DEVELOPING THE CASE FOR PRO-ENVIRONMENTAL PRACTICES IN COMMUNITY-BASED ASSOCIATION FOOTBALL IN ENGLAND

BY

ANDREW PAUL CARMICHAEL

A THESIS SUBMITTED IN PARTIAL FULFILMENT FOR THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY AT THE UNIVERSITY OF CENTRAL LANCASHIRE

APRIL 2019

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Type of Award **Doctor of Philosophy**

School **School of Sport and Wellbeing**

ABSTRACT

This thesis proposes the development of pro-environmental practices within football in order to reduce the sport's environmental impact. While research into the relationship between sport and the environment is growing, it remains largely focused upon the professional, commercial, and spectacular elite sector of sport. Much of the sport and environment literature, and advice provided by sport governing bodies, is written from the perspective that individual-centric models of behaviour are absolute and self-help can achieve desirable outcomes. Instead football should be considered as a social practice and the way to achieve change is to examine the relationships between the elements that contribute towards the creation of that practice.

Qualitative methods, comprising interviews and a period of participatory action research, involving the researcher undertaking a consultancy role within a community-based football club, were used to identify the extent of the problems facing such organisations. Collaborative efforts were made to reduce the environmental impact of the club via a range of practical measures. A shortage of resources, both human and financial, an absence of governing body programmes or initiatives to promote the environment, and a lack of control over the facilities used, were identified as barriers to this. This confirms community-based football clubs are beyond the scope of existing pro-environmental behavioural thinking, with little option in the management of their operations other than to follow existing routines.

The results illustrate the need for a wider debate on how to develop pro-environmental activity in sport and the experience of the majority of sporting organisations. Community-based football, with its many thousands of facilities, clubs and volunteers that rarely receive promotion in the mass media, can be at the forefront of developing a new approach to tackling environmental issues. This, arguably, offers the greatest challenge, but also potential opportunity, for reducing resource use in the sport and improving the environmental landscape. Drawing on social practice theory the findings from this research support the introduction of 'pro-environmental practices' in football to address the difficulties faced. This questions the existing relationships and interactions in football, and offers reflection for other sports and sectors seeking to alter their own activity.

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INTRODUCTION

The Aim of the Research Thesis

The aim of this research thesis is to propose ways to develop pro-environmental activity within community-based, association football in England. This aim is met by four research objectives: providing a critical analysis of theoretical perspectives on pro-environmental activity, with particular reference to sport, and specifically association football; examining the extent of pro-environmental activity within association football; identifying barriers to the adoption of pro-environmental activity in selected community-based association football[1] clubs; and developing informed insights into how these barriers can be overcome through the promotion of one theory of pro-environmental activity, that of pro-environmental practice.

This introduction situates the research aim and objectives by providing a contextual overview of the natural environment, the extent of environmental concerns and the necessity of action to increase pro-environmental activity. It outlines the relevance of sport to these discussions, noting its contextual and conceptual significance, and identifies that one sector of sport, community-based football, could act as an exemplar for changes in other forms of activity. Finally, the overall organisation of the thesis, and the subjects examined, are described.

The thesis is very different to that envisaged at the beginning of the research. My thoughts about the nature and extent of the environmental challenge for sport and football are much changed. This, as will be shown, is a result of reviewing sport governing body publications, industry advice and academic literature on pro-environmental activity, then trying to implement a programme of environmental improvements from within a football club. I approached the work with, what I believed was, an informed view of managing sports clubs, particularly the environmental aspects of their work, with a previous post-graduate research thesis and employment history to support this. It is now evident I was unaware of the scope of non-professional, community-based football and the operation of clubs in that sector of the sport. Similarly, I had yet to recognise the extent of the body of work that suggests the dominant pro-environmental activity perspective in the popular and academic press, based upon socio-

[1] Association football is hereafter referred to as 'football' and should not be confused with the sport known as 'American football' by those outside of the United States and Canada.

psychological models of individual behaviour, is not the only means to encourage change in those operations. Indeed, the data I collected would suggest that strategies based on those models are not suited to solving sport's environmental concerns and it is the study of, and promotion of change in, *social practices* that represents the best possibility of success for pro-environmental work.

Consequently, I define, and draw a distinction in the thesis between my review of existing 'pro-environmental activity' work, a generic term to describe multiple perspectives representing individual behaviour, its contextual considerations and social practice theory in relation to the environment, and the 'pro-environmental practice' I propose, which focuses on the social practice element of this activity. It is a position I identify as being unrepresented in either the sport literature, or management processes, to date.

The State of the Environment

In the highly influential *Economics of Climate Change*, Lord Nicholas Stern wrote that "An overwhelming body of scientific evidence indicates that the Earth's climate is rapidly changing" (Stern 2006 p3). Despite scepticism by some in the decade since those words that evidence has become even clearer. That the climate is warming is now indisputable (IPCC 2014). The year 2016 was the third consecutive occasion that a global annual temperature record was established (NOAA 2017). Oceans have warmed, ice sheets and glaciers have melted, and sea levels have risen (IPCC 2014). Of particular concern is that the rate of change is increasing. A series of recordings from the year 1880 show that the planet's annual temperature increased at an average rate of 0.07°C every ten years, until 1970, when it began rising at the average rate of 0.17°C per decade (NOAA 2016).

Reflecting this global picture, the climate of the UK has also altered. The most recent decade (2007-2016) has been on average 0.3°C warmer than the 1981-2010 average and 0.8°C warmer than 1961-1990. Eight of the ten warmest years for the UK have occurred since 2002 (in a series begun in 1910) and all the top ten warmest years have occurred since 1990 (Kendon et al. 2017). The most recent decade (2007-2016) has had 9% fewer days of ground frost compared to the 1981-2010 average, and 13% compared to 1961-1990. Nine of the ten warmest years for near-coast sea surface temperatures around the UK have occurred since

1989 (Kendon et al. 2017). Nor is change confined to heat. The last few decades have seen an increase in the average rainfall in all parts of the UK with seven of the ten wettest years occurring since 1998 (Kendon et al. 2017). The mean sea level around the UK rose approximately 1.4 mm/yr during the last century, with the last twenty years recording an even greater rise (Kendon et al. 2017). More than five million properties in England, one in six, are at risk of flooding from coastal, river and surface water (Committee of Public Accounts 2015). The expectation is for more severe flooding, more heatwaves in the summer, changes to water availability, and added pressures on the natural environment (Committee on Climate Change 2015).

The consequences of this environmental change are without parallel (Giddens 2009), indeed they will alter the very nature of human life across the globe (Szerszynski and Urry 2010). And yet humanity is the cause of many of the problems. Many factors influence climate, but the impact of human activity on the rate of change is clear (IPCC 2014). Such has been the influence of people on the earth that a new epoch, the Anthropocene, has been proposed to reflect the changes wrought. Some changes in land use and the levels of greenhouse gases released into the atmosphere, concentrations of carbon dioxide, methane, and nitrous oxide have risen to levels unmatched in the last 800,000 years (IPCC 2014), increase the probability of extreme weather events. These occurrences will in turn influence the choices available to human beings and their ability to act.

There is widespread agreement that the response to climate change will necessitate changes to existing lifestyles as current patterns of consumption are simply unsustainable (Shove 2010a). The emissions related to the consumption of food, water, products and services represent a major contribution to global climate change (Ehrhardt-Martinez et al 2015). Consumption changes, in energy use for example, must be "profound and immediate" (Anderson 2015 p898). Simply monitoring and attempting to mitigate climate change is "likely to involve dramatic changes in social organisation" (Szerszynski and Urry 2010 p1). Yet without a move to a low-carbon economy, a challenging and difficult task, there will be significant impacts on populations, including the availability of the essentials for life (Urry 2010b). In short, we need to adopt "new forms of living, working, and playing" (Shove 2010a p1273).

Responding to this challenge there has been activity, from governments, groups and individuals and a concerted effort by some to create a movement to safeguard the natural world, introducing environmental concerns to the mainstream political agenda (Mansfield and Wheaton 2011). Limiting the increase in global average temperature to less than 1.5 degrees C above pre-industrial levels is the mark by which world governments believe supplies can be sustained and climate danger averted (Rogelj et al. 2016). The last few decades have seen policy measures that undoubtedly have reduced particular impacts on the environment of some human activity; the removal of lead from petrol, the banning of certain hazardous chemicals for use as pesticides and toxic waste treatment. However, this is against a backdrop of rising populations and the increasing industrialisation of parts of the world leading to reductions in the volume and integrity of natural resources (Vlek and Steg 2007). Such pressures do nothing to reduce the consideration of economic growth and development. A series of high profile United Nations Climate Change Conferences, most recently in Copenhagen (2009) and Paris (2015), have produced proposals, statements of intent and non-binding agreements, receiving lukewarm praise and significant criticism (Rogelj et al. 2016). In June 2017, President Trump began the process of withdrawing the United States from the Paris agreement on greenhouse gas emission mitigation.

The reliance on self-regulation, a market-led solution to emissions and voluntary action, has delayed the response to the environmental crisis and, for some, allowed the problem to escalate to the next stage without meaningful change (Davis 2010). Giddens (2009) suggests the lack of progress is due to the paradox that the absence of direct, perceptible danger that climate change provides in daily life causes a level of apathy towards the issue, a situation that may only be overcome once the problems are very much impacting on everyday activities. It is surely more than that. As Urry (2010a) notes, tackling the environmental issues of the twenty-first century requires consideration and alteration of the very way we live. That has not happened as the agenda for environmental action has been set by the disciplines of science and economics, whilst the social sciences have largely been absent from the major debates (Szerszynski and Urry 2010). There has been a focus on the measurement of environmental change and the prevailing view of how to begin rectifying the problem is to modify human behaviour largely through fiscal mechanisms (Urry 2010b), witness the Stern Review's early statement that **"**it is

the science that dictates the type of economics and where the analyses should focus" (Stern 2006 p2).

Yet the pressure endured by the natural environment is relevant to all studies of society as it impacts both industrial and organisational activities (Mallen et al. 2010a). If the study of human behaviour is the solution to environmental problems, and many believe it is suggest Steg and Vlek (2009), then there is a role for examining economic systems and social practices, habits and particularly social life, something "central to the causes, the consequences and the possible 'mitigations' involved in global heating" (Urry 2010a p198).

Sport encompasses all aspects of the environmental debate. As an activity it registers significant and measurable impacts on the environment, with scientific methods at the heart of its landscape management and economic activity throughout its levels of organisation. Sport reaches large populations and offers a highly visible stage for promoting messages that seek to influence environmental behaviour (Casper and Pfahl 2015). It is also a politicised series of cultural practices that offer historical and sociological meaning (Horne et al. 1999). Mansfield and Wheaton (2011) highlight the way sociologists have remodelled the environmental debate and suggest there is a need for academic work to question issues of leisure, consumption and climate change. As such, sport offers a highly relevant, contextually significant, and required, forum for examining solutions to environmental problems that could provide insight for other sectors of society.

The Role of Sport

Though nations may differ on the concepts of what may enrich the daily lives of their populations, sport appears to be a universally acknowledged 'good', with participation valued by governments of all stripes (Manzenreiter 2015). The suggestion that physical activity can help combat health problems, crime and social exclusion is familiar (Downward and Rasciute 2010). Bale (1994) noted three decades ago both the fiscal benefit of sport, and the quality of life increase that can be provided by sports facilities. Sport has a wide reach, it can provide many intangible benefits to a large sector of the population (Humphreys and Ruseski 2009). However, the promotion of sport is not an altogether altruistic practice, and it has been used as a vehicle for advancing political and developmental agendas (Schimmel 2015). Such development may

seek to be positive, such as with programmes to use sport and culture as part of social and economic regeneration in deprived areas (Coaffee 2008). However, as acknowledged by the European Union, it is a double-edged sword, as sport, its expansion, facilities and practices, pose a specific and significant threat to the environment (Geeraert 2016). The possibility of mitigating this environmental impact, whilst retaining the positive features of sport, is the basis for this research project.

'Sport' is, however, a blanket term for what are many diverse activities taking place in widely varying locations utilising different resources and different quantities of resources. At times, the perception of 'sport' has been quite different from that popularly supposed today (Horne et al. 1999), and indeed the extent of a sport and its resonance may lie beyond initial considerations. Currently, the image of 'sport' may be established team sports with world recognition such as football, rugby and basketball, or individual pursuits with high profile, possibly even Olympic accredited, competition like golf, tennis and swimming. Arguably these sports also make the greatest demands on the environment. Casper and Pfahl (2015) suggest the environmental footprint of sport is a product of the hosting, operating and maintaining of sports facilities for events and the organisation and entertainment of their supporters. This must, however, be expanded to acknowledge it is not just elite level sport that is relevant, it is, as this thesis will identify, the mass participation in the sport, by those supporters and others competing themselves, that can have the greatest impact. While a million people taking regular exercise through sport may be beneficial for health, law and order and social integration, it can transfer a significant burden onto the environment, particularly if they require pitches, courses and pools to partake and use cars to reach them. Arguably, this is where the discussion on the environmental impact of sport has focused too selectively on the well-known image of sport, the professional organisations and the high profile events such as the Olympics and World Cups, at the expense of the less visible yet more commonplace mass participation sport.

Casper and Pfahl (2015 p4) propose "a need to examine the natural environment and sport from a broad and holistic perspective" and cite numerous aspects of sport provision as impinging on the planet. This seems sensible, however, they are similarly culpable in marginalising the consideration of non-professional sport when they talk about the importance of scale in the measurement of impacts and solutions. The large organisation, they argue, has

both the footprint and resources to make the environmental issue one of context. Indeed it has, but the context should consider that there may be hundreds or even thousands of small, community-based organisations operating within the hinterland of one large commercial one, providing a much greater impact on the environment, and offering a potentially bigger mitigation of the activity of their sport. Community level sport is different to the elite, and the experiences of a number of institutions operating in this sector will be more generalisable to the situation of the population, particularly those in similar voluntary positions. Whether these smaller organisations can be the focus of a 'bottom-up' movement promoting pro-environmental activity, however, requires examination of the organisation of the sport, the people acting within its service, and the influences upon their actions.

The choice of football as the focus of study of these processes and pressures is timely and relevant. Sandvoss (2003) suggests that modern football is a sport of consumption. Giulianotti and Robertson (2004 p546) note that "sport generally, and football in particular, constitutes a vital site for the theorization and empirical exploration of the multidimensional and long-term process of globalization." As 'the global game', football can offer insight into the unsustainable patterns of consumption and delayed response to climate change that now threaten many of its participants' lives. As will be shown, however, it is not the elite level of football where most of us live, work and play, as Shove (2010a) asks us to examine, but the non-professional, community-based sector, where our actions are localised but together combine to register huge impacts on the environment. Walvin (2001 p252) describes this world and identifies why it has been previously ignored;

> there is another football story to tell; about ordinary, run-of-the-mill football, about boys in the park, schoolchildren driven to games by parents, older men (long past their prime) struggling on bleary-eyed Sunday mornings to recapture their footballing best, and millions more simply kicking a ball against a back wall. It is generally untold because it is part and parcel of the world we live in. We see it, know it, have taken part in it, as children, parents, as players or as spectators. At this level football is just another feature of life's weekly routines and scarcely warrants a passing thought.

Yet, as the comments of Shove (2010a) support, it is those very routines to which we should be giving the most thought.

The Organisation of the Thesis

Following this introduction, Chapter One critically analyses the scale and nature of the environmental debate, the body of literature relating to what I define as 'pro-environmental activity'. It is shown that the subject has been considered from two main perspectives; the causes of activity (a retrospective attempt to understand what makes people act in a particular manner) and how to change that activity (a prospective approach utilising knowledge of the causes of activity). The positions adopted by different schools of thought and their implications for the strategies adopted by those seeking change in relation to the environment are discussed and assessed. Strategies that pursue environmental activity change, and related UK government policies, including consideration of theories of other types of activity change (for example health) are reviewed, in respect of the significant lifestyle shifts considered necessary.

Chapter Two defines and identifies the benefits of sport, and examines the relationship between sport and the environment, with particular reference to football. Data indicating the scope of sports, and specifically football, facilities in England are presented and discussed demonstrating the importance and relevance of the activity in discussions of the landscape. It identifies the demands that hosting the 'sport' of football (codified and made competitive) places on the environment and examines the extent of the existing pro-environmental activity debate in sport, and football. Sport governing body responses and initiatives in respect of the lifestyle changes required to reduce environmental damage are analysed and critically reviewed.

Chapter Three examines the work of the previous chapters in relation to football to show that the playing of the sport is a *social practice*. That a social practice is created from the interaction of *materials, meanings* and *competencies* is demonstrated with reference to examples of other social practices provided in the environmental literature. It analyses the impact these can have on the environment, and the consequences for the consumption of natural resources. The development and state of professional football is critically reviewed and shown to be comparable to these examples, with a footprint beyond the physical imposition identified in

Chapter Two. It examines the contrast between professional football and the community-based version of the sport, with explanation of how the social practice of the non-professional game differs, making it a more relevant and productive forum for studying environmental challenges. This establishes the theoretical framework for the fieldwork.

The methodology employed in this research thesis is discussed in Chapter Four. It identifies the methodological background and context for the conduct of this work, positioning the researcher within the field. The research methodology used and the methods of data collection and analysis are described, namely the qualitative methods of semi-structured interviews and a participatory action research approach.

Chapter Five describes the results of the first stage of field research, which involved a series of semi-structured interviews with both football club and local authority employees. The data provided by the interviews is critically analysed and themes relevant to the research are identified and discussed. Comparison is made between this original data and the points identified in Chapters One, Two and Three. Conclusions are drawn as to the challenges and opportunities for pro-environmental activity in English football afforded by this information, chief among them being that it is established practices in the sport that have to be reviewed should progress on this subject be made.

The challenges and opportunities for pro-environmental activity in English football are explored further in Chapter Six. The chapter describes and analyses findings from a period of participatory action research in a community football club. Contextual information regarding the football club, its organisation and management, is provided. It details the club's ownership and playing models, with identification of how these impact the modification of activity, particularly with respect to the environment. A series of meetings both internally at the club, and between the club and the local authority, form a narrative of the negotiations over attempts to alter these models and are evaluated for their consequences for developing a pro-environmental agenda.

The participatory action research analysis is expanded in Chapter Seven with a description and review of the particular form the research took, with the author acting as a voluntary consultant in the community football club. A range of collaborative activities between the club and myself

are discussed in respect of the theories of pro-environmental activity. The outcomes of these activities are critically evaluated in terms of the challenges of pursuing individual-centric strategies at this level of English football, and the opportunities that exist for pro-environmental gain by altering this focus to changing practices in the sport. I reflect upon my experiences, and perception of status, during these activities and give voice to the thoughts of my collaborators within the club.

The thesis concludes in Chapter Eight with a review of the work, establishing how far the research question has been answered and offering reflections on the research experience. The contribution offered to the literature by this research thesis is identified. Recommendations for increasing the level of pro-environmental practice within community-based football and the need for further research are provided.

CHAPTER ONE PERSPECTIVES AND MODELS OF PRO-ENVIRONMENTAL ACTIVITY

Introduction

This chapter critically analyses the main perspectives in the pro-environmental activity debate, summarising the theories and models adopted by different schools of thought and their implications for strategies developed by those seeking to alter the way people act in relation to the environment. It answers the question posed by the Introduction, in reviewing the state of the environment and the role of sport; if climate change demands the adoption of new forms of living, working, and playing, what are the barriers to embracing these and how can pro-environmental activity in the everyday arena of sport be developed? The chapter reviews strategies and related policies that pursue change in activity, with identification of the limitations and gaps in existing knowledge. It concludes by analysing work in specific sectors, such as health, that could provide insight for, or learn from, the study of sport and the environment.

It is shown that pro-environmental activity tends to be discussed in relation to two themes: the causes of activity (a *retrospective* attempt to understand why particular activity occurs) and how to change that activity (a *prospective* approach which utilises theories of the causes of activity). There have been a number of literature reviews covering both themes (for example Darnton et al. 2008; Jackson 2005; Prager 2012) and many studies identifying or testing specific interventions (for example providing information, Bolderdijk et al. 2013, altering buildings, Wu et al. 2013, and cost charging, Jakovcevic et al. 2014).

The causes of activity are typically approached, and often modelled, from different perspectives within the literature: prime among them is the study of individual behaviour, with examination of internal and/or external factors relative to the person; contrary to this is examination of social practices as the determinant of behaviour. Suggestions as to how to enact a change in activity are typically derived from an author's allegiance to one of these positions, whilst the UK government, non-governmental organisations and national governing bodies have historically tended to pursue strategies subscribing to the concept of individual behaviour and that factors internal to people's decision making can be influenced to alter activity.

This research thesis is not seeking to select and evaluate one particular model, or combination of models, for a deductive study. While Chapter Three highlights my feeling that one particular perspective, that of *social practice theory*, could be substantiated by the primary research I conducted, I wanted the data collected to inform this view, and not simply act as a test of a hypothesis. As Kollmuss and Agyeman (2002) suggest, the prospect of identifying a model that incorporates all the factors behind pro-environmental activity may be both unachievable and undesirable, Jackson (2005) summarises 22 socio-psychological models of individual behaviour alone. Instead, this chapter offers a critique of competing models and the interventions derived from them. It demonstrates the accuracy of suggestions of complexity and depth while producing useful terms of reference for the original research, and choice of research methodology, undertaken in this thesis.

Turaga et al. (2010) note that pro-environmental activity is a subject of interest to a range of social science disciplines including sociology, anthropology but especially psychology and behavioural economics. Vlek and Steg (2007) suggest that environmental degradation, human wellbeing, and environmental behaviour have been research topics within social and behavioural sciences for several decades with sufficient volume to produce numerous journals of note. As early as 1966, the *Journal of Social Issues* printed a “Human response to the physical environment” (vol. 12, no. 4, 1966), and subsequently produced five issues dedicated to aspects of environmental challenges. Paul Stern writes, in a 1992 edition of the *Annual Review of Psychology,* of the "Psychological dimensions of global environmental change", and a clear role for the discipline in the debate. More recently, Shove (2010a p1281) highlights the case for "geographers, social historians, sociologists, and experts in fields like those of political economy, material culture, consumption, and technology" being involved in the discussion. That there may be different disciplines seeking to answer the same fundamental questions surrounding pro-environmental activity testifies to its breadth and how the debate has advanced from early linear theories that presumed it to be a single, analogous concept to acknowledgement of several specific types of behaviour each the product of different factors (Stern 2000).

The Causes of Pro-Environmental Activity

In this section I discuss five perspectives of pro-environmental activity that have influenced different policies and attempts to encourage and change activity in relation to the environment. These are: socio-psychological models of pro-environmental behaviour; behavioural economic models; political, social and cultural models; combined models; and social practices. Darnton et al. (2008) suggest the literature on pro-environmental activity represents an extensive body of work, one their UK government appointed study concluded as being impossible to review in full (Darnton et al. 2008). Stern (2000 p421) considers that the complexity of environmentally significant activity is "daunting".

