PRACTICAL CHARACTERISTICS OF TENNIS COACHING AND APPLICATION OF RAHIM TRAINING MODEL IN PERFORMANCE ENHANCEMENT OF JUNIOR PLAYERS

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Abstract - Effective training is about providing not only quantity but also quality programs. Coaching effectiveness is defined as the degree to which coaches can apply their knowledge and skills to positively influence the learning and performance of their athletes. A coach has to visualise what it would take to achieve success, and then translate this vision into a training module where the coach can plan, implement and evaluate athletic performances towards building up for success. In order to be successful, a tennis player must have a high level of commitment and be willing to persist in a rigorous training programme. Coaches are responsible to explain and to train their athletes systematically on the basic technical skills and shot patterns that make up the game. Game Situations training is a viable method in enhancing the performance of tennis players. A sound background of physical, psychological, technical and tactical training program should prepare athletes for competitions. Further investigation on the relationship of technical and tactical skills with other performance attributes will allow more information and develop specific training program to improve the performance of the players. Incorporating match like situations into routine training however increases the probability that players will transfer skills from practices to matches effectively. These training characteristics was further developed into training model and used as guidelines in designing effective training development program in order to enhance the vital performance attributes of potential young tennis players. RAHIM Training Model which is an acronym for Repetition, Attitude, High intensity, Independence and Movement, was formulated as guidelines for future training program or research. The aim of formulating an effective training program is to provide a guideline for tennis coaches at various levels in preparing and designing quality training programs.

Keywords - Coach, Game - Situation, Physical, Technical, Tactical, Psychological.

I. INTRODUCTION

Enhancing the performance of the athletes to the optimal level possible is always the aspiration of any coaches. Coaches need to understand the complex processes in developing athletic performance for effective practices. Williams and Reilly (2000) stated that systematic training and well-planned programs may be significant in youth development programs. Effective training is about providing not only quantity but also quality programs.

Coaching effectiveness is defined as the degree to which coaches can apply their knowledge and skills to positively influence the learning and performance of their athletes (Boardley, Kavussanu, & Ring, 2008). There are many important features in achieving excellence in athletes' performance such as the drive to succeed, the ambition to push beyond limits, the right attitude and the desire to be the best in the sports. Planning, implementing and evaluating are an integral part of a sports organization, being determinants of successful coaching and of sporting performance (McLean & Mallett, 2012). However, there are several factors other than coaching that ultimately can influence whether an athlete or a team is successful or not such as match location, home advantage, quality of opposition and match status. According to Jowett (2017) coaching is probably the most important constituent of success as this is the activity that implies that the coach spend time with his athletes in order to develop them to reach peak performance. In order to be carried out at a level as high as possible, coaching has to borrow managerial instruments of planning, implementing and evaluating. Coaching does not have to be limited to an on-the-field athletic preparation of sportsmen skills, but needs to be combined with management, as it needs a vision for success.

A coach has to visualise what it would take to achieve success, and then translate this vision into a training module where the coach can plan, implement and evaluate athletic performances towards building up for success.Tennis is a distinctive sport which demands an integration of multiple factors or components (Abdul Rahim et al., 2021). As a high performance sport, tennis continues to develop and grow, accompanied by rapid transformation of the game. There is also an increasing need to develop performance qualities in which elite players can be trained to achieve their goal in international excellence.

Major shift in teaching methodology has been the catalyst for coaching process. In order to be successful, a tennis player must have a high level of commitment and be willing to persist in a rigorous training programme. Elliott (2006) suggested that success in tennis requires a mix of player talent, good coaching, appropriate equipment, and an

understanding of those aspects of sport science pertinent to the game.

II. SPORTS PERFORMANCE

The development of performance in competitions is achieved through an organized and systematic training process that is planned to improve automation of skills and enhance the abilities of athletes. Training is the total process of preparation of athletes, through various means and forms for better performance. In order to improve skills and performance during competitions, athletes must prepare themselves through a training process where the fundamental objective is to improve body function and optimize the performance. The training process involves repetition of exercises designed to induce automation in the execution of a motor skill and develop structural and metabolic functions that lead to increase the physical performance (Viru, 1995). Effectiveness of physical training involves the application of the training load through the variables such as intensity, duration and frequency. Sport activities are a combination of physical prowess executed in a coordinated and efficient manner with the development of sport-specific characteristics. Hence, training for peak sporting performance includes training for physical development (general and sport-specific factors), technical and tactical training (Bompa, 1999). During the competition time, optimal performance requires an integration of not only the physical elements but also the psychological, technical and tactical components. Tennis is a sport that requires a mixture of complex skills and physical attributes (Kovacs, 2007). Training the tennis players requires the successful integration of physical, psychological, technical and tactical attributes. These attributes will help the players in his or her game. Technical development will improve the players in various strokes such as forehand, backhand, serve and volleys. On the other hand, tactical development will assist on the usage of different techniques while mental preparation will provide stability of the players in critical situations. Physical prowess will help the players to execute skills at an optimum level. According to MacCurdy (2006), tennis is an open loop sports which requires constant decision making, response organization, spatial awareness as well as wide range of skills and abilities. Tennis player cannot be successful if he or she only excels in one area such as technical aspect but lack in other areas such as physical, psychological and tactical aspects. Since the effects of training on the body are very specific and not easily transferred from one activity to another, the exercises used in training should reflect the demands and characteristics of tennis play.

III. TRANSFORMATION IN COACHING METHODOLOGY

A major transformation in coaching methodology has been the catalyst of structuring the teaching and coaching process with the idea of adapting it to the match situation or game based and thus emphasizing the tactical approach to coaching (Unierzyski & Crespo, 2007). While the ability to perform a technical skill effectively is vital to performance, suitable judgments concerning what to do in the game situation are also paramount. Therefore the aim of the tactical approach to coaching tennis is to improve the overall game performance of the player combining tactical awareness and skill execution (Crespo & Cooke, 1999). Research by Turner (2003) confirmed that because of game based approach, tennis players demonstrated better game performance and have higher level of specific knowledge than players coached according to conventional approach.The game of tennis is based on assumption that at any given moment the players must be in one of five game situations which are serving, receiving, playing at the back of their own court with the opponent at the back of their court, approaching or at the net, playing at the back of the court with the opponent approaching or at the net (Tennant, 2004). In each of these situations, tennis players will have to execute some specific tactics. Therefore, the goal of training programs must be focused on how the players will be able to handle and react to these different game situations. Hence, the training programs should emphasize on the ability of the players to take effective tactical decisions. The technical based approach is also a necessary form of coaching but it has to be integrated with the tactical approach as well to promote the effective training of tennis since the tactical ability will assist the players to solve problems encountered during the match. This can only be achieved by practicing in the game situations. Therefore the goal of coaching process in all modern methods around the world is to teach how to deal in these five game tennis situations (Unierzyski & Crespo, 2007).

Effective planning of training program will help in optimizing performance of athletes. Coaches are responsible to explain and to train their athletes systematically on the basic technical skills and shot patterns that make up the game. These technical skills are the fundamental that provide tennis players with the tools to execute the physical requirements of the game (Anderson, 2009).

During practice, coaches must be creative to create scenarios on the tennis court in which players have to use their technical skills in competitions or matches like situations, forcing them to make decisions that simulate the choices they will have to make in a match. These tactical skills are the link between practice performance and match performance. Although the proper execution of technical skills is necessary for success, the tactical skills such as the ability to make

the appropriate decisions are the key to have the peak performance when it counts during competition (Anderson, 2009). The teaching of tactical skills takes technical skills a step further by putting them into action. In sport, this is done to give one team an advantage over the other team (Martens, 2012).

A. Game Situation Training

Game-based training can improve athletes' skills and fitness. With exercise it is possible to simulate sports movement patterns and in practice activities you can use games (Krističević, 2016), and game sense approach can be used to focus on learning and is the starting point of a game. It provides a context for developing the game. (Pill et al., 2020). Mastery of both technical skills and tactical skills of tennis is paramount. A good technical and tactical training prepares tennis players for match situations. By incorporating game situations into training program, it will improve the ability of tennis players to transfer their skills from practices to matches. The game based approach emphasizes the use of games to provide tennis players with situations that are as close as possible to a real match (Launder, 2001). This training approach or the game situations training provides players with a competitive situation governed by clear objectives and focused on specific individuals and concepts (Anderson, 2009). The game situations training approach also allows tennis players to experience a productive and meaningful training environment where players are motivated by the structure of the training programs and the improvements they gain. The principle of specificity states that training is of the greates benefit when it reflects the requirements of the actual performance (Morante, 2006). Consequently, optimal competitive tennis performance would be achieved through a practical The principle of specificity states that training is of the greatest benefit when it reflects the requirements of the actual performance (Morante, 2006). Consequently, optimal competitive tennis performance would be achieved through a practical and feasible training program that is similar to the characteristics and demands of performance in competitions. In order to ensure maximum specificity and benefits from training, the demands of tennis should be determined with the subsequent training program being designed around the activity profile of the sport. Game Situations training is a viable method in enhancing the performance of tennis players. A study conducted by Abdul Rahim (2018) has indicated that the five game situations training was statistically significant to the performance level of tennis players. In the effort to determine the contribution of five game situations training and tennis match play to predict the performance level of tennis players, the possibility of testing the relationship between these measures and performance levels during competitions or strokes production may justify further study. Further investigation on the relationship of technical and tactical skills with other performance attributes will allow more information and develop specific training program to improve the performance of the players. A sound background of physical, psychological, technical and tactical training program should prepare athletes for competitions. Incorporating match like situations into routine training however increases the probability that players will transfer skills from practices to matches effectively. Abdul Rahim (2018) concluded that Malaysian junior tennis players have the potential to adopt an effective training programs in order to enhance their performance and raise their standard to the next level. The study that was conducted on 30 junior tennis players age from 12 to 16 years old revealed that training intervention programs play a significant role in enhancing the optimum capabilities of selected junior players and performance profiling process will assist coaches to understand their players better. Although there are many resources of tennis training instructions and training programs exist from books, video tapes and online resources, it is difficult to find a structured and specific training protocol which provides an integrated performance progression and is based on proven program to improve performance.

IV. RAHIM TRAINING MODEL

Tennis performance attributes which include physical, technical, tactical and psychological skills are very essential in enhancing the overall performance of tennis players. Upon observing the process of training and performance development of junior tennis players, Abdul Rahim (2018) has formulated RAHIM Training Model which can be used as guidelines for future training program or research.



Fig. 1. RAHIM Training

Bench marking from many previous studies of tennis intervention programs, he has indicated five important combinations of the training characteristics and can be identified in the acronym of R.A.H.I.M as depicted in Figure 1. These training characteristics was further developed into training model and used as guidelines in designing effective training development program in order to enhance the vital performance attributes of potential young tennis players.

A. Repetition

The best tennis practice drills provide repetition, match experience and enjoyment. They may also be

employed to improve other performance components. Tennis practice drills are designed to be performed in a repetitive manner. There is a consensus among coaches that only practice drills performed with high intensity and purpose will result in better performance in tennis. Drilling offers two main purposes: repetitions to groove their consistency of technical shots, tactical situations, footwork patterns; and pushing their comfort zone to perform at a higher level of physical demands (Anderson et al., 2021). Coaches rationalised drill-based practice tasks by stating that they felt repetition was necessary to embed and retain technical competence in players.

Repetition in training is an important element in developing and improving any tennis skills. Players need to practice the drills and skills until they feel comfortable with them (Peterson, 2010). By including and repeating drills in practice, coaches intended to reinforce players' stored technical models of skill through high volumes of repetition. This demonstrates an understanding of skill as internal, cognitive, and separated from perceptual information (Davids, 2012). In conjunction with the RAHIM training model, it has indicated repetition as a vital element in training to enhance performance of tennis player. After all, repetition is the key to excellence in improving tennis skills. As such, repetition element is an important characteristic that must be emphasized in any tennis intervention program.

B. Attitude

Tennis is a game of skill and heart. A professional tennis player needs to have ample quality of both. Attitude is a set of functions or properties that are relatively permanent and organized in individuals who influence individual behavior (Alim, 2018). Attitude is one of the factors that can influence an athlete's success. Positive attitude is directly related to self-confidence.

Most sport psychologists agree that attitude plays a major role in the establishment of long- and short-term goals. The more positive the athlete's attitude, the more likely he or she is of achieving these goals. All athletes are physically limited to some extent, but their attitude can enhance their chances for success. Coaches must strive to provide positive experiences for their athletes. The great majority of successful athletes have very positive attitudes. In understanding the predicament of attitude, it is actually different with psychological control of the players.

This situation is clearly shows that if a player is exhibiting stubbornness to falter, he or she is demonstrating strong character. The athlete is also showing an incredible display of self-confidence to keep pushing, even if the odds are mounting in their opponents favour. A coach has to make efforts in creating the right atmosphere and attitude from the beginning in the training of a player for achieving maximum performance (Kawaljeet, 2009). In the RAHIM training model, coaches must have skills to impart and to develop the right attitude to create a stable characteristic of tennis players.

