muscle building in the legs. Vertical power jumps involve jumping as high as you can repeatedly with explosive power. Begin by standing upright, then slowly bend at the knees and hips. With all your force, propel yourself vertically into the air as high as possible. To get more out of the jump, drive your knees towards your chest when leaping. Do not rest between jumps. Instead, transition into each jump immediately upon descent. Repeat 10 to 20 times for a great leg work out.

**Box Jumps**

This involves jumping up onto a large stable box approximately two to three feet high (depending on your height). Box jumps promote power and muscle building as the vertical power jumps do, but with a little variation. Begin by standing at the foot of the box, about eight inches away. Jump up onto the edge of the box, stand up straight, then jump back down to starting position. Repeat 10 to 20 times.

**Ladder Drill**

The ladder drill encourages speed, agility, coordination and leg muscle strength. Use an imaginary ladder laid out on the ground. To make things simpler, draw a ladder pattern on the ground with some chalk to visualize the ladder. Begin by standing at the bottom of the ladder with your feet shoulder width apart. Step into the first square with your left foot first, then immediately with your right foot. Step on the outside of the second square with your left foot first, then your right foot on the other side of the square. Step back inside of the second square with one foot at a time, then back to the outside on the fourth square. Continue this pattern until you reach the top of the ladder, then run in a straight line back to starting position. The key is to make your steps as quick as possible to maximize the effectiveness of this football fitness training drill.
Figure 6: Ladder drill

ANALYSIS OF DATA PRESENTATION OF RESULT

‘t’-Test

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Table 2: Group Statistics

Independent Sample Test

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</table>

Table 3: Independent Sample Test

The calculated value of Mean on the above variable shows (number of footballs in 30 seconds) 15.65 and 12.2 respectively in among of Before Test Junior Players and After Test Junior Players. The calculated value of Standard deviation on the above variable shows (number of Football Match) 1.49649 and 2.16673 respectively among Before Test Junior Players and After Test Junior Players. There is a little variation in the Mean value as Junior players boys have less than Before Test Junior Players and this can be attributed that in this variable Before Test Junior Players and After Test Junior Players.

GRAPH 7: Comparison of Mean in Footballing ability among Before Test Junior Players and After Test Junior Players.
The above figure shows that there is variation in goal ability in Football in Hyderabad. 

**GRAPH 8: Comparison of Std. Deviation graphs**

![](https://i.imgur.com/3QGQ5QG.png)

The above figure shows that there is variation in Football ability in Football in Hyderabad. The above graphs show the comparative analysis of Mean and Standard Deviation in between Before Test Junior Players and After Test Junior Players to show the difference in Footballs ability in Footballball students.

**SUMMARY:**

The main results of this study showed that the skills that discriminate in favour of victory are the serve point and surprisingly, physical and physiological variables. On the other side, reception errors were the only variable that discriminated in favour of defeat. Our results clearly point to the importance of the serve point in determining victory. This result becomes even more relevant when we pay attention to the value of its effect size which is quite high and allows for generalization of results. Because the teams are evenly balanced, when a match gets close to the end, this skill (serving) may be associated with
victory. Our results confirm the observations of Zetou et al. (2007), who mention that the ace (direct serve) is a predictor of victory in high performance teams. In accordance with Marelic et al. (2004), the team that serves better has a tendency to win more sets. A more attentive analysis of the results highlights the fact that the number of serves that result in direct points was very low, but higher in the winning teams. Serve errors were also less frequent in winning teams. In fact, some researchers believe that teams that are at a disadvantage in the set take more risks while serving, probably because they have nothing to lose (João et al., 2010; Marelic et al., 2004). By risking more strategically, these teams also end up failing more frequently, consequently increasing the percentage of errors made. On the other hand, if the serve is risky, opponent reception will be more difficult, increasing error probability. Our results discriminate reception error in defeat so the teams with low efficacy in this skill are more likely to lose the game. It is important, therefore, to increase the efficacy of the serve, since it is considered a terminal action, and may result in a direct point. In that sense, we can infer that the serve is of crucial importance in the performance of Football teams. The importance of practicing this skill in the training process is quite clear.

CONCLUSION

In football is one of the most important sport, which significantly influences the results in modern football competition. The accuracy and passing are the main factors of tactical execution of volleying in the game. The present chapter aims of summarizing the findings reported in the proceeding chapters. The aim of investigation was to compare the volleying ability in football among the children studying in Before Test Junior Players and After Test Junior Players. It was hypothesized that government high school boys may posse’s better volleying ability when compared After Test Junior Players. The volleying ability in football was assessed with the help of volleying test i.e, ‘repeated volley test’. The factor of volleying ability in football of twenty colleges. Within the limitations of the study the following conclusions were drawn from the results obtained and presented in the previous chapter. Significant difference exists between the senior football players and junior football players boys in repeated football test. From the results obtained through the study it has been found that the football ability in senior players boys because they used to play a football game regularly. The subjects who had a low score in goal making, because of a slow movement and practice and techniques ability. Better football practice will help the individual to perform better passing in football game which needed greater speed, jumping ability co-ordination and reaction time.

RECOMMENDATION:

- It is important, therefore, to increase the efficacy of the players, since it is considered a terminal action (Marelic et al., 2004), and may result in a direct point. In that sense, we can infer that the serve is of crucial importance in the performance of Football teams.
- The importance of practicing this skill in the training process is quite clear. A few work-related, psychosocial, and sociodemographic variables have been confirmed as being identified with neck and shoulder torment in grown-up
populaces, however far less longitudinal studies concerning the point have been done in youthful populaces.

- An arbitrary example of school and college students, women clubs has researched when they were 15 to 18 years of age and again at 22 to 25 years old. Through and through, participants took an interest in both reviews.

- The result variable was week after week neck and shoulder agony amid the previous 6 months in adulthood, and the logical variables incorporated some sociodemographic components, relaxation time exercises, self-surveyed physical condition, psychosomatic anxiety manifestations, and side effects of exhaustion and slumber troubles.

BIBLIOGRAPHY:


