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**Agility Of Basketball And Volleyball Players At Collegiate Level**

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**Abstract**

The purpose of the study was to identify the agility of Basketball and Volleyball players. 50 Players, 50 Basketball and 50 Volleyball from various colleges of Amravati, Maharashtra India were selected as subjects for the study. Execution criteria were the presence of chronic medical condition such as asthma, heart disease or any other condition that would put the subject at risk when performing the Agility components. The data was collected by use of measurements of height & weight as well as by application of tests. The data was analysed with the help of statistical procedure in which arithmetic mean, standard deviation and t - test were employed. The Mean Scores (S.Ds.) age of Basketball players was 23.45 (4.56) years, mean scores (S.Ds.) weight was 67.21 (7.89) Kg, mean scores (S.Ds.) height was 175.06 (15.45) cm.. On other hand the Mean Score (S.Ds.) age of **Volleyball players** was 24.23 (4.79) years, mean score (S.Ds.) weight was 65.20 (7.81) kg., mean score (S.Ds.) height was 173.12 (15.11) cm. Significant difference in the agility ( $t=3.11, p<.05$ ) was found between Basketball and Volleyball players, Basketball Players was found to be greater agility as compared to Volleyball players

**Introduction**

Agility is the ability to body to change the direction rapidly and accurately. Agility is recognized as an important component of Sports related fitness and it may be important for the performance of Sports activities Low Agility may result in high physical strain during the performance of activities (Bruinings et al.2007). As a consequence, activity levels may decrease due to fatigue and discomfort, exacerbating low physical fitness. Caspersen and co-workers defined several performance -related components of physical fitness, i.e. aerobic capacity, muscle strength and endurance, flexibility and body composition (Caspersen et al.1985). Keeping in view the fact that childhood Agility has important health consequences during adulthood (sallis et al, 1992) a large number of studies on Agility have been reported from different countries of the world. Data on the Agility children from Denmark (Knuttgen, 1961), England (Campbell & Pohndof, 1961), South Africa (sloan 1966), Belgium (Hebbelinck & Borms, 1969), Israel (Ruskin, 1978), & Japan (Ishiko, 1978) are available in the literature. All these reports made the health planners realise the importance of the contribution of health education & Agility in the development of total fitness. The practice of physical testing in children started thereafter in various countries.

**Materials And Methods**

**Subjects:** Twenty five Basketball and twenty five Volleyball Players from various colleges of Amravati had been selected for the present study.

The volleyball and Who were regularly participating two years in the inter collegiate athletic tournament selected as subject for present study, "exclusion criteria were the presence of chronic medical conditions such as asthma, heart disease or any other condition that would put the subjects at risk when performing the test the subjects were free of smoking, alcohol and caffeine consumption, antioxidant supplementation and drugs. The age, height, agility, of all subjects were measured. The data analysed with the help of stastical procedure in which mean, standard deviation, t test were used to compare the data.

**Agility:** Agility measured by administrating SEMO agility test.

**SEMO Agility Test :** This test is used to measure agility ability of the subject during forward, sideward and backward maneuvering movements. The test is suitable for both boys and girls aged 12 years and above.

**Equipments:** A stopwatch, four plastic cons 9"x9" base having 12" height and a basketball court area measuring 12'x19'.

**Test Area:** A smooth plane area of 12'x19' size is marked. This marked area must have adequate running space around it. It is easier to mark the test area in a basketball court starting from the free throw line to the end line of the court. Four cones are placed at each inner angle of the 12'x19' rectangle.

**Test Administration:** After a demonstration given by a trained helper, the tester asks the subject to stand just outside the marked rectangle at the starting point. With his back towards the free throw line, the subject waits for the signal ready, go at the world 'Go' the tester starts the stopwatch while the subject start side stepping to his right has his faster speed until he reches outer corner of the3 second cone from where the subject start back pedaling (ruining backward) from the outer corner of the second cone I just outside the 19' marked line. As soon as the subject reaches the cone no. I he is to take a side turn and again run back pedaling to reach the inner corner of cone no.4 to no.2 where he is to perform a side step to his left to reach the finish line as rapidly as possible with his best efforts. As soon as he steps outside the finish line with his both feet, the tester stops the stopwatch.

**Scoring:** Each subject is given two trials and time of each trial is noted accurate up to 0.1 second. The lesser value of the time out of the two trial is the score of the subject.

## **Results**

The primary aim of the study was to compare the agility between Basketball and Volleyball players with the help of T-ratio.

The results concerning this are presented in the form of tables. For the sake of convenience and methodical presentation of the results, following order has been adopted.

