

Training Methods to Improve Basketball Skills

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Abstract – The aim of the present examination was to discover the impact of basketball particular training and traditional strategy for training on Speed-Agility-Quickness of National/Interuniversity/State level Basketball players. They were haphazardly allotted into three groups similarly. The three groups were named as pursues, the SAQE group-1, group-II named as the SAQNE and Active control (AC) - III. After finishing of the pre test, the subjects were treated with their particular training program. Training period was planned for seven weeks. Speed-agility-quickness - I (SAQE) experienced a basketball particular training program. Following seven weeks of the training time frame post test was led on the dependent variables of performance Ability for all the three groups. To dissect the treatment impact of training Mean and SD was utilized. To analyze the hugeness of mean contrasts among all the three groups investigation of covariance was utilized. It was inferred that the ramifications of multi parts training program particular to the basketball game may have been the wellspring of its predominance on the change of speed-agility-quickness of the male basketball players.

Keywords: Basketball, Speed, Agility, Quickness, Training

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1. INTRODUCTION

Basketball is one of the present quickest team sports and is embodied by bombastic manoeures, for example, pummel dunk and blocked shot. These features of athletic capacity obviously exhibit the idea of the sports, in that speed, strength and power are generally real determinants of effective basketball exhibitions. Albeit such attributes are generally connected with modern Basketball competitors, it is fascinating to consider basketballs advancement from its humble beginnings into a standout amongst the most well known and dynamic team sport of modern society (Brown, et. al., 2015).

Basketball has increased overall notoriety and captivated players and observers with its dynamic qualities as a team sport. In this game, players cover around 4500-5000m amid a 40-minute game an assortment of multidirectional developments, for example, running, dribbling, and shuffling at variable speeds. So as to execute running, dribbling, and shuffling like developments amid execution, both aerobic and anaerobic metabolic frameworks give off an impression of being required all through a game.

Speed-Agility-Quickness

Speed-Agility-Quickness (SAQ) training is an alternate sort of training technique, which means to expand every individual potential in his/her

genetically acquired abilities. Speed, agility and quickness are without a doubt exceptionally alluring in both team and individual sports particularly in irregular games like Basketball which is around 20% aerobic and 80% anaerobic in nature. Speed, agility, and quickness are probably the most noteworthy, and detectable parts of athletic achievement. A change in the capacity to respond rapidly, apply huge power quickly the proper way, and to divert that power if necessary is a definitive objective of a program to progress speed, agility, and quickness. A precisely composed programs those locations these elements of athleticism essentially enhances generally performance and lessens the danger of damage. Speed, agility, and quickness all include learned engine skills. Despite the fact that the magnitude of capability will fluctuate with every individual taking in the proficient and powerful execution of these skills can enhance by and large athletic capacity.

While enhancing and refining a player's basketball skills pivotal for upgrading the nature of play, it is the change of the player's athletic skills that enables him to lift his play to a larger amount. Athletic skills incorporate factors, for example, speed, power, endurance, agility, coordination, and balance and response time. Enhancing these athletic skills is basic to the aggregate advancement of the competitor. The level at which basketball skills are performed is straightforwardly identified with the level of the competitor's aggregate molding. In basketball, effective

performance is needy upon a few fitness segments that are anaerobic in nature. These segments i.e., speed, agility, furthermore, vertical jump stature must be performed more than once, with negligible decreases in performance for the length of the challenge. Basketball is one of the sports portrayed by numerous individuals of nuts and bolts and factors skills (Brittenham, 2012). The basketball player flawlessness to do such skills, protective or hostile, needs improvement in the physical characteristics in the basketball player which empowers him to do the required obligations all through the match. Unique physical arrangement in basketball is the primary column for the players to complete the exceptional necessities (physical, skillful and strategic). Without these necessities, the player can't accomplish the goals set up for the training or rivalry.

Physical adjustment of the player to play out the sports activities is one of the useful elements of the training which enhance the training of the player to reach to larger amounts in the sports activities. The skillful performance is appropriately related with the unique physical engine abilities as the flawlessness of the skillful performance relies upon the scope of the advancement of the unique physical abilities to perform such necessities, for example, solid power, endurance, agility and others. The skillful performance is frequently estimated by the level of the player to gain physical abilities.

2. REVIEW OF LITERATURE

Asadi and Arazi, (2015)[3] assessed the impacts of high-intensity plyometric training program on unique balance, agility, vertical jump, and run performance in young male basketball players. Sixteen semi-proficient basketball players took part in the investigation. Subjects were separated into two groups: plyometric training (PL; n = 8) and control group (CG; n = 8). Plyometric training occurred 2 days seven days for about a month and a half including profundity jump, squat profundity jump, and profundity jump to standing long jump. Star Excursion Balance Test (SEBT), vertical jump (VJ), standing long jump (SLJ), 4 x 9-m carry run, T-test, Illinois Agility Test, and 20-m run were estimated at pre-and post-training

Santos and Janeira,(2014)[4] chipped away at an investigation to decide the impacts of (a) plyometric training on touchy strength markers in adolescent male basketball players and (b) detraining and diminished training on already accomplished hazardous strength gains. Two groups were shaped: a trial and a control group. The previous was submitted to a 10-week in-season plyometric training program, twice week after week, along with normal basketball practice. All the while, the control group took an interest in general basketball practice as it were. Toward the finish of this period, the test group

was subdivided into 2 groups: a lessened training group and a detraining group

Ball, Kaur, and Singh,(2016) [5] dealt with an investigation to survey the impacts of a here and now plyometric training program of agility in young basketball players. A group of Thirty (N=30) male basketball players matured 18 – 24 years, who took an interest in bury school basketball rivalries sorted out by the Department of Sports, Guru Nanak Dev University, volunteered to partake in the examination. Their mean tallness, weight, and age were $1.87\pm 0.06\text{m}$, $75.5\pm 5.2\text{kg}$, 22.5 ± 0.4 years. All subjects, in the wake of having been educated about the goal and convention of the examination, gave their written assents and the investigation was endorsed by the nearby Committee of Ethics.

Jovanovic et al,(2017) [6] assessed the impacts of the speed, agility, quickness (SAQ) training strategy on power performance in soccer players. Soccer players were appointed haphazardly to 2 groups: test group (EG; n = 50) and control group (n = 50). Power performance was surveyed by a test of quickness-the 5-m dash, a test of increasing speed the 10-m run, tests of 20 maximal speed-the 20-and the 30-m run along with Bosco jump tests-squat jump, countermovement jump (CMJ), maximal CMJ, and nonstop jumps performed with legs broadened

Shallaby, (2017) [7] chipped away at an examination to recognize the impact of polymeric exercises use on the physical and skilful performance of basketball players. It was connected to an example of 20 players of 16 years of age from El-Shoban ElMusmeen club in Port Said. They were isolated into two identical groups (exploratory and control) of 10 players each. The test group connected the plyometric exercises and the control group connected the standard program. The program was connected for 12 weeks with 3 training units at 120 minutes for every unit. Through the training unit, the exercises were joined between the two groups aside from the piece of the unique physical arrangement

Zemkova and Hamar,(2015) [8] assessed the impact of multi week joined agility balance training on neuromuscular performance in basketball players. They found that balance exercises performed at the same time with response errands speak to a successful means for development of neuromuscular performance in first class athletes.

Franciosi et al, (2016) [9] chipped away at an examination to decide the commitments of chosen major components to basketball performance in grown-up players with mental impediment (MR). Their outcome demonstrated the likelihood to decide the commitment of chose basic variables to basketball performance. Along these lines, the

basketball mentor could enhance a chose essential factor to build particular basketball capacity.

