



Need of motor fitness components for hockey players

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Abstract

Motor fitness is the collection of physical skills. Various research has been done in order to determine the motor fitness with the relation to the playing ability. Some comparative studies with related to speed, power, performance, skills and muscle strength has been analyzed. Their correlation with one another is also focused in a lot of research work.

Various type of motor ability variables includes; speed, agility, endurance coordinate ability, muscle strength and stamina of the athlete. These variables or abilities must be present in the athlete in order to survive in the sport. The performance of the sportsperson mainly depends upon these factors. Though sportsperson faces tough challenges throughout the career, anxiety is one component which minimizes the performance of the athlete. Present review will focus the role of motor fitness in relation to playing ability components among the women hockey players.

Keywords: hockey, ability, performance, sportsperson and endurance

Introduction

Development of motor competence helps in related fitness, health fitness and physical fitness. Rikli, 2005^[8]; Kuh, 2007^[9]; Smee, Anson, Waddington, & Berry, 2012^[10], have revealed that motor competence is related to health issue. In other words we can say that motor competence are directly related to health status. They are also linked to physical independence and overall improvement in life.

Researchers have not got success in developing a method to determine the exact motor competence range for all ages.

Authors like, D'Hondt *et al.*, 2009; Henderson & Sugden, 1992^[11]; Haga, 2009, have defined motor competence an individual's moment coordination affinity to perform different physical activities. It involves body moving in space. Clarke & Metcalfe, (2002) have revealed that is directly related to life-long physical activities.

There are different motor competence skills which are called as fundamental motor skills. Among them locomotor skills are utmost important. Locomotor skills involves the movement of body parts from one place to another viz. running, walking and jogging etc. Lubans *et al.*, (2010)^[12] in their studies have worked on the relation between motor skills and health outcomes. They revealed that there is a positive correlation among the motor skills with relation to health outcome.

Holfelder and Schott (2014) also studied the relation between motor abilities, coordination and fundamental motor skills. Castelli and Valley (2007)^[13] children's with low physical activities were having low motor competence. In their studies on children's they came to conclusion that motor competence is very much important. Youth must show good physical activities for this they require a good motor competence affinity. Motor competence is directly related to the participation of the sports. Those who participate in sports have well developed motor skills than those who do not participate in sports.

Lubans *et al.* (2010)^[12] in their work have concluded that there is a positive correlation between the motor skills with competency and cardiovascular fitness.

Various authors have revealed that motor competence is directly related to health related fitness. Motor health competence helps in development and maintenance of healthy lifestyles into adult life. In sports person motor competence is of prime concern, Abant Izzet Baysal (2015) has reported that motor abilities in the athletes are much developed as compared to non athlete individuals and it also reported in his studies that various components are developed with playing hockey. Wharton (1962) has found that youth fitness test as a predictive method to develop motor skills in hockey athletes. Julee (1969) states that speed is one of the important component of motor competence. Dureha (1984) have stated that some components viz. speed, strength, agility and endurance are the important components of the motor competence. Similarly, Uppal and Datta (1988) have revealed that motor fitness as the predictor for the hockey performance. They reported speed, strength, flexibility, endurance and agility as the important components of the performance for the athletes. These are the main components for the hockey performances. It can be stated that flexibility is an important component of the motor competence which helps in better performance of the athlete. It is directly related to the degree of the movement. It serves as the positive component in motor ability. Thus, this has been concluded by many authors, that those athletes who have more power, endurance, flexibility and speed are better athletes as compared to those who have lesser components of motor abilities. Similar type of findings has been reported in case of hockey athletes. In case of hockey athletes, they should carry speed, they have to make quick passes in order to increase the chances of goal scoring, their endurance should also be high as compared to the athletes of the different game. There are various ways how can an

individual increases the efficiency of the motor competence. Researchers have found that a normal walk in individuals has a positive impact on the health status and the motor competence of the individual.

Fleisig, and Andrews, 2006a, 2006b^[16]; Stodden, Langendorfer, and Robertson, 2009^[17] have revealed that motor competence and various sequence increases the fundamental movements in hockey players and in various athletes from different games. They reported that jumping, running and dragging the ball has a direct correlation with increase in the ability of the motor affinity. The higher the motor affinity the better the health status of the athlete.

Authors like Nabhendra Singh, (2010) in their studies has reported motor abilities direct better results in the game for an athlete. He reported that in case of hockey which is very fast and energy demanding there must be too sharp reflexes for an athlete in order to play better. Hockey athletes should possess all the variables present in the athlete viz. speed, endurance, explosive power and momentum. Similarly, Manna, I., *et al.*, (2010)^[4] have also reported that stated athletes with hockey as playing game have well developed motor abilities and performance skills.

According to Cox and Yoo (1995)^[5] they revealed that success in sport is not mainly because of the physique of the athlete, it also depends upon the psychological aspects. That means the players with well muscular development is not that he must be good in sports. It also depends upon on his physiological aspects.

Mohoney and Gabriele (1987) in their studies have revealed that the players with well motor abilities should also focus on controlling the anxiety levels, motivation, self confidence etc. Motor abilities with positive physiological aspects can increase the performance of the individual in the game. It has been revealed by the authors that physiological challenges differ from individual to individual. Therefore, keeping this into consideration motor abilities with positive physiological mindset is important for the athlete.

The present study was to know the approach related to motor performance level for hockey players.

Studies reveal a direct correlation between the motor fitness components with the playing ability among the women hockey players. Researchers analyse a positive correlation with these parameters in some sports. In various games like kho kho positive correlation in motor fitness and playing ability was reported by authors. It might be because these games are of short duration while hockey is of long duration. Similar case was observed in games like football, similar observation was reported that there was a positive correlation among the motor fitness with related to playing ability. Various physiological aspects can also be behind the low correlation among the motor fitness and playing ability in some games.

Rosch *et al.*, (2000)^[6] have revealed a low performance can also with low motor competence is having a less playing ability in hockey performances. Hockey is the game in which players should have these qualities in order to be success.

Reilly, (1997)^[7] have revealed that in sports players must be physically as well as mentally fit, a physically fit players can only be successful in the game.

Despite hockey being a worldwide game but the patterns in

knowing relation between the motor fitness and playing ability is very fragmentary. The hockey players should possess various abilities like

1. A tremendous speed
2. Endurance, high stamina to play a game
3. Goal scoring ability
4. Good skills
5. Positive attitude in the game

All the above parameters have been analysed and studied well for the athletes in general and hockey athletes in particular

Outstanding motor abilities for hockey athletes include

1. Body Position
2. Endurance
3. Flexibility
4. Techniques
5. Arm strength
6. Hitting power
7. Goal Conversion rate

Conclusion

From the review of literature, it can be concluded that motor competence affinity is important for an athlete especially with hockey players. A good performer athlete in general and hockey in particular has higher motor competence as compared to low graded athlete. There are some various components of the motor affinity which an athlete should possess; especially hockey athlete should possess speed for playing the game, he should possess endurance as hockey is a long and energetic game. He should also possess a goal scoring ability. Motor competence has been reported to be directly related to the playing performances of the athlete in general and in hockey athlete in Particular.

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