C. High Intensity

The RAHIM training model indicates the importance of high intensity as crucial factors in determining the right method of training as most of the endurance athletes use the high-intensity training to prepare for competitions (Paton & Hopkins, 2004). A game of tennis is characterized by multiple high intensity efforts interspersed with variable periods of recovery. Fernandez-Fernandez et al., (2009) stated that tennis is an intermittent sport involving high-intensity efforts interspersed with periods of low-intensity activity, during which active recovery (between points) and passive periods (between changeover breaks in play) take place. In terms of energy production, the high-intensity exercise periods are important. Several studies from intermittent sports have shown that HIT is an effective training strategy to enhance the aerobic capacity without negatively affecting strength, power, or sprint performance (Buchheit & Laursen, 2013). Thus, it is clear that the amount of high-intensity exercise separates the elite players from the players of a lower standard. Based on the analysis of the game, it is clear that the training of elite players should focus on improving their ability to perform intense exercise and to recover rapidly from periods of high-intensity exercise. Coaches aimed to stimulate player physical development by prescribing high volume, high intensity tasks. Previous research demonstrates that these types of task require players to work together to keep the ball in play and focus primarily on quantity of balls hit, rather than shot quality or variation (Krause et al., 2019). This is in accordance with more studies which show that performance can be maintained and improved by reducing the amount of low-intensity training and keeping a sufficient amount of high-intensity training (Mujika 1998). Coaches use different training strategies to improve the physical capacity tennis players require for long matches, including aerobic endurance and high-intensity activities such as sprinting, jumping, and agility (Kovacs, 2007). Thus, it seems that the ability to maintain a high technical efficiency during those phases of high-intensity intermittent exercise is an important feature of successful tennis players (Mendez-Villanueva et al., 2007).

D. Independence

The development of self-independence in tennis player must be one of the primary goals in training. As in tennis, a player’s ability to assess match situations and make positive decisions is important for successful player development. A player’s

self-independence is highly inter-related to his or her level of self-confidence and it should be developed at the beginning stage of a player's involvement in the game. It is important for the development of the players that they are regularly given responsibilities or leadership tasks by the coach such as to lead the group in the warm up; to demonstrate something to the group and so on. This will encourage players to develop their independence and increase their self-confidence. This is a characteristic that coaches are trying to develop in the end, a strong and independent player with a clear vision of his or her goals, plans and abilities. By creating the culture of excellence which fosters the successful performance, coaches will help to develop the self-independence of players in making decision and the skill to handle difficult situations with confidence. Bull et al. (2005) presented a model of toughness that consists of four structural categories, each containing a number of themes related to overall mental toughness which include being independent that falls under category of tough character. Jowett (2005) has developed an evidence-based approach to practice of sports coaching and coaching education which ultimately will help coaches to create a certain type of relationship that athletes can use toward becoming independent, self-reliant, disciplined and successful athletes and persons.

E. Movement

Tennis has become a true physical challenge requiring strength, speed, power, agility, mobility, aerobic fitness, and anaerobic power output (Baiget et al., 2015). In a study of professional players' movement, it was found that more than 70% of movements were side to side with less than 20% of movements in a forward direction and less than 8% of movements in a backward direction (Weber et al., 2007). This is a vitally important statistic for coaches because the development of lateral acceleration and deceleration in the distances described are the major determining factors in great tennis movement. Thus, tennis players need to master the complex techniques and sport-specific movements, for example the service motion and the movement patterns on-court, requiring acceleration and deceleration in combination with change of direction (Hoppe et al., 2014).

Schönborn (1998) stated that the whole movement potential of a tennis player is determined by the individual's conditioning and coordination abilities and that is why these abilities must be continually integrated into tennis technique. Tennis involves significant movement back to the origin which implicates many change of direction. Therefore, unilateral leg reactive strength might be a greater factor in tennis. It has been stated repeatedly in the tennis literature that tennis places demands on the ability of a player to move quickly in all directions, change directions often, stop and start, while maintaining balance and control to hit the ball effectively. In addition, to enhance performance, players have to be in the correct position to provide a solid platform from which to hit the ball. This requires good agility, speed and balance. In tennis, the preparatory movement before such a quick change of direction is known as the "split step" (Roetert & Groppel, 2001). Since tennis is an open skill sport, the technique of movement needs to be developed and refined, such as the ability to sprint, change direction and recovery. In a practical standpoint of coaching an athlete to move better during tennis matches, the training should be in a multitude of movement patterns and similar to actual situation during tennis play in order to optimize performance.

V. CONCLUSION

A tennis intervention training program is a method of honing, developing and transferring skills from practice to matches which can be a difficult task. An effective training intervention programs play a significant role in enhancing the optimum capabilities of the junior players. A sound background of physical, psychological, technical and tactical training program should prepare athletes for competitions. Incorporating match like situations into routine training however increases the probability that players will transfer skills from practices to matches effectively.

The aim of formulating an effective training program such as the Easy Five is to optimize the option and the potential of junior tennis players in engaging better prospect of enhancing their performance as well as a guideline for tennis coaches at various levels in preparing and designing quality and effective training programs. Efforts should be made to further advance the method of training in the quest to enhance the tennis performance especially among junior players. Although the Game Based Approach was shown to have a significant impact on the performance enhancement of junior tennis players, other factors that have been discussed remain as integral parts of tennis performance development facets. It is recommended that more in-depth research should be conducted in order to explore the potentials of junior tennis players in competitions. Thereby, future tennis development programs may be structured around more scientifically based research in order to optimize the potential of aspiring junior tennis players.

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