One of the challenges of a review of the environmental activity literature is the choice of terminology by authors, and it is a subject that requires the exercise of caution. Many studies focus on the examination of activity in relation to the environment, yet there appears not to be a definitive term of reference for such activity. 'Pro-environmental behaviour' is a preference for many socio-psychological models and is summarised by Kollmuss and Agyeman (2002 p 240) as "behaviour that consciously seeks to minimize the negative impact of one's actions on the natural and built world (e.g. minimize resource and energy consumption, use of non-toxic substances, reduce waste production)". The term 'one's actions' makes it clear that Kollmuss and Agyeman (2002) regard the person as the central actor, as do Sawitri et al. (2015 p28) with their definition of the "conscious actions performed by an individual so as to lessen the negative impact of human activities on the environment or to enhance the quality of the environment". Steg and Vlek (2009), omit specific reference to the individual and simply say "Pro-environmental behaviour refers to behaviour that harms the environment as little as possible, or even benefits the environment" while Darnton et al. (2008) use the term 'behaviour' throughout their report while recognising the potential value of theories beyond the individual focus.

Even when not explicit, use of the word 'behaviour' implies that environmental challenges are a matter of personal activity and the solutions lie in altering those factors that can make individuals act differently. For social practice theorists this is a narrow interpretation, and they believe, as will be shown later in the chapter, it frames the debate in rather simplistic terms of reference. According to Hargreaves (2011), the restricted focus has been responsible for the failure of recent attempts to initiate change. However, as he also acknowledges, there is no

universal agreement on what a 'practice' is either (Hargreaves 2011). Shove (2010a, citing Giddens 1984 and Schatzki 2002) notes that terms such as 'behaviour' and 'practice' have been used in a broad manner and, at times, synonymously, despite numerous social theories of practice displaying no behavioural element. In using 'pro-environmental activity' as a term during the review of literature in Chapters One and Two, I have sought to avoid being mired in the semantics while establishing the frame of reference for my review. The word 'activity' allows me to consider work produced from all manner of perspectives without suggesting I have deliberately overlooked or marginalised one aspect of the debate. Later, when I reflect on my research experience and develop proposals for reducing the impact of football on the environment, I respond to the comment by Hargreaves (2011) in defining my use of the word 'practice' in the context of this thesis, a very specific perspective within the field of 'activity'.

The term 'sustainability' is similarly contentious and to describe an activity as being undertaken 'sustainably' assumes that it is possible to perform and maintain that activity with no additional impacts. Millington and Wilson (2016) note that this is a key debate in the environmental literature, and that there are opposing views of whether such things are possible, consequently the solutions to environmental challenges vary. A 'sustainability' approach, based on the theory of ecological modernisation has been utilised towards a 'business friendly' strategy, or 'light green' attitude to the task. For example, the idea that environmental damage can be reduced as consumers exercise their choice to purchase less harmful products, which inspires innovation by manufacturers to improve their standing and replace detrimental practices. Contrary to this is the 'dark green' concept, that holds that there are inequalities in prioritising economics as the solution to ecological problems and that the elements of 'triple bottom line' (a framework for identifying the social, environmental and economic concerns associated with business activity) should not be treated equally as environmental considerations need to be given prominence. This then begs the question of what is meant by 'green', a term Chernushenko (1994) notes is used loosely, but suggests that it is when the level of environmental impact of something is the lowest, or as near as possible, to that currently achievable. This implies there is only one state of 'green', a measurable quantity, it cannot be either 'light' or 'dark'. Clearly that is yet to be established by all parties and, as Miller (2017 p15) concludes, "green is up for grabs".

It is worth noting the difficulty this causes for the researcher. Being faced with a large volume of material to review, it is to be considered whether potentially useful literature may be overlooked because it uses different, possibly more flexible definitions of the subject or if the use of a familiar term has been broadened to include content that is not as relevant to this study. Fenwick (2007) shows how wide the definition net has been cast when saying that 'sustainability' has come to represent everything from economic development to environmental science, a point raised by Vlek and Steg (2007) when highlighting how environmental concerns have been bound alongside economic and social welfare ones in holistic definitions of 'sustainable development'. It is also important to consider that the literature sometimes discusses 'the consumer' when examining pro-environmental activity and may provide commercial examples, whereas this thesis features research within not-for-profit organisations. Bagozzi et al. (2002, cited in Jackson, 2005 p3), suggest that 'consumer behaviour' can be taken to refer to "the acquisition, use and disposal' of products, services, and practices", thus this definition can be applicable to community-based sports clubs managing their activities. However, this description also confirms Shove's (2010a) previously, referenced observation that some studies synonymously link the terms behaviour and practice when they should be treated very differently.

Despite these concerns, and the potentially "daunting" (Stern 2000 p421) and impossible task Darnton et al. (2008), the rest of this chapter reviews the environmental literature to identify the theoretical positions that underpin a study of activity in an individual sport. Not every perspective is given equal consideration within print or popular discussion, consequently they are accorded varying space in this review. It is also appropriate to consider each within a historical context as it was the perceived failures of some theories that gave rise to others.

1. Socio-Psychological Models of Pro-Environmental Behaviour

When individual behaviour is the focus for pro-environmental activity discussion of the causes of that activity is often framed with reference to a model, a feature that allows for theorising and empirical study (Jackson 2005). As Jackson (2005 p21) adds "these models are generally built from a set of conceptual premises, and some form of causal relationship between dependent and independent variables". However, models are also largely produced in response to the

need to inform those seeking to change behaviour and the requirements of policy makers (Wilson and Chatterton 2011). This is necessary, suggest Steg and Vlek (2009 p311), as "the effectiveness of behavioural interventions generally increases when they are aimed at important antecedents of the relevant behaviour and at removing barriers for change". If the causes of behaviour can be recognised this should help identify whether a particular intervention may succeed or fail. To this end there are now numerous models of environmental behaviour, each providing reasons for, and barriers to, particular behaviour and each needing to manage the conflict between the simplicity that allows for field testing but may ignore key variables, and a complexity that assists conceptualisation but is too difficult to test (Jackson 2005).

Jackson's (2005) work, looking at the subject of pro-environmental behaviour from a perspective of motivating sustainable consumption, rationalises the debate as being one between theories and models based on approaches that view behaviour as a function of processes and characteristics either *internal* (for example, attitudes, values, habits and personal norms) or *external* (such as fiscal and regulatory incentives, institutional constraints and social norms) to the individual. Baldwin (2010) calls it a distinction between the 'cognitive' and 'contextual' approach. Those writing on the importance of internal factors tend to come from psychological disciplines whereas the external perspective is advanced mainly within economics, behavioural analysis, sociology and political science (Jackson 2005; Prager 2012). Some models have tried to embrace both and offer a third option, incorporating both internal and external factors (for example Kollmuss and Agyeman 2002; Stern 2000), and this has filtered through to policies, such as 'nudge' interventions which sometimes select ideas from both positions.

Internalist Perspectives

Rational Choice

Rational choice is a familiar concept within discussions of behaviour, particularly as applied to economic theory, namely that people will seek to maximise their benefit as individuals by making decisions based on simple cost-benefit calculations. The individual is central to the model and it is assumed they are in possession of 'perfect' information about the implications of any decision. It is a prospect that has been argued as giving rise to Hardin's (1968) 'tragedy of the commons' impact on the environment, namely that people acting in their own self-interest ultimately harm the interests of all, such as over-fishing seas. Early theories on influencing

environmental behaviour concentrated on supplying the information that may be missing from individual knowledge, anticipating that educating people about the environment would lead to more environmentally positive activity. The models derived from this, 'expectancy-value' models (Jackson 2005), were soon proven to be flawed as research showed an increase in awareness and understanding did not significantly impact behaviour (Kollmuss and Agyeman 2002), and adjusted models were devised to acknowledge what was perceived as the moral, social and altruistic aspects of human behaviour (Jackson 2005).

Moral Dimension

Schwartz's (1977) 'Norm Activation' Theory and Stern et al.'s (1999) modification of this work in the 'Value-Belief-Norms' theory are two of the most often quoted when discussing moral motivation in relation to rational choice, likely because they display the greatest coherence and empirical support (Turaga et al. 2010). Schwartz (1977) proposes that 'personal norms', a product of awareness of the consequences of an action and a sense of personal responsibility for that action, are the singular direct basis of individual behaviour. The relationship between the personal norm and the behaviour is strengthened when a person is aware of any negative impact of not acting and feels accountable for this. No consideration is provided for social or institutional constraints (Jackson 2005). Stern et al.'s (1999) work goes beyond purely personal norms to analyse the link between values, beliefs, and norms to propose that it is the moral, altruistic and self-interested beliefs held by an individual that inform awareness, which in turn creates the personal norm leading to the behaviour. Jackson (2005) highlights an important point of Stern et al.'s (1999), with implications for this research, in so far as he suggests people may respond differently to surveys depending on how the questions are framed towards their values and beliefs. However, whilst the results of studies based on both Schwartz (1977) and Stern et al.'s (1999) theories may appear strong when compared to those of earlier theories, they offer weak evidence of a supposed correlation between personal norms and identification of the causes of pro-environmental behaviour (Jackson 2005).

Attitudes and Intentions

Fishbein and Ajzen (1975) derive a 'Theory of Reasoned Action' to include consideration of attitudes in behaviour. Whilst people still act according to their expectation of the outcomes of their activity, a rationalisation of the information available, their beliefs and evaluations of this

outcome lead to an attitude towards behaviour which in conjunction with 'subjective norms' (the views of influential others) forms an intention. This intention is the main cause of behaviour. It remains perhaps the most well known of such models with more recent work still utilising its provisions (Prager 2012). Kollmuss and Agyeman (2002) suggest, however, that the influence of the theory is largely due to the inclusion of an equation that allows for empirical study. Darnton et al. (2008) note that researchers in pro-environmental fields have repeatedly shown that holding pro-environmental attitudes does not necessarily lead to pro-environmental behaviour despite studies such as Bolderdijk's (2013) that found by providing information to people who strongly hold pro-environmental views their intention to act was increased. Stern (2000) dismisses intention as only one factor of behaviour, and even then not often the most important.

Ajzen develops a 'Theory of Planned Behaviour' in a series of single and collaborative papers (Azjen 1988, 1991; Azjen and Fishbein 1980; Azjen and Madden 1986;) that respond to some of the early criticism by including a consideration for the perception of control prior to the formation of intentions, essentially how achievable or not the action would prove to the individual. This theory is applied widely in both practice and literature and has been shown to have merit in predicting behaviour (Sawitri et al. 2015). Yet, there remains criticism that often the work fails to measure actual behaviour (Jackson 2005). Blake (1999) shows there is a 'value-action gap' between attitudes and actual behaviour, a point now made by many studies, and the simple inclusion of intentions does not redress a failure to consider wider structural factors that exercise constraint on individuals. Turaga et al. (2010) suggest that researchers from social psychology disciplines have recently begun to add 'personal moral norms' (seen in the previously noted Schwarz 1977 work) to the planned behaviour model but have displayed limited empirical success and little by way of agreement. Despite many studies being undertaken, there have been no definitive answers to the disparity between environmental awareness and acting environmentally (Kollmuss and Agyeman 2002) and this undermines the position of strategies that identify altering individuals' thinking as the way to increase pro-environmental behaviour.

In trying to summarise the components of the various models of the influences on pro-environmental behaviour, Kollmuss and Agyeman (2002) aggregate many of the internal factors

that have been proposed to display causality (Figure 1.1). The factors they note are; motivation, environmental knowledge (although to a small degree), values (although the factors causing values are not easily understood), attitudes and the closely related beliefs, locus of control, own well-being and responsibilities (as shaped by values and attitudes). They also include two personal factors; gender (women, it is argued by Kollmuss and Agyeman (2002), usually have a less extensive environmental knowledge than men, but are more emotionally engaged, show more concern about environmental destruction, believe less in technological solutions, and are more willing to change) and years of education (the longer the education, say Kollmuss and Agyeman (2002), the more extensive is the knowledge about environmental issues and the greater the pro-environmental activity).

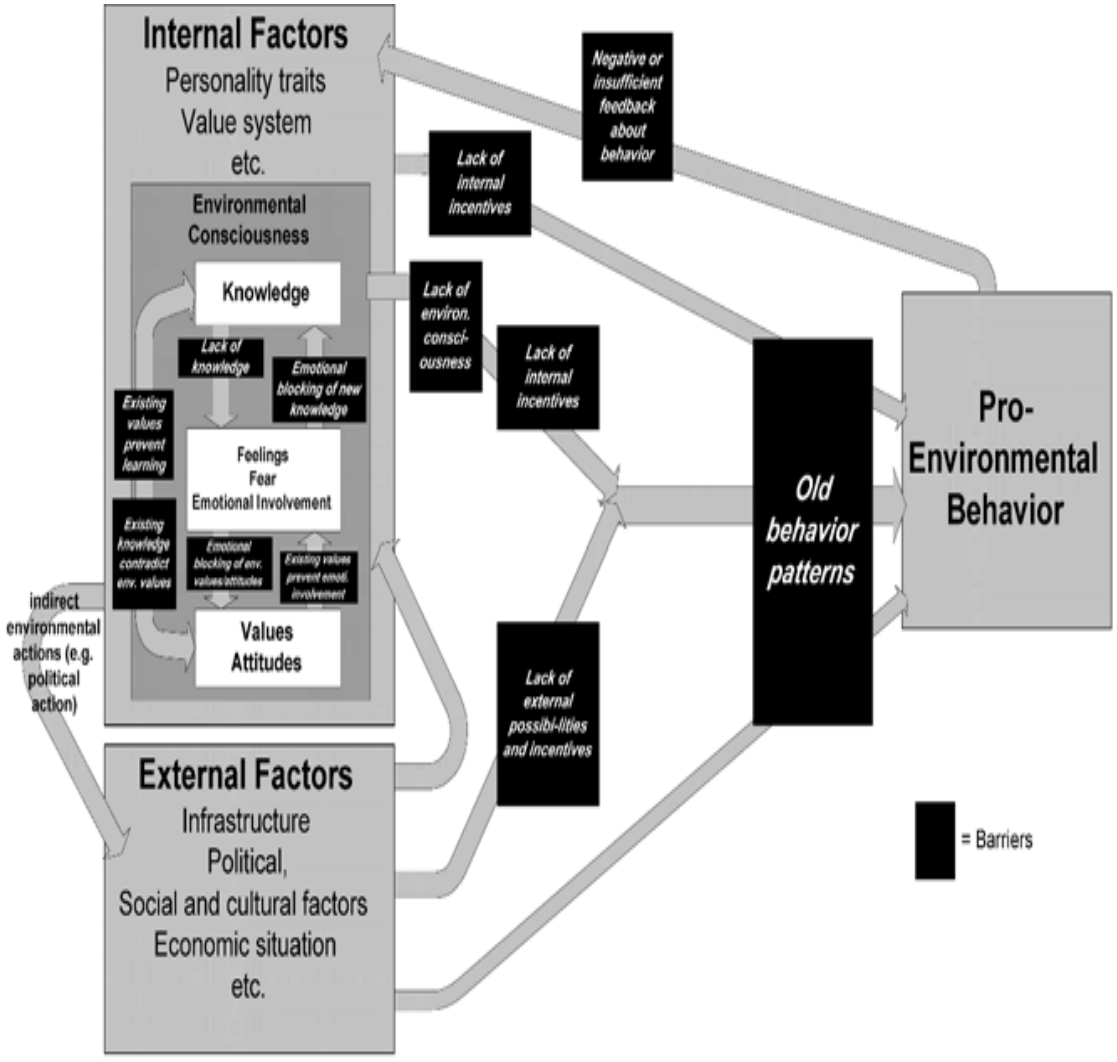

Figure 1.1 Model of Pro-environmental Behaviour (Kollmuss and Agyeman 2002 p257)

Yet the challenge in ascertaining the relevance of socio-demographic factors to pro-environmental behaviour is highlighted by the contrasting views of Larson et al. (2011 p69), who argue that the extent of their influence "has not been adequately explored", and Meyer (2015 p109), who believes there is "an extensive literature" on the subject. Where there has been study of specific aspects of populations and their impact on pro-environmental behaviour some studies have reached quite different conclusions. For example, the impact of affluence on pro-environmental behaviour is contested (Larson et al. 2011). Inclusion of gender as a factor, as in Kollmuss and Agyeman's (2002) review, is rejected by (Torgler and Garcia-Valinas 2007 p538) who found the relationship between it and environmental attitudes to be "meagre and inconsistent". Meyer (2015) notes that education has been examined by numerous studies and found to be positively, zero or even negatively correlated with pro-environmental behaviour. Moreover, Kollmuss and Agyeman (2002) do not mention age, an aspect of individuals highlighted by other literature as being of relevance (Torgler and Garcia-Valinas 2007), and ethnicity, a factor which will become of increasing importance as populations diversify (Larson et al. 2011). Before even considering either of the other perspectives on pro-environmental activity, it is clear there are divisions of opinion and contradictory results in behavioural studies alone. As Turaga et al. (2010) note there are divergent positions throughout the literature with philosophical and methodological bases so contrary to each other as to offer little by way of common ground. Indeed, the inconsistency in individuals' environmental behaviour may continue to generate different positions on causes of that behaviour (Steg and Vlek 2009)

Externalist Perspectives

Kollmuss and Agyeman (2002) accompany their list of internal factors with a summary of external factors found to have influenced, positively or negatively, pro-environmental behaviour (Figure 1.1). The provision of infrastructure, the economic situation, political, social and cultural factors are specifically noted in this field, and subsequently discussed, but perhaps the authors betray their allegiances by using the catch all 'etc' under the heading of 'external factors' in their diagram, or, more charitably, the broad summary is due to examination of these causes receiving less detailed attention in the literature than the internally focused work.

Infrastructure

The role of infrastructure appears more frequently in the literature as a consideration of specific interventions, or particular industry studies, rather than as a more general aspect of modelling behaviour. Possibly some models simply assume that the facilities for allowing a behaviour exist or that any lack of provision are first addressed before the theories are applied. For example, when Gatersleben et al. (2014) examined the relationships between values, identity and pro-environmental behaviour, one series of their data came from a question that asked households how often they bought Fairtrade or organic food products, another series was the result of queries regarding flying to holiday destination. No mention was made of whether respondents could find such products locally or lived near an airport, yet Blok et al. (2014) highlight how such situational factors are crucial and that people are simply likely to undertake pro-environmental behaviour more often when the means to do so are available.

Kollmuss and Agyeman (2002) advance the idea that such seemingly fundamental barriers to behaviour can be overcome by individuals if they create pressure for access to facilities or products. Calling them institutional factors they suggest, the perhaps idealised view, that an environmentally positive population can exert power for change, presumably at the ballot box and a political factor, before leading the discussion back to the internal factor of changing individual attitudes. Jackson (2005) queries whether providing specific infrastructure for one environmental aspect (such as recycling) may increase activity in other complementary activities citing Thogersen and Olander's (2003) work on such 'spillover'. However, the 'build it and they will come' approach is now widely criticised as being too simplistic a solution to various participatory challenges, particularly in the sports industry (Price 2013), a point reinforced by the lack of correlation between facility building and sports involvement found by the research of Kokolakis et al. (2014), described more fully in Chapter Three. Moreover, providing additional infrastructure such as that associated with the hosting of Olympic Games and football tournaments has had a negative impact on a location's ecological footprint, sometimes dramatically so (Thibault 2009), suggesting building our way out of environmental problems is not the solution. Yet without the most very basic means of undertaking an activity it is hard to see how any of the subsequent theories could assume their positions.

2. Behavioural Economic Models

Owens and Drifill (2008) note that economic measures make it possible to change behaviour without attempting to alter attitudes through the use of pricing, incentives and taxation. This has far wider implications than simply environmental behaviour and could be politically awkward, hence often such approaches are accompanied by complementary measures such as information provision (Darnton et al. 2008). Consequently, it can be difficult to isolate the impact of just one of these aspects on behaviour. Kalamas et al. (2014) note the extent of environmental efforts by a nation can ebb and flow according to their current economic fortunes. Torgler and Garcia-Valinas (2007) argue that the existing economic position of individuals is a significant influence on their environmental behaviour, with the protection of the environment being a 'good' and demand for it rising with income.

Conversely, there appears evidence that demand will be lower if the costs of pro-environmental activity are viewed as more expensive than alternatives and a lack of income may in fact preclude environmentally damaging activities such as driving a car. Hobman and Frederiks (2014) undertook a survey of Australian consumers to help understand the relatively low subscription rates to 'green' electricity; "Absolutely small attitude-action relationships" (Hobman and Frederiks 2014 p82) were identified, whilst nearly 39% of non-subscribers (n=913) stated financial cost as the reason for inaction. Interestingly, for some respondents it was not just outright cost that mattered but the benefit in relation to that cost, a hark back to simple rational choice theory. This Hobman and Frederiks (2014 p84) ascribe to the "pertinent psychological principles" that suggest humans act with a short-term view when costs and benefits are immediate but more long term when the expense/reward is distant.

Moreover, the benefits of a behaviour choice such as subscribing to green electricity are a common good (reduced production of fossil fuel energy for example), but the cost of subscribing to it are personal, the individual is effectively paying for others to share the value. This near-sightedness is suggested by Jakovcevic et al. (2014) in their study of behaviour in response to charging for plastic bags. The positive benefit of a free, useful bag is instant, the negative environmental consequence is distant. At such a point it would be easy to consider Kahneman's view that "no amount of psychological awareness will overcome people’s reluctance to lower their standard of living" (quoted in Marshall 2014 p58), yet this could be used to promote the

likelihood of behaviour if the immediate consequences of the 'wrong choice', as far as policy makers are concerned, is negative (as in Jakovcevic et al.'s 2014 study involving a fee for taking a bag). What Jakovcevic et al. (2014) ultimately found was that a financial penalty actually worked more effectively in cases where there was existing support for the policy due to environmental concern. Both surveys seem to suggest psychological and economic values are not as divorced in pro-environmental behaviour as some may suggest.

3. Political, Social and Cultural Models

Political interest and awareness are factors Torgler and Garcia-Valinas (2007) feel are afforded limited discussion in the literature, despite their results suggesting a strong impact on environmental preferences. Such a belief surely relies on the definition of 'political' as the provision of infrastructure and behavioural economic policies previously noted are hard to divorce from most considerations of the term. Moreover, Torgler and Garcia-Valinas (2007) suggest it is existing political interest and awareness that influences individual environmental inclinations which places the idea more within the 'internal' theorising than any outright alteration of intentions due to a political system. The idea of engaging people in environmental concern using terms of reference they can identify with is suggested in the work of Macnaghten (2001), generic iconography of ecological issues being replaced by images relevant to the lives they lead and activities they undertake. Kalamas et al. (2014) have a more external political view with their consideration of the Theory of Planned Behaviour's 'locus of control' as something that can be impacted by factors peripheral to the individual, such as others being more powerful or having a responsibility for environmental care, causing them to believe they have lost that control. Such consideration by the individual of their position, relationships and power in society is a feature of numerous theories, for example Collins et al.'s (2003) suggestion of ‘social learning theory’ and how behaviour manifests across a population when people change their activity to reflect that of role models. Klein (2014) is more radical, suggesting that the predominant market economy approach negates against the fundamental change required to alter behaviour and proposes a shift to completely different political systems would be the only thing to provide the opportunity for people to adopt new lifestyles.

