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Focus on the people: Key stakeholders' perceptions of elite sport in India and its potential for development

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Abstract

Rationale/Purpose: Despite its best efforts, India is still struggling to succeed in international sport. Consequently, this study aimed to firstly, contribute an empirically driven rich picture of the current sports environment in India and secondly, to explore management factors that might explain India's elite sport achievements and stagnations.

Design/Methodology/Approach: A purposeful sample of 25 key stakeholders (high level athletes, coaches, administrators and government officials) were interviewed. Data were analysed using thematic analysis and reviewed against factors identified by Green and Oakley (2001) as those contributing to elite success.

Findings: Participants revealed that India is definitely doing better on factors such as financial assistance and job security; issues that were always a constant source of concern in the past. Importantly, however, further exploration highlighted that resources invested in Indian sport are not being used effectively and that India may be following an erroneous pathway of prioritising hardware over liveware (i.e., stadia over people).

Practical Implications: The study provides some initial conclusions that managing the available resources differently by prioritising development of Indian coaches and a coach development system might better facilitate India's success in sport.

Research Contributions: The current study, to the best of our knowledge, represents an important but comparatively unprecedented step towards trying to unwrap the sports field in India, a diverse and vast country.

Keywords: Indian sports, coaching system, coach development, research, high performance systems

Introduction

Sport has become an important feature for all nations of the world due, perhaps, to its frequently inseparable connection to perceptions of national worth (Nicholson et al., 2011). This compelling almost all nations to strive to achieve sporting success. Consequently, the last few decades have seen a significant increase in the power struggle between nations to win medals in major international competitions. This is especially true of the Olympic Games (De Bosscher, De Knop, Van Bottenburg, Bingham & Shibli, 2007), which are considered the most influential sporting event worldwide, having political, economic, social and diplomatic impacts on the world (Zheng, 2015). In its race to becoming a top sporting country, India is often considered a serious contender with its high population of 1.3 billion people, millions of avid sports fans, a growing economy, a large bureaucracy that oversees sports and a deep sensitivity about its position in the world (Chelladurai et al., 2011; Sullivan, 2016).

Reflecting this vast potential, India has certainly made immense efforts to exploit these factors to develop world-class athletes and emerge as a successful sporting country. Recent initiatives include the Target Olympic Podium Scheme (TOPS) to fund potential Olympic medallists, introduction of sports leagues (e.g., football, badminton) to increase participation in and popularity of sports, and the Khelo India School Games (KISG) to develop sports and, consequently, inculcate a stronger sporting culture (Khelo India, n.d.; *"Premier Badminton League"*, n.d.; *"Target Olympic Podium Scheme,"* n.d.). With these and many other initiatives, athletes such as PV Sindhu, Sakshi Malik and Neeraj Chopra have emerged to impress everyone with their performances (Ghosh et al., 2018; Kumar, 2018; Ramesh, 2019). Notably, however, and compared to its population, there are only a handful successful Olympic athletes in India (Chelladurai & Nair, 2017; Dabholkar, 2020). So, why is India still struggling to emerge as a 'sporting nation' despite all these efforts?

Antecedents contributing to elite sporting success

With the identified importance of sport, nations realised that, to be in a position to use sport as a resource, whether for diplomatic, economic or social objectives, they would need a squad of elite athletes capable of winning medals. This need to develop world-class elite athletes resulted in numerous studies being conducted to identify ingredients of successful elite athlete development (e.g., Digel, 2002; Green & Houlihan, 2005). Although several key factors were identified through these studies, the factors seemed to overlap and were therefore organised into three groups: contextual- such as funding or wealth; processual- such as a system for talent identification; and specific- such as bespoke training facilities (Houlihan & Green, 2008).

Many models comprising a slightly different combination of the key factors were proposed to explain potential antecedents contributing to elite sporting success (Table 1). The focus of these models, however, do differ. For instance, Green and Oakley's (2001) model represents common approaches to the problem of enhancing elite sport rather than responses to the social, political and economic elements in each country. In contrast, Digel's (2002) model focuses on the context within which an effective elite sport system can develop. As another alternative, the Sports Policy Factors Leading to International Sporting Success (SPLISS) approach considers only developed nations, leaving very little utility in regard to less economically developed nations (Henry et al., 2020).

Despite contrasts between them, however, these models are all believed to identify antecedents contributing to sporting success. Although the antecedents are slightly different in each of the models, with the overlap between the antecedents or factors contributing to elite sporting success, an increasing trend towards a homogenous model of elite sports systems has been reported (Houlihan & Green, 2008). This increasing homogeneity was suggested by (Oakley & Green, 2001) and later confirmed in the SPLISS report (De Bosscher, Bingham, Shibli, Van Bottenburg, De Knop, 2006). A strong evidence of strategic approaches based

increasingly around a homogeneous model of elite sport development has therefore been very evident within the sports field. There is, however, no single generic blueprint that can simply be lifted from one context and placed in another to guarantee sporting success. No set of antecedents or best practices can be copied and pasted between different contexts. A set of broad principles or antecedents based on a common framework can however be adopted to local circumstances in a culturally appropriate manner (De Bosscher, Shibli, Westerbeek, Bottenburg 2015). Consequently, numerous studies have used these various identified models as the basis of comparison between elite development systems. For example, Green & Houlihan (2005) conducted a detailed analysis of the elite sport systems in Australia, Canada and the United Kingdom; SPLISS 1.0 was a comparison of six countries, while SPLISS 2.0 compared 15 nations (De Bosscher et al., 2007, 2015). These comparative studies essentially looked at the performance of each country on the proposed factors or antecedents contributing to elite sporting success to understand the position of countries against each other.

[Insert Table 1 here]

Notably, however, India is one country that still remains under-researched. A few previous studies have examined consequences of policy making on macro organisations in Indian sport but generally, studies on the elite development systems in India are limited (Bandyopadhyay, 2005). Reflecting this lack of research, the aims of the current study were firstly, to contribute an empirical, current and rich picture of sports in India and secondly, to explore management factors that might explain India's elite sport achievements and stagnations. As India has not been part of many comparative studies and is generally an under-researched country, the current investigation intended to measure India's performance against commonly used antecedents contributing to sporting success to follow a more strategic approach to elite athlete development.

Of course, the authors are aware that cricket stands apart within Indian sport as one which is very well-organised and well-resourced, and at which India has excelled at internationally for decades. Whilst we acknowledge this specific case, the current study focuses on Indian sport more broadly, considering what the general issues are and how the elite sport development system can be improved. Consequently, cricket is not discussed specifically within this paper.

Research methods

To understand why India is still struggling to emerge as a 'sporting nation', despite all its efforts, we specifically wanted to generate rich data by capturing the interactions and concerns seen at the higher levels of the sporting pathway. Such a qualitative study is bound to have certain limitations, including the capacity for generalising from the data and using a finite number of subjects; an especial concern with a large country like India (Ritchie, Lewis & Elam, 2013). Consequently, we purposefully sampled four groups drawn from the highest levels of Indian sport; athletes, coaches, administrators and government officials.

Research Design

The study adopted a case study approach, focusing specifically on the case of Indian sport. The rationale for exploring India is outlined in the Introduction above. Case studies are useful for developing an in-depth understanding of a specific phenomenon or context and for exploring contemporary events (Yin, 2003). A key point that Yin raises in relation to developing the research design is that multiple sources of data should be sought, which this study has achieved by sampling individuals involved in different sports within India and holding different roles in the country.

Participants

Considering the aim of the current study, including individuals who have a unique or important perspective on the Indian sports field was essential. Consequently, a purposive

sample of high-level athletes, coaches, administrators and government officials was chosen. The demographics of all participants are shown in Table 2. First, eleven athletes were selected from sports at which India has a good record of achievement and/or are rapidly gaining popularity. This resulted in the recruitment of one from badminton, three from shooting, two from chess, one from tennis and four from football, all of whom were international performers of at least three years standing. Chess was included as it is administered within the sports pathway and is an activity at which India enjoys some success (Patki, Anant, 2013; Shah, 2019). Secondly, and in similar fashion, we recruited eight coaches; two from badminton, one from tennis, one from shooting and four from football. All were coaching at international level and/or held national appointments as lead coaches for their sport at the time of the interview. Third, three administrators were recruited, all current heads of their sporting associations and/or organisations. Finally, three government officials, all holding high ranking positions in the National Government Ministry. All participants were, therefore, what Dexter, (1970) defines as 'elite', meaning they were all individuals who held a privileged position in their profession and would be highly influential on the concerned (sport related) issues. Elite interviews are usually conducted to provide an insight into the mindset of the actors who play an important role in shaping the society in general but, for the purpose of the current study, this refers to the Indian sports field. One disadvantage of having an elite sample, however, is accessibility as, by definition, elites are less accessible. Consequently, elite interview samples are inevitably smaller compared to other types of interview samples (Richards, 1996).

[Insert Table 2 here]

Procedure

Prior to approaching the participants, ethical approval was obtained from the University's ethics committee. Participants were then approached through the first author's contacts in India.

Interviews were conducted in a convenient and quiet location picked by the participants. All completed informed consent and were reassured that information discussed in the interview would remain strictly confidential. Once all the formalities and initial introductions were completed, interviews lasting 45-60 minutes were conducted and audio-taped for subsequent analysis.

Data Collection and Analysis

A pragmatic research philosophy was implemented, reflecting both the aims of the study and our wish to produce practically meaningful knowledge. Consequently, and considering the complex Indian setting, semi-structured interviews were used for collecting data (Giacobbi, Poczwadowski & Hager, 2005; Gratton & Jones, 2010). An aide memoire containing interview questions guided by the aim to understand the current scenario of elite Indian sports helped gather valuable data from the sample. Questions mainly revolved around factors contributing and/or hindering participants' performance. For instance, what factors contributed and/or hindered their/their athletes' success, additional factors that could have helped them succeed and, from a policy viewpoint, what is the current sports system applied in India and where do they feel India lacks. Validity of the data were enhanced by the current active involvement of the elite sample in the sports field, whilst reassurance of anonymisation contributed to participants revealing their 'honest' opinions rather than adjusting any information to avoid being seen in poor light (Richards, 1996).

Perhaps inevitably given the breadth of participants, interviews were conducted in a mix of three languages; specifically, Marathi, Hindi and English, with the first author (who completed all the interviews) being fluent in all three. As a consequence, perhaps, participants did tend to repeat themselves to emphasise the points they felt strongly about. Therefore, the interviews were brought to a close when participant repetition and lack of new information being mentioned was observed (cf. Cotterill, 2018).

Analysis of the data included the six phases proposed by Braun and Clarke (2006) to conduct an inductive interpretive thematic analysis. First, data were transcribed verbatim (translated where necessary), participants were coded and the transcripts re-read to become familiar with the content. Second, features were identified in a systematic manner using general codes across the data set. Third, themes were identified to organise the interpretations. Fourth, the alignment of themes and sub-themes was considered. To refine each theme, clear definitions for each of the labels were finalised in the next phase. For instance, within coaching, three major issues were highlighted: debate about an experienced coach versus certified coach, knowledge possessed by Indian coaches and funding for Indian coaches. The first two issues related to the quality of coaches and hence were grouped together under one theme, quality of coaches, whereas the third issue formed a separate theme, funding for coaches. However, both these themes were part of one larger issue, which then formed the overarching theme of coaching system. Lastly, as thematic analysis could go beyond organising and describing to interpreting, the sixth phase focused on theorising the significance of the patterns and their broader meanings and implications beyond a surface level. Thus, this phase focused on selecting compelling extracts and relating back to the research questions and the available literature (Schinke, McGannon, Battochio & Wells 2013).

Trustworthiness of the data

Firstly, it is important to note that coding did not occur in an epistemological vacuum. Although an inductive approach was adopted to avoid using any guiding or narrow framework, it was almost impossible to completely free ourselves from theoretical and epistemological preconceptions. For instance, there were perceptions about factors that may have contributed to the lack of elite sporting success in India (Braun & Clarke, 2006).