Khelifa,(2014)[10] analyzed the impact of a standard plyometric training convention with or without included load in enhancing vertical jumping capacity in male basketball players. Twenty-seven players were arbitrarily doled out to 3 groups: a control group (no plyometric training), plyometric training group (PG), and stacked plyometric group (LPG, weighted vests 10-11% body mass). When the 10-week training program, every one of the players was tested for the 5-jump test (5JT), the squat jump (SJ), and the countermovement jump (CMJ). The PG and LPG groups performed 2 and 3 training sessions for every week, amid the initial 3 and the most recent 7 weeks, individually. The outcomes demonstrated that SJ, CMJ, and 5JT were significantly enhanced just in the PG and LPG groups. The best impacts for jumps were seen in LPG ($p < 0.01$), which demonstrated significantly higher additions than the PG ($p < 0.05$). Taking everything into account, it was created the impression that heaps added to standard plyometric training program may result in more noteworthy vertical and horizontal-jump performances in basketball players

3. RESEARCH OBJECTIVES

1. To examine the impacts of speed-agility-quickness training on basketball performance.
2. To discover the impacts of simultaneous strength learning program performed around the same time on chosen skill performance and fitness related parameters of basketball players.
3. To discover the impacts of simultaneous aerobic and strength training program performed on the substitute days on chose skill performance and fitness related parameters of basketball players.

4. RESEARCH METHODOLOGY

Purpose of the Study

The choice of the subjects, choice of variables, administration of tests, paradigm measures, gathering of information, dependability of information, administration of training program, plan of the investigation and factual method utilized for breaking down the information have been depicted (Lain and Bethan, 2014).

Selection of Subjects

50 male basketball players, who partook in the National/Interuniversity/ State level Basketball tournaments, extending the age between 20- 25yrs,

were arbitrarily chosen from Shivaji Hockey Stadium, New Delhi as subjects of the investigation. The subjects took an interest intentionally in the program and gave the agree of eagerness to take an interest in the investigation they were inspected by the doctor to learn that they were free from restorative issues to experience particular training program for seven weeks.

The subjects were ordered into three equivalent groups on irregular premise comprising of twenty subjects in each group. Two groups were given trial medications. The principal group was administered speed-agility-quickness training with gear and was assigned as SAQE group.

The second group was administered speed-agility-quickness training without equipment and assigned as SAQNE group. The rest of the group went about as Active control and was assigned as AC group. The Active control group was not allocated any test treatment but rather the subjects of this group proceeded with their general game practice. Formal authorization was looked for from the authorities of each chosen focuses to direct the investigation on their players and broadening offices for the equivalent (Leger, et. al., 2017).

The significance of the methodology and the essentialness of the investigation were disclosed to the subjects to sum up things up and they were drawn nearer to act willfully and entire heartedly.

Selection of Variables

Basketball performance is related with various known and obscure factors. Based on accessible writing surveys and remembering the practicality criteria, the analyst chose the accompanying variables for the present think about:

Dependent variable

The performance ability of basketball was considered as dependant variable for the present investigation.

B. Independent variable

Picked independent variables for the examination were:

1. Power.
2. Agility.
3. Speed.

Administration of Tests

1. Basketball Performance

Method: Subjective rating or assessment of performance regarding some standard can be exceptionally helpful, whenever made while the players are engaged in game play. Three specialists were doled out for rating the basketball players amid the match circumstance. Periods of performance that were appraised on in the game circumstance were broken into seven units and appraised (Markovic, 2015).

