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A Qualitative Analysis of Perceptions of Venue: Do Professional Soccer Players and

Managers Concur with the Conceptual Home Advantage Framework?

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Abstract

Whilst a considerable amount of archival research has been dedicated to exploring the home advantage, little is known about the beliefs which key agents hold about the phenomenon. The aim of the study was to explore the cognitions of professional soccer coaches and players to ascertain their perceived reasons for why teams perform consistently better at home than away. A purposeful sample consisting of three male professional soccer players and six male professional soccer managers participated in semi-structured interviews. Framework analysis was employed to investigate consistency with Carron, Loughead and Bray's (2005) revision of Courneya and Carron's (1992) original conceptual home advantage framework. The results indicate that key stakeholders' views are in keeping with the framework, though both players and managers place a greater emphasis on the impact of the referee.   These findings offer a number of insights into implications for behaviour and suggest avenues for further research.

Keywords: home advantage, soccer, managers, players, framework analysis

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Coaches Concur with the Conceptual Home Advantage Framework?

Explanations for the home advantage phenomenon have been the subject of academic

debate ever since Schwartz and Barsky (1977) illustrated its pervasiveness and speculated

on its causes. Courneya and Carron have defined the home advantage "the consistent

finding that home teams in sports competitions win over 50% of the games played under a

balanced home and away schedule" (p.13). More recently a meta-analysis examining the home

advantage in athletics has indicated an overall 60% advantage in favour of the home team

(Jamieson, 2010).

Factors such as crowd support and density, referee bias, venue familiarity, territoriality,

travel fatigue and rule factors have all been seen as probable determinants of why teams

tend to perform better at home than they do away (Pollard & Pollard, 2005).

In their comprehensive review of the home advantage, Courneya and Carron (1992)

proposed a framework for game location research (see Figure 1) outlining the major

interpretations of the home advantage. Their review concluded that considerable research

into the mechanisms behind the home advantage was still necessary, a sentiment echoed

by Pollard (2006), who stated that definitive causes of the home advantage remain unclear.

The original game location framework (Courneya & Carron, 1992) incorporates five

factors consisting of game location, game location factors, critical psychological states,

critical behavioural states and performance outcomes. Game location represents the venue

location, home or away, while game location factors encompass the crowd, learning or

familiarity, travel and rule factors that impact on a home or visiting team. Critical

psychological states refer to the groups of individuals - namely, coaches, competitors and

referees - who can be affected by emotion, anxiety, self-presentation and outcome

expectations which can result as a consequence of a competitive encounter. Critical

behavioural states apply to the same collective groups, including effort expenditure,

aggression, tactics and subjective decisions. Finally, performance outcomes occur within

three distinct stages: primary, which reflects skill execution and includes variables such as

batting average and penalties; secondary, which represents intermediate factors reflecting

factors needed to win a game such as points scored; and lastly tertiary, which outlines the

traditional outcome measures for the final competitive event, such as win or lose and

points differences.

The original framework was reviewed a decade later (Carron, Loughead & Bray, 2005),

and it was suggested that some areas of the framework were due for modification,

particularly advocating further examination of the critical behavioural states of managers

and athletes. The conclusions proposed a revised version of Courneya and Carron's

(1992) conceptual framework (see Figure 1). The most significant difference between the

two frameworks is the omission of officials in the revised model. Carron et al. (2005)

acknowledged that officials can provide a significant contribution to the home advantage

but argued that because game location does not vary for them (i.e., they do not have home

or visitor status), specific relationships could not be tested. For instance, their

psychological preparation should not be systematically affected by venue. The authors

suggested officials' behaviours would be better considered as covariates or moderating

variables. One further noteworthy change is the addition of physiological mechanisms to

the critical psychological states factor, which enters the framework in the light of the

increasing literature base in this area. The inclusion of physiological factors such as

territoriality and hormones provides one of the newest additions to the understanding of

the home advantage phenomenon and has received increased research attention (Aquilar,

Jimenez & Alvero-Cruz, 2013; Carré, Muir, Belanger & Putnam, 2006; Neave & Wolfson, 2003).

Insert Figure 1 Here

The framework is well supported by a plethora of archival research pertaining to the home advantage across different sporting domains (Agnew & Carron, 1994; Courneya & Carron, 1992; Schwartz & Barsky, 1977; Snyder & Purdy, 1985) as well as experiments demonstrating contributory processes such as referee bias in football (Nevill, Balmer & Williams, 2002) and audience effects (Butler & Baumeister, 1998). However, little research exists into the extent to which the explanations featured in the conceptual home advantage framework are accepted by key sports personnel, such as players and coaches, and results have been largely inconsistent.   Bray and Widmeyer (2000) noted that intercollegiate basketball players endorsed familiarity and crowd support as the most influential causes of the home advantage, while Anderson, Wolfson, Neave and Moss (2012) reported that football players and fans focussed more on the impact of officials than did referees, while fans emphasised their role in helping their team to perform well at home.   Gayton, Broida and Elgee (2001), though, found no clear attributions of causality among high school coaches. These studies indicate few or no clear endorsements of causes of the home advantage.