**Table-1 Morphological characteristics of Basketball players**

Sr. No.	Components	Means Scores	Standard Deviations
1.	Age (Year)	23.45	4.56
2.	Weight (Kg)	67.21	7.89
3.	Height (cm)	175.06	15.45

Table -1 depicted the morphological characteristics of Basketball players, the Mean Scores (S.Ds.) age of Basketball players was 23.45 (4.56) years, mean scores (S.Ds.) weight was 67.21 (7.89) Kg, mean scores (S.Ds.) height was 175.06 (15.45) cm.

**Table-2 Morphological characteristics of the Volleyball players**

Sr. No.	Components	Means Scores	Standard Deviation
1.	Age (Year)	24.23	4.79
2.	Weight (Kg)	66.20	7.81
3.	Height (cm)	173.12	15.11

Mean Score (S.Ds.) age of **Volleyball players** was 24.23 (4.79) years, mean score (S.Ds.) weight was 65.20 (7.81) kg., mean score (S.Ds.) height was 173.12 (15.11) cm.

**Table 3 shows statistical comparison of Agility between Basketball & Volleyball collegiate Players.**

Component	Players	No.	Means(sec.)	S.D.	t-value
Agility	Basketball	50	10.03	0.93	*
	Volleyball	50	10.43	1.01	

\* Significant at 0.05 level.

With regard to agility of Basketball and Volleyball collegiate Players, mean values of 10.03 and 10.43 respectively were observed (Table-3).The result reveals that there was significant difference between Basketball and volleyball players . The findings indicating that the Basketball Players had greater agility than

the Volleyball Players. Finally Basketball Players were comparatively better than Volleyball Players agility ability of colleges to Amravati.

## References

1. **Brown, M.E., et al. (1986)** Effect of plyometric training on vertical jump performance in high school basketball players. *J. Sports Med. Phys. Fitness Q. Rev.* 26:1-4.1986.
2. **DevinderK. Kansal,(1996)** "Test and Measurement in sports and physical education" (New Delhi: D.V.S. Publications1996).
3. **Duke, S and BenElياهو, (1992)** Plyometrics: optimizing athletic performance through the development of power as assessed by vertical leap ability: an observational study. *Chiropr Sports Med* 6:10-15, 1992.
4. **Fatourous, I, et al.( 2000)** Evaluation of plyometric exercise training, weight training, and their combination on vertical jump performance and leg strength. *Journals of Strength Conditioning Research* 14: 470-476, 2000.
5. **Holcomb, W.R., et al.( 1996)** The effectiveness of a modified plyometric program on power and the vertical jump. *J. Strength Cond. Res.* 10:89-92.1996.
6. **Maffiuletti N, et al.(2002)** The effect of electro stimulation training and basketball practice on muscle strength and jumping ability. *International Journal of Sports Medicine* 2002; 21(6): 437-443.
7. **Poole, W. and M. Maneval. (1987)** The effects of two ten week depth jumping routines on vertical jump performance as it relates to leg power. *J. Swim. Res.* 3:11-14. 1987
8. **UmeshMuktamath et.al.(2010)**, Effects of two modes of resistance training on speed leg explosive power and anaerobic power of college men students ,*British Journal of Sports Medicinebjsm.bmj.com, Volume 44, Issue Suppl 1Sports Physiology*
9. **Andrea C. et. al. (2007)** **The Effects of Plyometric Training Versus Traditional Weight Training on Strength, Power, and Aesthetic Jumping Ability in Female Collegiate Dancers.** *Science, Volume1, number 2, June 2007, pp. 38-44(7).*
10. **B.Sankarmani, et. al. (2012)**, Effectiveness of Plyometric and Weight Training in Anaerobic Power and Muscle Strength in Female Athletes, *International Journal Of Pharmaceutical Science And Health Care ,Issue 2, Volume 2 (April 2012) Issn: 2249-57387*
11. **Blakey, J.B., and D. Southard(1987)** the combined effects of weight training and plyometrics on dynamic leg strength and leg power. *J. Appl. Sports Sci. Res.* 1:14-16. 1987
12. **Dalgas U, (2009)**, Resistance training improves muscle strength and functional capacity in multiple sclerosis. *Neurology.2009 Nov 3;73(18):1478-84*
13. **Holcomb, W.R., et al. (1996)** The effectiveness of a modified plyometric program on power and the vertical jump. *J. Strength Cond. Res.* 10:89-92.1996.
14. **Izquierdo, M., et al. (2001).** Effects of Strength Training on Muscle Power and Serum Hormones in Middle-Aged and Older Men. *J Appl. Physiol.* 90(4):1497-1507.