

Study of Running Posture of Regular Runners from Maharashtra Mandal's Athletics Track

Kaivalya Kale

MPED 2nd Year, CACPE, Pune

Kumar Upadhyay

Assistant professor, CACPE, Pune

ABSTRACT

The main purpose of the study is to study the Running Posture of regular runners from Maharashtra Mandal's Athletics Track in Pune City. The objective of the study was to study the Running Posture of the runners, and will the poor Running Posture affect the performance of the trainee's during the tests. The method selected for this study was a survey method in descriptive study of the research. In this study the trainees who are preparing for police selections were selected as the population from Pune city. Where for this study 56 trainees were selected as samples from Maharashtra Mandal's Athletics Track in Pune city were selected by purposive sampling technique. The trainees had to perform a 30-meter dash test and the time taken to perform the test and the videos of the 30-meter dash test was recorded. After the data was collected the experts evaluated the trainee's by watching their 30-meter dash videos. The evaluation of the trainee's was done on the basis of 0-10 rating scale, where the students were given the remark as "Excellent", "Above average", "Average", "Below Average" and "Poor" on the basis of their performance in 30-meter dash and Running Posture. When the data was analysed, it was found that the no students could perform the tests at "Excellent" level and most of the students were in between "Average" and "Above average" level.

Keywords : Regular Runners, 30- meter dash, Rating Scale, Performance.

Introduction

The search for understanding the movement starts with everyday observations and experiences. It is not unexpected that a wide range of techniques have been employed in the scientific and imaginative disciplines to unravel the meaning of movements around us, given the information that we learn from monitoring the body motions that are presented to us. What is motion? Movement consists only of moving from one location to another, it is **“The process or the state of changing place or position of the body or a body part from one position to another is called movement”**. Fundamental movement is divided into three types of basic body movements are **locomotor, non-locomotor, and manipulative movements**. These Fundamental movements differ based on whether or not the individual travels or moves from one location to another while doing them, as well as whether or not an external object is included in the movement (Amighi, Loman, & Sossin, 2018). Locomotor movements are those in which we move from one location to another, such as when a sprinter runs from the starting line to the finish line. Non-Locomotor motions are those in which we remain stationary, such as when we use Dumble’s in the gym during a workout. and Manipulative Movements refer to the manipulation of an object by the user, such as using a cricket bat in cricket, a basketball to shoot a basket, or a shot put.

The biological age group of elementary school students is 6 to 12 years, and this age group is the central and ultimate time of the children’s lives, during which the primary pattern changes of life occur. As a result, changes in attitudes, values, and behaviours occur. During this age, children have a strong desire to leave their homes and interact with their peers, as well as a strong desire to be physically active and participate in various forms of games and activities that require physical movements and mental desires to enter the world concepts, ideas, thoughts, values, and symbolical aspects of adults. As a result of these factors, physical growth is just as vital as other aspects of human development. Physical growth becomes finer and more coordinated as an individual’s biological age increases in comparison to early childhood. Smooth motor ability through play is a crucial step towards mastery of fundamental movement ability. Because of this mastery of motor abilities, the youngster will tend to undertake complex series of motions in sports, games, and other physical activities. Walking, running, jumping, leaping, sliding, skip, hopping, and galloping are locomotor movements that children use to get from one place to another. The children receive several advantages in their daily lives by mastering these basic movements. To reap the long-term benefits of fundamental movement, the child requires a variety of opportunities to practise in a difficult environment while receiving assistance through quality instruction and feedback (Sari, 2019). Same as walking posture there is

running posture which is one of the important locomotor movements for a human being. Many runners who practice daily and compete in the competitions have a bad running posture and some are suffering for physical injuries. To prevent these injuries the comprehensive and convenient running posture guidance should be given to the runners. This bad posture during running cannot be only the cause of injuries but also the cause of giving a bad performance and physical health of the athletes. The better the running posture the better the athlete can perform in the long-distance running events, and getting a medal in that particular event will be easier for the athlete (Lai, Wang, Wang, & Zhou, 2022). Running is one of the basic and key movement which all the athletes use in their own games and sports, every footballer needs the running movement to dribble the ball from one side of the field to the other side of the field. So having a proper and perfect running posture is important to each and every athlete from various sports. It defines their speed, performance and their achievements. Not only athletes but a non-athlete also needs it to stay fit and healthy.

Methodology:

Survey was conducted on the Maharashtra Mandal's Athletics Track for collecting data. Researcher followed descriptive survey method to carry out the study. Trainees who are preparing for Police selections were selected as the population for the study. Researchers conveniently selected trainees from Maharashtra Mandal's Athletics Track and then purposive sampling technique for selecting 56 trainees who are preparing for Police Selections were selected respectively. After selecting the samples, firstly the pilot study was done on the students of MPED 1st year and then the data was conducted on the trainees and the data was recorded in the form of time taken to perform the test and video of the trainees performing the test.