Scoring: Expert were told to rate the players for every unit of seven parts out of ten point. Average score of the three master's scores were recorded as the score of the player

5. DATA ANALYSIS

Table1 Calculation of Mean and S.D

| | SAQE | | | SAQNE | | | AC | | |
|----|----------|-------------------|-----------|----------|-------------------|-----------|----------|-------------------|-----------|
| | Pre Test | Intermediate Test | Post Test | Pre Test | Intermediate Test | Post Test | Pre Test | Intermediate Test | Post Test |
| M | 43.416 | 44.999 | 45.716 | 42.516 | 43 | 44.816 | 41.899 | 41.733 | 43.838 |
| SD | 1.393 | 1.581 | 1.271 | 0.708 | 0.730 | 1.089 | 0.679 | 0.617 | 0.594 |
| HS | 48 | 48.333 | 48.333 | 45 | 46.667 | 46.333 | 43.667 | 41 | 45.333 |
| LS | 40 | 41 | 42 | 39 | 40 | 39 | 38.333 | 38.333 | 40 |

Table 1 portrays the mean (M), standard deviation (SD), highest (HS) and lowest (LS) performance scores of subjects in basketball. The pre-test mean of SAQE group, SAQNE group and AC group were 43.416, 42.516, and 41.899 separately in performance. The transitional test means of SAQE group, SAQNE group and AC group were 44.999, 43 and 41.733 individually, though in the post test stage the mean of the three groups were 45.716, 44.816 and 43.383 separately. The standard deviations of pre-test scores were 1.393, 0.708 and 0.679 of the groups to be specific SAQE, SAQNE and AC separately while for middle of the road tests it was 1.581, 0.730 and 0.617 of SAQE group, SAQNE group and AC group individually. The post test standard deviation for SAQE group, SAQNE group and AC group were 1.271, 1.089 and 0.594. The highest value for SAQE group in pre test stage was 48 where as the lowest value was 40. For the SAQNE group the highest value in pre test was 45 where as the lowest value was 39. The highest value for AC group in pre test stage was 43.667 where as the lowest value was 38.333. In the middle of the road test for SAQE group the highest value was 48.333 and the lowest was 41, for SAQNE group the highest value was 46.667 and the lowest was 40, and for the AC group the highest value was 41 where as the lowest value 38.333. In the post test stage for SAQE group the highest value was 48.333 and the lowest was 42, for SAQNE group the highest value was 46.333 and the lowest was 39, and for the AC group the highest value was 45.333 and the lowest value were 40.

6. CONCLUSION

The motivation behind the present examination was to research the impacts of speed agility-quickness training on the performance capacity of basketball players. In the present situation extraordinary compared to other medium of indicating improvement and headway of the nation is matchless quality in games and sports. In this association every nation are endeavoring to grow new strategies and training techniques to prepare athletes or teams for upgrading performance at high level. India needs to strengthen this pattern in all fields of sports and this must be conceivable through logical, efficient and arranged sports training program. The manner by which speed-agility-quickness training set off the performance of basketball players was very little known and still stays to be contemplated inside and out. With a specific end goal to accomplish ideal performance, different training that assistance to enhance performance abilities and many are being presented in the field.

Speed-agility-quickness (SAQ) training is additionally viewed as an arrangement of training that may enhance performance capacity of basketball players while just restricted speculation can be drawn from the fragmentary information on basketball players. Logical data is by and large step by step aggregated this will fill in as a rule for growing more satisfactory SAQ training program for basketball players.

This is valid about the impacts of SAQ training on the performance capacity of basketball players. We have more convictions and conviction however couple of actualities. This does not mean to infer that there is no impact yet at the same time we need adequately satisfactory and target proof to toss light on different parts of performance abilities through the practice of speed-agility-quickness training the present examination was embraced (Matavulj, et. al., 2014).

FUTURE SCOPE OF THE RESEARCH

Looks into might be led to determine whether or not, practice of speed-agility-quickness training enhances performance capacity in other age group, sex and control. Reviews delighted that no investigations have been embraced to decide the impact speed-agility-quickness training on the performance of basketball players, henceforth more broad investigations might be directed to further investigate the impact. The standards of performance vary from place to place attributable to environmental, social and emotional conditions, so an examination might be directed on a more extensive scale covering the entire nation.

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