

The Psychology of Home Advantage in Sports: Mystery yet to be Decoded

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Abstract

Sports have its long history. History of struggle, of glorious uncertainty, of sportsmanship and of dominance, but one thing remain constant with its all evolution as a big global social force is the 'Home advantage' in sports competitions. Sports world has covered a long distance since the days of amateur participation to worldwide professional leagues in almost every sport. Staggering amount of money and efforts are invested in sports to get the best results. Latest technology and advance scientific methods have been used in every possible part of sports training. Result oriented approach put players and coaches under immense pressure to perform. Sports Performance is discussed and analyzed in every possible manner to detect and correct faults due to this sports coaching has become more challenging than ever. A home advantage in sport competitions has been well documented. The strength and consistency of the home advantage has made it a popular phenomenon in sport today. Very little systematic research has been carried out, however, and the home advantage remains one of the least understood phenomena in sport. The review of literature indicated that the descriptive phase of inquiry has been completed, and it is time to address the underlying mechanisms responsible for the manifestation of the home advantage. The present paper summarizes the available scientific evidences about home advantage in sport and tries to identify the environmental and psychological causes of this phenomenon and provide direction for future research.

KEYWORDS: Home Advantage, Psychology etc.

Introduction

Everyone knows that sports teams enjoy a big advantage whenever they play at home. But does anyone know why? Most of us probably think we do - after all, it seems obvious. Home teams have the crowd behind them, roaring them on, filling them with confidence; their opponents have to deal with the crowd's open hostility or, perhaps worse, its silent contempt, which both drain confidence away. Home players get to sleep in their own beds, make their own way to the ground, change at their own paces; the away team has to deal with sleepless nights in strange hotels, plus all the misery of travelling long distances to unfamiliar places - the mindless coach journeys, the wrong turnings, the traffic hold-ups, and the prospect of having to get changed too quickly in an alien dressing room. The home team know the playing conditions inside out; the away team never know when they are going to get ambushed by their lack of local knowledge. The home team feel at home; the away team feel lost.

For most of the history of professional sport, these explanations for home advantage were quite enough - sport is a tribal business, and local tribes liked to think that anyone who

strayed on to their patch was in for a hard time. What else was there to say? But professional sport is changing faster than at any time in its history and much of what we used to take for granted is now open to question. Two forces in particular have conspired to ensure that the traditional wisdom can no longer be relied on when it comes to home advantage: science and money. Sports scientists want to know what makes players perform to their full potential, and home advantage has become one of the battlegrounds for their competing theories. Meanwhile, the money men want to know why home advantage should still matter at all. In an increasingly globalised world, it is not clear to many of them what 'home' means any more. If you scour the planet for the best players, and if you pay them enough, surely they should feel at home anywhere ?

Causes of home advantage:- Home advantage in competitive sports is well documented despite some contradictory results. Previous studies have identified 5 main causes of home advantage in competitive sports: **crowd, familiarity, travels, rules and territoriality**. Moreover, several studies have proposed the influence of these factors over psychological and behavioral states in players, coaches and officials.

There have been few reviews that have provided a general overview of the home advantage effect in sports: those of Courneya and Carron (1992), Nevill and Holder (1999), and Carron et al. (2005). In addition to providing an overview of prior research, three of these reviews suggested frameworks or models to highlight and organize the major components involved in the home advantage process which interact with each other in ways that vary from sport to sport. According to those models, the most relevant causes of home advantage are-

(i) the influence of the crowd, (ii) the familiarity with the context, (iii) travel fatigue, (iv) rule factors that favor the home athlete/team, and (v) territoriality. These factors could influence the psychological and behavioural states of players, coaches, and officials, partially explaining the home advantage found in empirical studies.

i) Crowd and Home Advantage:- The crowd is one of the main factors thought to be responsible for home advantage due to differences in conditions between home and away (Agnew & Carron, 1994; Nevill et al., 1999). Researchers have tried to determine whether the home advantage is a function of crowd size (Dowie, 1982; Nevill et al., 1996), crowd density (Agnew & Carron, 1994; Pollard, 1986) and/or crowd noise (Nevill, Balmer, & Williams, 2002). Despite mixed results, evidence suggests that the influence of the crowd depends on the kind of sport and on other mediating factors, such as referees' decisions in subjectively judged sports like soccer. In fact, several studies have shown that referees may be influenced by a large crowd to favor the home team (Downward & Jones, 2007; Nevill et al., 2002; Sutter & Kocher, 2004). Obviously, size, intensity of support or proximity to the field play are factors able to influence mood states or even attention level of athletes, coaches and referees, affecting sport performance and partially explaining the home advantage phenomenon. A number of studies provide strong evidence that home advantage increases with crowd size, until the crowd reaches a certain size or consistency (a more balanced number of home and away supporters), after which a peak in home advantage is observed. Two possible mechanisms were proposed to explain these observations: either (i) the crowd is able to raise the performance of the home competitors relative to the away competitors; or (ii) the crowd is able to influence the officials to subconsciously favour the home team. The literature supports the latter to

be the most important and dominant explanation. Clearly, it only takes 2 or 3 crucial decisions to go against the away team or in favour of the home team to give the side playing at home the 'edge'.

