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Assessment of the start technique motion for the sprinters of singkill track project athletic club Yogyakarta

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Abstract
This research aims to assess the start technique motion of the sprinters of Singkill Track Project Club Yogyakarta. The research design was a descriptive quantitative study with the method used a survey. The determination of sampling was conducted by using purposive sampling with the conditions that athletes have experience in competing at the national level. Based on these conditions, a sample of 3 people was obtained. From this research, it shows that the score obtained by the sprinters of Singkill Track Project Club for the start motion is at 80 points out of a total of 100 points, which is classified in the Good category.

Keywords: Yogyakarta, assessment, sprinter, start block

1. Introduction
Athletics is the oldest sport in the world and is also called the Mother of Sports, namely as the mother or parent of sports, because this sport is the first sport in the world according to Eddy Purnomo and Dapan (3: 2011). Athletics consists of several race numbers where the track number consists of running and walking, while the field number consists of throwing and jumping. The running number itself consists of short distance running (sprint), middle distance, and long distance. One of them is the most prestigious, namely the 100 meter run.
The 100-meter run is fast and short. So it requires sprinters to run as well as possible at all stages of the run, so as not to make the slightest mistake that causes the runner to be left behind by other runners. The stages of the 100-meter run are start, run and finish, all stages receive serious attention as supporting factors for achieving achievements.
Running technique is an element of movement that can support runners to achieve maximum speed results. The things that must be considered in running techniques include body posture, steps and leg movements, arm movements, and when landing.
A coach is an expert in his/her field of sport. All factors become study material for the coach to be able to bring athletes to the highest achievement. Various factors must be analyzed and adjusted according to the needs of the athlete, one of which is the training factor. Each coach has his/her own way, one example is in compiling a training program which is a concoction specially designed by the coach so that athletes are able to achieve achievements. One of the materials in training is technical training, which is a means for athletes to be able to optimize movement.
For short-distance running, the start used is a crouching style start. This start uses a starting block as an aid. Starting blocks are used by sprint athletes to hold their feet at the start of the race, so that they do not slip when pushing when the gun is fired. In using starting blocks, athletes must be able to position their bodies correctly in order to produce maximum acceleration thrust. Practicing the use of starting blocks is very important, because if athletes are not used to using them, it will result in reducing the athlete's time to respond to reactions.

2. Materials and Methods

This study uses quantitative descriptive with the research method used is a survey. The population of the study used were all sprinter athletes of the Singkill Track Project Club Yogyakarta. The sample in this study was 3 athletes with experience competing at the national level. The survey method in this study uses an assessment with a research instrument grid sourced from the book RUN! JUMP! THROW! The Official IAAF Guide to Teaching Athletics (1996).

3. Results And Discussion

Table 1: Overall Score Results

Phase	Author's Assessment				Expert Assessment			
	Sample 1	Sample 2	Sample 3	Total	Sample 1	Sample 2	Sample 3	Total
"On your mark" position	18	19	17	54	18	17	16	51
"Set" Position	25	26	22	73	17	21	17	55
Drive Phase	23	21	21	65	19	19	19	57
Acceleration Phase	25	24	23	72	19	17	19	55
Total	91	90	83	88	73	74	71	73
Average Value	80							