To counter these almost inevitable limitations, efforts to link research goals, methods and findings to the available literature and a thick description of the Indian setting ensured the information gained was within context, highlighting coherence and credibility. Furthermore, the first author, an Indian national and a former national athlete, was well placed to establish rapport with participants, increasing sincerity and truthfulness of the data. In addition, experience of the other authors in either coach education, performance management or having served in a UK government agency offering support to international sports organisations, helped to increase the sincerity and truthfulness of the data (Tracy, 2010).

Since the interviews were conducted in three different languages, a back-translation process was employed to further enhance the trustworthiness of the data. Back-translation is a process whereby the translated text is re-translated back into the source language by a translator who does not see the original data (cf. Brislin, 1980). To ensure the meaning of the interviews is not lost, the entire process starts with forward translation followed by back-translation and finally a back-translation review is employed. At the back-translation review stage, back-translated data are compared to the original data to identify possible discrepancies. The success of this process depends on the linguistic skills and knowledge of those who engage in back-translation and review of back-translation. In the current study, two interviews were conducted in Marathi and two in Hindi which were translated into English by the first author. Thereafter, one researcher, fluent in both Marathi and Hindi back-translated the interviews which were then reviewed by a third researcher fluent in both languages. Given the nature of the content, conceptual as opposed to literal translations were employed. No discrepancies were found between back-translation and the original text, thereby strengthening the accuracy of the data (Chen & Boore, 2010; Tyupa, 2011).

Results

Results are presented under four overarching themes – systemic factors, coaching system, sport science support and research. The overarching themes are further divided into a total of eight themes and twelve sub themes (Table 3) that cover the key issues highlighted by participants and are explained by highlighting key quotes. In all cases, quotes from athletes are specified as P (Performers), coaches as C, high-level administrators as A and government officials as G. The results section is followed by a section relating the findings to the existing literature.

[Insert Table 3 here]

Systemic factors

This overarching theme captured issues highlighted as issues of national concern and relating to the governing or functioning of the Indian sport system. The three themes included are *issues of national concern, government influenced factors and infrastructure and resource support for athlete development.*

Issues of national concern

Issues of national concern included issues obstructing the progress of the entire sports field on a national level (both mass participation and elite sports) and this theme was further divided into two sub-themes; *lack of sporting culture and popularising sports in the country.*

The lack of sporting culture was highlighted by nine participants and their comments are exemplified in these quotes: *'I think Indian mentality is that there is no career in sports'* (C6); *'That belief to a very large extent is still there, an Indian has to get a qualification, has to be educated. He's not going to make money from playing football'* (C7). Furthermore, this lack of sporting culture also seemed to affect the second subtheme, popularisation of sports in the country. Currently in India, sports gain popularity once athletes from that sport succeed at the international level. One participant quoted, *'The more champions we have, the more idols we will have which means more parents will be convinced that sports can be an option'* (A2). At

present, however, the number of role models are quite limited, as repeatedly stated by the participants. The famous Indian belief that sports is not a thing to do could, therefore, be forcing youngsters to quit sport, thereby potentially affecting both the sporting culture and the participation in sports in the country. Another reason contributing to the limited number of successful Indian athletes could be the structure and organisation of sports, which forms the next theme.

Government influenced factors

Government influenced factors can be described as issues arising due to the organisation of the sports field in India and was further divided into three sub-themes; *self- versus system-made athletes*, *differences among sports* and *differences among States*.

As India has never been a sporting country, most athletes have succeeded because of their own efforts rather than through a system; i.e., they are self rather than system made. One participant observed,

If you really want to compete with China and USA you need to have a system, which is not there. Whoever has come up is because they had their own interest, it was their passion, so they entered the sports field (C1).

Unfortunately, the answer to why India lacks a system is not all that simple. With India being a vast and diverse country, it is only natural to expect at least some (if not a lot of) differences across the regions. Differences on two levels were reported in this study. First are the differences among sports, the second subtheme. In India, some sports are more developed and popular than others: “...in badminton, compared to many of the federations, the functioning is lot more professional. I think with badminton we are in a much better position than others” (C8).

The third subtheme was the differences among States, which is mainly because, sport, as per the Constitution of India, is a State rather than national subject. Consequently, the

different States in India do vary a great deal in terms of the sports development they have achieved. G2 justified these differences by stating, *'Some states have more funds, and a greater focus on sports, whereas some do not'*. Another government official saw such differences as a structural issue, *'See, basically as per the Constitution, sport is a state subject, so states are expected to take responsibility'* (G3). Therefore, as every State and sport federation prioritises sports differently, the level of sports development achieved is bound to differ.

Although the level of development achieved by various sports and States are different, the Government is still majorly responsible for providing sporting facilities to all athletes which formed the next theme.

Infrastructure and resource support for athlete development

This theme was further divided into five sub-themes; *providing and maintaining infrastructure, funding, post-career support, grassroot level support and talent identification and development*.

Providing and maintaining infrastructure was mentioned by twenty-one participants and their comments included the following: *'The infrastructure is still poor'* (C7); *'India still lacks good infrastructure'* (C1). Despite many world-class facilities being built in the recent past, Indian athletes' failure is often attributed to the lack of necessary infrastructure being available to support their progress (Saad, 2016). Participants in this study, however, identified the true problem with infrastructure in India:

You can't just build a stadium and be like, there's your stadium, train there and for the next 20 years we are not going to touch it, we are not going to maintain it. So, if you are not maintaining what you are creating, it is going to demolish and go down in terms of quality, which makes the players go down (P3).

The same athlete further observed, *'So, providing that basic infrastructure, where you can, you know train your national team, groom your national team is paramount'* (P3).

Barring the preference for maintained infrastructure, funding was another major factor contributing to an athlete's sporting success which was highlighted as an area that had fortunately changed in the recent past,

The biggest thing that's happened now is they have this thing called the 'Top Scheme' where the Government has actually picked up, I think 10-15 athletes from every sport, and is going to fund them for all the way to the Olympics (C3).