Waters and Lovell (2002) combined quantitative data with interviews in examining the perceptions of five professional English soccer players with regard to their perceptions of the home advantage. Interviews revealed that players did believe strongly in the home advantage and endorsed causal factors such as differences in physical and mental player states, sleep issues, crowds and referee bias. Their statistical analyses of mood data, though, showed few expected differences in players' states and expectations at home and away. Indeed, some of the players were surprisingly less anxious when playing away,

possibly due to their perceptions of less pressure to win when away from home. This finding, though, is contradicted by studies showing positive changes in mood as a result of performing at home (Terry, Walrond & Carron, 1998; Thuot, Kavouras & Kenefick, 1998). Given the inconsistent findings with regard to causes and responses, further research is needed regarding perceptions of causes of the home advantage and responses to the venue. In particular, it is possible that paper and pencil measures, with their problems of constrained responses, social desirability and instrument insensitivity, are on their own unable to delve into the complexities of perceptions. Perhaps the rich levels of detailed observation and elaboration in qualitative approaches are better equipped to explore and ascertain the beliefs of soccer managers and players regarding venue.

The present study uses framework analysis, a qualitative data analysis method similar to grounded theory which has been frequently utilised in applied policy research. It differs from grounded theory as it is more suited to examining research with specific questions, with a limited time frame and a pre-designed sample (Ritchie & Spencer, 1994; Srivastava & Thomson, 2009). The more detailed depiction of perspectives from the agents who are directly involved in the home advantage phenomenon might be able to yield an insight into how they conceptualise the causes of venue effects and how they feel when playing at home as opposed to away.

In order to address the somewhat limited research pertaining to the underlying mechanisms of the home advantage and the lack of qualitative research into the phenomenon, the aim of the current research was to give professional soccer players and coaches the opportunity to draw upon their previous experiences in identifying the most pertinent factors involved in the home advantage. Whilst quantitative approaches have assisted in the understanding the factors which directly contribute to the home advantage, the insight into these factors provided by managers and players is somewhat lacking.

Moreover, knowing whether their perceptions are consistent with the factors included in Carron et al.'s (2005) revised game location framework could be extremely useful for understanding how coaches and players anticipate and prepare for home and away competitions. It is possible that certain elements of the framework are highly salient while others are seen as relatively trivial or maybe even diluted given certain advancements, for instance with regard to new stadiums and better travel. Sport psychologists, if they have objective evidence showing that factors normally overlooked do have an impact on venue effects, can bring these to the attention of coaches and players as well as emphasise these in their match preparation advice. Consequently, in order to progress this area of research the present study will aim to establish players' and managers' belief systems and investigate whether there are evident differences between these groups' perceptions of playing in home and away environments.

Method

Approach

The study adopted a qualitative approach using semi-structured interviews, and framework analysis was utilised to identify soccer managers' and players' perceptions of the causes of the home advantage.

Participants

A purposeful sample of nine participants who had responded to a study recruitment email provided the focus for the study; this was comprised of three male professional soccer players and six male professional soccer managers who also coached their respective teams. Managers had also previously played soccer professionally and were asked to reflect on their experiences as a manager and a player. Participants were drawn

from the English Premiership, Championship and League 1, and ages ranged from 28 years to 60 years (players M = 30.33, SD= 2.09; managers M = 48.17, SD = 8.11).

Procedures

   The study was granted institutional ethical approval, and at the start of the study participants were provided with a project information sheet and asked to give their consent to take part and allow for the interview to be recorded. All interviews took place in person at the players' and managers' soccer training grounds during the season. Interviews were recorded using a digital Olympus VN-2100PC dictation machine, and a semi-structured approach was adopted, primarily based on previously known factors that influence the home advantage. On average the interviews lasted between 40 and 60 minutes.

Interview Schedule

   Questioning opened with a general statement encouraging participants to speak freely about their experiences and outline their perceptions of how they felt about competing at home and if they thought teams gained an advantage because of this. Once the participants had discussed their views, the interviewer (who conducted all interviews) then asked questions based on an interview schedule which consisted of open-ended questions based on the factors identified from the participants' opening statements and also from Carron et al.'s (2005) revised framework. Participants were asked about their perceptions of the venue (e.g. Tell me about a playing venue that is pertinent to you, what did you like or dislike); crowd (e.g. The crowd are known to have a big impact upon football games; how do your fans contribute to your playing experiences?); travel (e.g. How do you feel about travelling to games?); referees (Referees are also an integral part of a playing experience, what are your views of them?). The same questions were asked to all participants, and the interviewer asked for clarification on ambiguous points and used probes to elicit more in-depth responses about playing venue where appropriate (Patton, 2002).

Framework Analysis

The interviews were transcribed verbatim; they were listened to and read through several times to check for accuracy. Data analysis followed Ritchie and Spencer's (1994) five-step procedure (see Figure 2). The first step is data familiarisation, which refers to the process whereby the researcher becomes familiarised with the data collected, in this case interview transcripts. In accordance with the recommendations of Srivastava and Thomson (2009), during this phase notes were also taken documenting the key ideas and most recurring themes. The second phase of analysis is concerned with identifying the most emergent themes; in the current study emerging themes had been identified as a priori via Courneya and Carron's (1992) original conceptualisation and Carron et al.'s (2005) modified framework. However, it is also essential during this stage to allow the data to dictate the themes (Ritchie & Spencer, 1994; Srivastava & Thomson, 2009) The third stage, indexing, refers to identifying sections of the data which correspond to a particular theme, and QSR Nvivo (version 10) was utilised for this step. The fourth stage refers to charting which entailed organising the data which had previously been indexed into charts of emergent themes. More specifically, Ritchie and Spencer (1994) report this should be related to the headings and subheadings detailed in the thematic framework. The last step, mapping and interpretation, involved developing a schematic diagram to guide interpretations of the data set. A true reflection of the participants' attitudes, beliefs and values must be provided at this stage (Ritchie & Spencer, 1994; Srivastava & Thomson, 2009).

