



ISSN: 2456-4419

Impact Factor: (RJIF): 5.18

Yoga 2019; 4(1): 490-492

© 2019 Yoga

www.theyogicjournal.com

Received: 03-11-2018

Accepted: 06-12-2018

Shahid KP

M. Phil Scholar, SRMIST,
Chennai, Tamil Nadu, India

Dr. R Mohana Krishnan

Assistant Professor, SRMIST,
Chennai, Tamil Nadu, India

Strength and conditioning in field hockey

Shahid KP and Dr. R Mohana Krishnan

Abstract

Traditionally, efforts to improve performance in team sports have focused on technique and tactics at the expense of physical fitness (Stolen *et al*, 2005; and Reverter-Masia *et al*, 2008). However, with renewed vigour on enhancing performance in sport at all levels, several avenues within the realm of sport science are being utilised to facilitate this process. One of these avenues is strength and conditioning. The main objective of this mode of sport support is to maximise an athlete's physical performance whilst seeking to prevent injuries (Hunter & Harris, 2008; and Dorgo, 2009). Within Kerala, little is known about how strength and conditioning is used within non-professional team sports such as field hockey. This study therefore takes residence within a men's hockey club. 18 male players from HOPA Malapuram were selected, and all players completed both a training diary form and a semi-structured interview. An interpretive framework was adopted in order to analyse the data that emerged. Through a qualitative approach, the study reveals more about the role strength and conditioning plays within one of the top men's hockey teams in Kerala. The findings of this study establish a typology of four different player groupings (Majors, Make-its, Masters, Minors) relating to each player's understanding of, influences towards, and support within strength and conditioning.

Keywords: Strength, conditioning, hockey

Introduction

With renewed focus on enhancing performance in sport, several avenues within the realm of sport science are being utilised to develop individual athletes and teams of athletes. One of these avenues is that of strength and conditioning. In essence, the key objective of strength and conditioning is to maximise an athlete's physical performance in seeking to enable him/her to be more physically effective whilst seeking to prevent injuries (Hunter & Harris, 2008; and Dorgo, 2009). Field hockey is a popular sport for men, women and children in Kerala. Traditionally, efforts to improve performance in team sports have focused on technique and tactics at the expense of physical fitness (Stolen *et al*, 2005; and Reverter-Masia *et al*, 2008). However, the necessity of superior performance in sport has impelled coaches and athletes to use increasingly effective and sophisticated training methods (Koutedakis *et al*. 2006).

Methodology

In order to gain a deeper appreciation of the training load and regimes of the 18 players from HOPA in this study, two research methods were employed. In reflection of work by Lines (2007), diaries were used as a precursor to interview to provide the researcher with more room for probing on the specifics of each subject's training. The researcher wanted to firstly gain insight into the activities of each member of the hockey team, and then have the flexibility to discuss these activities in more depth through interviews which were semi-structured in style. The first of the two methods employed within this study was the 'training diary'. Diaries were selected as one of two methods in this study primarily as prompt mechanisms during interviews enabling the researcher to delve further in notable issues within the participants' training. They could also be used as a reference point after all the research had been gathered and was being analyzed. Such tools have previously been used in research by Polman *et al* (2007), Lines (2007), and Nicholls *et al* (2009). The former of these three studies focused on a group of twelve professional rugby players and their mood between home and away matches. Six analogue scales were used (as opposed to five in the later study by Nicholls *et al* (2009), as well as behavioral factors and self-rated performance.

Correspondence

Shahid KP

M. Phil Scholar, SRMIST,
Chennai, Tamil Nadu, India

Diaries were completed at the closest possible time each evening before retiring and participants were asked to leave blank what they could not remember rather than completing the diaries retrospectively. Both these two studies were quantitatively based and results were presented as statistics. Lines (2007) selected training diaries as well as interviews in a qualitative study on the impact of selected sports media events on the active participation of a group of youths aged fourteen to fifteen. It was reported that the structured daily diaries were used so that the researchers could get insight into individual daily patterns of consumption and interpretation. They were used a precursor, providing groundwork for determining themes worthy of more in-depth interpretative work completed through focus group and individual interviews. The primary reason for the use of training diaries was to allow the participants the opportunities to reflect personally on their experiences, and was also a means of discovering more within this social enquiry. Finally, Nicholls *et al.* (2009) used a group of five rugby union players to discover more about acute sports related stressors, coping, and emotion during training and matches. The players were originally asked to complete the diaries for thirty one days, but results showed that on average, diaries were only completed for nineteen days in total by each player. This factor possibly highlights the fact that thirty one days was a slightly unrealistic length of time for the players to stay committed to filling in the diaries, and could perhaps have been shortened to ensure full completion. This study is closest in relation to the work by Lines (2007). Work by Polman *et al* (2007) and Nicholls *et al* (2007) are still of value when designing a diary that might 24 be appropriate to use with athletes, but Lines (2007) combined these diaries with the addition of the interview in keeping with a qualitative approach. This study has been influenced by this structure of research and has been adapted for use to discover more within a different sporting field.