ii) Facility Familiarity and Home Advantage:- Familiarity with the home playing facility or even with the local climatic conditions and with altitude, are plausible contributing causes of home advantage. However, most studies have focused on sports with relatively little potential for variation in local conditions, in contrast to other sports like cricket and alpine skiing. Dowie (1982) and Pollard (1986) suggested that familiarity with the facility is one cause of home advantage. Subsequently, Clarke and Norman (1995) and Barnett and Hilditch (1993) observed that professional soccer teams in England that played on unusually large or small pitches or on artificial surfaces might have benefited from a slightly increased home advantage. There is also some evidence that familiarity with local conditions may contribute to the advantage gained by host countries in the Winter and Summer Olympic Games (Balmer et al., 2003). In fact, Balmer et al. (2001) identified a significantly greater advantage for disciplines that have the possibility of a local variation in the facilities. In this respect, Pollard (2002) estimated that about 24% of the advantage of playing at home may be lost when a team relocates to a new facility, but other studies have suggested that there are no effects or slightly positive effects associated with moving to a new facility (Loughead, Carron, Bray, & Kim, 2003; Moore & Brylinsky, 1995; Watson & Krantz, 2003). In any case, the primary findings tend to indicate only small effects for the contribution of familiarity with local conditions (e.g., physical characteristics of the stadium, distraction during games, disruption to the normal pre-game preparation, etc.) to the home advantage effect. In any case, this relative advantage from familiarity with the competitive context could justify the economic investment from competition managers to improve their athletes' sport performance.

iii) Travels and Home Advantage:- The travels associated with competition may contribute to the home advantage because of the fatigue that athletes suffer, and because of the disruption of the normal routine. Travel factors that have been analyzed include the distance between the two facilities (Clarke & Norman, 1995; Snyder & Purdy, 1985), the number of time zones crossed (Balmer et al., 2001; Pace & Carron, 1992). The results indicate a weak or no significant effect of travel duration and distance on sports performance, but home advantage is reduced in local derbies where no travel is involved (Carron et al., 2005; Nevill & Holder, 1999; Pace & Carron, 1992; Pollard, 2006a). Anyway, despite the athletes' common beliefs, only a small proportion of the variance in home advantage can be explained by travel-related factors and, therefore, competition is only slightly disrupted by including long travel distances for competitive events. Although the big countries like Australia, USA, China and even in India the travelling distance is far more than smaller European countries like England, Germany, France etc. So it is not clear how much impact of travelling in home land and foreign land has on the performance.

iv) Rules and Home Advantage:- The rules in some sports (e.g., the last offensive opportunity in baseball belongs to the home team or choice of playing surface for home

team in cricket) may provide home advantage; however, studies have generally been focused on referee bias. Referee bias has been identified as a cause of the home advantage. In fact, several studies have found a bias of referees in favor of the home team/athlete (more free kicks, fewer yellow and red cards, more extra time, higher scores, etc.) rather than a bias against the away team/athlete (Ansorge & Scheer, 1988; Boyko, Boyko, & Boyko, 2007; Downward & Jones, 2007; Nevill et al., 2002; Seltzer & Glass, 1991; Sutter & Kocher, 2004; Whissell, Lyons, Wilkinson, & Whissell, 1993). In team sports, there is evidence to suggest that a large crowd may affect the decisions of match referees, either by the noise they make or by the referees' perception that they are being monitored, and this may be a potential contributing factor to the home advantage phenomenon (Nevill & Holder, 1999; Nevill et al., 1996; Nevill et al., 2002). In any case, there is a debate about the importance of this factor because Jones, Bray, and Bolton (2001) in cricket and Dennis, Carron, and Loughhead (2002) in ice hockey found no effect from referee bias. It would appear that, if referee bias does have an effect on the home advantage, it is greater in sports in which there is a high degree of subjective evaluation. Balmer et al. (2003), after analysing the Summer Olympic Games, found that subjectively judged sports, like gymnastics or boxing, generated higher performance at home in contrast to objectively judged sports, like athletics or weightlifting. The home advantage is probably derived from referee bias and is mediated by different factors depending on the sport, such as the crowd and the political and nationalistic feelings. Thus, specific training protocols to improve official's ability to handle psychological stress could minimize home advantage phenomenon by reducing subjective decisions.