Scoring Scheme for Thematic Analysis

A scoring scheme for writing up qualitative thematic analysis was employed (Cooper & Rodgers, 2006) (see Table 1). The procedure assists with the description of weighting regarding codes or categories (the number of participants who have alluded to a particular

theme). The authors suggest that 'plain English' terms such as 'around half' is used to describe 50% of the sample; these are terms which can be used to describe the frequency or occurrence of themes. The themes were then reviewed by the research team, firstly to ensure all coded data within each theme was consistent and secondly to check that all of the themes adequately represented the data. All of the themes were defined and named by the research team.

Insert Table 1 Here

Results

The aim of this study was to give an in-depth account of the key beliefs held by players and managers regarding playing venue and the factors which ultimately contribute to the home advantage. The views obtained from players and managers were considered separately, and Carron et al.'s (2005) revised game location framework provided the focus of the analysis in order to examine perceptions of game location (home, away); game location factors (crowd, learning, travel); critical psychological and physiological states (competitors, managers) and critical behavioural states (competitors, managers). It should be noted that two factors included in the framework were omitted from the current study: performance factors, as the study is not statistically exploring win/loss ratios, and rule factors, which are not applicable to soccer.

This in-depth analysis of data has identified and verified similar factors in Carron et al.'s (2005) framework; however, findings revealed referees were still believed to be an instrumental component in relation to game location factors. The emergent themes based on the framework are discussed in the following sections, providing a comprehensive discussion which expands on previous knowledge. The source of quotation pertaining to managers is represented using *'M'* and the source of quotation pertaining to the players is identified using a *'P'*.

Game Location

All participants discussed their experiences of playing at home and away in great detail. Some noted their favourite and least favourite soccer grounds at which to play. Not surprisingly they indicated a preference towards playing at home rather than away and discussed distinct differences between their experiences of playing away and their more familiar home venue.

Home. Both soccer managers and players described in great detail the advantages of playing at a home venue, many commenting on the convenience, good atmosphere and impact of the crowd, as well as how crowd support could help raise a player's and team's performance levels.

> I think when you have the fans behind you…like 50,000 fans, big atmosphere, I think it helps the players give their best. I think when you play at X erm…it's a big game, you have a big atmosphere. I think it's easier and you feel more confident when you play at home (P1).
>
> My experience tells me as well that sometimes players will give an extra 5-10% playing at home than not and so that enthuses on the amount of desire that will be created at home because they have the home supporters and…. home is convenient sometimes playing away from home it can be….a smaller dressing room it can be worse conditions, worse pitch so I think sometimes the convenience of playing at home helps (M3).

Managers and players tended to identify the same key aspects of playing at home as being important for increased performance. Indeed, the quote highlighted by one manager (M3) suggested he was aware that sometimes he felt players increased their efforts when playing at home and suggested this was created largely by an appreciation of surroundings

and the impact of the crowd.

Away. All players and managers highlighted playing away from home could sometimes be an unpredictable experience with comparisons drawn between types of stadium (old and new) and how they felt at the mercy of the team they were visiting in terms of access to facilities and things they might require.

You go away from home and it's slightly different it's role reversal, instead of being able to go and dictate you're being dictated to. The fact that if you need anything there's a 99.9% chance you get it when you go away from home it might not always be the case they may not be in a position to be able to do it (M4).

When you play in some old stadium like X or X you know it's not very nice….unfortunately you have to play at home and away. For me I don't like to play away, it would be perfect to play at home, all the games at home (P1).

Interestingly, some managers when they discussed away grounds and their experiences of playing at away grounds commented on their perceptions of the sometimes underhanded methods the opposition would employ to gain an advantage. The quote below highlights the progression regarding the rules of the game as many of these practices are not acceptable during the modern game.

Away venues would usually mean a smaller dressing room and that was because a lot of the dressing rooms you used to go to they tried to make you feel a bit inferior, I remember a lot of occasions where there'd probably be a broken a mirror, they'd probably be darker than the home dressing room and that was to try and make yourself feel a bit gloomy, there's even instances where the heating's been turned up…the balls that you'd warm up with I mean everyone takes their own now whereas you'd always used to get 3 or 4 from the opposition that were probably soaked in

water before, there was always these, trying to make it more difficult for you (M3).

From the highlighted quote it seems that manipulative practices were in existence and teams used to employ these to gain an advantage over a visiting team by making it more difficult for them to win. The manager highlighted that tampering with the ball is no longer an option as visiting teams now bring their own soccer balls to away matches and use them for pre-game practice.

Game Location Factors

Crowd Factors. All participants identified the role of the crowd as having an impact on the home advantage, and they noted the instrumental role the audience can play in influencing a player's performance. Of all of the factors identified, the crowd was by far the most frequently discussed and emphasised by both players and managers.

