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Teaching and TrainingAspects of the Men's Lacrosse 1-4-1 Double Mumbo

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Abstract

An effective practice plan blends three elements: 1) tactical, 2) technical, and 3) conditioning. In men's lacrosse the 1-4-1 formation is an offensive set characterized by multiple passing and shooting options. When properly executed, it can create a myriad of scoring opportunities. In addition to being an effective alignment to score goals, in the practice setting it can be employed as a stimulus to encourage players to develop their individual technical skills, such as passing, catching and shooting. Examined under the lens of Tactical Periodization, the 1-4-1 Double Mumbo offensive set lends itself to effective Energy System Development. The purpose of this article is to: 1) dissect the 1-4-1 Double Mumbo play, and 2) examine post-practice conditioning drills that compliment this half field offensive set.

Key words: 1-4-1 Double Mumbo, tactical periodization, technical skills, tactical skills, energy system development

I. Introduction

Successful coaching is not about calling plays. It entails putting your athletes in the right position to make plays. Unfortunately, many coaching playbooks are overburdened with multiple offensive and defensive sets that are frequently executed poorly. Instead, coaches should minimize the number of schemes, teaching perfect execution and exploring multiple options out of a few base formations (Galloway, 2017).

The 1-4-1 formation is an offensive set that can be used in both man-up and even strength situations. Initially, it was intended for isolation dodging from the top of the restraining box (Urick, 2008). In the original conception, one player creates his own shot while the other five offensive players contribute by blocking out the opposition's defenders.

Over the last decade, the 1-4-1 half field set has evolved to become a staple in many lacrosse offenses (Kessenich, 2009). Similar to basketball's 1-4 High Stack, the initial goal is to get the defense on the same plane, making it easy for offensive players to screen and make backdoor cuts. The basic premise of both the 1-4-1 Double Mumbo and the 1-4 High Stack is that the off-ball screens create open shots. Additionally, the horizontal alignment of the players on offense makes it difficult for defenders to fight through the screens (Keegan, 2013).

Coaches are initially drawn to this set because the complex look befuddles defenses. However, when dissected and taught properlythe 1-4-1 set can be effectively executed by players ranging from middle school to the post collegiate level. The versatility of this formation allows for isolation dodging as well as catch and shoot scenarios. In even strength situations, the 1-4-1 set distributes defenders throughout the field. This opens lanes for shots, passes and dodges (Kessenich, 2009).

Wallball, repeatedly throwing and catching a lacrosse ball, is one of the best ways for an aspiring lacrosse player to develop technical acuity with their stick. In lacrosse there is a time-honored maxim stating "the more time you spend on the wall, the more time you spend on the field."

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Notwithstanding, it is often a challenge for coaches to inspire their players to hone their stick skills with this singular pursuit. Utilizing the 1-4-1 Double Mumbo may provide the impetus for athletes to engage in wallball sessions.

From the pedagogical and psychological standpoints,implementing the 1-4-1 Double Mumbo creates athlete buy in with respect to both technical and tactical skill development (Hauer et al., 2018). Every offensive player will have an on-ball and off-ball responsibility, necessitating the development of a full complement of technical and tactical skills. Every athlete needs to be practiced in passing, catching, shooting and off-ball play since player roles shift as the ball moves through the offense and the opposing defense adjusts (Renshaw & Chow, 2019).

A Mumbo is characterized by: 1) passes from either the top of the restraining box or from X (behind the goal) and 2) horizontal picks on defenders. In the parlance of lacrosse this offensive set keeps the ball hotand creates scoring opportunities for time and room shooters. A hot ball is one that is rapidly passed between players. The time and room shot affords a skilled player the opportunity to execute a full wind up, maximize their force producing movements and completely follow through; delivering a high velocity shot with high accuracy (Coker, 2019). Time and room shots are an exceptional option when the opposition is playing a zone defense.