These ideas, about whether people remain free to make choices about their own actions, whether they are influenced or bound by forces outside their control, reflect an issue that has

long provoked discussion in the social sciences, the 'agency-structure debate' (Jackson 2005), discussed more fully later in the chapter. Some researchers attempt to bridge this divide with models encompassing factors from both perspectives.

4. Combined Models

Lucas et al. (2008), in a paper that resulted from the work undertaken as part of the Darnton et al. (2008) review, propose that the socio-psychological models of individual actions themselves display evidence for wider consideration. The models argue that behaviour is complex and shaped by multiple factors, for example personal norms, which are in turn, say Lucas et al. (2008), influenced by social context, an external factor. Steg and Vlek (2009) found it remarkable so few socio-psychological studies had considered context, given that environmental psychology aims to study transactions between humans and their environment. Jackson (2005) believes the evidence is indisputable, that as behaviour can become 'locked-in' via a range of factors such as norms, habits and facilitating conditions, consideration of the social and cultural context in which an individual exists is essential.

Stern (2000 p415) includes this consideration, with an update of his earlier work and integration of internal and external factors in an ‘attitude-behaviour-context’ model (ABC). This model outlines how "environmentally significant behaviour" (again, a different definition) is a matter of attitudinal factors (attitudes, norms, habits), personal capabilities, routine and the provisions and constrictions of the situation (for example, infrastructure, technology and legal concerns). Contextual factors also appear in the work of Steg and Vlek (2009). Such factors, they argue, may impact behaviour either directly (as with for example recycling, if the facility is not there it cannot be done) or indirectly where the context (a new recycling facility) alters attitudes and behaviour (recycling becomes more popular as the new facility makes it convenient). Blake's (1999) response to the value-action gap is to suggest that three barriers have to be overcome in behaviour change; individuality (in terms of attitude and temperament), responsibility (something Kollmuss and Agyeman 2002 liken to the 'locus of control' of earlier models) and practicality (social and institutional constraints such as time and finance). Kollmuss and Agyeman (2002) highlight the value of such a model in seeking to combine factors, but, as was shown to be common to many such reviews, point out the omission of other considerations such as family circumstances and cultural norms.

Habit is a factor that is utilised in support of the different contextual positions. The idea of habit in pro-environmental behaviour modelling stems from the understanding that people sometimes act in routine ways, instinctively or automatically without reference to reasoned decision making or intentions. This feature would go some way to explaining why there is a gap between intention and practice. Stern (2000) states habit to be a key factor in environmentally significant behaviour in organisations and in Darnton et al.'s (2008) review habit is identified as one of the three principal internal barriers to individual behaviour change. Triandis (1977) proposes a Theory of Interpersonal Behaviour that places habit (directed by past behaviour) alongside intentions as causes of behaviour, yet crucially begins the process of looking to factors outside the individual by including the moderating effect of 'facilitating conditions'. However, others who remain critical of the individual-centric theories, such as Shove (2010a), dismiss the idea that habits cause behaviour with the contention that habit is behaviour and the two are not individual entities to be acted on.

Whether they view the influences on behaviour as being either internal, external or something of both, what the models reviewed so far have in common is that they believe that behaviour is a force at the heart of activity, to be acted upon, influenced, nudged or changed. Criticism aimed at these socio-psychological models is more fundamental than simple neglect of internal and external factors or context, such models are considered by some as being too individualistic, too rationalist and insufficiently critical of the status quo of neoliberal and consumerist socio-economic systems (Hargreaves 2011). Shove (2010a p1274) highlights the 'ABC' model in particular as adopting a political position that obscures " the extent to which governments sustain unsustainable economic institutions and ways of life, and the extent to which they have a hand in structuring options and possibilities". Showing how reports may vary in emphasis, yet still place individual behaviour as central to the problem with mutual referencing providing support for such claims, Shove argues (2010a and 2010c) that this thinking relegates the policy options to an expensive and risk-laden list of possible influences on individual choice and how best to increase the efficiency of 'good' decisions. Moreover, the value-action gap becomes explainable because it only arises as an issue when starting from the assumption that values will (or should) be translated into action, flawed thinking at the heart of behavioural modelling. When the authors of the individual-centric models include context they are not essentially

changing the approach, they are merely offering retrospective consideration for why initial ideas may have failed. The interpretation of the agency-structure debate by these models remains focused on the individual, not seeking to explore wider structural explanations.

5. Beyond Behaviour - Social Practice Theory

Cheryl Mallen, having published widely on the subject of management of sport and the environment (for example, Mallen et al. 2010a, Mallen et al. 2011), refers to 'environmental sustainability' as "the practices to protect the natural environment within sport facility operations" (Mallen et al. 2010a p. 369). Not only does this add to the debate on the language used in definitions of pro-environmental activity, but introduces to this discussion, and the context of sport, something beyond individual behaviour, namely the study of *social practices*.

Social practice theory has developed from the ideas of the philosophers Heidegger, Wittgenstein and the sociological works of Bourdieu, Giddens, Foucault and Butler (Halkier et al. 2011). As is now familiar in the language of this debate there is no definitive agreement on the description of the theory (Warde 2005) but the concept of practices summarised by Reckwitz (2002 p249) is widely used; "a routinized type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge". Shove (in 'The choreography of everyday life' an ongoing collaborative project, accessed 2015) produces a model showing three elements to a practice; materials (objects that allow for a practice), meanings (concepts that determine how and when a practice may be performed) and procedures or competences (abilities that allow for a practice). Wilson and Chatterton (2011) illustrate this with an example of tea drinking; an interaction between cups, a teapot and a kettle (materials), a tea-break or tea with breakfast (meanings) and number of tea bags to use and volume of milk (procedures). Individual behaviour is a product of these interactions, for example, we do not seek to consume electricity, it is simply desirable as the means of producing the cup of tea we want, and we may behave by drinking more tea (and consuming more electricity) because society has developed the concept of times to do so.

Social practice theory, therefore, contends that 'behaviour' should not be the starting point for examination of why or how to change activity; practices themselves need to be considered as entities as individuals carry out the practices (Darnton, 2011). Consequently, it is the practice that should be studied and attempts to alter activity should be focused on interventions at this level. This thinking has been applied to environmental challenges by a number of authors (for example Hargreaves 2011; Shove 2004, 2010a). As Shove (2010b p283) suggests, it is an attempt to understand how practices "capture us, their carriers" and why some people avoid these practices, how the materials behind a practice are distributed and in what ways do social practices travel and intersect. Taking the environmental example of water use, this approach would seek to examine routines connected with an aspect such as showering or bathing, not individual behaviours such as allowing taps to run too long, but the concept of cleanliness and why we wash in the first place. Isolating just one aspect of a practice in, for example, a technological approach to change, is insufficient. Product innovations, such as energy saving devices and water efficiency measures, are not in themselves capable of increasing pro-environmental activity as people need to recognise their value, buy them and use them appropriately (Steg and Vlek 2009). Shove et al. (2007) observe a relationship between the 'having' of materials and the 'doing' of activity. These can be out of balance, or 'restless', if people either do not have the tools to act or the ability to use the tools. Thus it is important to look at, and question, all the aspects of an activity, not just the final act of behaviour.

Social practice theory suggests examination of the agency-structure debate at a much broader level, or even thinking beyond that debate towards a third possibility, what Hargreaves (2011 p283) suggests is a "middle level between agency and structure" and is evident in the work of among others; Bourdieu (1977), Giddens (1984), Reckwitz (2002), Schatzki (1996), Shove (2010a) and Warde (2005). Hargreaves (2011) believes there are extreme difficulties in changing these socially embedded and historically established entities and cites Whitmarsh et al. (2011) when noting that critics accuse the social practice approach as being excessively structural, insufficiently explanatory, and too radical to generate useful policy. Shove (2010b p283) acknowledges that those pursuing a social practices based study of environmental issues are "definitely not short of things to think about" but Whitmarsh et al. (2011) allege Shove creates simplistic portrayals of psychological models of behaviour, and wholesale dismissal of non-sociological approaches to social or behavioural change. They add that while psychological

and sociological approaches may differ, there are mutual points of agreement such as psychological acceptance that habitual behaviour is a product of contextual stimuli and sociological theorising that action stems largely from norms and institutions, with individuals in turn perpetuating these norms and institutions through their action. This does, however, also rather undermine the view that individuals should be the focus for change and advances the idea that *social practices*, with its broader approach to the problem in examining how relationships between materials, meanings and competencies create such norms, is the appropriate framework for this thesis.

Changing Activity to be more Pro-Environmental

The literature does not present a particularly clear transition from activity to activity change partly because papers making recommendations towards policy often seek to review the causes of activity or at least identify the theoretical position their strategies are based on. There is a significant restatement of previous work. Darnton et al. (2008) note that while examining the causes of activity may be useful, it does not necessarily mean anything can be done to alter the outcomes. Models are useful tools, but they are generalised pictures of the group being studied and seek to describe activity in broad terms. To this end they are not particularly portable to different scenarios and do not offer up simple solutions to problems. The evidence from this review would suggest selecting any one model for use in this thesis would ignore the weight of work suggesting that all models are flawed. However, there seems general agreement that something can be done about the environmental situation, and that it is not too late to redress current problems (Klein 2014). As many of the problems of environmental damage are caused by human activity, they can be managed by changing the activity (Steg and Vlek 2009).

Suggestions as to the best means to achieve this clearly differ in line with the model and interpretation of the causes of pro-environmental activity. Those pursuing an individual, internally focused model will seek to alter the factors relevant to an individual's decision making, whereas the external advocate will seek wider change, the social practices theorist more fundamental change and organisational scholars seem to embrace some aspects of all of these. Jackson (2005) notes that the task of understanding how to change activity is as complex as that of understanding what causes activity. It is a point furthered by Steg and Vlek (2009) in showing that different activities can have different causes, and policy makers need to intervene

specifically to impact on those particular causes. Indeed, similar activities may have different causes, the reasons for car use for example. Steg and Vlek (2009) note a further distinction between antecedent and consequence strategies, that is those that seek to change factors prior to activity (education, commitments and environmental design) and those that impact after the activity (mainly financial).

Targeting a factor in isolation may be challenging. Nevertheless, there are numerous strategies proposing such specific intervention; information based approaches (the theory behind which was previously identified as appearing based on flawed assumptions), persuasion (aiming to influence attitudes and values), interventions to adjust social norms and develop new accepted ways of acting, varying the economics of an activity, changes to infrastructure and altering the legality of a behaviour. Many authors suggest a combination of strategies will be the most effective way to modify behaviour, particularly as they may need to be targeted at different groups (Darnton et al. 2008; Jackson 2005; Steg and Vlek 2009, Stern 2000).

One of these groups would be those with a particular interest in acting pro-environmentally. Environmental movements have been around for a relatively long time in comparison with the academic work on this subject, organisations dedicated to conservation and the enhancement of nature thrived during the Victorian age. Economic and legal measures have of course sought to influence behaviour for as long as they have existed, but, for Stern (2000), it is only recently that environmental protection has become an important consideration in such human decision making. Information based techniques are a similarly modern aspect of this, whilst there were propaganda appeals during the First World War, the first really major attempt to use communication to alter behaviour in the United Kingdom came during the Second World War (Collins et al. 2003). Post-war, these messages developed into government campaigns directed by the Central Office of Information on a multitude of subjects from health issues to driving habits. Impetus for the environmental movement was given in 1992 when the United Kingdom was amongst 178 nations adopting The United Nations Agenda 21 on Sustainable Development at the Earth Summit in Rio de Janeiro. The Summit's message on reducing natural resource use and pollution; " that nothing less than a transformation of our attitudes and behaviour would bring about the necessary changes" (United Nations 1997) has subsequently been updated on specific anniversaries (Johannesburg 2002, Rio 2012). It was around the time of this first Rio

Summit there developed in the United Kingdom policies that Lucas et al. (2008 p457) suggest displayed "an explicit aim to influence environmental behaviour", and a first Sustainable Development Strategy was issued by the UK government in 1994.

A number of years later, and as mentioned in the Introduction of this thesis, the UK government commissioned Sir Nicholas Stern to report on the '*The Economics of Climate Change*' (Stern 2006). In it, Stern (2006 p395) provides an acceptance of the 'internal' view of the causes of behaviour and advocates an approach to policies based on these theories; "Individual preferences play a key role, both in shaping behaviour, and in underpinning political action". Stern (2006) makes clear how he has placed the concept of offering what he calls 'sticks' and 'carrots', in order to influence the economic theory of individuals displaying preferences and valuations, central to his analysis. He also calls for governments to promote the debate of what is acceptable behaviour and encourage populations to act environmentally. This line of thinking has since been adopted by successive administrations, and as was identified in the Introduction, it has been a case of 'economics getting in first' and monopolising the debate (Szerszynski and Urry 2010).

Jackson (2005) notes how modern economies' individualist typology promotes Stern's (2006) suggestions at the expense of other considerations. The consequence is that despite attempts to change environmental activity requiring complex, innovative policies and practical interventions across a wide range of sectors at every level of society, three distinct approaches have dominated policy in the United Kingdom; the provision of environmental information, the incremental introduction of environmental regulations and the use of environmental taxes and charges, all individual-centric, behavioural ideas (Lucas et al. 2008). The Department of Energy and Climate Change (DECC) suggested in personal communication with the author (April 2015) that the document that continues to be central to United Kingdom government policies in this area is 'A Framework for Pro-environmental Behaviour' published by the Department for Food and Rural Affairs (DEFRA) in January 2008. This Framework notes; "The most unsustainable behaviours, including the consumption of poor performing products, can be discouraged through a mix of minimum standards, tax/penalties/grants and choice editing (including voluntary action by producers and retailers)" (DEFRA 2008 p21), confirming Lucas et al.'s (2008) conclusions. Yet, like so many previous studies, the Framework acknowledges the

value action gap, identifying what are called 'willingness' and 'ability to act' indicators for behaviour, measuring these verbal commitments as being in excess of the current activity in those areas. Rather than acknowledging any theoretical flaws in the socio-psychological model interpretations of behaviour the Framework, and by extension the United Kingdom Government, suggests, people need "enabling, engaging, encouraging and exemplifying" (DEFRA 2008 p51).

Not only is there criticism from social theorists for the entire premise of this approach, there is a suggestion that this even fails to initiate the nuanced, effective policy that behavioural models support for such a complicated issue (Lucas et al. 2008). Specifically; that provision of environmental information is of limited or no impact in changing behaviour (Bolderdijk et al. 2011; Kollmuss and Agyeman 2002; Whitmarsh et al. 2011 and many others), voluntary schemes and codes of conduct rather than regulation result in non-compliance and malpractice (Howes, 2005 cited by Lucas et al. 2008) and fiscal measures can disproportionately impact the poorest or smallest enterprises in society (Lucas et al. 2008). Information provision is reserved for particularly vocal criticism in the literature, appearing; insufficient to initiate change (Whitmarsh et al. 2011), ignored (Webb 2012) and at best only effective under explicit conditions, such as being specifically channelled and acceptable to the audience (Bolderdijk et al. 2013; Collins et al. 2003). Collins et al. (2003 p24) highlight the case of eco-labelling, "a naive conceptualisation of human behaviour" that assumes the information on a label will be sufficient to engender rational action when promoting a pro-environmental behaviour message, something they believe is not only difficult, but is placed before a public whose perception is that they can do little to effect change. Policies target the individual as being in control of decisions, such as the choice to buy a smaller car, with incentives for 'better' options alongside information about why such a choice is important. The government's role in this situation is very much as the 'enabler'. This approach contrary to a large body of research seems typified by DEFRA's policy (2013 p1) suggestion that "if businesses provide clear and relevant information about the environmental impacts and performance of products and services, consumers can make informed choices about what they buy".

Such statements seem to reinforce Shove's (2010a) point about policy that adopts the 'ABC model' but proposes choice, not context, as its final strand. This implementation of one

particular aspect, to the exclusion of alternatives, is according to Shove (2010a), depressing for its acceptance of individual behaviour and personal responsibility as central to the issue, flawed logic that such choice is compatible with identification of context and society as being crucial to the outcomes. Webb (2012) feels this focus on altering, or 'greening' consumer choice and behaviour through the mechanism of the market is to provide for unchecked growth avoiding confronting the inherent tension between climate change and economic development. This is the argument advanced by Klein (2014), and such an approach belongs to the concept that growth can be environmentally sustainable.

Yet alternative approaches to changing activity to be more 'pro-environmental' do appear to have some support within successive United Kingdom governments, and to add to the uncertainty around policy, these are also evident within DEFRA. In contrast to their governmental colleagues in DECC (author's personal communication with DEFRA May 2015) DEFRA suggests the 2008 Framework document has been "supplemented by the 2011 ‘Sustainable Lifestyles Framework’ and a paper on DEFRA’s behaviours work more generally". The 2011 (p3-4) Framework referred to suggests it has drawn on "developments in the evidence base" since 2008 with a purpose "to enable citizen focused policy and communications activity that is targeted, engaging, relevant, and delivered more effectively". To this end, DEFRA's 'Centre of Expertise on Influencing Behaviour' produces a factorial diagram (Figure 1.2) that seems to provide room in policy for every theory thus far mentioned in relation to behaviour in this literature review. This at least reflects the belief that there is no single solution to the question of how to change behaviour and the rationale for intervention "goes beyond traditional market failures (such as information deficits) and recognises the need to address breadth of barriers and motivations for different groups" (DEFRA 2011 p9). Eppel et al. (2013 p31) say that the "publication of this Framework illustrates a shift from ‘pro-environmental behaviour’ to behaviours that constitute a ‘sustainable lifestyle’ (or sustainable living). This is an important distinction reflecting evidence which shows that not all sustainable behaviours are motivated by environmental concerns". It also appears an important distinction from the basis of the work within DECC and adds to the impression of a complex and confusing literature.

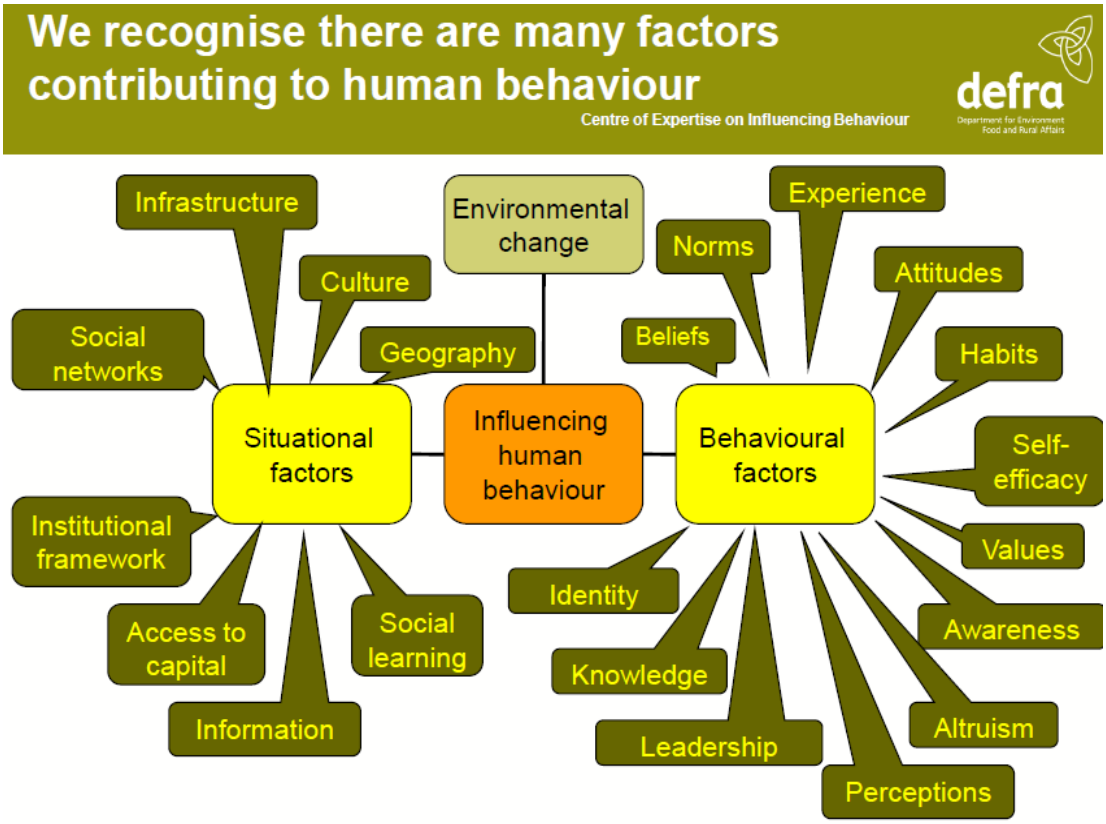

Figure 1.2 DEFRA diagram illustrating behavioural factors (DEFRA 2011 p8)

However, again the question of language appears to highlight the focus of their activity, right at the heart of the illustration (Figure 1.2) lies 'influencing human behaviour'. In seeking change what DEFRA have done is identify a series of 'headline' behaviours and activities with their relative impact and potential for action amongst particular populations. DEFRA then assess measures according to the potential of a population enacting a behaviour. The four key areas resulting from this are; the activity of other people, skills and ability (more so than understanding), self-interest and, the rather vague, 'common sense' of acting. The development of this work, reviewed specifically by Eppel et al. (2013), has, however, seen the creation of two research groups, with what would appear irreconcilable differences of opinion; the Sustainable Lifestyles Research Group based at University of Surrey under the direction of Professor Tim Jackson and the Sustainable Practices Research Group based at the University of Manchester, directed by Dale Southern and notably counting Elizabeth Shove as a member. Perhaps they too see there are no clear answers to this question.

Between the 2008 and 2011 frameworks the Scottish Government held a 'What works in behaviour change' conference that produced 'ten key messages' (Scottish Government 2010). While the majority of the conclusions are broad and non-specific (for example "The public expects government to act") one of the 'messages' quotes Jackson's (2005 p1) review stating that "evidence is clear that facilitating conditions (e.g. structures, the organisation of the built environment and local services) have far greater influence on many behaviours than values and attitudes" (Scottish Government 2010 p1). They later reinforce this allegiance to the external view of behaviour with the statement that "structural changes (including provision of infrastructure, influencing price and regulation) are more likely to have an impact" (Scottish Government 2010 p2). This move away from the concept of 'light touch' government, a notion criticised by Jackson (2005) as governments interfere in our lives almost constantly, could, however, be a temporary phase, subject to any changes enforced by the electorate. Perhaps Kollmuss and Agyeman's (2002) concept of an environmentally minded population demanding infrastructure needs to be tempered with the idea that a non-environmentally minded majority might seek a reduction in government expenditure on such schemes.

One area that is becoming increasingly relevant to the discussion of policy formulation with respect to environmental behaviour change is technology, an area in need of expansion in the literature. Midden et al. (2007) suggest the link between technology and behaviour is under-examined simply because access to particular equipment happens far sooner than the conduct and publication of research and there often need to be greater considerations than whether devices can be harnessed to alter behaviour. Kollmuss and Agyeman (2002) suggest more innovative techniques enjoy greater success when compared with traditional educational methods, and if applied to communications (such as with social marketing tools) it can be a means of refining information and tailoring messages to selected groups with the intention of creating new social norms and behaviours (Hargreaves 2011). Social marketing has, however, attracted divergent comment from the positive role of 'nudging' behaviour to negative mention of the legitimacy it offers existing, unsustainable practices (Hargreaves 2011). Darnton et al. (2008) note that it offers the potential to be useful towards initiating small, stepped changes with particular groups, whereas Webb (2012) cites a review of the evidence from evaluation studies (Thøgersen and Crompton 2009) that suggests the concept of 'nudging' and of small ‘wedge behaviours’ acting as a prelude and enabler of greater change is flawed.