I think the crowds were fantastic really, and I think even when the players probably weren't er…at their best I think the crowd lifted them to you know give that little bit more which I think all the good crowds do (M6).

Yes of course for a player the big thing is to have the fans behind you, if the fans like you like a player….it's perfect because me I know, the fans like me as a player at X because every time I come to play at X, they support me…they're behind me sometimes there are some songs you know about my name and about me yeah of course and the best…best is the fans, the best thing when you play at home is the fans (P1).

Interestingly, some interviewees also commented that a disillusioned or agitated home crowd could work against the home team and also help to motivate the away team. One player suggested that sometimes managers use this as part of their team talk, and when away teams sense the crowd going against their team they use it to their

advantage. The following quotes highlight this from the perspective of managers, who use this to motivate their teams:

> I would imagine the effect it has when the teams have poor home records because you get the opposite if something and they're not playing well and they get that negative reaction from the crowd which effects and as the away team I think you can sense that more (M6).

> If we went to X away it their fans if we get on top of them, X away as well their fans, we can hear them and as an away side that gives you… you think that they're under pressure now, and they start trying to do things out of their norm to try and get better but that's when they make mistakes. Sometimes that's part of your team talk (P2).

This highlights the detrimental effect a home crowd can have on their team which can result in a worsened performance. It also suggests opposing managers are highly aware of home teams with a frustrated home crowd and how they can use this to their advantage.

Learning/Familiarity. All participants mentioned familiarity as a cause of the home advantage, discussing in great detail venues where they had played or managed and describing what they liked and did not like about certain venues. Both managers and players commented on the luxuries associated with playing at a home venue and the external factors that made a player's experience easier. Examples reported by interviewees included having their own car parking places and a designated space in the changing room. However, for many interviewees it was also about seeing familiar faces within their club and being able to call upon them if needed; these factors are illustrated in the following quotes:

> It's a more familiar feeling, the people when you get there the parking in your own

parking place all the way through to like I say familiarity of seeing people you're

comfortable with, and the fact that if you need anything there's a 99.9% chance you

get it (M1).

Yes I think when you're playing at a club you're obviously….and the clubs that I've

played at you're playing a lot of games I've been here, you feel you, you are used to

walking out, you're used to surroundings (P2).

Territoriality. Closely related to familiarity is the concept of territoriality. Some of

the managers and players discussed how their home stadium was like a second home and

that they felt protective over it. They discussed having their own seats within the changing

room and feeling protective towards the stadium due to the amount of time they have spent

there.

 It's just like when you play at home you have like your own proper seat and your

cupboard and your seat every time is in the same place, when you go away…it's not

like usual the dressing room, no it's not very nice because you don't have the fans,

you don't have the dressing room it's a different kind of atmosphere/feeling (P1).

It was more like home because I spent most of my time there…you know you're

there on a daily basis the fixtures and fittings becomes second nature. The changing

rooms, the corridors, the going out on to the pitch, the pitch itself it becomes part of

what you're about (M5).

Although the managers and players did not directly use the term 'territoriality', it is

evident from their comments that they view their space as their own. Knowing the fixtures

and fittings much the same as they would view their own homes indicates a perception of

primary territoriality (Altman, 1975).

Travel.   Mode of transport was identified as one of the most pertinent factors associated with travel. It was evident from the players and managers interviewed that they had different travelling experiences.

If we've got to go away a longer distance we travel the day before, sleep in hotels and that's a bit different, but you're still quite well rested and things. I don't really like travelling on the day of games and we have done that a couple of times if it's only an hour, hour and a half but I prefer to be at home, or travel overnight, I'm not a fan of travelling on the day (P3).

As a player at X we used to fly quite often to games and that made preparations a lot in terms of the physical side a lot easier…you got there in decent shape whereas it stands to reason that a 6-7 hour journey on the bus is not going to do you the world of good. I would imagine you could do some interesting studies with the teams that have to travel long distances in the lower leagues that their away form will probably not be successful and it's easy to understand why (M2).

Nearly all of the managers and players preferred travelling to away venues the day before a game, and some of them also indicated they preferred to fly to venues. For some this was considered a luxury and was very dependent on the finances of the clubs with which they were involved. For some of the players and managers the mode and day of travel in relation to the quality of the hotel were identified as having a substantial impact on their preparation for a game.

Referee Factors. Referees have become increasingly under the media spotlight, with criticisms emerging from soccer managers and players about physical fitness, decision-making and bias towards certain players and teams. Although the revised framework omits the role of the referee, all managers and players discussed the instrumental role of the

referee, with some feeling strongly about the impact that referees can have on a game and especially game outcome.

I think the home fans when they put pressure for 90 minutes on the referee… they can affect him…little decisions you know when like you have someone fall on the floor in the box and you have 50,000 fans start to boo or you know to do some noise it can affect the referee. I think the fans can help you get something from the referee (P1)

They (referees) are put under intense pressure by supporters and management and you know I think it's for really, the top teams like X, X, to get more penalties at their home grounds than it is if you're the away team, if there was a similar sort of incident and it was border line there'd be more chance of one of the top, top home teams getting the decision than the away team (M5).

Despite some suggestion of referee bias by both managers and players, some of them also acknowledged the difficulties that referees can sometimes face. They specifically highlighted the pressure that referees are under in terms of all of the scrutiny directed at them via the media and how pundits, managers and fans had the benefits of video replays.