After initially reviewing the research area, the chapter will lead on to provide a summary of findings from the study. Any implications the study may have will also be discussed as well as the provision for some potential directions for future research in this field. This research paper set out to address the sport of field hockey in Kerala and its relation to strength and conditioning. With the majority of previous research surrounding the sport of hockey and its physiological components in the past taking a quantitative stance, this study selected a qualitative methodology in order to take a different approach.

Summary

The findings of this study concluded that within the HOPA Malapuram, the eighteen players came under one of four player groups. These are the Majors (players currently part of Kerala squad), the Make-its (players currently involved in a home state development squad), the Masters (players previously involved in a home nation squad or development squad), and the Minors (players who have never been a part of a home nation set up).

Majors Make-its Masters Minors, A representation of S&C components within player groupings Understanding Influences Support is a representation of the level of understanding, influences and support each player grouping receives with relation to strength and conditioning. It is easy to depict that the Majors receive the most support and because of this their training has the most structure and they have the best understanding about strength and conditioning and why

they do additional training. The diagram also shows that as you move down the player groups from the Make-its, through the Masters and to the Minors, the level of support and understanding decreases and the amount of influences from outside factors such as hockey coaches and players, educational courses and the media increases. Strength and conditioning is not fully understood by any of the players, and this is mainly due to little exposure to strength and conditioning coaches and support. Training was broken down into five different categories, notably; team training, pre season training, structured, unstructured (strength based), and unstructured (conditioning based) It was discovered that although all members of the squad partake in additional training away from the pitch, it is only the Majors who have any real structure with their training due to the extra support they receive from their home states. The remaining members are left to decide for themselves what they think is suitable. The players were stimulated to train by a number of different influences including; hockey coaches, hockey players, personal trainers and fitness instructors, sports institutes support, educational courses and the media. It is due to this broad spectrum of influences that many of the players approach their training in very different ways. The majority of players agreed that strength and conditioning training was an integral part of improving performance on the pitch. However, without guidance, many of these players may be taking part in training that could be detrimental to their performance instead of enhancing it.

Implications of the Study

Care must be issued when generalising findings based on a small sample. Results from this study were extracted from one of the top ten men's field hockey teams in Kerala. The study does support elements of current research which state that aerobic and anaerobic endurance, speed, agility, strength and flexibility are all important physical components to be considered when looking at the physical aspects of the game of hockey However the training of these components and why this training is important is not fully understood by any of the players. The study does however contribute to some new understanding within this area on where these top end athletes receive their influences for their training from. However the sources of information were all very different. In the future therefore it might be of more benefit to draw all of these sources together to format a more condensed information unit which players and coaches can access to understand more about their physical training in seeking improvement in the physical aspects of their game.

Recommendations

The findings of this study provide insight into the lack of focus on strength and conditioning with top end players within Kerala. To understand more about this area and to see whether this is common among more or all players in Kerala, it would be insightful for more clubs to be investigated. Much data has been gathered within this study from taking a qualitative approach and it would perhaps be appropriate for this format to be used within hockey clubs outside Kerala to discover whether there is a different structure or focus on training abroad. This data could then be disseminated to HOPA and to Kerala coaches for them to decide whether new strategies need to be employed to improve the physical development of hockey players, both at the top end and lower down in the sport in seeking progress in hockey at all levels.

Conclusion

This study set out to discover more about the use of strength and conditioning by top end field hockey players within Kerala. It was found that the players use for this strand of sport science was majorly dependant upon their involvement with a home state set up. Players who are involved receive a higher level of support and therefore have a better understanding of strength and conditioning than players that are not. Players receive influences for their training from a number of different sources, and often these sources are not the most valuable for information. If the physicality of athletes is one variable that if managed correctly is easy to control, it would be interesting to see if the sport of hockey would take a step forward in Kerala if there was improved management around the influences for training players come under, and if there was more emphasis on strength and conditioning within hockey clubs across the country.

References

1. Reilly, Borrie. 1992.
2. Boyle *et al.* 1994; Aziz *et al.* 2000; Bishop *et al.* 2003; Astorino *et al.* 2004.
3. Elferink-Gemser *et al.* 2004; Spencer *et al.* 2004a; Spencer *et al.* 2004b.
4. Spencer *et al.* 2005. And Elferink-Gemser *et al.* 2007.