



Shot Familiarization for Elites – A Rational Approach

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Abstract

Shot put is a track and field event involving throwing in a pushing motion of a heavy spherical object as far as possible. The thrower must commence the throw from a stationary position and leave the circle under control from the rear half after completing the throw. The shot must fall within a 40 degree sector at the front of the circle. The shot must be put from the shoulder with one hand only and be kept in close proximity to the chin during any preceding movements. The shot put competition for men has been a part of the modern Olympics since their revival in 1896, and women's competition began in 1948. The first events resembling the modern shot put likely occurred in the Middle Ages when soldiers held competitions in which they hurled cannonballs. Shot put competitions were first recorded in early 19th century Scotland, and were a part of the British Amateur Championships beginning in 1866. Currently, most top male shot putters use the spin. However the glide remains popular, especially among Olympic and World Champions and among women, since the technique leads to greater consistency compared to the rotational technique. The familiarization of shot put may not be applicable same for all the categories (Novice, Intermediate and elites). Each and every category has its own limitations and delimitations. This article describes the familiarization exercises only for elites and would pave way for the further improvement in putting. Now days, the familiarization of exercises are ignored not only in shot put, but also other events too. The current trend concentrates only on the strengthening part of entire body by using free weight, with weights, multi gym and other means. But to improve the real strength of the particular (specific) muscles could be developed by familiarization exercises first then advisable to opt other training means and methods next. One way or the other this approach would minimize the error and an injury.

Keywords: Shot Put, Familiarization, Elites, Technique, Exercises.

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Introduction

Shot put is a track and field event involving throwing in a pushing motion of a heavy spherical object as far as possible. The thrower must commence the throw from a stationary position and leave the circle under control from the rear half after completing the throw. The familiarization exercises are important for each and every sport or an event. Because these exercises are the base for teaching a technique or skill in proper manner. These exercises must be taught first before you enter into main part. I could say that this familiarization exercises are known as specific exercises of an event or sport. We are all familiar about the general and specific exercises and but each have its own common and specific objectives. The familiarization of shot put may not be applicable same for all the categories (Novice, Intermediate and elites). Each and every category has its own limitations and delimitations. This article describes the familiarization exercises only for elites and would pave way for the further improvement in putting.