 I think it's obvious that they can be (influenced) with their decisions, I'm not one of those who really slag referees off. I think TV has a lot to answer for now and referees are under the spotlight more than ever. How many of us have actually watched a decision and we're not sure first time we have to see a replay, then a replay then it's slowed down and we make our decision. I think they have a hard job but yes they can have a massive bearing on the outcome of a game, with their decisions. All you hope is that they're fair (M3).

Critical Psychological and Physiological States.

In the revised version of the framework, critical psychological and physiological states have been combined, largely due to findings regarding hormone mediated responses to playing venue. This phenomenon has been supported by managers and players in the current study who alluded to experiencing certain physiological and psychological feelings prior to playing at home.

Physiological Responses. Half of the interviewees frequently alluded to feelings that a hormonal or physiological response could be occurring prior to a game by referring to the 'adrenalin surge' or 'adrenalin rush' terms typically used within the sporting domain. The managers also indicated they experienced this in the same way as they had as players.

Yeah I think you're definitely aware of it when things go well because I think you…you know get that adrenalin surge because you are doing well and the crowd respond (M4).

I was only ever out the game for 3 months when I left X but I missed that adrenalin…. cos you can't, take a drug or anything like that to give you that adrenalin rush that is there when you win a game or when you score a goal it's amazing (M6).

Well obviously there's the butterflies because you get them…I think it's probably a good and right thing to do to have them cos it shows that you care, you want to do well- one for your teammates and two for your management team, but also three for your home supporters, you know to give them something to shout about so, there was obviously apprehension and the excitement, apprehension and the build-up (M5).

It is evident from the quotes that interviewees were aware of a physiological response to playing. One interviewee discussed experiencing a physiological response when walking around his stadium in a non-competitive situation. This provides support for conditioned responses and the physiological reactions associated with venue. This response also links

to familiarity and territoriality, highlighting the strong protective feelings that a player can exhibit about a territory even when not playing a competitive game.

Stressors/Anxiety. Most players and managers discussed the psychological demands of playing at home and away. One player mentioned the intimidating impact of a partisan crowd at particularly vociferous grounds when they were warming up as a substitute.

> You get some teams that are more abusive, get more behind their team it sort of
> depends if you play at X if you come on as a sub and warm up on the side you just
> get loads of abuse you do have places that are more like that (P3).

A couple of the managers also highlighted that they felt anxious before a home game, indicating they still felt nervous and apprehensive in their managerial career prior to a game. This provides some indication of the psychological and potential physiological stress to which elite managers are subjected in creating a winning team.

> Always nervous and couldn't really have much breakfast and things like that you
> know tummy going round …even now I get the same thing and if I didn't feel like
> that I think there'd be something wrong with me really, but that's just how I am
> really…nervous. I think it's the adrenalin that's going, worried about your
> performance or now worried about the team's performance (M1).

Critical Behavioural States

Most of the participants discussed a variety of behavioural states that they experienced when playing at their home venue. Interestingly, they identified experience as a factor; this has not previously been discussed in the home advantage literature. They indicated how their previous experience could assist them with dealing with stressors such as a negative crowd or dealing with defeat. The quotes below highlight managers' and players' perceptions of specific critical behavioural states:

Experience. Some of the participants alluded to their perceptions of experience in managing some of the factors associated with the home advantage. Both players and managers suggested they had built up some resilience to issues they encountered that would have impacted on them more when they were younger; they noted that they had witnessed negative effects on the younger players in their team.

"When I was younger yes…I think when I was younger maybe the crowd…. or to play in front of 50,000 fans would put pressure on me but now I'm 31 I've got experience and everything… now it's more easy for me to play every game you know, I don't have the pressure to play now…when I was younger a little bit now it's more usual for me to play in front of 50,000, even if I play away (P1).

I've got my kids, family, just go home and you can just walk through the door and forget. I think there are some players and I didn't used to be able to forget when I was younger. Now, experience that does help you put things in perspective but you do still think about things. What's helped me is being able to do that, in the past when I've had a lot of time and gone home should have done this, you can beat yourself up. I don't like to think about it too much as I can't do anything about it (P2).

Tactics. The quotes obtained from players and managers provide an interesting insight into the belief systems held about tactics and also reveal an indication of the time spent devising appropriate strategies with regard to the venue. It is clear that some managers felt more pressure to get a win at home than away.

I think you try and, I think you are aware that winning away from home is more difficult, getting a result away from home is more difficult than getting a result at home regardless of who you're playing, you know you could play a team that's struggling and it's at home so you know it's going to be more difficult, tactically you

know you would go there maybe with a more don't get beat attitude rather than a

we're going to win this, which is what you get at home you know we must win this at

home, there's a definite difference between home and away (M6).

I think sometimes you can see some big differences when the team plays at home to

away…like I think you attack more when you play at home and defend more when

you play away (P1).

Around half of managers identified that tactical changes needed to be made depending

on whether their team was playing at home or away. For players this change was perceived

as much more subtle and was viewed more in terms of being less likely to play attacking

soccer away from home.

Discussion

The present study gained an in-depth understanding of the underlying perceptions held

by players and managers with regard to the home advantage in soccer. In addition, the

investigation was designed to examine these perceptions in relation to Carron et al.'s

(2005) revised conceptual framework. The results offer verification of the factors

encompassed within this framework but also provide a greater understanding of these

complex pertinent factors from the individuals who are potentially affected by them.