Ii. Dissecting the Play

Use the following guide for positioning players and assigning initial roles (Figure 1). Player 1, the top side midfielder, is the primary ball carrier who will initiate this play from outside the restraining box. An isolating midfielder, this athlete needs to be the best offensive stick handler on the field. An ambidextrous, effective dodger with a pass first, shoot second mentality is ideal to run this set.

The "4" of the 1-4-1 set is comprised of players 2-5 who are positioned approximately 5 yards from goal line extended. Players 2 and 5 are the other two midfielders. Their initial responsibility in this play will be to crash and seal by setting picks on defenders. However, their roles may rapidly change into passers or shooters depending on how the defense reacts.

Players 3, 4 & 6 are attackmen. Player 3 will be the best right-handed shooter on the field, while player 4 will have the best left-handed shot. As the play begins, they have the responsibility of looping out for shooting or passing (Kessenich, 2009).

The crease attackman, player 6, should be equally comfortable playing in front or behind the goal. In this scenario, he will start behind, at X attack, and have the responsibilities of: 1) securing possession shots or 2) sneaking to the crease for a quick, high percentage shot (Jutter, 2015).

The play begins with a split dodge by Player 1 (6). In the illustrated scenario, the initial dodge is to the right; all contingencies will be based on the ball moving to the right side of the field. When a dodge to the left is employed to initiate this play, reverse the contingencies to reflect the appropriate ball movement.

Once the dodge is initiated, if Player 1 beats his man and has a shot, he takes it. If not, passing lanes open as players 2 and 5 pick and players 3 and 4 pop out for feeding options from player 1. The pops from the center of the field out create better shooting angles for the two on-field snipers (Jutter, 2015).

Player 6 moves to the off-ball side near goal line extended and has the following responsibilities: 1) back up errant shots to retain possession, or 2) sneak above weak side goal line extended to receive a pass then feed it to shooter with a better angle or make a quick stick catch and shoot.

The success of this play is predicated on keeping the ball hot and utilizing short passes to the adjacent man (Renshaw & Chow, 2019). In this scenario, player 1's best pass is to player 4. After receiving the pass from player 1, if a shot by player 4 is not option, he can move the ball to player 3 or 6 for shots. If the ball is passed to player 6 at X, Player 3 sets a pick in the crease while player 2 pops ball side and is fed by player 6 for a quick stick shot.

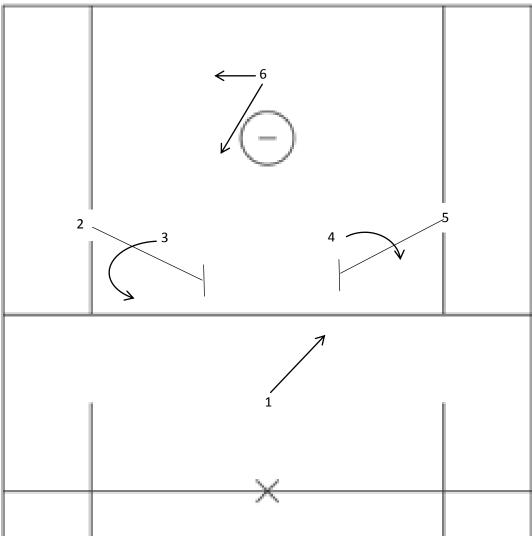


Figure 1: The 1-4-1 Double Mumbo Schematic

Iii. Key Coaching Points

The success of the 1-4-1 Double Mumbo hinges on a cohesive, well-practiced offensive unit (Jones &Ronglan, 2018). When coaching this set the following should be stressed 1) horizontal movement, 2) horizontal passes, 3) defense identification, and 4) passing and catching fundamentals.

The hallmark of a good offense is one that keeps their spacing. In this example, at the outset of the play, the picking midfielders are positioned at the edges of the retraining box. As the play evolves, the width of the restraining box needs to be fully utilized to force opposing defenses into long (15 yd.) slides. The inherent horizontal player movement of the 1-4-1 Double Mumbo interferes with defensive slides. It becomes difficult for defenders to recognize their assignments and make appropriate adjustments.