In fact, participants identified that the apprehension about sports not being a good career could be very closely related to both the financial instability and the third subtheme, the issue of post-career support. Fortunately, with the increased involvement of the private sector and continued support from the Government, this situation is also changing. *'A belief that as an athlete you can survive, improve your sport and that now you can receive jobs through sports, even get cash awards, is coming up'* (P9). Increased financial stability during the career and more job security after retirement have certainly contributed to parents (whose influence is still substantial in Indian society) believing in sports a lot more than before.

The fourth subtheme was somewhat related to both of these preceding issues. Namely, the availability of infrastructure and funding: participants identified that India lacks grassroots level support, i.e., athletes do not receive opportunities such as funding and basic infrastructure, until they succeed at the International level. A quote from an athlete accurately summarised this lack of grassroots level support,

Unless someone becomes a hero, till that point, till that journey he is not given the basic stuff that he needs, after he/she has achieved something in life, then everyone pays attention to it, then everyone is like okay we'll provide you this, we'll provide you that (P3).

Participants thus felt that support, financial and otherwise, was provided to athletes only *after* they became champions rather than *during* their journey from pre-elite to elite as might be more logical in a development-focused system.

Another related issue identified by ten participants was identifying and developing talent, the final subtheme related to TID: '*So, I think that identifying and nurturing talent is something we are currently lacking*' (P11). The limited avenues for identifying athletes and nurturing them appropriately, was linked to a lack of a nationally applied athlete development system. Along with the limited avenues, lack of appropriate and efficient personnel to identify and nurture athletes was also highlighted and was closely related to the next overarching theme.

Coaching System

This overarching theme was divided into two themes; *quality of coaches* and *funding for coaches* and included factors essential within a coaching system. Detailed exploration acknowledged coaching as an important factor responsible for athlete development and an area India majorly lacks.

Quality of coaches

This theme was further divided into two subthemes; *experienced coaches versus qualified coaches* and *knowledge possessed by Indian coaches*.

There was general agreement about the poor quality of Indian coaches, for example: '*The level of coach education in this country is abysmal and that's why we don't have good young Indian coaches coaching younger players*' (C7). Even with this agreement, and reflecting ongoing debates in the literature, there was great disagreement about the quality of experienced versus certified coaches, the first subtheme under coaching system. Here, experienced coaches were defined as those who had been athletes themselves and participated at the international or national level, whereas certified coaches were those who may or may

not have had any experience as athletes but had pursued formal coach education degrees (i.e., those who were national level athletes but had no specialized training as coaches, those who were athletes and who had specialized training as coaches, and those who had specialized training as coaches but were not national level athletes). *'Certified coaches are different and experienced coaches like us, who have practical experience of playing at the international level are different'* (C1) which was in contrast to this quote,

Again, being a player does not necessarily mean that he will be a good coach. So, that is what I learned. Being an Olympian did not make me a good coach. So, I had to start from scratch when I started, so it's all about learning all the time (C5).

Despite such contradictory statements however, which certainly are not an issue exclusive to India, the important message from participants was the quality of *knowledge* possessed by Indian coaches, which formed the second subtheme. There were suggestions about the need to have knowledgeable coaches as follows: *'But now, since I got educated, I know how to coach, how much load to give to a certain player, if I see something, if a player is weaker I know how much load I should give'* (C4); *'We don't have good-quality Indian coaches. Therefore, the information going to our young players is not correct'* (C7). This poor quality (whether genuine or perceived) almost forced the need to hire foreign coaches, which was made clear by one of the administrators; *'But coaching is science, so either you have it or you don't; if you don't, you import it, which is the easiest thing'*. Having foreign coaches has major drawbacks, as evident from P6's quote, *'One, there was a language barrier and two there were a lot of cultural difference. He expected something from us, and we were something completely different'*. Aside from the language and cultural barriers, another major drawback was funding for coaches, which forms the next subtheme

Funding for coaches

At present, funding for coaches, the second subtheme under coaching system, is a serious issue, potentially affecting the perceptions of Indians about the coaching field. In India, just like being an athlete is not seen as a thing to do, coaching is also not considered an attractive career path because of the limited financial support provided. A1 summarised this lack of funding in his interview:

So, again it must be made attractive enough for people to be able to get into it. People get paid Rs 50000-60000 per month (USD 720-860), chief coach gets paid Rs 1.5 Lakh, what do you do with 1.5 lakh a month (USD 1,440)? I mean you are paying foreign coaches USD 3000, USD 5000 and some even USD 10,000 a month but you pay them (foreign coaches) because they are of that quality.

To have better quality Indian coaches, India would need to ensure the coaching field is made attractive enough for people to consider it as a viable career option. For example, in following up on his points made in the previous quote, A1 observed that Indian coaches often did not wish to commit the time and effort to achieving the standards possessed by their foreign competitors, "Nobody wants to come up to that quality". In fact, C2's observations further emphasised this in his interview. Although C2 had achieved the pro license qualification, it is important to note that many Indian coaches dropped out of the programme following a perception that they would simply be wasting their money as, ultimately, only the foreign coaches would get all the top ISL (Indian Super League, football league) jobs.

Sport Science Support

A strong link between this overarching theme and the poor knowledge possessed by Indian coaches was established. This overarching theme is further divided into two themes; *importance of sport science support* and *lack of knowledge about sport sciences*, involved acknowledging the lack of sport science support prevalent in India.

Importance of sport science support

Twenty-two participants identified sport science support as an area where India is massively lacking. For example, A1 stated, *'What we seriously lack is sport science, we have absolutely no concept of sport science, of training, of biomechanics, of biochemistry, prevention of injury, no concept'*. Most participants acknowledged that India lacks sport psychology support: *'Yeah definitely, psychology is important'* (P1); *'This is extremely important and undervalued experience'* (P11).

Unfortunately, just acknowledging the importance of sport science is not enough. A greater issue is the misconceptions about sports psychology and other sports sciences, which could also be contributing to unsuccessful implementation of these techniques in training.