All of the participants in this study had considerable histories of playing at home and

away venues and were able to draw upon their experiences to inform the present study.

When asked an introductory question about playing at home and away, all players and

managers stated they preferred playing at their home venues.

There was overwhelming subjective evidence in the current study surrounding players'

and managers' perceptions of the impact of the crowd; all participants identified the

benefits a supportive home crowd could have on individuals and team performance. This

is in keeping with the views of Olympic athletes who met or exceeded expectations and identified the crowd as a positive performance influence (Gould, Guinan, Greenleaf, Medbery & Peterson, 1999). United States Olympic managers also reported they felt their athletes performed better in Olympic competition with loud, enthusiastic crowd support (Gould, Guinan, Greenleaf & Chung, 2002). The current findings regarding the positive impact of the crowd on performance and potential impact on the referees decisions also gives some substance to the findings of Wolfson, Wakelin and Lewis (2005) who reported that soccer fans believed they played a vital role in in inspiring their team to victory, distracting opponents and influencing the referee. In addition, the impact of spectator booing has also been suggested to increase the performance advantage of the home team and negatively impact on the away team's performance (Greer, 1983).   In support of this research, one manager in the current study reported that his club's scouts check on and warn of the likelihood of particularly supportive opposition crowds. Even though various crowd factors proved difficult to disentangle, particularly the effects of crowd size, density and intensity on players (Pollard & Pollard (2005), the present research provides some indication of the impact of the crowd on key personnel within the game, with all of the interviewees highlighting the crowd as an integral component of the home advantage.

Venue familiarity was strongly identified by managers and players in the current study as providing the home team with an advantage. This finding is in support of previous research with these groups, endorsing venue familiarity as the major home advantage contributor (Bray, Culos, Gyurcsik, Widmeyer & Brawley, 1998; Gayton, Broida & Elgee, 2001). Frequent exposure to a stadium has also been suggested to make the home team feel more confident, comfortable and assertive (Wolfson & Neave, 2007), and this was corroborated by the majority of the interviewees in relation to positive psychological states

experienced when playing at home. Other aspects of familiarity, such the knowledge of the properties of the ball, can also play a role in the home advantage (Dosseville, 2007).

Those players and managers who mentioned travel in the present study highlighted mode of travel, quality of hotels and routine disruption as a consequence of travelling away. Courneya and Carron (1991) reported few effects for travel on performance, though travel has been seen to form part of elite sports performers' organisational stress (Fletcher & Hanton, 2003; Hanton, Fletcher & Coughlan, 2005).   It appears that travel is perceived to be more troublesome than statistics suggest.

Referees have become increasingly under the media spotlight, with criticisms emerging from soccer managers and players about physical fitness, decision-making and bias towards certain players and teams. It has been widely reported that referees can display a bias towards the home team; for example, studies have shown that referees have given more red cards and penalties against the away team when compared to the home team (Nevill, Newell & Gale, 1996) and have been more likely to award legitimate penalties to the home team as opposed to the away team (Sutter & Kocher, 2004). The home crowd have also been reported to have a significant effect on referees decision making, with an experiment by Nevill, Balmer and Williams (2002) demonstrating that bias was significantly higher in referees who heard genuine crowd noise as opposed to those in a no noise condition. Indeed, the interviewees in the current study noted that some referees could favour the larger, more successful teams in their home environment on critical decisions such as penalties. Further, they discussed how the home crowd were instrumental in swaying referees to make decisions in favour of the home team. Notwithstanding, one pertinent factor which emerged from the interviews was the acknowledgement and awareness of the difficulties that referees faced. Interviewees gave their support to using technology to assist referees, and a couple of managers also

suggested that former players should be directed towards refereeing due to their greater experience of the game. The current findings could have an overall impact on the practical application of the revised framework, as even though referees do not have home or visitor status, players and managers believed referees do play a major role within the home advantage. These particular findings are in contrast with Carron et al.'s (2005) decision to omit referees from their framework. The, potential role and impact of the referee thus warrants further investigation, especially in the light of what players and managers have inferred in the current study.

Players and managers identified general feelings of nervousness and anxiety when playing away whilst also identifying the negative impact of the away team's supporters on their psychological state. In contrast to previous studies, some of the managers and players also reported that they sometimes felt excited but also apprehensive due to expectations of them prior to a home game. This seems to be a consistent finding among professional soccer players who have identified combined feelings of confidence and anxiety at home (Waters & Lovell, 2002). Rugby players have also reported enhanced positive psychological states at a home venue (Terry, Walrond & Carron, 1998). Pollard (2008) has suggested that players will have a heightened awareness of the existence of a home advantage, which will ultimately affect their mental attitude before and during a game. In addition, the psychological effects stemming from this awareness could increase their confidence at home, though when combined with agitated crowd effects might not always facilitate the continued existence of the home advantage (Pollard & Pollard, 2005).