In the parlance of lacrosse, a slide is synonymous with a double team. When playing man-to-man defense, a slide occurs when a defender temporarily leaves their assigned offensive player to help a teammate defending the offensive player with the ball.

By keeping the ball hot with horizontal passes, defenses will be caught off guard. Typically, offenses work north to south with defenses being oriented likewise. East-west passes, hallmarks of the 1-4-1 Double Mumbo, create opportunities for high percentage shots.

The fundamentalsof throwing and catching at the outside shoulder are a final point of emphasis. These techniques place the player's body between the ball and the defender (Urick, 2008). This increases the degree of difficulty for a defender to strip the ball from the offensive player's stick.

Iv. Employing Tactical Periodization

The 1-4-1 Double Mumbo provides context for incorporating tactical periodization into a practice plan (McConnell, 2017). This conditioning philosophy begins with recognizing that the game of lacrosse is a non-linear, dynamic process and that physical training is an integral component of teaching and learning sport skills. The holistic goal is to bring about a signature style of play for the team with collective identity and intentions which emphasize experiential learning (Correia et al., 2019). In this way technical and tactical skill work become intertwined with energy system development giving rise to a unique playing style (Aquino et al., 2016).

McConnell's (2017) Tactical Periodization Model is predicated on the appropriate match between technical/tactical practice and conditioning, specifically energy system development (Castillo et al., 2021).

Tactical periodization makes the mission critical elements of the game the centerpiece of training, while the training plan is dictated by the actions of the game. Consistent with the principle of specific adaptations to imposed demands, the greatest adaptations within the tactical periodization framework occur when tactical and technical components are sufficiently stressed by a functional load. To achieve this end, sport specific movements are executed at game speed, complexity and duration (Aquino et al., 2016)).

According to the tactical periodization model presented by McConnell (2017), if a team has a game on Saturday, Wednesday would be the ideal day to work on this play. The practice three days out from a contest should: 1) have moderate intensity and volume, 2) work in a half field set, and 3) emphasize conditioning at game speed.

The current trend in lacrosse practice design entails using a series of 10-minute blocks linked by a common theme (Pietramala, 2017). A tactical periodization practice plan centered onthe 1-4-1 Double Mumbo could be structured as follows (Collins & Barcelona, 2018). After concluding the team's standard warm up, Period 1 is dedicated to the basics of this play including low intensity 6 v 0 repetitions stressing on field spacing and stick work fundamentals. Period 2 is for exploring the various pass, pick & shoot options at a faster pace. Game tempo repetitions against a defense are reserved for the third practice period of the day. The fourth 10-minute period could be a half field scrimmage under game conditions (Galloway, 2017). Since the primary objective of this practice is development of half field play, during periods one and two the defense would be on the other half of the field working on defending in this half field set (Galloway, 2017).

V. The Metabolic Cash Out

Energy System Development is the domain of the Metabolic Cash Out. The purpose of this period is to create a state of metabolic fatigue for the athletes. Coupled with subsequent recovery days, a state of supercompensationshould be produced on game day (Hannon et al., 2021). Supercompensation is a transient physiologic state where the body recovers above and beyond pre-training levels (Vachon et al., 2021).

The Metabolic Cash Out is the final period of a daily practice session. Given the intermittent running nature of lacrosse, the training principle of specificity dictates that conditioning should include a myriad of high-speed stops and starts (Hauer et al., 2018). Additionally, medium intensity work should be avoided since it is: 1) too slow to be specific for sport performance, and 2) too fast to adequately recover from within 24 hours (McConnell, 2017). Consistent with these maxims, the high-low approach to metabolic conditioning alternates periods of high intensity running (95% intensity or greater) with periods of low intensity running (75% intensity or less) (McConnell, 2017).