Lack of knowledge about sport science

Misconceptions about sport science and a lack of awareness about its implementation in training was mainly seen in interviews with administrators and coaches. A1 observed, *'But today we sit in the meeting and ask if they want a foreign physio, too often however, the response is 'Oh yeah the malishwala (masseur), take the malishwala'. A masseur is not a malishwala, he's a doctor'*. As A1 pointed out there seems to be considerable confusion about what specialist does what, a situation common even in British sporting circles (Lebrun, MacNamara, Collins & Rodgers 2020).

Similarly, C7 expressed apprehensions about the way sport science techniques are being implemented by stating, *'I would say that a lot of clubs in the ISL now have adopted the GPS system. However, I would say most of them have no idea how to use the information'*.

Regarding the lack of knowledge about sport science support, C3 raised his concerns, *'I am not too sure we have enough people who have studied that subject thoroughly enough to impart that knowledge and help our next generation'*. These highlighted misconceptions do raise concerns about the knowledge prevalent in Indian sports, especially within the coaching field.

Although participants in the current study identified many issues, they also felt that more data needs to be collected to better understand the intricacies of the Indian sports field, which brings us to our last overarching theme.

Research

This overarching theme covered the need for India to widen its research base in the sport field and was clearly emphasised by participants. For example, P3 stated:

I mean first we have to listen, because people are not ready to listen to all the information that is provided by us Indians, about what we think should be changed or updated. Then there is no point, I mean you can look outside as much as you want but if you can't put off a fire that's inside the house, how are you going to put off a fire that's outside?

Evidently, as key stakeholders are primarily responsible for delivering sporting success, understanding their perspective could help formulate better strategies and thereby minimise any potential wastage of resources (Kulkarni & Magotra, 2017). Having an increased research base would also confer an additional advantage, as it would contribute to the generation of a database to monitor each athlete's development. For example,

In my Federation, what we are trying to do is we are trying to tie up with a large company or someone who will sit with us and create a huge database on the basis of which we can do a lot of monitoring, we can do a lot of predicting of performances.

There are a lot of models to predict performances, right? But unless you have the data how will you do that? (A1)

Finally, research was thought to be important in coaching and sport science. A1 stated, *'Today all the coaches from abroad are PhDs, with huge amounts of research'*. Even though available data do not support this contention, this was a generally expressed opinion which is evident from C3's statement, *'His knowledge is very good, he's studied abroad, he's done a*

lot of research'. Both these quotes do indicate that knowledge is considered extremely important. As evident from all the above quotes, research is one area in which India could really improve and get a better understanding of what athletes and coaches want, have a better database to monitor each athlete's (and coach's) progress and have better quality coaches and sport scientists.

Situating findings within the literature

Having identified potential factors impacting sports development in India and as a broad set of principles or antecedents based on a common framework which can be adopted with subtle domestic variations, Green & Oakley's (2001) model was used to compare India's performance on each of the antecedents specified in the model. For a complex country like India, the 10 factors identified in Green and Oakley's (2001) model would seem ideal as the model focuses on the problem of enhancing elite sport rather than the social, political and economic elements in a country. The model also seems to more broadly consider the various factors identified as impacting the Indian sport field in the current study such as an accepted notion of excellence in sport being a viable career path, and the role of different agencies in developing elite performance sport. A comparison with Green and Oakley's model would help gain deeper knowledge about India's performance against antecedents contributing to elite sporting success in one of the common frameworks used to discuss national sport development systems in the West. With the stated aim to succeed at the international level, comparing India's performance on antecedents contributing to sporting success used by more successful countries (e.g., the UK, the USA, Australia, Canada) might provide some important ways forward for India.

Consequently, a comparison against Green and Oakley's (2001) 10 factors highlights that India is not lacking on all factors and has at least attempted to deal with some of them

(highlighted in Table 4). The following section, therefore, highlights factors India seems to have made some progress on, followed by factors which still require attention.

[Insert Table 4 here]

Factors on which India has progressed

First, and at the administration level, the 2001 National Sports Policy clearly outlines roles of different agencies. Both state governments and national sports federations are responsible for different aspects of sports development, resulting in different levels of development achieved by each state and sport, as highlighted within this study and also by Chelladurai and colleagues (2002). For instance, cricket, badminton and shooting classify as the more developed sports in which participation is higher, and athletes receive more support (Narain, 2016). The national Government still has considerable influence on the sport sector and is responsible for providing facilities to elite athletes (Chelladurai & Nair, 2017). Furthermore, and despite such a federal system, whereby co-ordination could be slightly problematic as different states have a degree of political autonomy, like in other federal system, such as Canada, Australia (Green & Oakley, 2001), India has still managed to make some progress, evident from success achieved by certain sports (e.g., badminton) and States (e.g., Haryana) (Duggal, 2018; Kumar, 2018; Sengupta, 2020).

Of the facilities provided by the Government, financial stability has always been highlighted as a consistent concern in the sports field, at least until recently, and participants did emphasise that the financial situation in Indian sport is now evolving further and for the better. Many private companies and government schemes are providing jobs and launching numerous schemes to ensure athletes have some financial stability and can potentially train as full-time athletes (Hannon, 2012; *Lakshya Sports*, n.d.; Prasad, 2020). In fact, the jobs could provide lifestyle support by ensuring athletes have a steady income when they retire (Green & Oakley, 2001). Next, the government has also taken efforts to provide enough competition

exposure to athletes to better prepare them for the international competitions (e.g., Hussain, 2020).

Another facility provided by both government and private sector are excellence centres built for athletes to train at (e.g., "Padukone - Dravid Centre", n.d.; "Sports Authority of India", n.d.). The problem, however, as reported by participants in the current study, is the maintenance of the infrastructure, as most is usually of good standard but not properly maintained, making it less usable and potentially affecting the performance of athletes. Next, to ensure India has a continuous supply of athletes, attempts at identifying talent are undertaken. National Sports Talent Contest Scheme (NSTC) and the Rajiv Gandhi Khel Abhiyan (RGKA) were launched in 2014, which are now merged under KISG (Srivastava, 2016) wherein scouted talented athletes will be enrolled at various KISG accredited academies for nurturing their talent (Saha, 2018). KISG is also aimed at promoting physical activity, encouraging participation in the annual games to achieve excellence in sport, providing athletes with top-notch infrastructure and training of the highest-level and providing a strong framework for all sports played in the country (Khelo India, n.d.). Finally, the 2011 National Sports Development Code of India specified that the responsibility to monitor the progress of athletes lies with the national coaches who will evaluate the progress of athletes at coaching camps and make recommendations for inclusion or exclusion of athletes (Government of India, 2011).