Changing people's behaviour is something that has been pursued within public health policy for a number of years. The intention is the same, to intervene to produce a more positive result for people. As improving health relies on the same attempt to adjust lifestyles, it is as similarly complex as the pro-environmental behaviour debate, with many theories and proposals. Programmes have typically centred on three levels of intervention; on individuals, within communities and on a national scale (Cutler 2004). Results from the first two groups have shown limited success (Cutler 2004), and the British Medical Association (2012) has drawn attention to the many influences behind individuals' actions that do not square with placing the emphasis on personal choice and avoiding regulation. Maller (2012) suggests that external views of public health success in changing behaviours are not sufficiently critical of either the outcomes, or the models, at the heart of perceived accomplishments and advocates a social practice approach to health and wellbeing research in order to consider wider insights.

Yet, Kelly and Baker (2016) note that individual behaviour is often targeted by policy makers as it avoids the difficult subject of social, economic and political influences on people's lives. They summarise a number of problems in health policy that echo many of the thoughts of those opposed to 'internal' theories of behaviour; that it is not a matter of common sense, people do not act rationally (nor always irrationally), that messages and information alone will not solve issues and that predicting results is difficult (Kelly and Baker 2016). An example of the approach they criticise is the UK Department of Health's 'Changing Behaviour, Improving Outcomes' report (2011). While acknowledging the complicated subject, it emphasises promotion of information, inspiration, helping make choices and, again, 'nudging' people to the preferred behaviour.

'Nudge theory', or the aspects of behavioural economics and social psychology that has come to be commonly branded such, is an idea that appears to have come full circle in terms of praise and criticism within the academic literature and popular understanding of governmental policy trends. First brought to widespread attention by Thaler and Sunstein (2008) 'nudging' is a concept that finds favour with administrations that seek to maintain the 'light touch', reducing the role and taxation of the state, seeking to influence people to make particular choices while attempting not to interfere in their lives (Goodwin 2012). An example of this may be to make

healthier food more obtainable while making access to more harmful products more difficult or providing assistance in clearing loft space to anyone wanting to insulate their roof. Michie and West (2013) suggest it is a more subtle means of changing behaviour through the use of tools such as framing, social norm feedback, incentives and environmental cues. Under such influences people can be guided away from their automatic responses by those able to determine their 'choice architecture' (Thaler et al. 2010) and indeed the practice is everywhere from labour saving devices to prompts that help us save money. However, as Selinger and Whyte (2011) note the idea was that a nudge would be something inexpensive and easily declined, designed with transparency and only meant to impact those things helping people live according to their best interests. No-one appears to suggest it is the entire solution to any perceived issues.

Goodwin (2012 p86) notes three negative issues with 'nudging'; the first two, that it is inherently unfair and manipulative, perhaps belong to a slightly different debate to the environmental one, but the third, that it is "not an effective strategy for changing behaviour on the kind of scale needed to solve society's major ills" is clearly an issue for what is "one of the greatest challenges of our time" (UNFCCC 2010) and certainly not something likely requiring inexpensive and easily declined measures. The argument is that the issue of climate change and environmental decline is so important as to require joint endeavour and large-scale action, not micro intervention upon individual choices. Moreover, there may be conflicting interests within society that are ignored by seeking to 'nudge' one group (Michie and West 2013). For example, for every governmental message about choosing to cycle rather than drive there may be many more messages from the manufacturers of cars. Michie and West (2013) argue it is the state's duty to protect its citizens from the potential effects of such excesses and Thaler and Sunstein's (2008) assumption of decision making based on individual choice rather than actual behaviour is an ideologically driven idea and a deep flaw in policy making.

Shove (2010a) highlights the case for transition management alongside technological developments. This way of thinking suggests that the move towards sustainability does not depend on policy makers persuading individuals to make choices, indeed one single group of actors does not have control over such choices. Instead, more sustainable regimes of technologies, routines, forms of knowledge, conventions, markets, and expectations take hold

across all domains of daily life. This has some echo in the literature noted by Darnton et al. (2008) encompassing theories of pro-environmental organisational activity that pursues a change mandate rather than a behaviour one. If nudge thinking represents one end of the policy spectrum, with its subtle and light touch intentions, then transition management and social practice theory, with their questioning of the way activities are undertaken, is the other. In between are a multitude of theories, models and proposals that certainly encourage Darnton et al.'s (2008) view that it is impossible to review the subject literature in full.

Conclusion

The challenge of aligning to any one position in the literature is clear in the lack of common ground and multiplicity of theories and policies that seek to manage one task, to create a more positive environmental situation. If an internal view of behaviour is taken then strategies to increase pro-environmental behaviour need to be targeted at the people involved, giving them the conditions to choose 'correctly'. Those accepting of both internal and external factors would seek to adjust contextual factors, but still ultimately suggest it is the people who must be the point of activity. If the external theories of behaviour are taken then it is a matter of potentially quite fundamental alterations to the status quo in order to effect change. Organisational theorists look beyond individual behaviour as the means for progress and social practitioners question the entire focus of activity itself.

Whatever means are chosen to explain and attempt to invoke change Steg and Vlek (2009) note the importance of evaluating the impact of the efforts. The need for comment, directly from the participants is essential and to this end they feel only information based strategies have received appropriate attention. This would support Kollmuss and Agyeman's (2002) observation about the persistence of the decades old Theory of Reasoned Action purely for its empirical testing properties. The lack of first hand evidence from other theoretical bases and studies may go some way to explaining why there may be limited agreement on the subject. Darnton et al. (2008) feel that policy makers need to consider the audience more as 'actors' in change, consulted with rather than talked at. Involving them as early as possible in the proposed changes is vital in a continuous cycle of action and reflection and this process should, in some way, go towards measuring the impact. This process would be very much in keeping with the participatory action research approach adopted in this thesis.

Steg and Vlek (2009 p33) cite Gardner & Stern (2002 p313) when suggesting "Participatory approaches are useful to understand the actor's perspective, to attract people's attention and gain their commitment, to design interventions that are within people's limits of tolerance, to build support for such interventions, and to increase public involvement in environmental policy making". This is of significance to the choice of research approach adopted in this thesis and discussed in detail in Chapter Four. Moreover, the suitability of the research methods, and the data provided by them, are what allowed me, despite the challenge suggested by Kollmuss and Agyeman (2002), to inductively align to a particular theoretical position when I came to write the thesis. Of all the theories and models of pro-environmental activity, it is *the study of social practices*, and *developing pro-environmental practice by looking at the whole system of the sport*, that the evidence from my research suggests has to be the focus for a change in football's relationship with the environment. That relationship, between sport, and particularly the sport of football, and the environment, and the need for a new approach, forms the basis of the next chapter.

CHAPTER TWO SPORT, FOOTBALL AND THE ENVIRONMENT

Introduction

This chapter critically discusses the relationship between sport and the environment, with particular reference to football. It identifies the definition of 'sport' used in this thesis. The benefits of sport are recognised, while noting the responsibility for the natural environment sport shares with other aspects of social life. It presents and discusses data indicating the geophysical and spatial scale of sports, and specifically football, facilities in England. The demands that hosting the sport of football places on the environment are identified and analysed to show the extent of the challenge the codified, competitive game provides for pro-environmental activity. It critically reviews the existing pro-environmental activity debate in sport, and football, and concludes with a discussion of the need to reconsider the relationship between staging sport and protecting the environment.

Sport and the Environment

The Council of Europe definition of sport, earlier enshrined in the European Sport for All Charter (Council of Europe 1975), states that "sport means all forms of physical activity which, through casual or organised participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels" (Article 2, Recommendation no. R (92) 13 rev, Council of Europe 1992). This definition is far from universal, the Charities Act (2011 Part 1, Chapter 1, section 3) for example states "sport means sports or games which promote health by involving physical or mental skill or exertion", yet this was unsuccessfully used by the English Bridge Union in 2015 in a legal challenge to Sport England's lack of recognition for their interest. Bale (1994 p5) suggests that sport is "what we make it" in so far as it is not a single concept with a fixed, collectively accepted designation. Humphreys and Ruseski (2009 p61) highlight the distinct challenges in defining sport in noting that inclusion of activities based on the use of gross motor skills, competition, organized rules, objective scoring or restricted to actions using only simple or no devices means that under such criteria it would be possible to embrace both "hot dog eating and ballroom dancing" as sport.

Bale (1994 p5) proposes the idea of a "sports trialectic" that sees definition not in terms of the field of the individual activity, for example the notion that football is always a 'sport', chess is

always a 'game', but in terms of the intention when participating; taking part for achievement, for fitness or for body experience. Competitive sport with organised results and bureaucratic structures becomes divisible from health based pursuits or simple recreational play. An activity such as running may embrace all three but it is only those recreations with an intent to identify winners and losers that are classed as 'sport'. The distinction is highly significant when looking at the demands on the environment of each type of undertaking, the simple kicking of a ball around on a piece of grass for fun, 'sport' according to Sport England's definition (Sport England 2015a) requires little and probably leaves limited trace but to play Bale's 'sport' of football with multiple teams in structured competitions using managed landscapes needs significant human and natural resources, with considerable implications for the environment. It is this definition of 'sport football', and this type of activity, that is relevant to this research thesis.

The benefits of sports facilities are clear; they serve a valuable social and economic function in communities and offer recreation, the potential for health improvement and a quality of life aspect for individuals (Strandberg et al. 2012). However, such provision comes at a price, not only do sports facilities take land out of use for other purposes, they require management which produces both financial and environmental costs. Using scarce natural resources for the staging of sport has been linked to ecological damage such as a decline in air and water quality, a decrease in habitats and a reduction of species (Mansfield 2009). This is occurring at a time when, as the Introduction highlighted, the environment is already under pressure; from climate change, population growth and the demands of economic development. Legislative protection, particularly from the European Parliament in, for example, the Water Framework and Sustainable Use of Pesticides Directives, adds to the potential conflict between low impact land management and the provision of sport (Strandberg et al. 2012). Often sport gains primacy in this conflict with new facilities constructed on top of an already large environmental footprint (Thibault 2009). Little wonder Mallen and Chard (2011 p425) conclude the natural environment is a "primary stakeholder in sport".

Given its social significance, it is appropriate for sport to respond to these challenges with acknowledgement of its responsibilities, maximisation of natural resource efficiency and minimisation of the harm that may be done (McCullough et al. 2016). This is a new experience for sports administrators who previously enjoyed an attitude extolling their interest as a force for

social good, but now face a population wanting all the perceived social, health and entertainment benefits of sport without the negative consequences of their existence (Cachay 1993). However, the subject of environmental sustainability is complex (Mallen et al. 2010a) and the practices required to implement effective landscape management strategies are new to professional sport (Babiak and Trendafilova 2011). That this is a challenge for commercial organisations, with the assets they have available (Jenkins 2012), serves to highlight the potential difficulty for those with more limited means in the non-professional sector.

As Bale (1994 p187) notes the "human-induced reversal of nature" is not only being contributed to by creation of sport facilities it is ultimately impacting sport, to the extent that opportunities for play are reduced. Bale (1994 p186) describes it as "nature's revenge" that irreversible environmental damage could cause the sporting landscape to disappear. A lack of mitigation being enacted in the staging of sport will potentially increase the efforts needed to adapt to the impact of climate change and an altered environment. Strandberg et al. (2012) envisage the many changes sports facilities utilising turfgrass will need to make to counter environmental change and the greater uncertainty it brings. Warmer summers may not only require more widespread employment of irrigation but scrutiny of the use of water. The demand for use of the facilities may increase with the rise in outdoor temperatures and the extra pressure on the turf will need careful management, yet the use of fertiliser to help turf recover may be monitored. Growing seasons may be lengthened causing additional use of machinery but so too may pest and disease lifecycles with fewer chemical options to treat them. The greater incidence of heavy rainfall will necessitate more effective drainage systems and flood prevention strategies on land now compacted more from the extra play and cultural activity. There are many ways in which attempting to solve one issue may impact or cause another and have ramifications beyond the field.

It is not just the natural environment that has been impacted by sport, increasingly the urban environment is being altered by sports facilities (Bale 1994) with noise, pollution, impacts on ecosystems and land deterioration (Cachay 1993). Transport to the venues can cause such issues before a ball has been kicked or bowled. Additionally, there are the effects caused by sport's demand for products to support its operations, and the consumption of resources to create them, such as the production of food and drink containers and equipment. At the level of

the sports 'mega-event' there is social conflict over the use of land, with questions of facility construction, implementation and legacy (Hayes and Karamichas 2012). Consequently, sport as a sector is under pressure from a broad spectrum of other elements in society; neighbouring communities, ecological groups and governments seeking to advance an environmental agenda. The challenge of tackling the environmental consequences from sport as a sector were summarised by Cachay (1993 p316-7) more than two decades ago;

> Organized sports' treatment of the environmental problem can be described as a reflection with double limitations. On the one hand, it blocks internal reflection by neglecting to deal with the subject of the limits of growth; while, on the other hand, it blocks external reflection by omitting the social causes of its own problematic relationship to the environment. Obviously such omissions will not facilitate a solution to the sports-environment problem - even more so because nature is a finite variable which cannot be manipulated and because every further measure of growth in the sports system brings the final exhaustion of nature's capacities that much closer .

Despite this warning, and it is of note that it has been over twenty years since Bale (1994) and Cachay (1993) wrote of the problem, remedial action since then seems to have been somewhat slow and the issue remains.

The Sporting Environment of England

To identify the scale of national sport-environment interactions, and the importance of sport in the pro-environmental debate in terms of its impact on the physical environment, a search was undertaken of the Sport England database, Active Places Power (Sport England 2017a). This provided data on the number and type of sports facilities in the country, defined within 14 categories and encompassing different models of access, ownership and management. In January 2017 the total number of all operational sports facilities in England was 123,654, everything from ice rinks to swimming pools to golf courses, consuming resources and changing their environment. Within those facilities, more than half the total (n=67,655) comprised "grassed pitches" ("a grass that is marked out for at least part of the year as a pitch for a particular sport, upon which a match could be played", Sport England 2017a). Of these grassed pitches, the number identified as being used for football was 40,661 (60%). Even removing the

sometime multi-use artificial grass pitches from the figures for sports facilities, nearly a third of all sporting venues in the country are used for football. By comparison cricket has 8,388 of the national figure, just under 7%. This prominence of football in the nation's sporting life, a life that needs to see dramatic alterations to its pattern of consumption in the light of climate change, makes it a relevant and significant context for examining environmental activity. It is a sport which, in the words of Bale (2000 p91), "imposes itself on broader communities".

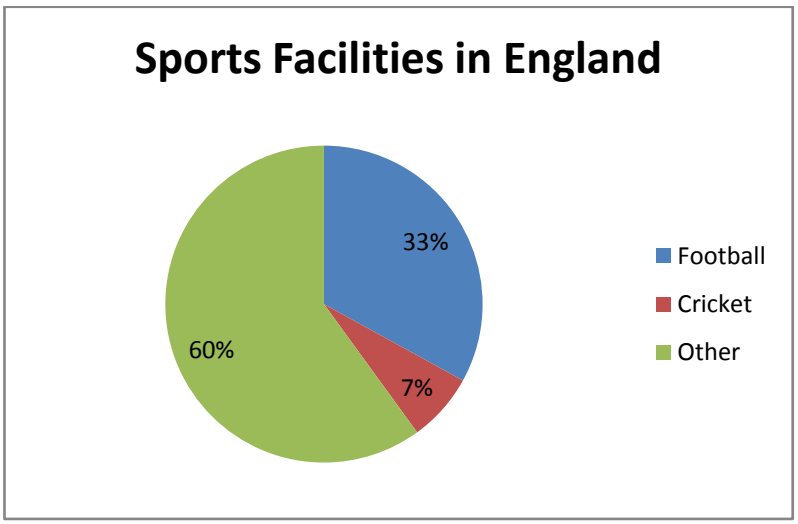

Figure 2.1 Total Sports Facilities in England Divided by Sport

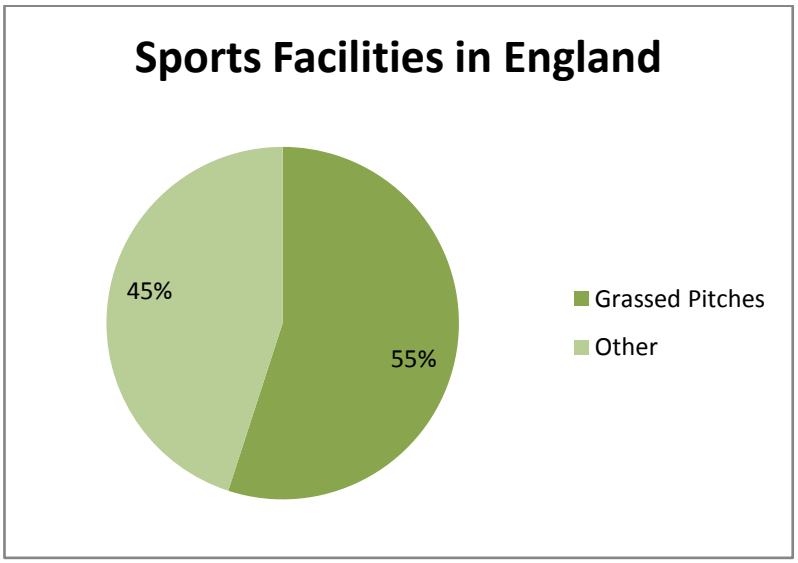

Figure 2.2 Total Sports Facilities in England Divided by Surface

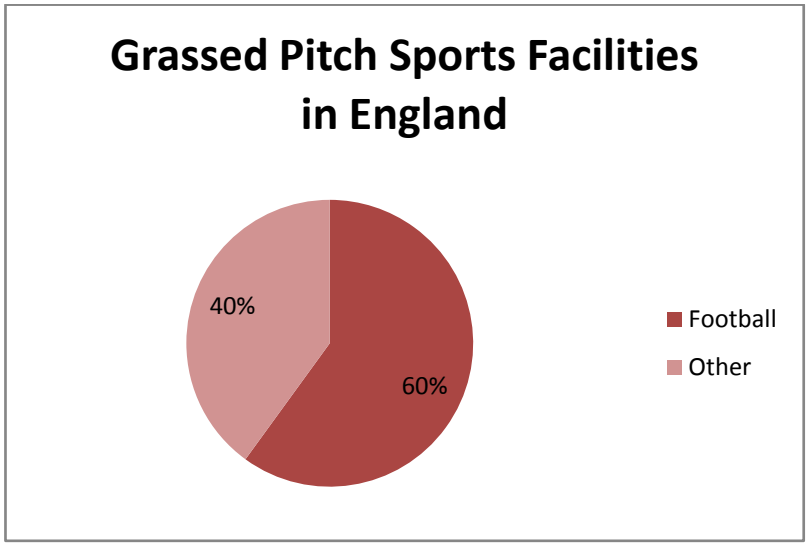

Figure 2.3 Natural Turf Sport Facilities in England Divided by Sport

It is possible to sub-divide the 40,661 football facilities returned by the search to identify the area of land used for different organisational levels of football and emphasise the relative importance of each in environmental decision-making. For grassed pitches used for football the Active Places database lists separately; "Full sized football, junior football, mini soccer" (the three available football criteria) with the results shown in Table 2.1;

Grass pitch type (football use)	*Number of pitches in England*
Full sized football	21838
Junior football	13022
Mini soccer	5801

Table 2.1; The number of natural grass football pitches in England.

The recommended sizes for football pitches are stated by the FA (2015a) and are highly specific to particular age groups as shown in Table 2.2

Grass pitch type (football use)	*FA (2015a) recommended pitch size (per year group) in yards (including run off area)*
Full sized football (18 years and over)	116 x 76 yards
Junior football (age 10 - 18 years)	86 x 56 (u11/12years), 96 x 61 (u13/14), 106 x 66 (u15/16) and 116 x 76 (u17/18)
Mini soccer (under 10 years)	46 x 36 yards (u7/8) and 66 x 46 (u9/10)

Table 2.2; FA recommended pitch sizes (in yards) for each pitch type and year group

It is not possible to identify the number of each sized pitch within the type, so an average of each year group recommendation is appropriate as shown in Table 2.3

Grass pitch type (football use)	*Average of FA (2015a) recommended pitch size (per year group) in yards/m (including run off area)*	*Area of the average FA (2015a) recommended pitch size (m^2)*
Full sized football	116 x 76 yards (approx 106m x 69m)	7314m^2
Junior football	101 x 65 yards (approx 92m x 59m)	5428m^2
Mini soccer	56 x 41 yards (approx 51m x 37m)	1887m^2

Table 2.3; Average size and area of FA recommended pitch sizes for each pitch type

This offers the opportunity to calculate the total land area utilised by football in England, as shown in Table 2.4.

Grass pitch type (football use)	*Number of pitches in England (Jan 2017)*	*Area of the average FA (2015a) recommended pitch size (m^2)*	*Total area in use for each pitch type (m^2)*
Full sized football	21838	7314m^2	159, 723, 132
Junior football	13022	5428m^2	70, 683, 416
Mini soccer	5801	1887m^2	10, 946, 487
	40,661		Total 241, 353, 035 or 241.35km^2

Table 2.4; Average and total area of FA recommended pitch sizes for each pitch type

A total of 241.35 km^2 represents an area more than twice the size of the island of Jersey given over to football use in England. This footprint underlines the significance of studying football and the potential for a pro-environmental activity agenda. There are 92 professional football clubs in the top four divisions in England. The pitches they play their home matches on provide for 0.23% of the land area identified in this data. These clubs, particularly the 20 playing in the highest division, the Premier League, generate the majority of articles written in the academic and popular press (Brown et al. 2008). Yet in terms of the landscape they constitute a very small minority, and due to the presence of an 'away' team a mere 46 of the pitches will be in use as a maximum at any one time. Of the 40,661 grass football pitches recorded by Sport England, 15,750 are sited at educational establishments and 17,584 under the care of the local authority. That is over 33,000 pitches far removed from popular notions of football and worthy of further study.