v) Territoriality and Home Advantage:- Evidence has shown that having to defend the home ground evokes territoriality, that is, a protective response to an invasion of one's perceived territory (Neave & Wolfson, 2003; Pollard, 2006b). Pollard and Pollard (2005a, 2006b) have shown that the clear variations in soccer home advantage can be largely explained by geographical location. The Balkan nations of southeastern Europe, especially Albania and Bosnia, have shown a larger home advantage than elsewhere (e.g., Baltic republics, Scandinavia, and the British Isles). It is likely that physical location of this territory, between mountains, and its historic ethnic and religious conflicts are responsible for an increased sense of territoriality. Similar findings have been shown in other geographical locations such as Asia and Latin America. In relation to the sense of territoriality, Mazur and Booth (1998) determined that higher testosterone levels are linked to aggressive and assertive behaviours, both of which are very important in competitive sports. In fact, higher concentrations of salivary testosterone have been found in players before home games than before away or training games (Carre, 2009; Neave & Wolfson, 2003). The exact manner in which this finding might affect performance awaits further research. Sport psychologist should promote those territoriality feelings in order to achieve more adequate psychological competitive conditions that ensure higher performance levels. Coaches and Home Advantage Some studies suggest that strategic and tactical coaching decisions are influenced by game location and by the crowd. In fact, coaches tend to adopt more offensive strategies at home than away, which could partially explain home advantage in sport (Dennis & Carron, 1999). Referees and Home Advantage bias of referees in favor of the home team/athlete, especially in sports with a high degree of subjective evaluation, has been identified in several studies. Theorists

have suggested that the home crowd's may influence referees' decisions by increasing anxiety and decreasing self-confidence, which could partiality explain the home advantage phenomenon (Ansorge & Scheer, 1988; Boyko et al., 2007; Downward & Jones, 2007; Nevill et al., 2002; Seltzer & Glass, 1991; Sutter & Kocher, 2004; Whissell et al., 1993). Similarly, Thuot et al. (1998) found lower levels of somatic anxiety and higher levels of self-confidence when high school basketball players competed at home. Despite the evidence, the influence of game location on the psychological states of athletes remains inconclusive due to some contradictory findings (Bray & Martin, 2003; Bray et al., 2000; Carron et al., 2005; Duffy & Hinwood, 1997; Neave & Wolfson, 2003; Polman et al., 2007). For example, Duffy and Hinwood (1997) found no differences in the pre-performance anxiety levels reported by professional soccer players competing at home versus away. Thus, it is impossible to determine whether those athletes who had a better psychological profile at home also performed better at home.

Home Advantage and Individual Sports:- The prevalence of home advantage both in individual sports and in unbalanced competitions is less clear. Some evidences for home advantage has been identified in cross-country running (McCutcheon, 1984), wrestling (Gayton & Langevin, 1992; McAndrew, 1992), World Cup alpine skiing (Bray & Carron, 1993), speed skating (Koning, 2005) and boxing (Balmer, Nevill, & Lane, 2005). By contrast, once the quality of the athletes has been accounted for, home advantage was not found to be a major influence on performance in individual "grand slam" tennis or "major" golf tournaments (Nevill et al., 1997).

A significantly greater advantage has been identified for disciplines in which officials directly judge the outcomes, probably due to disproportionately high scoring for home competitors, and for disciplines that inherently entail the possibility of local variation in the facilities. Clarke (2000) reported that 17 out of 19 hosting Nations of Olympic Games achieved its better historic performance as home Nation. Thus, Balmer, Nevill, and Williams (2003) analysed the Summer Olympic Games and found that team sports, which have higher spectator attendance and subjectively judged sports, like gymnastics or boxing, yielded higher performance at home. However, objectively judged sports, like athletics or weightlifting, did not show home advantage.

Psychological Aspect of Home Advantage:- Psychological Implications of Home Advantage Aside from the identified causes of home advantage in competitive sports, game location seems to have an influence on the psychological and behavioural states of (i) coaches, (ii) referees, and (iii) players, which contribute to higher performance levels at local facilities. Despite little is known about the role that psychological states, including mood, anxiety, confidence and efficacy may play in the home advantage. Sports Psychologists use a term 'Optimum zone' for best performance in a given situation. It makes a player to remain focused and take the challenge of competition in positive manner. Home conditions play significant role in keeping a player in Optimum Zone. If we overlook other factors, still we can say that home conditions make player less anxious and more self confident for the competition which is the key to the good performance. We have found some scientific evidence related to those physiological states, confirming that this may be a potentially fruitful area of research.

Conclusion:- The existence and magnitude of home advantage has been established by several studies. However, scientists have failed to isolate a dominant factor that is responsible for this phenomenon. According to available scientific literature, it is likely that a number of individual factors interact with each other and influence the psychological and behavioural states of coaches, referees, and players in a manner yet to be established. Thus, home advantage is probably the result of their combined effect and the influence of other less explored factors such as competition pressure, athletes' salaries or even ticket prices. Coaches and managers could use the available information about home advantage to adopt strategies that would abrogate the negative influence of a hostile crowd; to create routines that generate a familiar ambience, even in away competitions; to prevent the fatigue associated with long travels; to take into account a possible referee bias; to evoke territoriality; to promote positive psychological and behavioural states; and to make optimal coaching decisions to improve the performance level of their athletes. Currently, few studies have investigated the psychological and behavioral states of coaches, referees and athletes in home and away competitions. Therefore, future investigations should focus on factors that influence these psychological states that can have a profound impact on sport performance, having consequences for all the involved elements: managers, crowd, media, athletes, coaches, sport psychologists, referees, etc.

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