Despite the progress on these factors, much work still needs to be done. For example, although India has some good infrastructure, the inability to maintain it, as highlighted in the current study, would need to be tackled before India could host mega sporting events (Polson & Whiteside, 2016). We address these in the next section.

Factors in which India still lacks

An embedded lack of sporting culture is often 'blamed' for India's poor performance at international events. This poor sporting culture could have originated from the famous Indian saying which roughly translates as, 'If you study hard you will live like a king but if you play sports you will ruin your life' (Chandran, 2016). To tackle this poor sporting culture, one of the main aims of the KISG is to inculcate a stronger sporting culture within the country (Khelo India, n.d.). Another factor contributing to a stronger sporting culture is the recent international success achieved by a few Indian athletes which helped attract the population towards sports (Nadaph, 2020). For example, following the success achieved by badminton athletes such as Saina Nehwal, PV Sindhu and Srikanth Kidambi, participation increased from less than eight entries for the doubles in 2008-09 to around 3000 entries for tournaments in 2019 (Acharya, 2019). Although causation is hard to prove, this would be strongly suggestive of an effective step for sports to pursue. In short, and unlike the reported impacts of elite sport in other countries (e.g., Boardley, 2013; Pappous & Hayday, 2015), it seems that Indians are very susceptible to national success.

Another major issue is a lack of sporting system, a criticism India receives very often. Boria Majumdar, a leading Indian sports scholar, asserts that Indian athletes who have achieved international success are not actually products of the country's sports system but mere exceptions the country has witnessed (Chandran, 2016). Abhinav Bindra, the only Indian to win an individual Olympic gold medal also supported this systemic drawback by asserting that it is not about supporting a select few athletes, but the whole system should be such that it ensures the right things reach a larger population (Mutter & Pawlowski, 2014). This, however, is not a case of India failing to invest in developing its sporting system, as there is the current ability to produce a few successful Indian athletes. It is more likely that the resources invested in the Indian sporting system are not used impactfully (Kulkarni & Magotra, 2017), which was also identified by participants from the current study. For

instance, financial resources are allocated to athletes that are already successful rather than athletes that are in the early stages of their journey to excellence (e.g., Bose, 2020). Similarly, despite the need that a focus on coach development has been recognised (Kannan, 2020), and was also reinforced by participants from the current study, the coaching system in India is still considered to be the least evolved system in the country (Raj, 2018). India, over the years seems to have prioritised infrastructure and the like over development of people, which whilst being important may have put India at risk of prioritising hardware over liveware (i.e., stadia over people).

Reallocating existing resources from hardware to liveware

High-quality coaching is an oft-cited necessity for a nation's success in elite sport (De Bosscher et al., 2007; Green & Oakley, 2001; Houlihan & Green, 2008). Notably, De Bosscher and colleagues (2015) identified Canada, Australia and Switzerland, all western nations that perform well at the Olympic Games, as having particularly strong systems for developing coaches to support elite athletes. Unfortunately, however, as mentioned by Gopichand, a well-known Indian badminton coach, the coaching system in India is the most unevolved system in the country (Kulkarni & Magotra, 2017) and could potentially be contributing to the limited sporting success achieved by Indian athletes (Raj, 2018).

Participants in the current study, whilst agreeing to the lower quality of Indian coaches, identified three additional factors hindering development of the Indian coaching system: less funding to Indian coaches, knowledge possessed by Indian coaches and an ingrained debate about the experienced coaches being better than certified coaches.

Most sports in India have foreign coaches who are paid comparatively huge amounts of money to train Indian athletes. In contrast, some Indian coaches training the national and junior teams are paid Rs 30,000-50,000 per month (approximately USD 421-701), which makes the coaching field less lucrative for Indians (Rasquinha, 2018). Although Indian

coaches could make a positive difference to the development of athletes, due to a fair understanding of both the realities of the sport field in India and the various Indian cultures, foreign coaches still seem to be preferred over Indian coaches (Sarkar, 2018). In fact, even badminton, which has a good number of successful experienced Indian coaches (Dutta & Bandyopadhyay, 2018), has foreign coaches working with Indian athletes (Saha, 2019). These foreign coaches seem to be preferred over Indian coaches due to the gap in knowledge between Indian coaches and their foreign counterparts (Rasquinha, 2018). A potential short-term measure to improve relationships between coaches and athletes while foreign coaches remain part of the Indian system would be to implement better induction and psychosocial support for foreign coaches to help them deal with the complex Indian milieu. Exploiting social learning between Indian and foreign coaches would be one good way to address this issue (cf. Stoszkowski & Collins, 2014).

There may be another factor in play, however, which would also need to be addressed if India is to achieve more in sport. There is much anecdotal evidence which supports the existence of a preference against Indian coaches. In short, a common feeling that 'foreigners know better'. This problem is not unique to India, but it does highlight the need to market and promote the strengths of the home-grown products (e.g., Rasquinha, 2018; Sarkar, 2018).

Another issue relates to the challenge of achieving internationally recognised qualifications. Primarily, in India there are two routes of becoming a coach. First is by gaining formal education which is, unfortunately, often viewed as being outdated, lowering the value of the coaches who undertake this route. For example, coaches clearing the National Institute of Sports (NIS) course with specialisation in athletics usually tend to fail the IAAF level 1 course, which is the basic level (Business Standard News, 2019). Former athletes, on the contrary, are generally believed to have an unusually good opportunity to learn about coaching from their own coaches through observation.