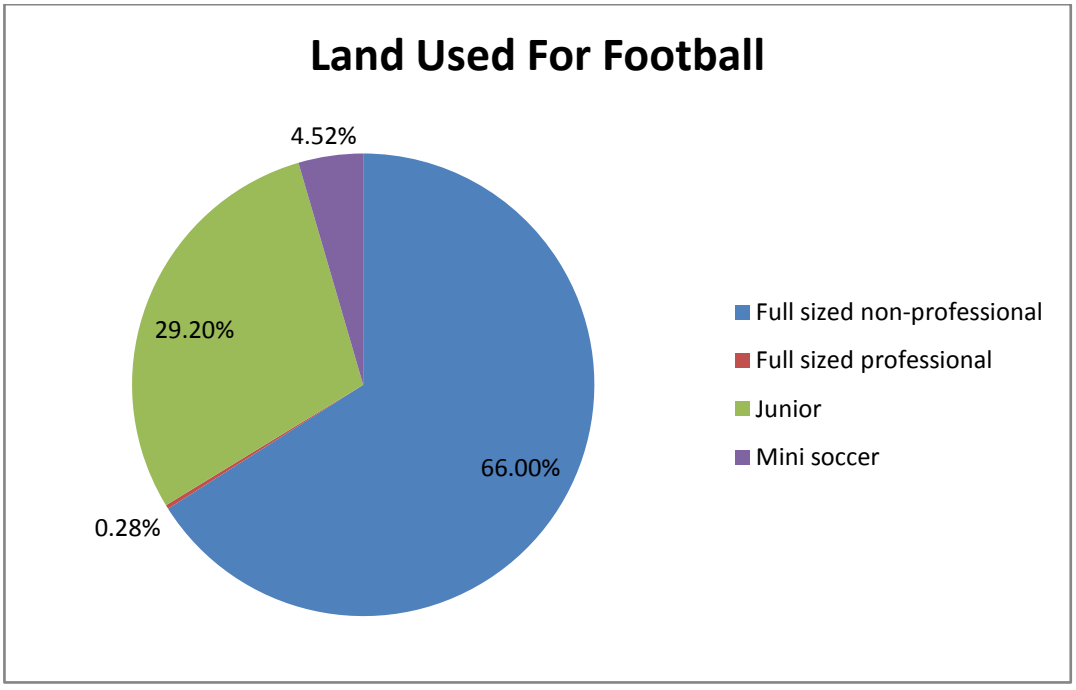

Figure 2.4 Percentage of total area of land used for football in England for each pitch type

The Physical Demands Of Football On The Environment

The management of the 40,661 grass pitches identified for playing football in England can consume large volumes of natural resources, particularly when seeking to meet standards and guidelines identified by governing and advisory bodies. The Football Association (FA) organises

football in England under the worldwide authority Fédération Internationale de Football Association's (FIFA) Laws of the Game (FIFA 2015a). The very first law, Law One, is concerned with 'The Field of Play'. Specific references to the environment in which the sport must be undertaken include; "Matches may be played on natural or artificial surfaces, according to the rules of the competition... the colour of artificial surfaces must be green... where artificial surfaces are used in either competition matches between representative teams of member associations affiliated to FIFA or international club competition matches, the surface must meet the requirements of the FIFA Quality Concept for Football Turf or the International Artificial Turf Standard, unless special dispensation is given by FIFA" (FIFA 2015a p6).

The 'natural' surface identified by FIFA is a turf sward overlaying a soil-based rootzone. The construction and maintenance of this feature demands significant shaping of nature to achieve successful results and conformity with both assessed standards and industry recommendations. Everything from the type of soil used, the grasses, orientation, slope and typical costs for the prescribed pitch sizes are suggested by the sport governing bodies and advisors (FA/IOG 2009) (Sport England 2011). A full description of the creation and management of football pitches in the landscape, and their consequences for the environment, is included in Appendix 1. To summarise, it is evident that while turf, as a living feature, may have positive environmental benefits in its ability to sequester carbon from the atmosphere, the technology that is used in building and maintaining it can reverse this position, so that a pitch can be a net contributor to harmful gases in the atmosphere. Procedures such as the use of fossil fuel based machinery, fertiliser and chemical sprays are the main cause of this. Moreover, there is nothing 'natural' about the pitch in terms of the landscape. Both the soil profile and grass used are unlikely to be native to the area and are regularly ameliorated throughout the pitch's lifetime. When categorising football's playing environment, Chernushenko (1994 p16), noted it was not akin to sports such as sailing and rock climbing, undertaken in a genuine natural setting, but an "outdoor sport practiced in a developed natural environment".

This imposition on the environment is not avoided by the use of non-turf surfaces. Similarly described in Appendix 1, artificial grass pitches (AGP) have standards for construction and management should they be approved for competitive play. While their maintenance may not generate the environmental impacts of turf, they are certainly not maintenance-free, nor will they

offer any prospective sequestration and are created using materials and processes of ecological concern. There are also significant financial and resource costs involved in what can be a regular replacement of the surface.

The environmental and financial impacts of hosting football are not just pitch related. In addition to shaping the landscape for play in England there is a requirement to build on it if seeking to create a club engaged in a particular level of competition. 'Ground grading' is a series of minimum standards for club facilities stipulated by the FA and individual leagues (see Appendix 2). Failure to meet these standards will see a club denied the opportunity to play in a particular league. Notable aspects with ramifications for environmental behaviour include the requirement for car parking, changing areas and toilets for spectators. For both full sized and junior football Sport England has collected data on the year every facility was built. More current facilities were created in the 1960s (n=3428) and 1970s (n=3698) than any other decade (Sport England 2017a). By comparison facility building in the current decade is currently at a much lower rate (n=1279 to April 2017). This is partly explained by the high incidence of refurbishment undertaken in the 2000s (n=3853) but this would have occurred before many of the current pro-environmental measures for buildings were introduced and could result in higher consumption of, for example, energy and water, than need be the case.

The need to work to a specific set of guidelines is not just best practice it is reinforced by the process employed for certain funding applications. The FA works in partnership with the IOG under the Grounds and Natural Turf Improvement Programme helping to support a network of regional advisors. If an FA affiliated club sought financial or practical assistance from their local FA the first stage of the procedure would be for a regional advisor to produce a report on the quality and performance of the pitch. This review would be undertaken according to the Performance Quality Standard (PQS) system, a series of measurable criteria with recommended dimensions for features such as grass height, cover and soil content (Appendix 3). PQS was developed "In order to ensure that any funding produces pitches of sufficient quality for community and non-league competitive use" (FA Grass Pitch Quality standards - n/d). The PQS system has also been adopted by Sport England for natural grass pitches funded under their Playing Fields and Community Green Spaces programme. This establishes a clear link between the club's choice of management strategy, their potential pro-environmental

behaviour in relation to the pitch, and the decisions of the sport's governing bodies to fund, or not, that behaviour.

Sport England, as an executive non-departmental public body sponsored by the Department for Culture, Media and Sport (DCMS), is the organisation that provides a lot of that funding (an Exchequer and Lottery derived estimated £1 billion between 2012-17 to sport national governing bodies and individual clubs). The strategy of such funding according to DCMS in "Creating a sporting habit for life" (DCMS 2012) is to provide "direction and purpose" (DCMS 2012 p2) across sports, in a competitive scenario with a need for sports to "deliver" with "clear financial sanctions" (DCMS 2012 p9) for those who do not meet the expectation. Sport England distributes this funding in accordance with participation targets for each sport. In their 'Whole Sport Plan' football, via the FA, is accorded £30 million between 2013-17 (Sport England 2013). In the calendar year 2015 the spending by professional football clubs on player transfers was approximately £1 billion (BBC 2015). It is difficult to reconcile the idea that public money needs to be given to football when it enjoys such existing finance and registers impacts that move society further from the low-carbon ideal.

Sport and the Environment Literature

Given that climate change demands fundamental transformation of our lives (Shove 2010a) and sport has been identified as a significant consumer of resources (Mansfield 2009), it might be expected to find a comprehensive sport and environment literature. Instead, discussion of sport and pro-environmental activity is relatively recent and offers the potential for expansion. Mallen et al. (2011) undertook a content analysis of research within 21 sport-focused, refereed journals spanning the period 1987 to 2008, finding only 17 (0.37%) of a total of 4639 peer-reviewed articles focused on, what was identified in Chapter One, as the often broadly defined term of 'environmental sustainability'. Since 2008, and what Mallen et al. (2011 p251) concluded was neither a "robust" nor "comprehensive" body of work, there has been what Trendafilova et al. (2013) describe as a growing academic interest in sport and the environment. From a point when Chernushenko (1994 p2) felt able to suggest "not a single paragraph existed on environmental concerns in any of the mainstream sports history, sociology or management texts", research now encompasses the legacies of major sporting events such as the Olympic Games to the footprint of smaller individual sports (such as golf), team based facilities and the

behaviour of those concerned (see for example Karamichas 2013; Mansfield and Wheaton 2011). Yet, in contrast to other aspects of sport, research focusing on the relationship with environmental management remains somewhat sparse (Babiak and Trendafilova 2011), since Mallen et al.'s (2011) analysis there have been only another 29 articles on this subject in the 21 journals they examined.

The aspects of pro-environmental activity covered by the post 2008 articles are yet to advance the debate to the level of the general pro-environmental literature in terms of the causes of behaviour, an understanding of practices, or interventions to change them. The focus of some of the sport based work is observation of what exists in facilities operation (for example Casper et al. 2012; Collins and Flynn 2008; Mallen et al. 2010b; Phillips and Turner 2014). These are surveys, interviews, case studies and measurements, more audit of the state of a sport, organisation or event than analysis of activities. A number of other studies seek to make the behaviour of consumers of the sport the focus, identifying how their actions may be influenced by the sport or sports venue they attend rather than examining the environmental implications of hosting the sport and its organisers' managerial decisions (Baldwin 2010; Brymer et al. 2009; Inoue and Kent 2012; McCullough 2013).

Where there is examination of motivations or influences on environmental activity in a sport the subjects of study are large scale or professional organisations (for example Babiak and Trendafilova 2011; Kellison and Hong 2015; Mallen et al. 2010a; Peachey and Bruening 2011). There is no acknowledgement of the scale of the non-professional field based sports sector and their impact on the environment and no work relating to the practices of these organisations. The *Routledge Handbook of Sport and Politics* (Bairner et al. 2017), for example, illustrates its brief chapter on 'Sport and Sustainability' with a case study of Centre Court at the All England Club, Wimbledon (Atkinson 2017). McCullough and Kellison (2018) begin their introduction to the *Routledge Handbook of Sport and the Environment* by positioning pro-environmental activity with reference to the professional National Hockey League, individual behaviour change and the few sport organisations who have integrated environmentally responsible policies in their operations, the first example given being the International Olympic Committee (IOC). While the general pro-environmental activity debate considers the activity of large populations, for example the city of Buenos Aires (Jakovcevic et al. 2014), Spain (Torgler and Garcia-Valinas

2007) and Europe (Meyer 2015), the sport based pro-environmental activity research largely confines itself to discussions based on data from a very small elite of the total acting in sport.

The comments of Shove (2010a) regarding mutual referencing, noted in Chapter One, seem particularly apposite when reviewing the existing sport focused pro-environmental literature. Not only are North American based, or professional, commercial, examples used for data collection and citation, but the starting point for much of the work is that there are confirmed antecedents of behaviour and that particular debate has already been largely resolved. The premise appears to be that individual sport managers are able to make decisions that will impact the environment and other considerations are offered more, as Shove highlighted (2010a), as contextual influences on the decisions managers will make. Of social practice theory, if there is any consideration there is no mention. This is reflected in the chapter provided by Inoue (2015) in the work *Sport Management and the Environment* (Casper and Pfahl 2015), which seeks to provide "theoretical foundations for understanding the pro-environmental behaviour of individuals involved in sport" (p14). In its ten pages there is brief mention of internal and external factors with the majority of the work and a concluding diagram drawn from the theory of reasoned action, the theory of planned behaviour and the value-belief-norm theory. This seems typical of the sport pro-environmental literature, that it is derived from a sports agenda rather than a deeper appreciation of the environmental discussion. The last of Inoue's (2015) highlighted theories was written in 1999, and the volume and importance of work produced since then cannot be ignored in any serious discussion of the subject yet, in the rush to introduce case studies of well known sports teams and venues, that appears to be exactly what some authors are doing. Despite Shove's (2010) assertion that the issues associated with climate change and natural resource depletion are so significant as to prompt investigation of new ways of living it seems the sport literature is yet to address the question posed by Thibault (2009) about what we are prepared to give up to protect sport, let alone what sport is prepared to give up to protect the environment.

Football and the Environment Literature

The sport of football has the potential to change this debate, not only because of its physical footprint on the land. Parnell et al. (2013) note football's ability to promote positive messages and achieve social change. To this end various campaigns have been launched within the sport

seeking to remedy the divisive issues of racism, sexism and homophobia (Tucker 2015). Beyond the sport itself Brown et al. (2008) highlight how a football club can both embody and reflect the views of their community, developing a link that goes beyond mere participation in the activity. O'Gorman (2016 p794) identifies programmes adopted by governments around the world to use non-professional football as a means for "community cohesion, positive youth development, enhanced social inclusion and improved health and well-being". This influence, says Baldwin (2010), is why community-based organisations, such as football clubs, have been considered as potential vehicles for driving environmental activity change.

Yet, within studies of the sport of football the environment is little mentioned. The *Routledge Handbook of Football Studies* (Hughson et al. 2016) contains forty chapters documenting many social, political and cultural aspects of the game, the environment is not one of them. *Soccer and Society* devotes an entire issue (Volume 17, Issue 6, 2016) to the challenges facing youth and junior level football yet does not include management of their environment. There is some research relating to the relationship between the community and its local professional football club (Brown et al. 2008) and the stadia such ventures occupy (Bale 2000). Other authors have sought to use the medium of a professional football club or event to measure impacts on the environment, economics or society (for example Baldwin 2010 and Collins and Flynn 2008). There is also discussion of corporate social responsibility (CSR), a broad term often including decision making in relation to the environment, in professional football (for example Hamil and Morrow 2011, Reiche 2014, Walters and Panton 2014). That research seeking to understand behavioural cues within football could be of relevance to this study is evident, however, the difference between the finance, resources and aims of a highly select group of commercial organisations (professional football clubs) and the majority of those involved in the sport (the not-for-profit, largely voluntary, non-professional clubs) renders simple transfer of this knowledge inappropriate.

A decade ago Collins and Flynn (2008) noted that the environment was beginning to be recognised at an international level of football, but since then it appears little attention has filtered down the football pyramid to encompass those outside the elite. Another potentially insightful article in terms of the causes of behaviour within football, a health intervention through a football in the community scheme, similarly uses the vehicle of a Premier League football club

rather than a non-professional organisation (Parnell et al. 2013), but ultimately offers a verdict on the effectiveness of the scheme in relation to its goals rather than a more general understanding of how to alter practices. While there is potential merit in such work for understanding the football sector, and the prompts and impacts of decision making, these are studies rooted in large scale commercial club observations, far removed from the majority of organised football, the subject of this research. Such focusing of research on the higher echelons of the game leads O'Gorman (2016 p793) to conclude there is a "bias" in the work towards professional football and "a relative academic neglect of football at youth and junior grassroots level". This, despite it being, "a fertile ground for future academic analyses" that can "better capture the lived experiences and realities" of those involved in the sport (O'Gorman 2016 p797).

Sports Industry and National Governing Body (NGB) Initiatives

Outside of the academic literature, sports governing bodies and individual organisations have produced publications relating to pro-environmental activity. Schmidt (2006) suggests that environmental thinking within the sports industry has been formulated with two goals; a reduction in the impact on the planet of sport and a utilisation of enthusiasm for sport to raise environmental behaviour amongst the population. Such a situation would reflect the findings of the academic literature review, but again it would presuppose that the determination of activity discussion has been resolved in favour of a behavioural agenda and that sport can be retained, albeit with a lower footprint, with individuals being inspired, persuaded or cajoled into altering their daily activities. Karamichas (2012) believes there is little evidence of such environmental transformation at the level of host nations of major sporting events. For a sports club simply looking for ways to increase their pro-environmental activity this debate would potentially pass them by, thus the stance of the industry and the opportunities they choose to provide become highly relevant to what may be found at the non-professional level.

Whether it is because it is 'the right thing to do', a cost saving exercise, pre-emption of legal challenges or attempt to strengthen relationships there are now numerous environmental initiatives across sport (Trendafilova et al. 2014). Like the academic literature, however, these initiatives represent a small proportion of the overall activity and Kellison and Kim (2014) note the lack of attention to sustainability by much of the sports industry. Moreover, the information

being produced by sports bodies largely reflects the examples of journal articles in so far as the perspective seems very much 'top-down', large organisations, big events and strategies that offer encouragement to the wider sporting community rather than any fundamental change to either the way that sport is run or the resources available to organisations. The sports industry appears to have embraced at least some elements of the psychological interpretation of behaviour while not considering either organisational or social practice interpretations.

The International Olympic Committee (IOC) is regularly mentioned in sport and pro-environmental activity work (for example Casper et al. 2012; Mallen et al. 2011; Mallen and Chard 2011; Paquette et al. 2011; Thibault 2009; Trendafilova et al. 2014). As the organisers of the world's largest sporting event and their early recognition, relative to the rest of sport, of environmental issues in the delivery of their events, the IOC has also included the subject within their 'Olympic Charter'. The IOC initiated the First World Conference on Sport and the Environment in 1995, began the process of measuring the environmental impacts of its games in 2003 and released a code of conduct for athletes to be environmental role models in 2006 (Mallen et al. 2011). In 2007 the IOC produced the 'IOC Guide to Sport, Environment and Sustainable Development', a document containing a lot of suggestions with regard to pro-environmental activity, for both national sports authorities and club organisations seeking to act locally. However, the wording of the IOC guide supports the claim that their pledges on the environment are open to interpretation and there is suggestion they have simply been following societal trends in promoting an image of care and its events continue to exert significant environmental damage (Paquette et al. 2011). The inclusion of "sustainable development" within the IOC's guide implies that development is compatible with pro-environmental activity and it is clear there is no intention of sacrificing growth to ecological management. For Hayes and Horne (2011 p3) the IOC are not simply delivering an altruistic approach to the environment, their sporting 'mega-event' provides "a platform for economic growth oriented approaches to environmental protection and amelioration" with the IOC fulfilling the role of "regulatory authorities for the development and dissemination of environmental best practice and sustainable technologies, facilitating the creation and growth of new markets". Adoption of behavioural theory that places the individual at the heart of any change, to be informed, assisted and nudged by government and governing bodies, is consequently more compatible with the need for continued development than any suggestion of examining existing practices.

This transfer of emphasis onto the individual was found to equally apply to sports clubs by Mallen et al. (2010a). Examining environmental sustainability amongst leading sport facility managers in North America they identified that whilst a range of programmes offered participatory schemes (such as Leadership in Energy and Environmental Design (LEED), the Global Reporting Initiative (GRI) on sustainability performance standards and the International Standard Organization (ISO) certification programme) none of them provides specific industry-based requirements and instead expect organisations to develop their own solutions to be submitted for approval. Thus, it is noted that "consistency in ES [environmental sustainability] initiatives to obtain certification is not a requirement of these programmes at this time" (Mallen et al. 2010a p370). This remains the case, that numerous environmental standards are optional and a decision for the individual club to make. Even if the decision is to commit to action there are an array of options. Wembley Stadium and Manchester United FC, for example, have achieved ISO14001 certification, whereas Arsenal FC (Arsenal FC 2015) suggest the club is "making efforts where practical to try and operate as a more environmentally friendly organisation" although on 29 November 2015 Arsenal flew from Luton to Norwich, a 14 minute aerial journey (Hytner 2015).

At a national level, Sport England produces a large volume of information relating to sports club practices, however within the organisation's numerous guidelines, strategies and suggestions there is little mention of pro-environmental activity as an end in itself, everything is done towards attainment of other goals, particularly growth through increased activity. For example, under the heading of 'Planning for Sport' (Sport England 2015b p1) they state;

> Our planning objectives are to seek to protect sports facilities from loss as a result of redevelopment; to enhance existing facilities through improving their quality, accessibility and management; and to provide new facilities that are fit for purpose to meet demands for participation now and in the future.

The Playing Pitch Strategy Guidance document (Sport England 2013 p1), a resource offering local authorities "a recommended step by step approach to developing and delivering a playing pitch strategy", and developed in conjunction with The Football Association, England and Wales

Cricket Board, Rugby Football Union, Rugby Football League and England Hockey Board, does not mention the environment at all in its 61 pages.

A website, separate to the Sport England home site, called Sustainable Clubs, has, however, been developed for the organisation to provide "guidance to help community sports clubs use environmental sustainability to reduce their running costs" (Sport England 2015c). An energy calculator and decision maker, interactive tool and audit guide demonstrate how a sports club can identify its impacts and options. Case studies give examples of organisations who have reduced their resource consumption and there is a brief guide to legislation. A section on funding any improvements to facilities refers the user to their sport's national governing body. Yet the impression is very much one of information provision, self-help guidance to promote changes individual clubs can make to alter their consumption not any consideration of how sport is governed, organised or played. The expectation appears to be the continuation of the sport, whichever sport, as per normal, reducing the environmental footprint however each club can, and there is no advice for pitch related activities. Once again the aim is familiar; small scale, advisory interventions that claim to both promote the environment whilst embracing development. There is no effort to examine the forces noted by the pro-environmental literature, Sport England (2015b) simply state "we add value to the work of others and help to deliver sustainable development goals".

McCullough et al. (2016 p4) observe how sports administrators and organisations promote and support particular initiatives such as environmental sustainability "to boost the credibility of the league's environmental efforts and to stave off threats (e.g. accusations of greenwashing; perception of unauthentic or dubious intentions and motivations) to the legitimacy of these organizational practices". This suggestion of 'greenwashing', a term Lyon and Maxwell (2006 p6) define as "the selective disclosure of positive information about a company's environmental or social performance, without full disclosure of negative information on these dimensions" is a feature identified by a number of studies of sports industry led initiatives and an entire book, Greenwashing Sport, by Miller (2017). MacIntosh et al.'s (2013) examination of the sport of skiing noted the significant gains consumer-driven businesses stand to make from public relations that herald their environmental credentials and the motives of the facilities studied in framing their policies were towards this return on investment. Levermore (2011 p555), looking at

the broader promotion of CSR in sport, found that despite increasing claims of importance there was limited evidence of impact in the sector, few means of evaluating outcomes and little external verification of claims, reserving particular criticism for the 2010 FIFA World Cup. Football comes in for further criticism by Miller (2017 p72) who observes that the environment is of concern to the sport only in so far as "FIFA, host countries and football more generally consider it a factor in their public imagery". That football tournaments attract sponsorship by fossil fuel extracting multinational companies does not escape Miller's (2017) attention, and he suggests attempts to portray the 'green credentials' of the event are derisible when allied to the ecological footprint of hosting the competition and the promotion of their benefactors.

The evaluation and external verification for Mallen et al. (in Casper and Pfahl eds 2015 p213) is key, to avoid greenwashing "an event must establish a feedback process that engages with related stakeholders and includes designated timelines in order to continuously develop understandings on the progress towards each target". Yet as MacIntosh et al. (2013) noted organisations may seek to minimise their environmental activity reporting, a response to perceived 'green fatigue' amongst the public and a potential backlash if believed to be engaging in greenwashing. Caratti and Ferraguto (2012) confirmed little evidence of environmental monitoring in the mega-events they studied, a suggestion of failing to follow through on claims made during the bidding process. Mallen et al. (2010a) noted that their interviewees agreed there were some areas of venue management, such as recycling and electricity use, where it was easier to see impacts of environmental measures, where change is quantifiable and monetary savings are maximised. By contrast other aspects of operations were not subject to evaluation as it was more difficult or the tools for doing so had yet to be developed. All this makes it somewhat difficult to accept the claim that "the sport industry has positioned itself as a leader" in environmental sustainability (Trendafilova et al. 2014 p13).