30-meter dash test : A 50-meter track is marked where the student have to sprint for 50 meters, where the timing only for 30 meters will be recorded so that the acceleration and deacceleration will be excluded while recording the time taken to perform the test.

Running posture of the sprint : While the student is performing the sprint, He/she has to follow all the necessary cues while sprinting.

Analysis and interpretation of data: In this present study data was collected in the form of time taken to perform 30-meter dash test and video of the 30-meter dash test. After the data was collected 0-10-point rating scale was prepared for the analysis of running posture through of 30-meter dash test. The data analysis of the test was done by the expert by observing the videos and rating them through rating scale, the interpretation of the data is as follows in table 1.

Table 1 : Summary of frequency analysis status of 30-meter dash of runners from Maharashtra Mandal's Athletics Track

Category	Frequency	Percentage
Excellent	7	13%
Above average	21	38%
Average	19	34%
Below average	6	11%
Poor	3	5%
Total	56	100%

From the above given table, the remarks were given to the students for the 30-meter dash test and frequency. It is found that 56 students who were selected as sample for the study from Maharashtra Mandal's Athletics Track, 7(13%) students were given as "Excellent" remark, 21 (38%) students were given "Above Average" remark, 19 (34%) students were given "Average" as a remark, it is very important that only 6 (11%) and 3 (5%) students were given a "Below Average" and "Poor" remark.

Table 2 : Summary of frequency analysis status of running posture of runners from Maharashtra Mandal's Athletics Track

Category	Frequency	Percentage
Excellent	0	0%
Above average	8	14%
Average	23	41%
Below average	19	34%
Poor	6	11%
Total	56	100%

From the above given table, the students were given remarks on how their running posture was while performing the 30-meter dash test. It is found that out of 56 students who were selected as sample for the study from Maharashtra Mandal's Athletics Track, 8 (14%) students were given "Above Average" remark, 23 (41%) students were given "Average" as a remark, it is important that the 19 (34%) and 6 (11%) students were given "Below Average" and "Poor" remark for their performance. None of them could perform the running posture at "Excellent" remark.

Discussion:

In this study the running posture analysis of the trainees was done. From the above analysis it was found that maximum number of trainees scored “Average” and “Above Average” remark. None of them could perform the tests at “Excellent” level. (IMPACT OF CORRECT POSTURE ON SPORTS PERFORMANCE, n.d.) A good posture is more than just you’re standing or sitting position. When you have good posture, your muscles and skeleton are in balance, which prevents injuries whether you’re moving or not. This means that in addition to sitting or resting, athletes must maintain appropriate posture or form while running, jumping, diving, tumbling, and tackling. According to (Hay, 1936) in the book of “THE BIOMECHANICS OF SPORTS TECHNIQUES” chapter 15 “Track and Field”, he stated the basic factors of running. Where (Hay, 1936) mentioned various factors which affect the performance of an athlete. Thus, the researcher concluded and came to an understanding that running posture is not one of the key factors which affect the performance of the athletes.

Conclusion:

It is concluded that the trainees who are preparing for Police selections from Maharashtra Mandal’s Athletics Track can perform 30-meter dash test while keeping their running posture at Average and Above Average level.

Recommendation:

- It is recommended that research shall be conducted on the Primary school children to see how many schools focus on the Fundamental Movement Skills of the children.
- It is recommended to conduct a study on awareness and knowledge about good posture within the parents of primary school children.

References ;

- Amighi, J. K., Loman, S., & Sossin, K. M. (2018). *The Meaning of Movement Embodied Developmental, Clinical, and Cultural Perspectives of the Kestenberg Movement Profile* (Second ed.). New York: Routledge.
- Anderson, O. (2013). *Running Science*. Human Kinetics.
- Anderson, O., & Anderson, O. (2019). *Running Form*. Human Kinetics.
- Dreyer, D., & Dreyer, K. (2004). *Chi Running*. Fire Side Publications.
- Hay, J. G. (1936). *The Biomechanics Of Sports Techniques* (Second ed.). Iowa: Prentice-Hall, Inc., Englewood Cliffs, N.J.
- IMPACT OF CORRECT POSTURE ON SPORTS PERFORMANCE. (n.d.). Retrieved from TrueSports: <https://www.truesportsphysicaltherapy.com/blogs/proper-posture-matters>

Lai, Z., Wang, M., Wang, L., & Zhou, Y. (2022). Intelligent Running Posture Detection Based on Artificial Intelligence Combined with Sensor. *Journal Of Sensors*.

Sari, E. N. (2019). Basic Locomotor Movement of First Grade Students of Elementary School. *Advances in Social Science, Education and Humanities Research*, 1-5.