Unfortunately, what goes unnoticed is that observing your own coach only gives a partial view of coaching and may fail to reveal the true extent of the coach's role. It also only serves to transmit a 'mixed picture' of strengths and weaknesses which will omit the essential need for effective professional judgement and decision making (PJDM-Abraham & Collins, 2011) as the basis of optimised coaching. The point of entry into coaching, therefore, may not necessarily guarantee the required quality of coaching (Knowles et al., 2005). The key point here is, it is not about arguing over the best method to get into coaching but ensuring that whoever gets in is fully equipped to handle the pressures of the complex process of coaching.

Irrespective of the point of entry, Indian coaches have been given the responsibility to monitor athlete's progress (Government of India, 2011). If the coaches have been criticised for the knowledge they possess, however, the evaluation of athletes may be done by outdated methods as well. For instance, although TID research criticises one-off anthropometric tests, as the TID processes in India are still primarily one-off anthropometric, technical and competitive testing protocols, Indian coaches might be using similar methods to monitor progress of athletes (Abbott et al., 2005; Abbott & Collins, 2004; Pankhurst, 2014). It is, therefore, crucial to invest more resources on developing Indian coaches and ensuring their knowledge is updated and consistent with the most recent research.

A coach, along with providing constant support and developing their athletes, also needs to co-ordinate and manage other coaches, sport scientists and sports medicine personnel. Sport psychology was specifically discussed in more detail, with participants considering the role it plays in an athlete's success (Kremer & Scully, 2003; Sridhar, 2010). Notably, however, a significant lack of knowledge about sport sciences in general and sport psychology in specific was highlighted especially from interviews with coaches. Unfortunately, if coaches do not have the necessary knowledge about sport sciences and sports medicine, it would be almost impossible for them to implement and/or co-ordinate these facilities for their athletes. As

noted previously, however, this lack of understanding of roles is not solely a problem in India (Lebrun et al., 2020).

Currently, foreign coaches are, to a certain extent, doing all these things for their Indian athletes and this can continue (Rasquinha, 2018). But as mentioned, this does have an impact on the Indian population as it pushes people away from sports and towards the deep-rooted, 'Sports is not a thing to do' belief (Chandran, 2016). If India had a well-developed coaching system that developed Indian coaches, it could ensure Indian athletes who can't make it to the elite level can still contribute to sports. This could potentially also help tackle the belief that sports is not a good career as parents would have some reassurance that even if their children fail to make it as an athlete, they could still have a decent career as a coach.

Developing more Indian coaches that match up to the level of their foreign counterparts would therefore have many benefits, such as Indian coaches getting better salaries, making the coaching field more lucrative, having a cultural edge over their foreign counterparts and obviously possessing increased ability to develop successful world-class athletes (Sarkar, 2018). All these factors might further contribute to inculcating a stronger sporting culture in India which might facilitate India's efforts of succeeding in sports. In fact, numerous significant sporting figures in India are of the opinion that India needs to shift its focus to coach education (Raj, 2018; Rasquinha, 2018). VVS Laxman, a former batsman, in one of his interviews stressed that coaches are more important in an athlete's career than the infrastructure. He further cited an example of Sachin Tendulkar's (Indian cricketer) coach, saying the iconic batsman was developed by his coach and not by the ground where he practiced. This is not to say that India has not come a long way from having limited coaches to now being in a position where it does identify the need to have better quality coaches and a more developed coaching system (Gautham, 2017; Kannan, 2020; Raj, 2018). The point,

however, is that India would most certainly benefit from managing the resources it invests in sport differently.

Discussion and Conclusion

India, so far, seems to have prioritised facilities to support development of its athletes. This was certainly an argument levied against the UK as a missed opportunity from the 2012 Olympics (De Bosscher et al., 2015; Nicholson et al., 2011) and it may be that India has erroneously followed the same path of hardware over liveware (i.e., stadia over people). Despite the criticism, the UK struggled to reprioritise its focus and, like many other nations, is still not giving sufficient importance to development of its coaches (e.g., Nash et al., 2012; Norman, 2008). India could therefore, learn from the UK's mistake of overly prioritising stadia over people and shift its focus from development of infrastructure and allied factors to increase the number of quality coaches it develops (Kannan, 2020; Rasquinha, 2018).

The current study attempted to explore ways India could use its resources efficiently. As the research done on the Indian sports field is very limited (Chelladurai et al., 2002; Bandyopadhyay, 2005), this study could be considered as an important step into developing more India-specific knowledge. Comparing India against 10 antecedents or factors contributing to sporting success that have been used as the basis of discussion for many successful sporting countries, provides important insights about ways forward for India; for example, prioritising liveware over hardware.

Although the sample size could be considered small, the quality, level and roles of participants can be classified as high, as all are currently active at the highest level in their sport. Inclusion of this 'elite' sample increased our chances of gathering information most relevant to the Indian sports field which had probably not been recorded elsewhere or was lesser known to the public (Richards, 1996). Including these key stakeholders' perceptions is also generally extremely important as any changes to the sports field will have a great impact

on (athletes, coaches), and be exerted by (administrators, government officials), these individuals (Dolowitz & Marsh, 2000). It is, therefore, important to note that the study, to the best of our knowledge, represents an important step towards trying to unwrap the sports field in India, a diverse and vast country. Importantly, however, whilst previous studies have examined consequences of policy making on macro-organisations in Indian sports, far fewer, if any, have pursued the actual voice of those involved. Progress is being made but the challenge of the lack of sporting culture remains and there are frustrations voiced by the participants in this study. Further development of coaching and sport science in India has the potential to not only better develop India's athletes but also to alter the perception of sport more generally as a respectable and worthwhile career path.

The discussion and conclusions drawn in this study are based on the data set from the current study and the minimal research available. Of course, one study alone is not sufficient to understand and explore the sports environment in a country as complex as India and, although this study has brought together the viewpoints of key stakeholders within the Indian high performance sport system, more work needs to be done. India remains an under-researched nation when it comes to sport-related research. We are currently pursuing further data collection, including using an athlete survey that seeks further insights on many of the issues highlighted through this study. Furthermore, additional research involving a broader range of stakeholders, potentially from specific sports or states, would further benefit understanding of this complex nation. Despite these limitations and the need for further insight, however, the study does provide some initial conclusions that managing the available resources differently by prioritising development of coaches and a coach system might facilitate India's success in sport.