Football and the Environment

The commitment to pro-environmental causes is expressed at the top in football, by FIFA, noting a "duty to society that goes beyond football: to improve the lives of young people and their surrounding communities, to reduce the negative impact of our activities and to make the most we can of the positives" (FIFA 2015b). Positive words, yet FIFA's 'improvements' seem

unlikely to signal the change required in the organisation and consumption patterns of the game, particularly at the 'surrounding communities' level. They document their "zero emission building" that "sets benchmarks for the environment" (FIFA 2015b), Cape Town winning the 2010/11 IOC Sport and the Environment Award for the 2010 FIFA World Cup and 40,000 tonnes of GHG emissions offset for the 2011 Women's World Cup (FIFA 2013). However, Cape Town's own assessment of the 2010 World Cup showed various issues with the management of the environmental programme (City of Cape Town 2010) and the practice of offsetting is the subject of widespread comment and criticism (for example Broderick 2009; Gilbertson and Reyes 2009; Hayes and Karamichas 2012; Lovell et al. 2009 and Hepburn 2007). Undeterred, FIFA launched another programme four years later, this time encouraging supporters attending the 2014 World Cup to do the offsetting (FIFA 2014). Not only does this seek to transfer the responsibility to the individual and promote the message of self-help but it does little to aid the community having to cope with the influx of visitors and travel. If it is the football world's version of top-down, nudge theory it is important to note that a requirement is for behaviour to be measurable and influenced. As there is no indication of this occurring either FIFA do not appear to have understood this or it is simply another effort to build reputational capital (Babiak and Trendafilova 2011).

In England, the FA proclaims its own environmental credentials in a manner similar to FIFA. As the national governing body, the FA has two means of influencing environmental activity in football ; via its own activities in respect of the facilities, personnel and events under their direct management, and through the direction they provide to local FA bodies and clubs with policies, funding and information provision. Thus they can influence both the professional game and that of the community-based sector. The FA makes numerous statements both online and in print about their status with regard to environmental management, noting they are "committed to managing the environmental impact of our operations. In particular, we are extremely aware of our responsibility to respond to the many challenges of climate change" (FA 2015b) The FA describes how it has pledged to monitor and improve environmental performance, taken steps to reduce its carbon footprint, worked with partners and suppliers towards achieving best environmental practice and communicated its achievements in this area (FA 2015b). Wembley Stadium is highlighted for its impressive environmental results, along with the national training facility at St George's Park, a place where the FA are "committed to demonstrating leadership in

environmental sustainability" (FA 2015b). However, while the publicity generated by internationally known venues can advance the pro-environmental agenda, Wembley remains one pitch, even less statistically significant than the 92 professional pitches in the country and with an environmental impact dwarfed by the 21,746 other pitches of similar dimensions managed with what is likely a fraction of the resources available to the national stadium.

Writing in 2008 Collins and Flynn believed that "in the UK, the Premiership League and Football Association currently does not force or encourage clubs to consider the environmental impacts of their operations and take action to minimize those impacts" (p753). Leaving aside the point that the Premier (not "Premiership") League and FA's jurisdiction does not extend to 'the UK', that statement should perhaps have been qualified by the authors as relating to professional level clubs. It will be of note to this research as to how much force or encouragement there may have developed in the game since that report, as the environment has clearly been witnessing change. The Premier League can claim there are funds that assist the 'trickle down' of wealth, but only a few are specific to facilities and none are environmentally related. Amid much publicity, 'The Premier League and The FA Facilities Fund' was announced in October 2013, a capital investment vehicle administered via the Football Foundation (the UK's largest sports charity) described as "crucial to our aim of improving facilities up and down the country" (Horne 2014). Yet the fund is only £102 million spread over three years and includes public money. Manchester United's wage bill for 2013/4 was £216.4 million (Manchester United FC 2014).

Recognising that more than 80% of football is played on publicly owned and managed facilities, the FA (2013 p8) notes "the important role that local authorities and schools play in supporting the National Game and over recent years we have started to work much more closely with these partners in helping to identify and support local priorities for football". Given that the FA includes the environment in its priorities it might be expected to see support offered for local implementation of this agenda. The FA claims so by developing "advice and support for clubs seeking to address environmental sustainability issues" (FA 2013 p18). The Football Foundation, a charity dedicated to improving the facilities infrastructure across grassroots football, has, according to the FA National Facilities Strategy 2013-15 delivered over £780m of facility improvements across over 1600 projects and is the vehicle for the FA and its partners to "continue to invest in clearly prioritised facility projects" (FA 2013 p35). That the FA also raises

the issue of financial sustainability in the document; "clubs and leagues must work with their County FA and The FA to identify how opportunities for income can be maximised and how costs can be minimised" (FA 2013 p19) is relevant because of the link between reducing natural resource use and making expenditure savings. Thus pro-environmental activity would not be out of step with community football facility development by the governing body.

The Football Foundation, offers some guidance to smaller clubs on environmental issues "to encourage potential Football Foundation grant applicants to consider the environmental impact of their proposed projects and how this might be reduced" (Football Foundation 2011 p1). This includes mention of environmental impacts and issues and some deft fence-sitting on topics such as artificial pitches, heaters and heat pumps. The statement on car travel to games perhaps best typifies the lack of actual advice and priority of the environment in relation to growth of the sport;

> Car parking can be a controversial issue for the Football Foundation. Ideally we would wish to promote the use of public transport and cycling to our funded facilities and not seen to be offering support to car parks that might encourage thousands of regular users to arrive by private transport. We need to recognise however, that this could severely disadvantage rural areas with little or no public transport and also raise child protection concerns by encouraging young children to travel alone. Also, without parking provisions it would be less convenient for parents to get their children to a Foundation facility and this in turn could lead to a decline in participation (Football Foundation 2011 p2).

The existence of a programme that supports football clubs to behave in a certain way (the PQS system) is potentially encouraging because it could be utilised to deliver a pro-environmental agenda. A pro-environmental agenda presumes that football pitch and facilities management could be managed to a less harmful impact on their surroundings and that must clearly be the case when practices are misguided, wasteful and inefficient. The European Sport Charter states that provision of sports facilities can be arranged in accordance with sustainability and environmental regard when they "incorporate measures designed to ensure good management and their safe and full use" (Article 4 Recommendation no. R (92) 13 rev, Council of Europe 1992). Lest the definition of good management be unclear, Article 10 states "sporting activities

including those in urban, open country and water areas be adjusted to the planet's limited resources and be carried out in accordance with the principles of sustainable development and balanced management of the environment" (Article 2, Recommendation no. R (92) 13 rev, Council of Europe 1992).

The reasons for the use of the PQS system and the desire to provide high quality facilities for players are clear, particularly if they are a perceived as a barrier to participation. Yet environmental management is not a feature of the current PQS pitch assessment system, deficiencies are identified and action is suggested to raise the standard, whatever this may entail. This is despite acknowledgement that elements of the system are flawed, such as the lack of weighting within the scoring, in a study that showed pitch quality can be linked to resource availability, particularly finance and personnel skills (Bartlett et al. 2009). A study conducted on behalf of the England and Wales Cricket Board (ECB) (Carmichael 2011) found various ways in which the sport of cricket could improve environmental performance. As cricket outfields are similar in composition to football pitches and buildings used at cricket venues may be multi-purpose or akin to football facilities (indeed the IOG/FA/ECB and Sport England have produced a guide to "Successful Management of Dual Use Cricket and Football sites" 2014) some of the recommendations adopted by the ECB could be promoted within football. However, that work is very much aimed at the individual club taking specific management decisions relating to the provision of their sport, it does not question the physical basis of the sport, the infrastructure or changes that could be made from a whole sector perspective.

Nonetheless individual management decisions relating to natural resources can have an impact. Kong et al. (2014) confirm that turfgrass has the potential to become a long term carbon sink if only maintenance practices were manipulated to retain turf integrity whilst reducing emissions. Given the area of land under non-professional management there could be a substantial collective result were clubs to adopt more pro-environmental recommendations. Strandberg et al. (2012) believe maintenance practices, when properly designed and managed, can be a force for greater biodiversity and bolster environmental protection. That there is the potential for the management of football pitches to become more pro-environmental is possibly best illustrated by the work of Forest Green Rovers Football Club. Forest Green Rovers have sought to create the first professionally managed organic football pitch by focusing on the requirements of soil

and grass when used for a playing surface and delivering them via highly specific monitoring of site conditions and application of particular products. Rather than synthetic chemicals the groundstaff have used Biochar, coconut based wetting agents, compost teas and seaweed extracts in their pitch management. Alongside this is a rainwater recycling system, solar powered robotic mowers and analysis of all aspects of their activity. However, even then it is recognised by Stewart Ward, the former head groundsman who began the programme, that only "around 90 per cent" organic status has been achieved (IOG 2015). The reason is the continuing need for fossil fuel based machinery to enable many of the maintenance tasks undertaken on natural turf. Additionally there is a lack of evidence of the success of additives such as compost teas in achieving claims made by supporters (Dearborn 2011) and indeed some research has suggested they are of little or no value in turf management (Rossi 2007).

Suggestions of new technologies to achieve such a reduction in the environmental impact of pitch management, however, would come at a cost and Kong et al.'s (2014 p136) proposal for a maintenance schedule "based on its carbon stock and functional purposes to achieve a net carbon budget beneficial to the environment" seems a demanding suggestion for any non-professional club. It is notable that Forest Green Rovers FC are owned by the founder of a green energy company and play in the fourth highest division of English football. Strategies that seek to promote the individual agenda need to consider the pressures and requirements on a voluntary group operating in what is a completely different practice, displaying vastly different interactions between each element. Perhaps in order to embrace management changes clubs may need to be freed from the burdens of some of these elements. Maguire (2015 p521) notes how work published in the *International Review for the Sociology of Sport* and other journals has highlighted " how the structure of global sport is symptomatic of a new, consumer dominated phase of western capitalism". Viewed from this perspective it appears unchecked growth in sport, the increased participation sought by Sport England, and harmony with the environment may be incompatible.

As Jenkins and James (2012) found, even at a Premier League level of football there are no codes of conduct or specific instruction relating to aspects of corporate social responsibility, such as environmental behaviour, and pressure from legislation, government, NGB's and supporters appears weak or non-existent. The lack of guidance on environmental management

should be contrasted with the abundance of information given by football authorities on pitch management. That the latter can directly impact the former is relevant but the FA, Institute of Groundsmanship and Sport England do not make that link. As Darnton et al. (2008 p4) note in the broader pro-environmental activity debate;

> Initiatives are more likely to succeed where there are clear legislative guidelines supporting their activities, as this helps to ensure that schemes are prioritised within local delivery programmes and can be used to secure the support of local politicians. Pilot schemes can also be useful for securing wider policy buy-in. Initiatives are more likely to achieve success where policy-makers work interactively with target audiences. It is also important to ensure that project participants understand the policy intention and process in a wider context.

Such communication of intentions towards stated aims and long term planning for the environment simply do not appear to exist in English football. It would be difficult to even make claims of 'greenwashing' by the governing bodies as there is so little promotion of pro-environmental action. Individual, large commercial organisations such as Wembley National Stadium Limited and Premier League clubs are cited as evidence of good practice, but even the work being done by Forest Green Rovers is the result of individual ambition calling upon resources that non-professional clubs do not have. Academic research does not currently highlight this divide or show the potential development that could be made to improve the environment around the many thousands of football clubs in the country. The depth of the pro-environmental debate and the challenges faced in pursuit of positive action is ignored in the overly simplistic guidance issued to those in the sport.

Conclusion

It is important not to hold football, or indeed any sport, up as a singular cause of environmental problems. As Jarvie (2006 p239) notes, the link between sport and the environment must be viewed in terms of the wider landscape of political, social and economic development that, regardless of sport, is impacting the environment;

> Students of sport, culture and society should recognise that many environmental sporting problems and concerns are not disconnected to the key causes of environmental problems

related to the generation and distribution of wealth, knowledge, power, patterns of energy consumption, population growth, affluence and poverty.

Wainwright and Ansell (2008) describe how sport has actually been used as a vehicle to try and redistribute wealth and reverse the decline of urban landscapes with enhancements to both the physical environment and the health, wealth and wellbeing of their populations. Sport's supposed potential to change the outlook for some sectors of society has been noted by government and consequently it experienced an increased profile in social and economic regeneration schemes promoted by the Labour government in the early part of the last decade (Coaffee 2008).

Moreover, as Bale (1994) observes sporting landscapes have additional value, culturally and financially, before consideration is given to how they may be managed to be net providers of environmental worth. Kaplanidou and Gibson (2012) note the value of youth-based football events with their large numbers of participants, parental accompaniment and revenue generating potential, so much so that communities in the United States may actively seek to host such tournaments. Land used for sport has a significance beyond economic measurement (something difficult to measure anyway) as "unlike many other industries, sport also generates significant intangible benefits to a large segment of the society" (Humphreys and Ruseski 2010 p74). There is a shared potential in a sporting space to impact emotions and the quality of life, the development of a 'sense of place', a geographical description to describe personal feelings and attachment to an area. As Wainwright and Ansell (2008 p183) propose, "spaces of sports development may be absolute, material and concrete, but can also be metaphorical and imaginative". On a more basic level, sport may simply represent a welcome diversion from the struggles of hard and monotonous lives (Tucker 2015).

However, difficulties in the economy have impacted the ability to make good on the intentions. Local authorities are the providers of community sports and leisure facilities and, since changes to the Public Health Outcomes Framework (Department of Health 2013), now have a duty to promote healthy lifestyles amongst their populations. However, there are no statutory requirements for them to support sport with facility provision and the cost of maintaining these has seen many close or be the subject of attempted asset transfer from public to community

management (Findlay-King et al. 2018). In addition, the benefits of spending on sport may have been overstated. Coaffee (2008) notes the potential exaggeration of impacts on regeneration and Parnell et al. (2013 p35) raise the "widespread belief " that social inclusion and healthier lifestyle activity can be promoted via football and note that, despite numerous initiatives, there is little evidence to support this theory and "football-orientated interventions tend not to utilize coherent research-based procedures that can adequately evidence any ‘real’ (i.e. observed, articulated, measured and evaluated) effectiveness".

To view the challenges for football thus requires a consideration of the relationship with the environment and identification of what one sport has any right to do. Pietarinen (1990) notes four attitudes towards nature within sport, ranging from 'utilism', defined as the environment purely being used to serve human requirements such as pleasure and standard of living, reflected in sports such as motor racing, through to 'naturism' which would exercise a radical constraint of sports that unacceptably impact the environment. Football could possibly be included in a category of 'humanism' (Pietarinen says 'social outdoor games') which sees use of nature to promote friendship and intellectual activity for example, but currently, for Pietarinen (1990), competitive football is less a celebration of humanity and more an extreme form of nature usage for the sport's own ends.

Perhaps what is necessary in terms of the wider debate is to conclude what constitutes an acceptable level of damage to the environment from both sport as a sector, and football as an organised game given that, as Bale (1994) highlights the use of the landscape has impacts beyond the natural world. Considered from the opposite perspective, what are sport and football prepared to sacrifice from their current practices in order to retain their value yet contribute to a more environmentally positive future? This rethinking of the pitch, as it were, can provide the framework for particular measures to be introduced, rather than attempting to append ad hoc programmes to individual behaviour within a rigid system of sporting operations and an imposing relationship with the environment. It is clear from the existing work that there is not only the opportunity to answer the research question using methods not applied in previous studies, but to expand both the academic work, and world/national governing body advice, on the subject of football and the environment. The study of sport, football and the environment to date has failed to include many of the features upon which this research thesis focuses. The

theoretical basis of investigations or interventions should not be restricted to behavioural models or variations on the individual-centric approach to change. The spatial data identified in this chapter confirms that the subject of those investigations or interventions should not be exclusively large commercial organisations, the elite of their sport, who do not represent either the majority of participants in that sport or the environmental interactions that occur. The conduct of those investigations or interventions will always be subject to the challenges of the value-action gap should it fail to embrace an insider's perspective of activity. Understanding how to change the relationship between sport and the environment, and introducing potential solutions to the change in lifestyles needed, requires the acknowledgement that football is a sport very much the product of social practices. This is the focus of Chapter Three, football as a social practice. It is not a chapter I envisaged writing when I began this thesis but the results of my research showed that community-based football must be viewed as the product of the interaction between materials, competencies and above all meanings in the sport.

CHAPTER THREE FOOTBALL AS SOCIAL PRACTICE

This chapter synthesises the review of environmental theory in Chapter One, and analysis of sport, football and the environment interactions in Chapter Two, to identify that the sport of football is a social practice. The chapter examines examples of other social practices provided in the environmental literature in terms of their carbon-intensive operations, based around meanings, materials, competences and self-extending, energy-rich routines. It identifies the development and current state of professional football, showing it to be comparable to these. The contrast between professional football and the community-based version of the sport is analysed, with identification of how the social practice of the non-professional game differs. This establishes the theoretical framework for the fieldwork.

As observed in Chapter One, social practice theory contends that making individual behaviour the focus of efforts to increase pro-environmental activity, shown in Chapter Two as the primary base of both the sport environment literature and governing body initiatives, is flawed. Instead efforts to cause change should examine social practices, that is, according to Shove and Pantzar (2005 p45) "the active integration of materials, meanings and forms of competence". A practice changes, and thus the behaviour that is enacted by the practice changes, when these aspects, or the relationships between them, alter. Spotswood and Marsh (2016 p287) believe it is the model most likely to find favour with policy makers, should they abandon their individual socio-psychological thinking to instead examine the "structures that are ingrained and reproduced and adapted by our actions". Having reviewed the literature, I concluded it is also the perspective that reflects the sport of football and one I believed would be substantiated by my fieldwork.

Showering was noted in Chapter One as an example of a social practice, and it is an activity that would not be out of place after a sporting endeavour. Hand et al (2005) show how the frequency of showering has changed within a generation, illustrating that it has become a daily exercise for many. It is not sufficient to simply ascribe this to the changing infrastructure of dwellings and the opportunity to use the technology more. The fundamental principle and design of a shower has remained unchanged for centuries but decades after piped water supplies and electricity were supplied to homes showering was still a relatively rare activity.

Materials development alone did not cause the change. The view of the body and what it means to wash and be clean has fluctuated over history; from public display in communal surroundings to fear of being wet, a site for intervention for either status or health reasons to the image of fitness and vigour with the 'freshness' of showering contributing to that current conception. However, again this is not cause enough for the development of the practice, as Hand et al (2005 p7) state "bodies do not need showers to be thought of as clean". That the activity is now considered a faster way of ensuring that cleanliness, and makes it easier to achieve than other forms of washing, such as running a bath, contributes to the concept of showering in our increasingly busy lives. However, it was not always a perceived convenience, that is a position that has developed over time. Thus the practice of showering as currently conceptualised and popularised draws on all three of these aspects, the materials, meanings and competence identified by Shove and Pantzar (2005), and the way they currently relate to each other. The history of each aspect shows also how the future of showering is not fixed and we may again reinterpret our concept of cleanliness, for example to alter the practice to manifest in some other form of behaviour.

That these integrated elements have come to cause a change in behaviour has environmental impacts in terms of water and energy consumption. Daily showering by the population in a habitualised routine leads exactly to the resource-intensive, highly consumptive lives that the challenges of climate change need us to be abandoning. Rather than identifying and addressing the practice, however, the societal response to the increase in natural resource use has been to introduce new technology such as more efficient shower heads to try and manage behaviour. The thinking is yet again of information deficiency, and innovation, to seek to influence and nudge the population into altered states of activity. This is very much parallel with the environmental impact of sport and the response from academic research and governing bodies identified in Chapter Two.

This view of activity as social practice has been consolidated in examples from the sport and leisure sector. Shove and Pantzar (2005) studied Nordic walking, a commodified and commercialised exercise that derived from a basic form of movement. Noting how the activity has been lauded for its health benefits, Shove and Pantzar (2005) show how it has rapidly grown in popularity around the World. Walking itself is not a singular concept as many forms

exist, from country hiking to strolls along a pavement, but there is a competence of walking, the ability to manoeuvre oneself appropriately, necessary to reproduce the form. The idea of walking simply for the enjoyment, or health benefits, it brings is a particular meaning, rather than a basic means to travel to an alternative end point. The use of Nordic walking poles as an integral part of the activity introduces a material and completes the practice as a specific interaction between three elements.

These elements were studied by Shove and Pantzar (2005) to show how they came to be. The health benefits of what was to be termed Nordic walking were identified by sports coaches who noticed how the use of sticks when walking could increase muscle development while lowering the potential for injury. Evolving from skiing poles, Nordic walking sticks took on a particular design and became a marketing trend, emphasising particular styles and levels of sophistication. There was considerable initial derision at the appearance of practitioners while trying out this new sport, but this was overcome as people realised enjoyment may stem from the new fitness regime but also from the social aspect of the activity, that you can converse with fellow walkers while engaged in the pursuit. The ability to undertake the pursuit and walk with sticks in an effective and beneficial manner is something that was widely agreed to derive from appropriate instruction. Training courses, manuals and accreditation relating to being competent in Nordic walking thus isolated it from other forms of walking. When the links between these elements started to coalesce, the practice came into being. Finally, it began to find favour outside of its base, crossing cultures and showing how the links between each element evolved, making for a slightly different practice in each new Nordic walking country. There are clear parallels with these findings in the history and development of football.

Reckwitz (2002) demonstrates how the concept of social practice theory is enacted in a generalised game of football. Playing football requires the use of both cognitive understanding and the ability to move the body in appropriate ways, these are the competences needed. Something fashioned to be a ball, a physical goal and a surface to play on are the basic materials required. The meaning is in the aim of the game, what you are seeking to do with your body and the materials. Like the example of Nordic walking these different elements can be examined to identify how the current social practice of football has come to be, and as is shown a number of authors have done this. This thesis advances their work by not only linking the

social practice of football to analysis of the sport's impact on the environment, but in demonstrating, through the results of field research, that it is the elements of the practice of mass participation, community football that need to be assessed, and the relationship between them altered, if a lower ecological footprint is to be achieved.

Football Materials

Chapter Two identified that the spatial organisation of sport has reached a point where such highly exact areas in particular states are required that "it is self evident sports landscapes are not natural" (Bale 1994 p10). However, it is also evident that some sports prescribe more specific settings and exert greater demands on the environment than others. Football cannot be compared to, for example golf which, despite employing a larger area of land in its activities, has greater flexibility for managerial decision making. Golf courses may seek to integrate existing features; a Links course where there is sand, heath and moor landscapes utilising gorse as rough areas, a water course being turned into an aesthetic feature or wildlife haven. Golf course managers can vary inputs and work on specific strategies for different parts of the course without impacting the whole arena and environmental stewardship is being promoted via a scheme that prompted the Chief Executive of the Royal and Ancient to declare that "sustainability is key to the growth and vitality of the sport" (Golf Environment 2016). There remains a link between the history and development of golf and its present day appearance. Modern football has not worked with the geography of a place to fashion a landscape for the sport, it has created an entirely artificial one.