Closely linked to psychological states is the concept of a hormone-mediated response to playing venue and associated territoriality. This avenue of research provides the newest addition to home advantage literature stemming from recent studies showing increased testosterone levels, associated with aggression and dominance, at home in ice hockey and

soccer and ice hockey players (Carré, et al., 2006; Neave & Wolfson, 2003). Carré et al. also measured ice hockey players' cortisol, typically seen as a stress indicator, and reported their pre-game levels were also higher at home. Although this hormone-mediated response has been documented experimentally, studies have yet to determine the beliefs held by sports personnel with regard to why this elevation might occur. It is possible that the mix of emotions associated with playing at home is indicative of a challenge, associated with increased cortisol.

The current study provides the first indication that players and managers have a potential awareness of physiological responses at home. This was highlighted by managers and players referring to the 'adrenalin surge' or 'adrenalin rush,' terms typically used within the sporting domain. Managers also indicated they experienced these feelings in the same way as they had as players. On a related note, some of the responses given by interviewees indicated a territorial or strong protective response in relation to their home venue. This was of a similar strength to those felt over a primary territory such as their home (Altman, 1975). Territoriality, although primarily discussed in relation to familiarity, does also have a relationship to physiological responses (see Neave & Wolfson, 2003 for review).

Critical behavioural state research has received little empirical attention (Carron et al., 2005). Most of the research to date has focussed on aggressive behaviours and the tactics employed by teams with regard to how they differ between venues. One recent study has attempted to link behavioural states to audience effects, with golfers performing best under silent crowd conditions and worse amid jeering and cheering. Moreover, in the same study, baseball pitchers threw significantly fewer strikes with an unsupportive audience compared to a silent or supportive one (Epting, Riggs, Knowles & Hankey, 2011). In the present study, in contrast to previous research linking home players with increased

aggression (McGuire, Courneya, Widmeyer & Carron, 1992), players and managers did

not allude to feeling or acting more aggressive at home. Instead, they focussed on the

extent to which their experience could be used to cope with the increased pressures and

expectations when playing at home. In support of the inclusion of tactics in the framework,

some of the players and managers discussed tactical differences in relation to venue and

acknowledged they felt it was harder to win away from home. Teams playing away from

home sometimes can adopt a cautious and defensive approach to the game, specifically

during the knock-out stages of a European competition (Pollard & Pollard, 2005);

however, Pollard (2008) later reported that no firm evidence exists to link tactics to the

home advantage. The current finding provides an interesting avenue for future research, as

even though statistical based evidence may not support the impact of tactics in the home

advantage, the players demonstrated an awareness of tactical differences in relation to

venue.

Overall, the results suggest that the nature of the home advantage is not simplistic,

supporting previous suggestions of a multifaceted phenomenon comprising a number of

inter-relationships between variables. Additionally, the findings show that the core beliefs

held by managers and players are generally compatible with Carron et al.'s (2005) revised

conceptual framework. The perceptual data obtained suggest a number of future research

avenues and applications. Among these is the need to identify the role of the referee in the

revised framework, perhaps as part of game location factors. Since players and coaches do

focus on the role of the referee, it may be useful to develop preparation strategies to help

them deal with their expectations and responses.   In addition, the potential effects of

facility quality and routine disruption to managers and players could be explored,

especially at lower league levels where finances supporting comfortable settings and

transportation are more restricted. Bray, Law and Foyle (2003) reported that low quality

teams had a slightly smaller home advantage than high quality teams. Interestingly, Allen and Jones (2012) have recently reported that teams who are located towards the bottom of their leagues show a greater home advantage than those who are near the top of the league.

The present study is based on self-reported behavioural and psychological data provided by a select group of professional individuals; this could compromise the generalisability of the findings in relation to different sports performers. Future research is thus needed to ascertain whether these belief systems and resulting effects are consistent across other team sports and subgroups differing in age, experience and gender (see Bateup, Booth & Shirtcliff, 2002).

In conclusion, the findings of the study add to the existing literature base in several ways. It appears that players' and managers' beliefs are largely in keeping with the factors represented within the revised framework, the major departure being a strong emphasis on the influence of referees on the home advantage. In addition, while critical physiological and psychological states are clearly perceived as salient, the results suggest that a mix of positive and negative responses are prominent in home conditions, often as a result of changes in the crowd's behaviour. Thus the interaction of factors may need further exploration. These findings have practical implications for key personnel involved in elite soccer. Managers and players, as well as fans and referees, could draw upon these results to increase their own awareness of factors which may impact on their expectations, preparation for competition and behaviour during games. Indeed, interventions dealing with such effects should be developed and integrated into psychological preparation strategies. Ultimately such knowledge could be used to maximise a team's home advantage and minimise its difficulties away from home.