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Table 1: Models identifying factors contributing to elite success

Factors	Oakley and Green	Digel	UK Sport (SPLISS Consortium)	Green and Houlihan
Contextual	An excellence culture Appropriate funding	Support, especially financial, of the state Economic success and business sponsorship A media supported positive sports culture	Financial support Participation in sport Scientific research	Support for 'full-time' athletes
Processual	Clear understanding of the role of different agencies Simplicity of administration Effective system for monitoring athlete progress Talent identification and targeting of resources Comprehensive planning system for each sport Lifestyle support	Talent development through the education system Talent development through the armed forces	Talent identification and development system Athletic and post-career support Integrated approach to policy development Coaching provision and coach development	
Specific	Well-structured competitive programmes Well-developed specific facilities	Sports science support	International competition Training facilities	A hierarchy of competition opportunities centred on preparation for international events Elite facility development The provision of coaching, sports science and sports medicine support services
Adopted from (Houlihan & Green, 2008)				

Table 2: Participant Characteristics

Athletes		
Age range	18-42 years	
Overview	All athletes have played at the international level at least once, with majority of them playing at least one or more international events per year. All athletes have been involved in sports for a minimum five years.	
Sport	Badminton (1)	Doubles player
	Shooting (3)	Two are international medallist One has been an international athlete since 2012
	Football (4)	All four are part of the Indian football team
	Tennis (1)	Playing at the international level since 2014
	Chess (2)	Both hold the chess grandmaster title
Coaches		
Age range	40-60 years	
Overview	Three coaches have played at the international level whereas the others have played either at the National/State level. All coaches are coaching International-level athletes	
Sport	Badminton (2)	Both hold important positions and are also head coaches at two of the badminton academies in India
	Shooting (1)	Head coach at one of the shooting academies in India
	Football (4)	Two coach at one of the football clubs participating in Indian Super League (football league in India) One is at a government academy One is directly involved with the Indian football team
	Tennis (1)	Head coach at one of the tennis academies and is involved with the Indian team at different tournaments
Government officials		
Age range	48-70 years	
Overview	All three hold high ranking positions in the National Government Ministry. One of them has been an athlete before taking a position in the Ministry	
Organisation/ Affiliation	Two of them are part of the National Government Ministry, with one of them being part of the sports ministry	
	Holds a high post at the national sports body of India	
High-level administrators		
Age range	48-68 years	
Overview	All three were athletes themselves and had coached before taking an administrative role.	
Organisation/ Affiliation	One is the president at one of the National Sport Federations One is the secretary at one of the state sport associations One is the national for one of the sports as appointed by the MYAS and also the director of a company responsible for promotion and development of the same sport	

Table 3: Results of thematic analysis

Overarching Theme	Theme	Subtheme	Raw data exemplar	Number of participants mentioning this	
System influenced factors	Issues of national concern	Lack of sporting culture	'I think Indian mentality is that there is no career in sports'	9	
		Popularising sports in the country	'Right now, it's like let's say you see PV Sindhu wins, then everyone wants to join badminton so it's more drawn from inspiration than structure'	8	
	Government influenced factors	System-made vs Self-made athletes	'if you see any player's graph, they are all self-made, they are not system generated'	10	
		Differences among sports	'I think that in badminton we are in a much better position'	3	
		Differences among States	'Indian states are not uniform in size, or availability of resources, be it land, money or talent.'	6	
	Infrastructure and resourced support for athlete development	Providing and maintaining infrastructure	'just want them to start with providing basic infrastructure which is maintained'	21	
		Funding	'One of the most pressing challenges for athletes is the issue of financial security'	16	
		Post-career support	'there are a lot of companies now the companies, private companies, government companies are giving the jobs for the sportsmen.'	5	
		Grassroot level support	'So, in India the thing is when you achieve something then you know they are overwhelmed with gifts and all this'	9	
		Talent identification and development	'some approach towards the raw talent that the only solution is to introduce serious and sincere Sports...'	10	
	Coaching system	Quality of coaches	Experienced coaches vs	'certified coaches are different and experienced coaches like us which we	11

		qualified coaches	have practical experience of that level are different'	
		Knowledge possessed by Indian coaches	'Look at the quality of coaches that come out of the NIS, they can't read, they can't write, most of the literatures are English or French what are they going to read'	7
	Funding for coaches		'People get paid Rs 50000-60000 (USD 720-860), chief coach gets paid Rs 1.5 Lakh, what do you do with 1.5 lakh (USD 1,440)?'	6
Sport Science Support	Importance of sport science support		'What we seriously lack is sport science, we have absolutely no concept of sport science, of training, of biomechanics, of biochemistry, prevention of injury, no concept'	22
	Lack of knowledge about sport sciences		'Events, like the individual events like badminton and shooting, chess, snooker where there is no team coordination your own talent you have to fight with that sport psychology matters'	12
Research	Increasing research base in India		'I think we need to do far more research, we have no research, we have no data, we don't have either'	6

Table 4: Summary of results from the current study

India's performance against Green and Oakley's (2001) 10 factors		
Current Scenario	Factors India has made some progress on	<ul style="list-style-type: none"> • Specified role of different agencies and a clear administration structure • Appropriate funding and jobs provided to athletes • Competition exposure to athletes • Infrastructure provided to athletes • Talent identification and development of athletes • System to monitor progress of athletes
	Factors India still majorly lacks	<ul style="list-style-type: none"> • Sporting culture • Sporting system as a whole • Insufficient focus on a key specific factor - 'coaches' • Unimpactful resource allocation and management
Main conclusions from the study	Reallocating resources from hardware to liveware	<ul style="list-style-type: none"> • Prioritise liveware over hardware, i.e., focus on 'people' rather than 'stadia' • Manage resources differently by prioritising development of coaches and a coach system