Objectives of familiarization exercises

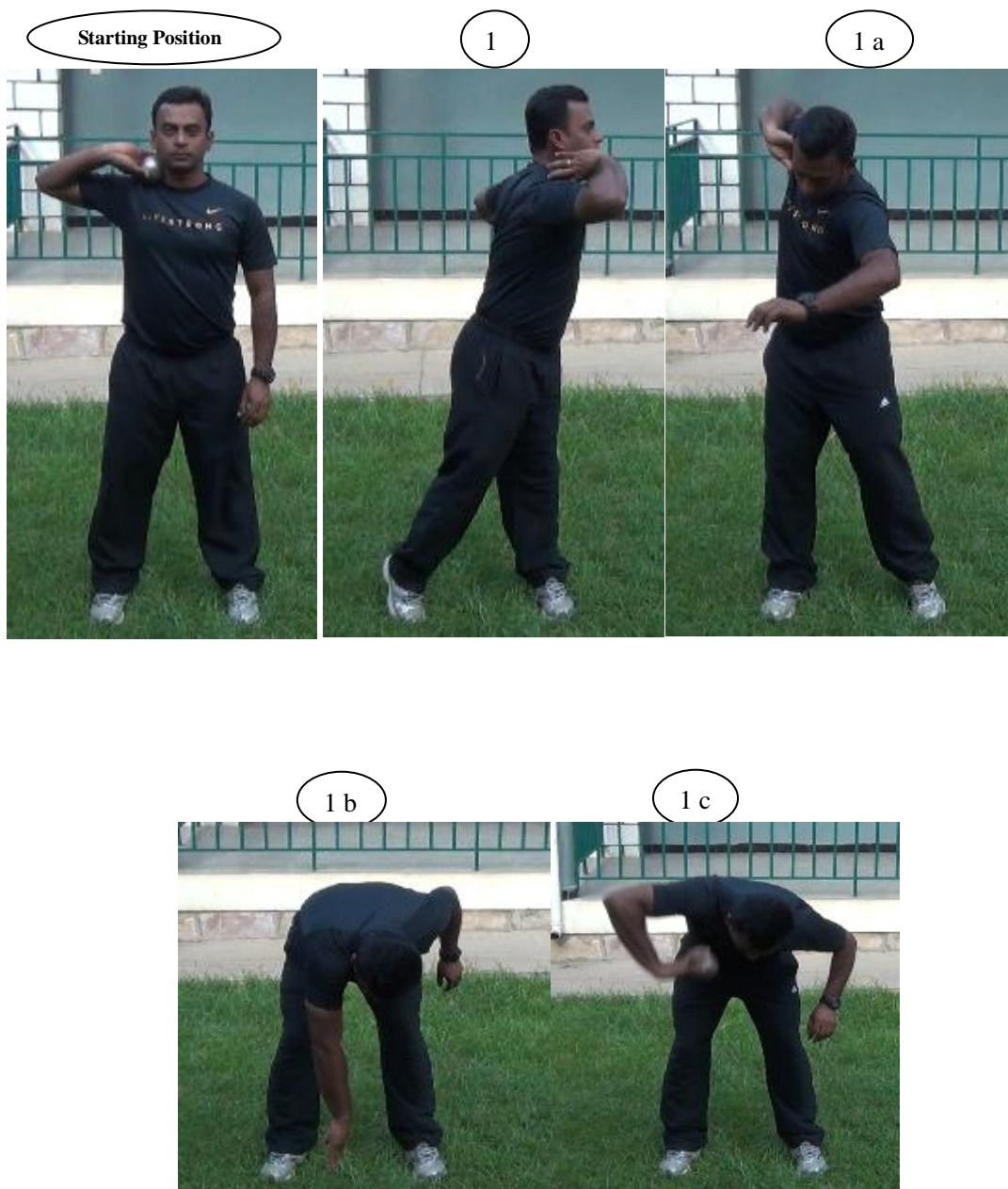
1. Develop specific skills and specific fitness to a particular sport.
2. Develops specific speed, strength, endurance and other related motor qualities in relation to the specific event.
3. Develops Co-ordination of specific muscles and muscle groups.
4. Develop and apply knowledge about general rules, refereeing, and training.
5. Work effectively by him / her toward a specific goals.
6. Atomization of a technique through kinetic and kinesthetic aspects.
7. Not to prone injury.
8. Develop mental strength for particular event.
9. Obviously, it improves technique.
10. Athlete could feel the weight of standard implement at all the time (seasons)

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Familiarization Exercises

Some of the specific exercises to improve various phases of the technique for Elites.



1. Twist and Put Drill (to the ground)

Objective:

To improve the flipping action of a throw

Description:

1. Parallel stance and hold the shot.
2. Twist to left then right
3. Put the shot to the ground by the outward movement of the wrist.



Starting Position

1

2

2. Double Arm Put Drill

Objective:

To improve the flipping action of a throw

Starting position:

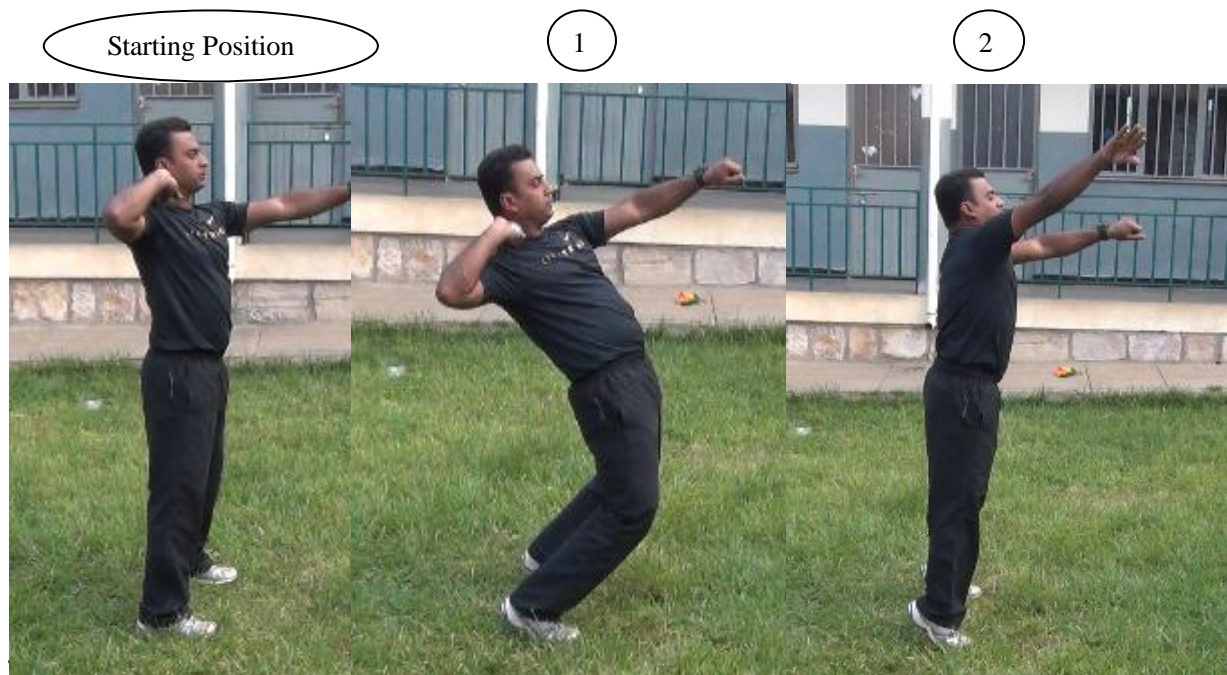
Facing throwing direction and hold the shot at chest level

Description:

Count 1: Bend back with the shot and unstrained of the muscles (back and neck)

Count 2: put the shot with both hands of outward movement of the wrist.

Note: The same exercise can be formed without count.



Starting Position

1

2

3. Single arm Put Drill

Objective:

To improve the flip action and also feel of stopping of non throwing arm (left arm)

Starting position:

Facing throwing direction with the shot

Description:

Count 1: Bend back with the shot and make sure of no strain in the muscles (back and neck)

Count 2: put the shot with outward movement of the wrist.

Note: The same exercise can be formed without count.

Starting Position



1



4. Single Leg Stance and Double Arm Put Drill

Starting Position:

1. Facing at 9'O clock direction and shot with both hand at chest level
2. Right foot also faces at 9'O clock direction and the left leg extended which facing throwing direction.

Objective:

To improve the pivot movement especially joint (right side).

Description:

From the above said position, the thrower has to put the shot by extending the right toe, knee, hip, shoulder and stretched both arm.

Starting Position



1



5. Single Leg Stance and Single Arm Put Drill

Starting Position:

1. Same as previous exercise but here put with the single arm.
2. Facing at 9'O clock direction and the shot at chest level
3. Right foot also faces at 9'O clock direction and the left leg extended which also facing throwing direction.

Objective:

To improve the pivot movement especially hip joint.

Description:

From the above said position, the thrower has to put the shot by extending the right toe, knee, hip, shoulder and stretched both arm.

Starting Position



1



6. Single Leg Cross Over and Double Arm Put Drill

Starting position:

1. Facing at 9'O clock direction and hold the shot with both hands at chest level.
2. Left leg also faces 9'O clock direction and right leg is kept cross over the left.

Objective:

This exercise is mainly to improve the hip thrust movement.

Description:

Put the shot with flipping action of both hands outside by straightening the left ankle, knee, hip, shoulder and arms.