It is evident that what Bale (1994) would class as 'sport football', the game organised, made competitive and bureaucratised, has a distinct set of needs. These needs are undoubtedly driven by safety and the quality of the playing experience but also by the commodification of football and the requirement for its use of space to generate revenue (Bale 2001). This is far removed from precursory folk games of one side of a village attempting to navigate a ball to the other side. It was established, in Chapter Two, that the surface required to play the sport of football is a relatively large tract of land that exerts a demanding environmental footprint. The equipment of the goals, the ball and players' clothing are specifically identified within the sport's rules. The facilities that must be provided for participants and spectators are prescribed by the FA and are a requirement of playing in a competition. The maintenance of the playing surface

and management of the immediate surroundings are highly recommended to the point of impacting funding should such recommendations be ignored. The lack of local flexibility, especially when compared with the example of golf, is evident. There are no behavioural decisions to make in respects of these requirements. The materials of the game are imposed, they are intrinsic to the structure of codified, standardised football. What is produced, and what is ultimately seen by the governing body as the ideal, are homogenous spaces for play, planned to be exact across football club sites regardless of the existing environment and ecological needs. Modern football is an exercise in mastery over the environment and a dominion over the earth attitude towards natural resources which is incompatible with the changes needed in consumption patterns to avoid a rise in climate beyond the 1.5 degrees C threshold.

Football Meanings

England is home to the oldest Football Association, the longest established clubs and, in the FA Cup, the most historic national competition in the World. Over half a million people aged sixteen years and over are members of a football club, and over 2 million participate in the sport at least twice a month (Sport England 2018). The importance and impact of football to the nation is such as to suggest it is "the expression of Englishness" (Robinson 2010 p1012). Sandvoss (2003 p2) emphasises the need to look at practices within football as "powerful reflections of historical, social and economic conditions". It is these that have led to the meaning of football today, a meaning that shapes both the materials required for the sport and the competences needed from those involved in its provision.

There are many references to ball kicking games within different cultures spanning the last two millennia, football has antecedents in such early folk events (Bale 1994). It is not like basketball or volleyball in being invented to meet a perceived need (Goldblatt 2006). Yet it is "unrealistic and unrewarding" (Walvin 2014 p1) to attempt to pinpoint the exact origin of the game and Goldblatt (2006) decries suggestion of early invention of the 'sport' as more descriptions of 'play' that simply utilised a spherical object. Reflecting Horne et. al's (2004) point about modern sports developing in nineteenth century Britain amidst a period of great economic and social change , Goldblatt (2006 p18) suggests what we would recognise now as football is very much "born of modernity".

The traditional ball games that had been played for centuries, such as the 'uppers versus downers' battles of Shrove Tuesday celebrations, had found themselves out of favour in the eighteenth century with attempts to outlaw or marginalise their impact. That the game was to experience such a revival in Victorian England was due to interests who saw an opportunity to further their agendas through sport, whether it be the public school emphasis on healthy bodies and the use of playing fields as precursors for winning battles or the Methodists seeking temperance through activity whilst publicans were creating teams to drive trade. As Bale (2001) writes, commerce and the rise of capitalism were creating divisions in society, specialisation of labour, separation of work and play and a restriction in the use of geographical spaces; "Football (and other sports) simply reflected the processes of economic, social and spacial specialization which were taking place in society at large" (Bale 2001 p18). Sandvoss (2003 p5) concurs, suggesting that it was "the Protestant work ethic, the industrial restructuring of work and leisure practices, and technological change (that) constituted the central premises for the rise of the modern leisure practice of football".

It was, according to Bale (2001) the pressure for games to move beyond local boundaries that caused the first attempts to codify football, modern competitive sport requiring the organisation of distinct clubs with laws by which to abide and governance to oversee them. The folk version of the game was simply "not conducive to the mores, values and aspirations of an expanding commercial and industrial culture" (Horne et al 2004 p39). This culminated in the creation of the Football Association in 1863 and the beginnings of the professional era of the sport. Standardisation in the materials used allowed for the spread of the practice of football and increased leisure opportunities, accompanied by transport development, provided the popular pastime with a more mobile and time-rich population to spectate and pay for the privilege.

Diffusion of the game in this new professional era was rapid. Brown et al (2008) report how football clubs became sites for local expression and community focus. Football is a "representational sport" according to Bale (2000 p91) that can foster a "love of place" (Bale 2000 p92) in the stadium hosting matches. Bale (2000) notes two different types of community within the hinterland of a professional football club; the city or town it represents in its profession, and the people and businesses in the streets surrounding the stadium where it plays, a more local and immediate association with the benefits and detriments of proximity.

Perception of the value of being close to a professional football club may be linked to an individual's stake; a business owner that profits from increased custom, a fan with their idols on the doorstep, a homeowner frustrated by increased traffic.

It has been an evolving relationship between supporting community and club, one, which in more recent times, has changed dramatically. By the 1980s, football stadiums had become, for many, what Robinson (2010 p1014) calls places "of violence and social malaise". The sport's authorities developed, and were forced to adopt, means to curb the problem. Following, the *Hillsborough Stadium Disaster Inquiry* report of 1990, measures for professional football grounds were introduced to make them "surveilled, safe and sanitized" places (Bale 2000 p93). These efforts to exercise greater control of the spectating public, combined with the creation of the highly commercial Premier League and a huge increase in the television offering of football, changed the relationship with, and meaning of, football for many. Now there is a need to plan attendance at matches with highly variable kick off times to suit television, a requirement to buy tickets weeks in advance and the rising cost of those tickets in stadiums now seen "as a site of production" pursuing maximum efficiency in "rigid regimes" of sport manufacture (Sandvoss 2003 p110). Bale notes description of places now being 'tradiums' (2000 p93), occupied by entities "wedded to financial interests – to corporate organizations that have taken control of what had previously been regarded as the game of the people" (Kennedy and Kennedy 2015b p497). Sandvoss (2003) talks further of modern football becoming a predictable event; you can no longer simply pay to stand wherever you want in a football ground, you have a designated seat in an area that is strictly controlled. This experience is replicated across all top level football matches, it is, what he calls, the 'McDonaldization' of football (Sandvoss 2003 p105). As with the materials used for the game, the meaning of football is now not shaped by the individual behaviour of those involved, it is a simple question of whether to participate in a standardised practice in a habitualised regime.

Football Competencies

That there is now a competency in the business of modern football is incontrovertible. There are job roles within the sport that previously did not exist, specifications in the exercise of their duties and vast numbers of staff occupying these positions. To return to the preparation of land for football, as it exerts such a direct context for environmental impacts, there is no single

competency for being a pitch manager. Instead, there are many. Elite level groundstaff possess higher education qualifications and require numerous accreditations to meet the needs of their work. The use of chemicals, for example, is regulated and requires examination success in at least two different subjects. Machinery is now so complex that manufacturers provide training programmes for users. Leading club pitches are assessed and graded by consultants to provide administrators with indices of quality and there are annual awards for the most highly rated.

However, this thesis identifies that for all the popularity and relevance of the modern, commercial, resource consuming, sport of professional football it is its community-based equivalent that can offer the biggest opportunity to alter the game's greatest impact on the planet. The social practice of professional football cannot be simply applied to all discussions of the sport, the relationships at the community level of the game are different, consequently the social practice is different.

Community-Based Football as Social Practice

Chernushenko (1994) suggests a number of the activities in local sport may be similar to that at the professional level; competitors use the same equipment and fields, spectators drive to games and purchase the same type of disposable products. However, when writing more than two decades ago this was a highly generalised suggestion, and the point of his argument was more to make sports organisers at all levels aware that they also had an environmental footprint, that it was not just an issue for the select few, rather than imply any transferable value in elite-based theories.

Community-based football is unlike the professional game in many respects, not only due to the huge variation in land employed. The extent of the variation, and the challenges and opportunities for pro-environmental activity within community-based football's social practice, is what the research of this thesis identifies. Other authors have made more general points, about the nature of the game (if not nature and the game) at this level, that help shape understanding prior to this.

Giulianotti and Robertson (2004 p546) discuss football being adopted by communities in a process of "glocalization", the global game being redefined in terms of local needs and mores.

O'Gorman (2016) criticises this interpretation as failing to recognise junior football, established in Chapter Two as the single biggest majority involved in the game. More than this, Giulianotti and Robertson's (2004) view assumes that local communities have choice in how they live, work and play the sport of football. Even prior to the fieldwork in this thesis, the review of how community football is organised demonstrates this is not the case.

The *materials* of the non-professional game are the element that most closely resembles that of elite football. Chapter Two showed that football pitches have an ideal standard to be worked towards, with agronomic and financial support conditional on aiming for this level. Facilities have mandatory requirements. The equipment for play does not alter from the rules if the sport is played as a profession or just for enjoyment, the only concession is age-related reductions in materials size. The *competencies* for managing the provision of the materials do not demand the same expectations of professional qualifications as the sector relies on voluntary efforts. For those intent on pursuing the individual socio-psychological behavioural strategies of environmental change this poses a problem. As Cary (2008) suggests there is a difficult challenge in achieving environmental goals with a voluntary behavioural agenda as the goals are often based on complicated or unspecified assumptions about how that behaviour might be changed. As Kennedy and Kennedy (2015b p498) note, football at the community-level "is an activity for its own intrinsic usefulness to the individual and society".

However, when examining the sport from a broader, social practice, perspective there is more reason for optimism. There are training courses and certifications in managing community-based facilities and their provision, and the ability of volunteer staff to meet the needs of the sport is closely linked to the pitch inspection and funding scheme. The FA employs a network of pitch advisors to assist clubs with their work in providing surfaces for play. The legal requirements for a range of activity, from supply of food to spectators and disposal of waste water, similarly does not alter just because the sport does not offer a wage. Community clubs are the subject of inspections by the Environment Agency and have a duty of care towards all people at their site. When viewed beyond the individual, in respect of both the materials and competencies of a social practice, and the relationships they maintain with the management of a successful club, there is seemingly little variation between professional and community-based football.

The suggestion of a difference by Kennedy and Kennedy (2015b) is based on the *meanings* of community-based football. That the game is not for profit owes much to the provisions of funding and the likelihood of actually generating a surplus, a similar reason for the inability to pay those helping host matches. However, the governing body's view of community-based football has, as Howie and Allison (2016) describe, altered significantly in recent times. As recently as 20 years ago the county associations, those organising the local provision of football and its competitions, were often voluntary, with few resources. Up until the 1980s schools had organised and hosted many of the junior football matches played but this provision was to be impacted by teachers' industrial action and changed views of after-school activity. A 1997 review, the *FA Charter for Quality*, noted the relative failure to provide appropriate support to football at the community level and a programme of professionalisation of the county bodies, with defined responsibilities and objectives was introduced. Targets were set and key performance indicators identified desirable outcomes for community-based football. Clubs were given standards to meet and personnel involved in delivering the sport were required to undertake accreditation. This was when the mini-soccer programme was introduced in what Howie and Allison (2016 p800) describe as "an increasingly strategic approach to football development at the junior grassroots level".

These changes have created the current meaning of community-based football. Clubs are now highly regulated, standards are rigorously enforced, competitions dictate requirements and experiences are similar. To contrast with the professional game, match kick off times are set for identical times. The impact of car use and parking of multiple teams arriving for mini soccer matches at fixed intervals alone is worthy of study. The sense of place noted by Bale (2000) is potentially different, with fewer possible benefits on offer to neighbours the positive feelings generated by a site may lie entirely within the club. Yet within that club it could be a very powerful force, a topophilia that connects the members. Perhaps it could be a feeling harnessed in attempts to reduce the negative footprint of the sport, of looking after one's home.

The extent of the top-down instruction, and creation of meaning, in community football could allow for inclusion of responses to the environmental issues arising from increasing the numbers of those participating. So much of the relationship community-based clubs have with

the sport is derived from the governing body's instruction that leadership on this subject could be groundbreaking in the sector. A pro-environmental framework for community-based football could be used by other sports, indeed other leisure activities, looking to pursue a more 'professional' setting for their non-professional provision.

What is meant by community-based football facilities, however, is changing. Just as the concept of showering, and what it means to sections of the population, was shown to have evolved by Hand et. al (2005), thus to is the idea of who should provide community sport sites, how they should be operated and the role that community should have in their development. The policy of asset transfer, the process by which some local authorities are allowing individual clubs to take over the running of facilities so as to make savings for the public purse, is increasing in popularity (Findlay-King et al. 2018). The traditional owners of community sport sites, local authorities, are currently experiencing pressures on their budgets causing them to reduce their activity in particular sectors. Findlay-King et al. (2018) highlight the political sensitivity in closing leisure facilities yet the need to safeguard funding for other services means a solution where the asset remains, but at no cost to the local authority, is highly desirable. To aid the process within football the FA has produced a 'Guide to Asset Transfers' booklet for club use (FA 2012b). Moving football sites into the competency of individual clubs' to manage them will clearly alter the existing relationships at those sites and impact the practices, with all their implications for the environment, that occur.

An alternative, but no less relevant change in the meaning of community-based football, is offered in other FA literature. In 2013 the FA set up the FA Chairman's England Commission to look at the question of why there were so few English players in the English Premier League and what could be done to remedy this. It was a clear progression of the attempt to professionalise the junior levels of the sport. The FA's National Facilities Strategy (FA 2013) revealed that participation numbers were falling due to players expectations of provisions at a site not being met. Noting its own 'Big Grassroots Football survey' (FA 2011a) the FA identified 84% of respondents suggesting 'poor facilities' was the most important issue to them. This prompted the FA to commission a second report purely on facilities (FA 2011b) which collated the views of 3200 respondents involved in the game. Prominent amongst the results were the 49% of respondents who had experienced more than five games per season cancelled, mostly

due to pitch and/or weather conditions and the 60% of players who trained at a location other than their home ground. The top three priorities for training grounds expressed by respondents on a weighted scale (+100 for top priorities and -100 for lowest) were: Artificial Grass Pitches (+100), Floodlighting (+53.6), Grass Pitches (+37.2). The top three weighted priorities for home grounds were: Grass pitches (+100), Changing facilities (+57.5), Provision of toilets (+22.9).

By 2015 the commission had produced two reports, the second of which, whilst not mentioning the environment at any point, nonetheless has significant implications for football's impact on the environment. The Commission reaffirmed that the major barrier to player development was a lack of facilities, particularly quality pitches. Clubs lacked security of tenure, they were unable to maintain surfaces and the skills of young players were affected. Better facilities, the Commission claimed, would increase participation, enjoyment and ability. The reason for this state of affairs was "compared to other sports, grassroots football is disproportionately reliant on publicly owned facilities" (FA 2014 p21). The objectives they created to address the situation were to; "Reduce football's reliance on local authority subsidies, build significantly more artificial grass pitches and build a sustainable model to make this change happen" (FA 2014 p25).

The means by which the FA proposes to achieve their objectives is via the creation of football 'hubs' owned and managed by a third party, a local football trust, providing numerous playing surfaces in major population areas. This scheme has been termed 'Parklife' by the FA. Amongst the various expected outcomes would be; "Ensuring where possible all mini-soccer and kids football up to the age of 13 is played on AGPs [artificial grass pitches], allowing all County FA and local pro-club youth development and FA coach education programmes to be facilitated on AGPs and providing high quality natural turf pitches where appropriate." (FA 2014 p25). The contrast between the 'all' relating to the AGPs and the 'where appropriate' of the natural turf option appears highly significant, particularly when noting that the Commission states that while "the new revenues generated by the AGPs on the hubs will help to cross-subsidise an improvement in the remaining grass pitches", they add the caveat that "it will be for each local authority to best determine the subsequent usage of any pitches deemed surplus due to the greater durability and utilisation of AGPs" (FA 2014 p27). A pilot of the scheme has been created in Sheffield and the intent is to work with up to 30 of England's largest cities or unitary

local authorities towards goals which would see the number of AGPs rise to over a thousand by 2020.

The consequences of these hub proposals for the meaning of community-based football are numerous, with implications for the relationships in the social practice and thus the impact on the environment. Not least of these is the concept of 'place' and the value of, and need, for a home site for clubs. There is a choice to be made between the benefits of each type of provision. The construction of the facilities will obviously consume natural resources and lead to an increase in traffic and maintenance at those sites with all the attendant emission implications of fuel burning machinery. Added to this is the uncertainty that prompts the call for more research into the long term effects of different materials used in the artificial surfaces (Cheng et al. 2014). However, hubs could greatly reduce all these negative consequences elsewhere in the locality by reducing the need for as many sites. If the FA can divest itself of some of the current total of over 40,000 football pitches, without an attendant loss in participation, it will surely provide for a lower environmental footprint while raising the potential for redistribution of materials and competencies to manage them. As such, the Parklife scheme appears to represent a significant effort to change the structure of how junior football is organised.

Conclusion

Whether the proposals will lead to the ultimate goal of the commission in increasing participation is debatable. Kokolakakis et al. (2014) examined the determinants of sports participation across the English regions, considering 325 local authorities. While noting the general trend of existing literature suggesting that sports participation is impacted by the number of sports facilities made available "the empirical evidence is far away from being clearly conclusive" (Kokolakakis et al. 2014 p155) and factors such as type of sport and size of population in an area are of significance. The results of the study suggested other variables influenced participation, such as education, income and age (Kokalakis et al. 2014). They found "neither sports expenditure in the region nor the sports infrastructure are determinants of sports participation" (Kokolakis et al. 2014 p164) and perhaps most damagingly of all for the FA's proposal "the general problem of stagnation in sports participation rates could not be solved simply by pouring increasing levels of public funds into the sport industry" (Kokolakis et al. 2014 p168). Should attempts to change the way non-professional football is organised flounder, due

to a misguided belief they would impact participation, the environment would be similarly affected. The prospect of half empty or abandoned hub sites across the country needs to be acknowledged in the light of such research.

Despite this prospect, it appears that both asset transfer and the creation of football hubs, one moving towards a greater sense of place and local control, the other abandoning place altogether, represent a very real opportunity to change the relationship between community football materials, meanings and competencies, and thus its social practice. More so than information-based campaigns and restricted funding, this could have the potential to impact the sport's relationship with the environment. Whether either could work in this regard, however, requires examination of the views of those who would be required to implement it. The methodology for doing that is identified in the following chapter.

CHAPTER FOUR METHODOLOGY

Introduction

This chapter describes the research methodology used in the thesis and the methods of data collection and analysis. It provides the historical background and context for the conduct of this work, positioning the researcher within the field. The chapter initially describes desk-based research and preliminary interviews with personnel involved in the organisation and management of football. This develops understanding of the game at the non-professional level and provides context for the subsequent choice of methods. Then the selection of semi-structured interviews as a method is explained, with discussion of their use in this study. Next, the participatory action research literature is reviewed and ways of implementing the method are critically analysed. Finally, the choice, and type, of participatory methods used for this thesis are discussed.

The Researcher and Research Methods

It is important to note a researcher is never a completely detached observer and appropriate reflection on their experience and motivations by the person conducting the study can lead to higher quality research (Cooper 2008). My previous experience includes; conducting postgraduate masters level research in increasing environmental sustainability amongst a group of sports clubs; training, certifying and practicing as an ISO14001 associate environmental auditor; and working for a number of years as an academic tutor and technical advisor within the sportsturf industry. While these roles have helped inform this study, and afforded a degree of credibility that assisted access to research subjects, they have also impacted on the knowledge of the topic being studied and increased empathy with personnel involved in the sport sector. This clearly has influenced my awareness of, and attitude to, football matters. Consequently, while the aim has been to conduct the research with objectivity, it is appropriate to note the argument of Letherby et al. (2014 p14) that owing to the underlying "moral and political positions of their advocates...there can be no objective ‘factual’ descriptions of the social world" and that I utilise the existing understanding, convictions and conceptual orientations that are typical of an interpretivist research perspective (Miles and Huberman 1994).

The choice of research methods for this study was influenced by an important observation in the environmental literature, the disconnect noted in Chapter One between what people say they will do and what they actually do in regard to their environmental activity, what Blake (1999) calls 'the value action gap'. Chapter One identified that while authors from different paradigms disagree on the causes and implications of this gap, they agree on its existence as an observable phenomenon. Consequently, this could have proved problematic in terms of the reliability of any data gained purely from questioning football personnel. Leaving aside the alignment of this thesis with one particular view in the pro-environmental literature, the value action gap remains an 'attitude-behaviour' problem in terms of the methodology literature in that an underlying attitude as expressed to a researcher will not be the sole determinant of the participant's actions (Procter 2008). The implication of a potential variance between reported intentions and actual activity is that the research strategy should encompass multiple methods that investigate both to ensure greater depth of study and accuracy. This would be welcome in sport management research where according to Rudd and Burke Johnson (2010 p15) "few employ mixed methods approaches" and, of the ones that do, the majority involve "relatively weak use of combining quantitative and qualitative methods".

While some work in the consideration of sport and pro-environmental activity has employed singular methods - survey (for example Casper et al. 2012; Inoue and Kent 2012) or interview (for example Kellison and Hong 2015; McCullough 2013) - other research has utilised the mixed methods approach (for example Babiak and Trendafilova 2011; Baldwin 2010; Mallen et al. 2010a). Mixed methods as a form of research is well established and increases both the validity of research results and level of confidence in the work (Alexander et al. 2008). In this thesis the decision was made to use multiple qualitative tools for a number of reasons. Firstly, while the author's knowledge and experience of environmental auditing would allow for the deployment of the alternative of a recognised method of quantitative data collection, Silverman (2000 p5) notes the potential "problem of ad hoc procedures to define, count and analyse" developing within such methods. A previous quantitative research study of environmental activity at sports clubs (Carmichael 2011) found a lack of quantitative data to which the interviewees had access. Furthermore, comparison across criteria could be challenging given that clubs themselves may measure by different units (for example by cost or volume) making inference from a sample to a population difficult (Sturgis 2008). Expanding the research sample to a size able to satisfy

external expectations of representation and validity in such methods (Biddle et al. 2001) would be difficult given the typically low response rate to surveys (Simmons 2008) and the impracticality of visiting a potential research base of 29,000 FA affiliated clubs.

Secondly, the aim of the study was not to conduct an audit of the state of English football with regard to the environment but rather identify the potential for, and practical steps towards, ways to develop pro-environmental activity within community-based football in England. As Chapter One notes, there is no desire to attempt the unachievable, and undesirable, task of testing a model (Kollmuss and Agyeman 2002). If, as the literature suggests, the question of what causes environmental activity is unresolved, it is of greater importance to understand the factors that may contribute to the activities within football. Kellison and Hong (2015 p254) note the importance of this when stating "although it is clear that sport organizations are becoming more responsive to calls to reduce their environmental impact, less is known about the considerations of decision makers during the actual processes of innovation adoption and diffusion". Quantitative research can lack the appropriate contextualisation and interpretation for understanding such factors (Amis 2005) and "is generally not very helpful if one is interested in testing for causes and effects" (Gilbert 2008 p35).