Within McConnell's (2017) tactical periodization framework, conditioning work mirrors sport skill development with respect to the portion of the field used. In this case, since the 1-4-1 Double Mumbo is a half field set, conditioning will take place in the half field as well. Full gassers and half gassers are excellent for developing metabolic and movement specific properties necessary for success in half field sets, see Figure 2. Depending on the interaction between training age, fitness level and season phase (General Physical Preparation, Specific Physical Preparation, or Competition) the volume of a Metabolic Cash Out at the end of a half field day could range between 800yds and 2 miles (approximately 3500 yds.).

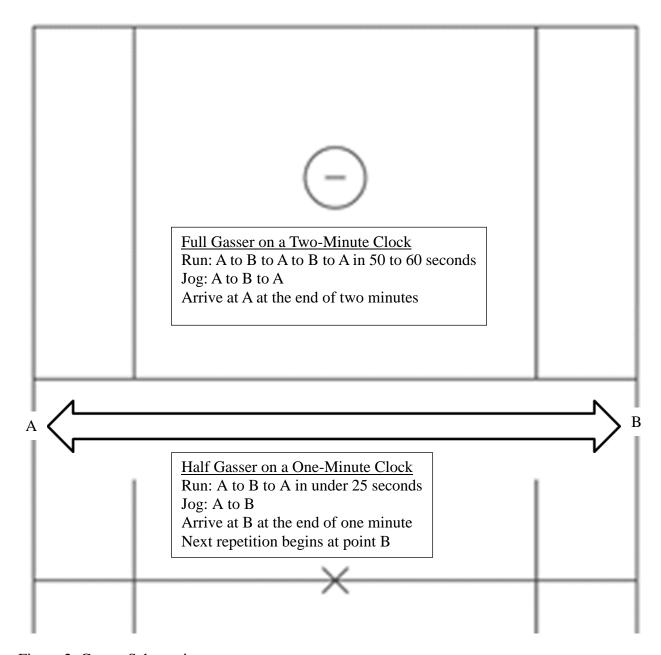


Figure 2: Gasser Schematic

At the High School Varsity & Collegiate levels, full gassers, traversing four widths of the field, can be done on a two-minute clock: 1) 50 seconds to 60 seconds to run a full gasser, 2) jog slowly across the field and back, arriving at the starting point when 2 minutes has elapsed. At this point, another round begins. Similarly, half gassers would be done on a one-minute clock: 1) running two widths of the field in under 25 seconds, 2) slow jogging across one width of the field until one minute has elapsed. At this point, another round begins.

Half and full gassers can be incorporated into the same Cash Out. For instance, a Cash Out with approximately one mile of volume could be constructed as follows:

- 2 x ½ gassers on a 1-minute clock (165 yds each, 330 yds total)
- 3 x full gassers on a 2-minute clock (330 yds each, 990 yds total)
- 2 x ½ gassers on a 1-minute clock (165 yds each, 330 yds total)

This Cash Out period would take 10 minutes to complete. Also note that there is no additional rest during the transition between half and full gassers.

Athletes are competitive by nature (Duguay et al, 2019). To increase the intensity of the workout, group the athletes by position and have groups compete against one another. For example, attackmen would compete against long stick defenders, while defensive mid-fielders would compete against their offensive counterparts.

Vi. Conclusion

The nature of the 1-4-1 Double Mumbo makes it difficult to defend and involves all six players in the flow of the offense. With the multiple options it presents, this set favors a hard-nosed approach to picks, rapid ball movement and athleticism. Used in concert, these characteristics confound defenses, force long slides and open shooting lanes.

A well-constructed practice plan employing tactical periodization and a properly executed Metabolic Cash Out will prepare athletes for the physical and mental demands of this play. What makes this play special is that, with proper context, each player can shoot, pass and contribute off ball. It is ideal for getting everyone on the field invested and playing for the name on the front of the jersey, not the name on the back of the jersey.

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