Starting Position



1



1 a

**7. Kneeling Back and Single Arm Put Drill**

Starting position:

1. Hold the shot in kneeling position (make it 90^0 at left knee, right knee and upper body)
2. Left arm is parallel to the ground in front of chest.

Objective:

This exercise is to improve the hip thrust movement and release.

Description:

Count 1: Sit back on your right heel

Count 2: Come back to starting position and put the shot.

Starting Position

1

**8. Kneeling and Single Arm Put Drill****Starting position:**

1. Hold the shot in kneeling position (make it 90^0 at left knee, right knee and upper body)
2. Left arm is parallel to the ground in front of chest.

Objective:

This exercise is to improve the strength of throwing arm and thrower could feel the importance of lower parts.

Description:

Put the shot high without disturbing body.

Starting Position

1

**9. Single Arm Put Drill (Sitting)**

Starting position:

1. Sit in “V” position and rest the shot between neck and collar bone in single hand.
2. Left arm is parallel to the ground in front of chest.

Objective:

This exercise is to improve the specific strength of the shoulder and also to improve putting action of throwing arm.

Description:

Put the shot high without disturbing body.

Starting Position



1



1 a

10. Double Arm Put Drill (Sitting)

Starting position:

1. Sit in “V” position and hold the shot with both hands at chest level.

Objective:

This exercise is to improve the specific strength of the shoulder and also to improve putting action of both arms.

Description:

Put the shot high without disturbing the body parts.

Starting Position



1





1 a



1 b



1 c

11.Hit the Target with Shot

Starting position:

1. Hold the shot and come to delivery stance / power position.

Objective:

It is to improve the specific angle of throws

Description:

Put the shot by pivoting of right leg (ankle, knee, hip and shoulder). It is same like normal throw.

Note: make sure that position at the time of delivery and at release are predominant in any sort of throws.

Starting Position

1



2

12. Twist Drill

Starting position:

1. Facing 9'O clock direction and rest the shot in neck.

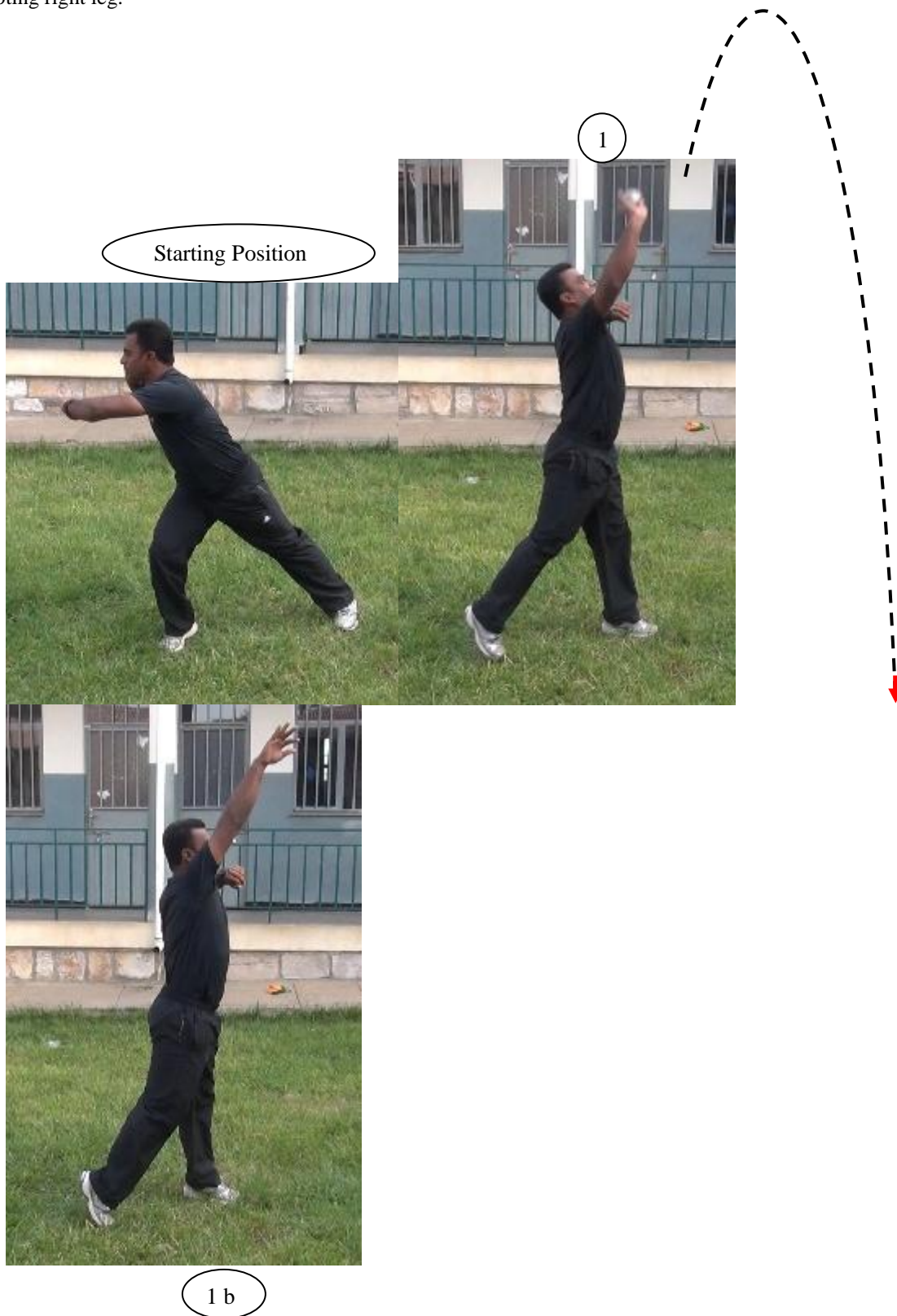
Objective:

The thrower must feel that the forces generated from all over (summation of force) also to improve the hip thrust

movement.

Description:

From the above said position, just flex the knees like half squat and come up vertically and put the shot by pivoting right leg.



13. Twist Drill Height

Starting position:

1. Be in delivery stance (power position) with the shot.

Objective:

The thrower must feel that the forces generated from all over (summation of force) also to improve the hip thrust movement.

Description:

From the above said position, just flex the knees like half squat and come up vertically and put the shot by pivoting right leg.

1

Starting Position



14. Straight Leg and Single Arm Put Drill

Starting position:

1. Be in delivery stance (power position) with the shot.

Objective:

The thrower must feel that the forces generated from all over (summation of force) also to improve the hip thrust movement.

Description:

From the above said position, just flex the knees like quarter squat and come up vertically and put the shot by pivoting right leg.

Implement is a tool (light, standard and heavy)

Usually the following sequences are followed in performance sports training especially on throws. The weightage of training first given to develop the specific strength of the muscles, technical perfection and speed of the specific muscles. During the early season, the specific strength and balanced approach are used more often. As the peak season approaches, speed training is

more dominant. The coach should find what method works best for each athlete and develop a program that best fits each thrower. Generally, there must be a 10% difference in performance between the standard and light/heavy implements listed. It is not recommended going beyond or below the implement weight listed for most throwers. Suggested weights are given below to develop some important aspects of throws.

Speed	Specific Strength	Balanced
30% of Standard Weight	20 % of Standard Weight	34 % of Standard Weight
60% of Light Weight	20% of Light Weight	33 % of Light Weight
10% of Heavy Weight	60 % of Heavy Weight	33 % of Heavy Weight

Conclusion

Now days, the familiarization of exercises are ignored not only in shot put, but also other events too. The current trend concentrates only on the strengthening part of entire body by using free weight, with weights, multi gym and other means. But to improve the real

strength of the particular (specific) muscles could be developed by familiarization exercises first then advisable to opt other training means and methods next. One way or the other this approach would minimize the error and an injury.