Acknowledgements

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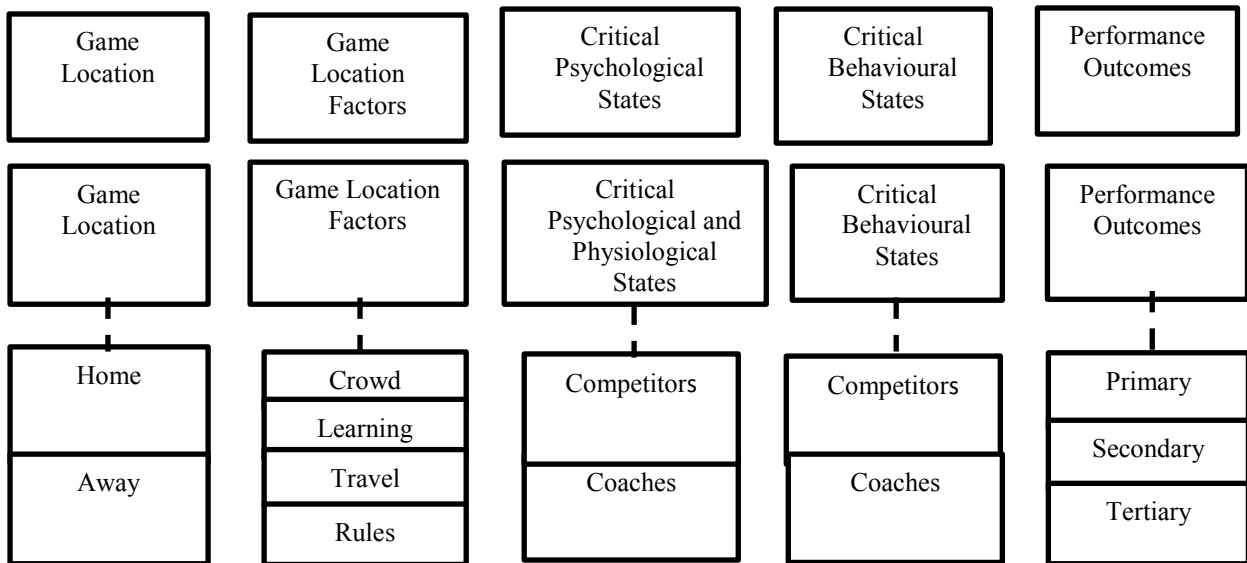
Game Location	Game Location Factors	Critical Psychological States	Critical Behavioural States	Performance Outcomes
Game Location	Game Location Factors	Critical Psychological and Physiological States	Critical Behavioural States	Performance Outcomes

Home	Crowd	Competitors	Competitors	Primary
	Learning			Secondary
Away	Travel	Coaches	Coaches	Tertiary
	Rules			

Figure 1 Carron, Loughead and Bray's modified Game Location Framework (2005, p 406)

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Familiarisation
        ↓
Identifying a thematic framework
        ↓
Indexing
        ↓
Charting
        ↓
Mapping and Intepretation
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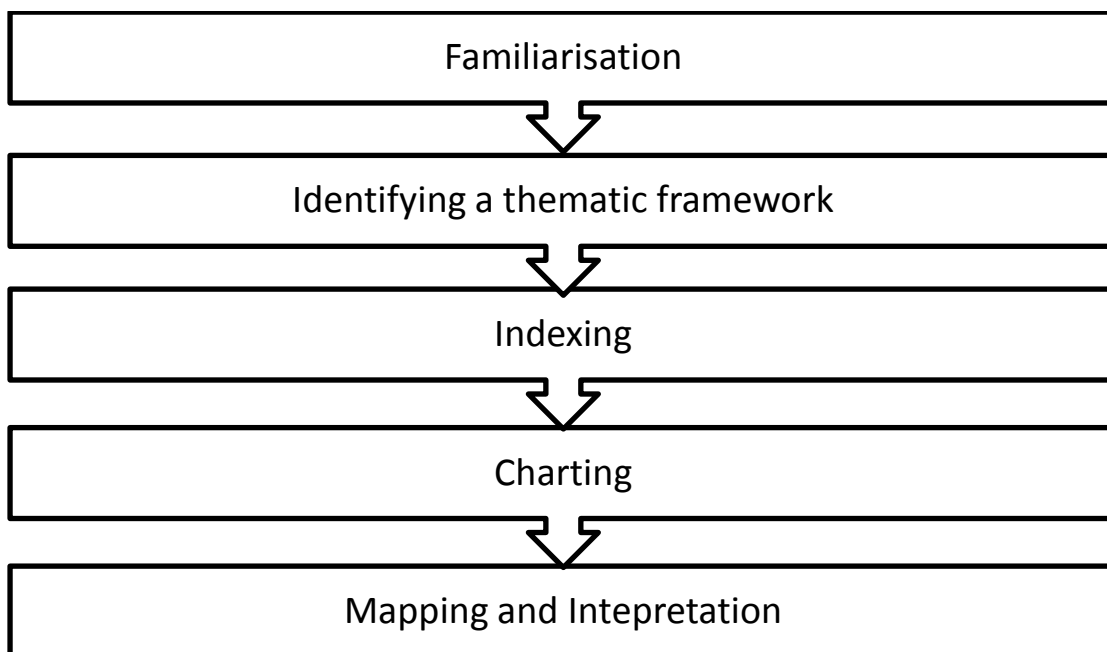
Figure 2 The five stages of framework analysis (Ritchie & Spencer, 1994)

Table 1 Cooper and Rodger's (2006) scoring scheme for qualitative thematic analysis

		Number of Participants (6-11)					
		6	7	8	9	10	11
All	All participants	6	7	8	9	10	11
Nearly All	100% -1 participant	5	6	7	8	9	10
Most	50%+1 to 100% -1	4	5	5-6	6-7	7-8	7-9
Around Half	50%+1 participants	3	4	4	4-5	5-6	5-6
Some	3 to 50% +1 participants	-	3	3	3	3-4	3-4
A couple	2 participants	2	2	2	2	2	2
One	Only 1 participant	1	1	1	1	1	1