3.1 "On your mark" position

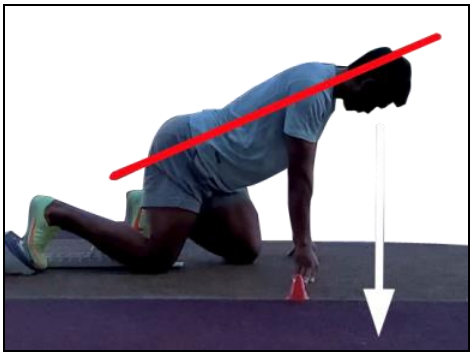

Fig 1: Sample 1 "On your mark" position

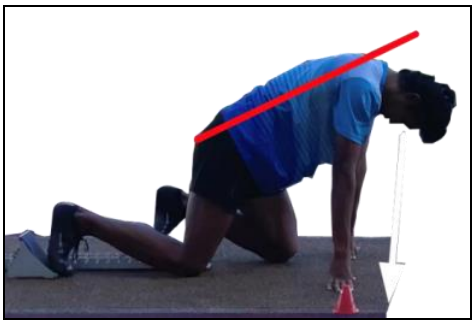

Fig 2: Sample 2 "On your mark" position

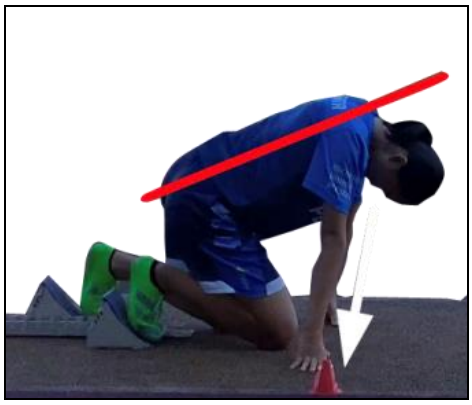

Fig 3: Sample 3 "On your mark" position

This phase, sample 1 gets 18 points from, sample 2 gets 19 points, while sample 3 gets 17 points from the total points. Most of the samples have shown a good position. The discrepancy occurs in sample 3, where the position is more bowed than the other samples so that the assessment given is 2 points. Then other discrepancies are shown by samples 1 and 3 where the position of the torso does not show a straight position.

In this phase, all samples obtained a 90% success rate based on the researcher's assessment with a value of 54. Meanwhile, based on expert assessment, the success rate obtained was 85% with a total value of 51.

3.2 "Set" Position

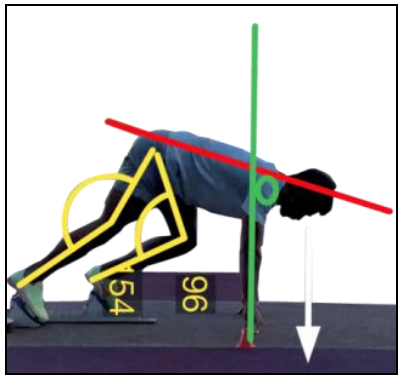

Fig 4: Sample 1 "Set" Position

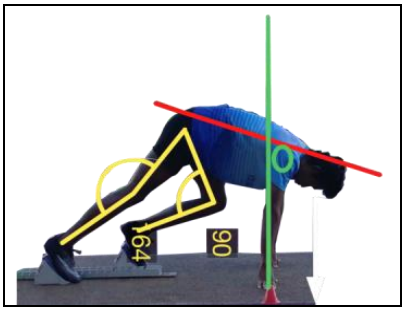

Fig 5: Sample 2 "Set" Position

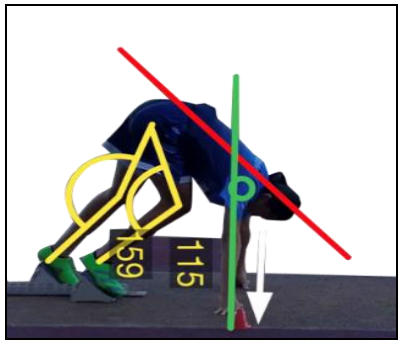

Fig 6: Sample 3 "Set" Position

This phase, sample 1 gets 25 points, sample 2 gets 26 points, sample 3 gets 22 points from the total points of the "Set" Position. The emphasis on the heel of the back leg is seen due to the rising hip position. The gradual rise in the hip position results in the formation of an angle on the front and back knee. The angle of the front knee formed in each sample is, sample 1 is, sample 2 is 90, while sample 3 is 115. Of the three samples, sample 2 shows the optimal angle while the other 2 samples show a larger angle, sample 3 shows a larger angle, so it is given 2 points compared to sample 1 with 3 points. The angle of the back knee formed in each sample is, sample 1 is, sample 2 is 164, while sample 3 is 159. From the results of the review, the value given to each sample is 2 points because the angle formed is too large. 96°°°154°°°

From the results of the description above, the discrepancy that occurred in the three samples was the formation of the front and back leg knee angles that were too wide. In sample 3, the angle range that was seen was larger due to the short starting position used so that the effect of the rising hips on the distance between the hands and the line resulted in the formation of a large knee angle. In addition, sample 3 showed a parallel hand and shoulder position so that it was given 3 points because with this position the hands could hold the body more lightly. In the future, coaches can provide more hand utilization training.

In this phase, all samples obtained a success rate of 87% based on the researcher's assessment with a total value of 73. Meanwhile, based on expert assessment, the success rate obtained was 65% with a total value of 55.

3.3 Drive Phase

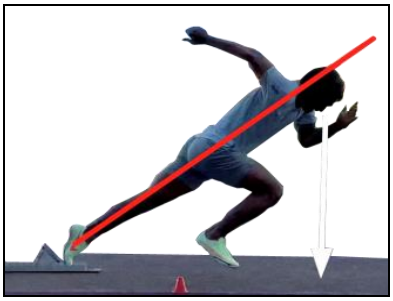

Fig 7: Sample 1 Drive Phase

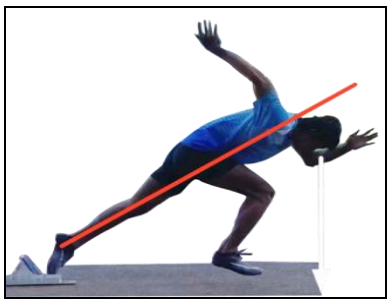

Fig 9: Sample 2 Drive Phase

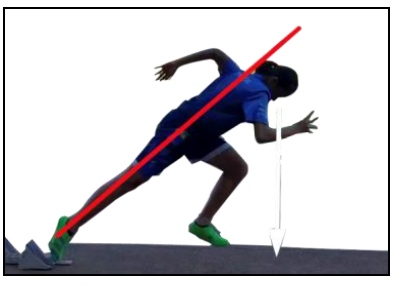

Fig 10: Sample 3 Drive Phase

In this phase, sample 1 gets 23 points, sample 2 and sample 3 get 21 points from the total points in the Drive phase. In this phase, the start signal is given "Yak!" or in the form of a gunshot sound which is a marker for the athlete to leave the starting block to run.

The discrepancy occurred in sample 2 and sample 3 where the sample position was too bent down so that it did not show a straight body and hip position so that in points 13 and 16 it was given point 3. This can happen because the athlete does not master the starting technique. This problem can be overcome by repeated starting exercises so that it creates a habit in the athlete.

In this Drive phase, all samples obtained a 90% success rate based on the researcher's assessment with a value of 65. Meanwhile, based on expert assessment, the success rate obtained was 79% with a total value of 57.

3.4 Acceleration Phase

Fig 11: Sample 1 Acceleration Phase

Fig 12: Sample 2 Acceleration Phase

Fig 13: Sample 3 Acceleration Phase

In this final phase, sample 1 gets 25 points, sample 2 gets 24 points, and sample 3 gets 24 points from the total points in the acceleration phase. All three samples are given a score of 3 points for the movement of maintaining a position parallel to the ground on the sole of the swinging foot during recovery. The hand swing movement of each sample is given a score of 3 points. However, the rest of the samples have shown good positions.

The obvious discrepancy is in sample 3, namely the upright body position before passing the 20-meter mark, so it is given a score of 2 points. The increase in the head position of sample 3 is slightly faster following the upright body, so it is given a score of 3. This can occur due to athletes who are not relaxed enough, which affects movement. In the future, coaches can provide more understanding regarding acceleration positions and provide more repetitions so that athletes can be more relaxed and accustomed.

In this phase, all samples obtained a value of 72, indicating a 90% success rate based on the researcher's assessment. Meanwhile, by expert assessment, the success rate obtained

was 65% with a total value of 55.

4. Conclusion

Overall, the value obtained by the Sprinter Singkill Track Project for the start movement was 80 points out of a total of 100 points, which is included in the Good indication.

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