By contrast qualitative data "are a source of well grounded, rich descriptions and explanations of processes in identifiable local contexts" where they can "lead to serendipitous findings and to new integrations; they help researchers to get beyond initial conceptions and to generate or revise conceptual frameworks" (Miles and Huberman 1994 p1). Particularly useful for this study, and my initial suggestion that it is social practice theory that potentially provides the solution to football's environmental challenge, is the ability of qualitative data to highlight the meanings people accord to events, processes and structures they encounter and how these relate to wider society (Miles and Huberman 1994). That qualitative methods can offer sustained examination of the research subject and an understanding of both how and why a situation occurs makes them appropriate for work seeking to identify barriers and opportunities incumbent in a situation. Such methods offer flexibility and the ability to develop hypotheses (Miles and Huberman 1994), qualities that will be useful for a study requiring longer term relationship development between researcher and researched, to best appreciate a subject with currently a low volume of published work.

Yet as Miles and Huberman (1994) note, there are many options in the choice of qualitative research methods and much evidence and history to support them. The four qualitative methods used for this study were desk-based research, preliminary interviews with key personnel, semi-structured interviews with a representative sample of the population, and a period of participatory action research in collaboration with one of the clubs that took part in the interviews (see Figure 4.1, and Appendix 4 which includes timings and participant information for each stage). The result is a thesis that has been produced from inside an organisation, a representative of the population forming the majority of those in the sport, beyond the elite, their vast resources and the popular reporting of their activities. The data generated by these methods comes from within mass participation, community-based football and provides those people and clubs with a voice to highlight the challenges they face and the opportunities that exist for improving the sport's (and sports') relationship with the environment. This distinctive and unique contribution to understanding how sustainability in sport may be achieved was only possible due to the choice of the immersive participatory action research method and my role in the life of a football club.

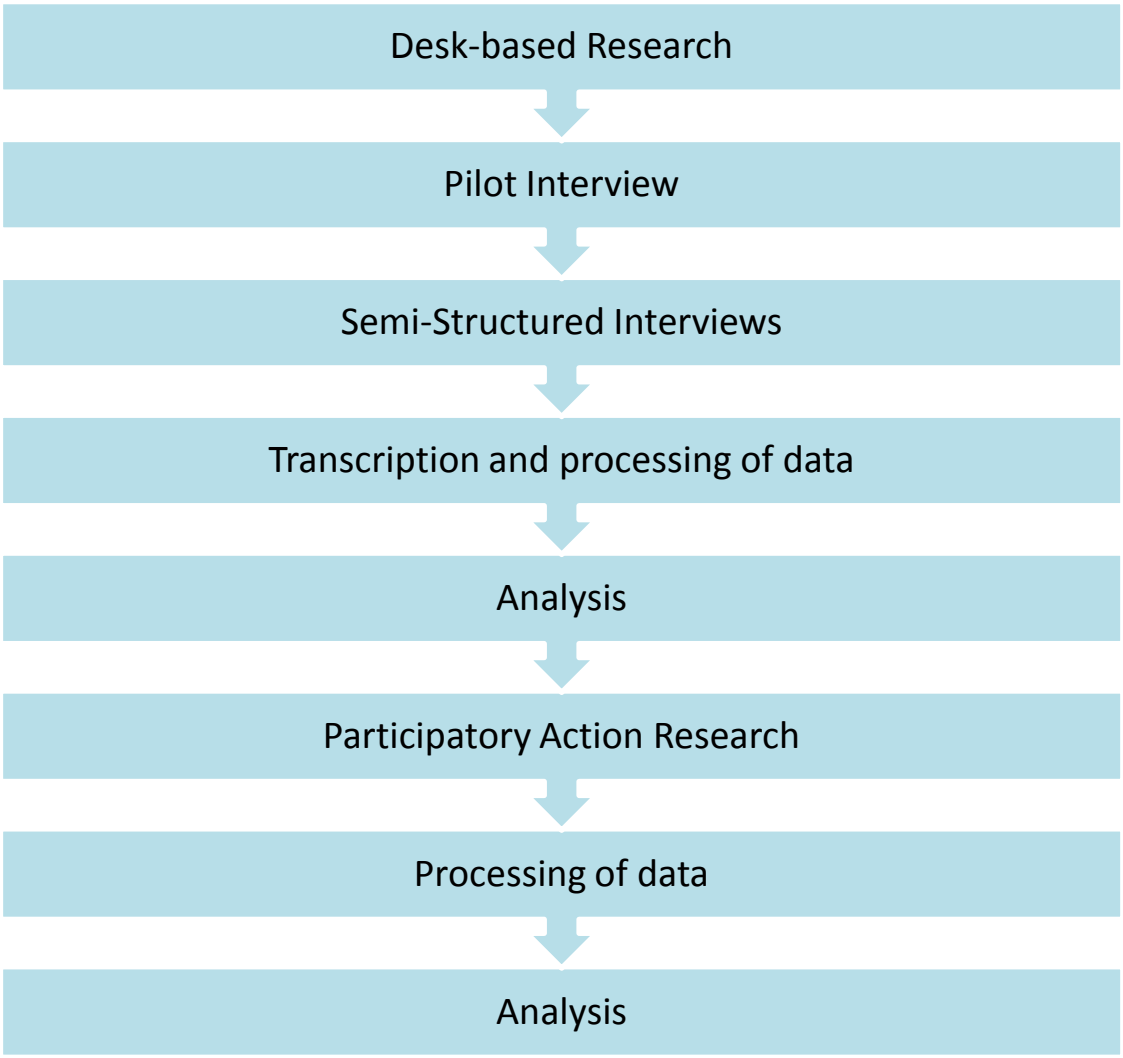

Figure 4.1 Research Stages Employed in the Thesis

Desk-based Research and Preliminary Interviews

The first stage of research was to scope the organisation and management of English football. This identified it is a sport in which environmental activity is an issue of significance and that a study of it would be of interest and impact. The second step was a thorough review and critical analysis of the pro-environmental activity literature, the results of which comprise Chapter One. Chapter Two identifies the interaction between sport and the environment and responses within sport and football to the subject. Chapter Three synthesises the two to suggest that football is a social practice and environmental activity within it should be positioned accordingly. Field research sought to provide data that would examine this.

Desk-based research revealed that beyond the entirely professional 92 clubs of the top four divisions, English football under the control of the Football Association (FA), maintains a 'step'

system, a hierarchy that identifies clubs according to the level of the league they play in. This system is pyramid-like ranging from those at the apex, 'step one' a single league (the Vanarama National League as of 2016/17) down to the base and lowest step, 'step seven' (42 leagues across categories named 7, 7A and 7B). It was initially thought that this research study should focus on this lowest group, for example the Northern Football Alliance, a competition comprised of three divisions, the foremost of which is considered a 'step seven' division.

However, further investigation established that step seven categorised clubs did not represent the majority of the sport's participants, the Northern Football Alliance, for example, having 16 such teams, yet almost twice as many (n=31) beyond this seemingly lowest classification. As the FA identifies 29,000 affiliated clubs in England (FA 2013) this denotes many teams must similarly exist beyond the 42 step-recognised leagues, effectively uncategorised, yet comprising the majority of participants in the sport. As Chapter Two highlighted the material requirement for playing football is consistent across every level of the sport, so it would be most appropriate, in terms of both the contribution to the literature and potential impact on pro-environmental activity, to select for study the level where the largest group of clubs, the users of the greatest percentage of land, operate.

Contact was made with various FA officials, both local and national, to further qualify the data identified by desk-based research. No sponsorship of the work was sought and no objections or refusals were received from any FA personnel. During one conversation with an FA representative an important point was noted with regard to the scale and organisation of football clubs. While I had identified one adult football team might exist within a league such as that of the Northern Football Alliance with personnel and activities solely in support of that team, I had not been aware that many other clubs, not in the step system, had numerous additional teams of non-adult status, from the ages of under 7 to 18 years, and other clubs were entirely non-adult teams. The scale of non-adult, non-professional football became evident upon learning that clubs local to the author could field twenty or more of these 'junior' teams and expect a thousand visitors on a single Saturday morning. As the requirement to host all these teams far exceeds the single team adult club it was clear that this was the sector where the environmental footprint may be highest in the non-professional game. As many of these clubs are also lacking

the exposure and rewards potentially available to step seven and above registered clubs it was also felt that the challenges facing these clubs may be the most acute.

Defining this large majority of clubs 'beyond the steps' is essential. To call them 'non-professional' organisations suggests shared characteristics with football clubs simply outside of the top four divisions and aspiring to join the professional game. The clubs identified by this research as below step seven, and hosting a large volume of junior teams and football fixtures, are best described as 'community football clubs'. The relationship between a community and its football club has been explored in other work, and previously highlighted in this thesis, such as Bale (2000), Kennedy and Kennedy (2015a), and notably an entire issue of *Soccer and Society* (2009). There has also been exploration of the ownership of clubs by their supporter community (Martin 2007), the influence the club can have on a community improvements (for example Baldwin 2010, Parnell et al. 2013) and discussion of what the very term 'football communities' may mean (Brown et al. 2008). This thesis, concerned as it is with investigating the relationship between football and the environment, is not seeking to resolve or add to these discussions about the nature of 'community' within football. Instead the term 'community football clubs', and reference to them being 'community-based', is being used to identify the very large number of clubs who are typically non-profit organisations, rely on volunteers for management of their operations and often host many junior football teams comprising young people from their immediate locality in addition to any senior football they provide. Chapter Two identified that more than 33,000 football pitches in England were either educational establishment or local authority owned, data also shows that almost 19,000 football pitches are used purely for junior football or mini soccer (Sport England 2017a). This football is provided for the community, by the community and while few headlines would be written were one club to close, the state of the game would be very different without their collective numbers.

The term 'grassroots football' has deliberately been avoided by this thesis. It is an expression used widely in the media, FIFA devotes a large section of their website to discussion of it (FIFA 2016), yet it is neither defined nor qualified there. Kennedy and Kennedy (2015a, 2015b) suggest there is a wide scope as to what could be termed 'grassroots football', from casual, friendly games on a piece of land to more organised games in leagues involving networks of local junior and senior clubs. Common to all of these clubs, they suggest, is "a decidedly non-

commercial and pro-community outlook amongst those involved" (Kennedy and Kennedy 2015b p498). This latter point seems misplaced when Notts County Ladies, then an entirely professional team playing in the FA Women's Super League, was named as the 'Grassroots Club' winner of the FA's Respect Award in 2016 (they subsequently ceased to exist in 2017 when the Chairman of Notts County FC decided he could no longer support them financially). Consequently, the term is unreliable within a discussion of research methods and data management and will not be used within this study as a 'catch all' for those simply outside of the professional level of the sport.

Semi-Structured Interviews

The analysis of the pro-environmental activity debate and secondary data from governing and funding bodies within sport and the sport of football informed the development of a semi-structured interview schedule. Interviews are a highly effective method for providing detailed exploration of a topic, unmatched in this by any other method of data collection (Amis 2005). However, as there was a need to understand the challenges and opportunities that may be present in clubs of different means, identified by people with potentially divergent views on the environment, it was necessary to avoid an overly formal, standardised interview as these could have restricted interviewees responses (Biddle et al. 2001). The suggestion that standardised interview questions increase the reliability of the research ignores the depth of peoples' cultural worlds and emotional responses (Silverman 2005). Moreover, asking highly standardised questions would have necessitated exploratory research on the individual club prior to the interview to enhance the prospect of obtaining valuable data (Simmons 2008). This would have been an unachievable task given the lack of publicly available information at this level of football. Semi-structured interviews fit within an interpretivist paradigm providing flexibility to tailor questions to the participant's situation and allowing for the presence of equally legitimate multiple realities (McCullough 2013). The questions used as a starting point for the interview discussions are documented in Appendix 5.

As Biddle et al. (2001) note the capability, reliability and credibility of the interviewer may be identified by a declaration of existing skills and training, their trustworthiness linked to their technical ability and the extent of their sporting background. I consider myself to have appropriate competency in these areas due to employment history, qualifications and previous

experience of such work. The interviews were conducted, recorded and transcribed in accord with British Sociological Association (BSA) guidelines and the University of Central Lancashire ethical approval requirements. Ethical approval was granted for all stages of the research.

The aim of each interview was to identify; the extent of pro-environmental activity within the club, the thoughts of interviewees towards the subject and the opportunities and barriers perceived to exist when considering increasing pro-environmental activity in the club. If sport is a key component of the need to look at how we live, work and play and its impact on the natural world, then it is essential to gain as much insight as possible from those involved in its provision. As McCullough (2013) demonstrates a schedule of questions can be organised in advance of each interview to capture attitudes, norms and behavioural controls, but as this study considers that such factors only represent one aspect of the pro-environmental activity debate, the individual-centric theories of behaviour, other questions were included to contextualise responses and allow for the analysis of features of the club, the system they operate in and any external factors that may impact upon their practices.

A pilot interview was undertaken with an official representing a community football club hosting numerous representative teams in a different county FA region to the sample area. The interviewee and club were not previously known to me. A pilot interview is a positive inclusion in a research study when it is not clear whether particular techniques may elicit the evidence required to answer the research question and allows for reflection as to whether questions should be amended (Green 2008). This was indeed the case with some minor revisions being made to the scheduled questions and the addition of other questions relating to national football initiatives not evident from desk-based research.

Semi-structured interviews were undertaken with a sample of non-professional, community-based clubs from the population of North Country FA (an anonym). The decision regarding where, and from whom, to gather evidence is a difficult one, not least of which in a study where subjectivity, diversity of influences, underlying motivations and entrenched attitudes in specific contexts are highly evident (Jackson 2005). The FA categorises county FAs according to size based on the number of affiliated teams in their area. North Country FA is considered a 'large' county FA, the third largest in their geographical region and usually ranks between 10th and

15th (out of 48) in terms of size in England (n=823 adult teams, n=220 youth clubs fielding 1630 teams). For comparison, a neighbouring county has n=343 adult teams and n=860 youth teams (figures and descriptions from personal communication with County FAs and national FA management 2016).

Potential club and personnel interviewees were identified using the North Country FA handbook (2014/15). This listed all the adult and youth clubs affiliated to that particular FA, the number and type of teams each club fields, the club website if one was maintained and the contact details of the club secretary. As club circumstances directly relating to environmental behaviour could differ a purposive sample of clubs was used so that every type of club model identified by desk-based research would be represented in the study. The four potential models were 'club facility owned', 'club facility rented', 'no facility but regular rental of specific pitches', and 'nomadic', where the pitches utilised varied across teams and matches. Purposive sampling allows for investigation of the beliefs surrounding an issue and has precedent in a sport pro-environmental behaviour research setting (McCullough 2013). It is a logical and powerful method when wanting information-rich data (Patton 1990). Patton (1990 p177) identifies fifteen types of purposive sample with 'criterion sampling' one that seeks to identify and understand cases that "may reveal major system weaknesses that become targets of opportunity for program or system improvement", a highly appropriate fit with the aims of this research study.

As well as club circumstances another criterion included in the sample identification was geographical location. There was a need to seek inclusion of clubs from every one of the seven local authority areas in the geographical range of North Country FA. As Chapter Two noted there is a significant level of local government ownership of football facilities (80%) suggesting that the number of clubs with the relative autonomy to make individual decisions may be relatively small. The extent of that involvement in North Country is even higher than the national average, with 88% of grassed football pitches (n=1100 of the n=1250) in existence being sited at either local authority or educational establishment venues (Sport England 2017a). This factor also necessitated the inclusion of interviews with local authority representatives in the research.

30 clubs were initially contacted using the details and method preferred by the club as noted in the FA handbook. If a positive response to a summary of the research was received, further

details of the project including an informed consent form were sent electronically. If the prospective interviewee agreed to take part, a time, date and location most convenient for them was organised. None of the club personnel who were contacted declined to be interviewed, yet not all of them could be due to the very practical difficulty of finding a suitable time for an interview with someone already committed to a voluntary activity, work and family life. This identification of the population as 'time-poor' in itself suggested a potential barrier to any pro-environmental initiatives.

Eight interviews were held with eleven club personnel representing six community football clubs, the number of attendees exceeded the number of interviews because on two occasions the original contact had decided it would be appropriate to invite one or more colleagues. One further interview arranged with a seventh club representative became a group response session as the prospective interviewee decided instead to ask the researcher to address a monthly meeting of 25 club members. Eight clubs initially confirmed interviews but personal circumstances caused one club (number five) to withdraw before the interview could be held. The remaining seven clubs retained their original numbering, so as not to confuse the existing data.

All seven local authorities were contacted, with some difficulties in initially identifying who might have responsibility for football related issues, sport sometimes being considered within a leisure and culture remit or a community and health matter. This was reflected in the different departments, job titles and roles of each interviewee. One local authority declined to be interviewed, two others did not respond despite repeated efforts to contact them. Four interviews were held with five representatives of local authorities occupying football provision related roles, the additional person again being the result of the scheduled interviewee's invitation to a colleague.

The FA was contacted at all levels of the organisation with requests for an interview. No response was received despite earlier success at discussing the proposed research study and receiving personal endorsement for the work. It is possible that initial enthusiastic support from a managerial figure within the FA created a negative association when that manager subsequently left their position in acrimonious circumstances. A research diary was maintained

throughout this study and of note is the gradual reduction in FA responses to researcher queries after the departure of this individual. However, this could be due to other factors unknown to me and later in the research study there was significant discussion and exchange of information with a newly appointed FA employee suggesting there was no specific intention not to co-operate.

While there is consensus on the appropriate forms of analysis of interviews there is no definitive agreement on the required number of interviews for the process (Biddle et al. 2001). Ethical approval did not require specification of the number of interviews intended and the exploratory nature of the research meant this would have been challenging and potentially restrictive. Baker and Edwards (2012) note that some studies have utilised just one participant's contributions, and the question of how much data is needed is often unknown prior to collection. The total number of interviews (n=12) completed in this study is commensurate with other studies in this field (for example Baldwin 2010; n=10 interviews for stage 1 research). While this was fewer than initially anticipated, the different formats interviews took; single, joint and group session, provided different types of response and data. There was a large volume of data gathered from each interview, sufficient to cause a change in my thinking regarding the challenges facing community-based football clubs and an appreciation of how to develop the work. Moreover, interviews were never intended to be the sole provider of data, they were acting more as an extended scoping exercise for the participatory action research period that was to follow in stage two.

Analysis of the Interviews

Qualitative analysis of interviews provides a benchmark of current activity and an identification of perceived barriers to change amongst the sampled population and informs the third stage of research. As Biddle et al. (2001) note, research papers vary in the detail offered in discussion of interview methods and some fail to clarify the extent of analysis of data. Miles and Huberman (1994) suggest a number of analytical techniques to be used across qualitative methods and these were adopted by the author; use of field notes and reflections from interviews with associated coding, organisation of these into similar patterns, themes, phrases and relationships, use of these in any subsequent field-based data collection, elaboration of any small set generalisations and response to these with any formalised theories or constructs.

However, caution should also be exercised in so far as field notes represent data that needs to be capable of being written and read, and transcription of recordings may be achievable via different means resulting in alternative texts (Miles and Huberman 1994).

Biddle et al. (2001) highlight a range of evidence in their discussion of whether to adopt analysis that favours a deductive approach (use of pre-determined themes to assign evidence to) or inductive style (where themes emerge from the participants words). It was appropriate for this study to adopt an inductive approach as it has already been shown that there was no intention to test one particular model over another. Clearly, however, it needs to be acknowledged that the researcher will have existing thoughts and influences regarding the subject and that there is inherent bias in the analysis. Chapter Three documented my belief that football existed as a social practice but this idea does not exclude from consideration any potential data, rather it may highlight information that could have been previously overlooked by elite and individual-centric behavioural studies.

Additional field notes of particular observations, for example the location of the club or aspects of the club environment, were made both before and after the interviews. Except where permission was not granted interviews were recorded (two local authority interviewees declined and the group session was not recorded as it would have been difficult to secure audible responses in the setting). Immediately after the interview, the field notes were examined and the recordings listened to multiple times (the number varied according to the clarity of the speaker) in order to transcribe questions and responses. A number of interviews were transcribed verbatim, but it became clear that this process did not add to the quality of the information produced and would in fact make analysis more difficult by obscuring some of the salient detail in the sheer volume of words generated by interviewee's patterns of speech. Halcomb and Davidson (2006 p40) question the value of verbatim transcription when analysis should be "more about interpretation and generation of meanings from the data rather than being a simple clerical task". Moreover, the process of turning audio into written form is subject to other challenges, such as how to capture the non-linguistic observations of the interview, meaning the researcher will always have to compromise on what is transcribed (McLellan et al. 2003). As Saldana (2009) notes the process of coding from evidence is an interpretive activity, it is not a precise science, and consequently it did not feel that any potential input was being lost by not

recreating every word spoken on the page. In keeping with a number of points made by Fasick (1977) it was more valuable to listen to the recordings repeatedly, not only clarifying what the interviewee was saying and making note of this for coding but comparing the words spoken with the field notes and observations made at the time of the interview to reflect on these initial interpretations. A summary of the interview, condensed into key points to help avoid overload (Miles and Huberman 1994), was sent to each interviewee for confirmation of accuracy and the opportunity to add to the information provided. Only one minor amendment was suggested by an interviewee and this was updated in the interview summary. No interviewee objected to their summary or sought to expand upon their original comments.

When reviewing the data, of particular use was the checklist of steps described by Fielding (2008). Coding of the data began by re-reading field notes and summaries and initially noting aspects. The recordings were listened to again, making additional notes on the existing codes. This reflects the thoughts of Saldana (2009) who suggests coding is a cyclical process, with multiple attempts made to extract salient features, discover meaning and generate theory. The software package Atlas Ti (release 7) was used to collate, code and analyse information, however the cost and time restrictions imposed by licensing of the product meant 'low-tech' written efforts were necessary and of greater value throughout the entirety of the research. As there was no attempt to test a model in this work it was not appropriate to code data a priori, in so far as using the theories identified in the literature review (for example whether internal or external factors influence behaviour) and coding the data to see how it may fit with these. Instead in line with the realist approach (Silverman 2000) the data were read, coded and theory generated to compare with the existing literature. The initial thoughts were that the interviews would identify a level of club pro-environmental activity and set alongside the interviewee's views and club circumstances this would start to answer the research question.

To avoid over representation of particular views it was important to remember when coding that three individual interviews discuss the same club. This was a purely practical issue, this being the first club approached and their personnel being happy to arrange individual meetings, subsequent clubs suggested joint interviews due to pressures of time. It is another point against a quantitative analysis of these results as the data they provided would potentially provide a bias to the interpretation of club information. Of interest in this was that data that

should have been consistent across the first club interviews was not, for example the estimates of the cost of pitch management differing by £4000 per annum across the three interviewee responses. Such anomalies were not seen in group interviews as interviewees either deferred to one speaker or arrived at a collectively determined response, themselves interesting in terms of not just what was said, but by whom and with what acknowledgement of colleagues.

Participatory Action Research

To enrich the data of the research additional qualitative methods were undertaken with a subset of the interview sample. Despite the benefits of conducting interviews it is sensible not to use them as a singular research tool but combine them with other methods of enquiry (Grix 2001). This was always the intention of this thesis, the importance of the debate on how we act socially, and the widely varying proposals of how to alter that activity, demand a greater depth of insight and appreciation of the challenges. Consequently, the response rate to interview requests did not impact the progress of research, in fact they helped refine the choice of second stage activity. Once interviews were concluded a period of participatory action research was organised working towards a collaborative promotion of pro-environmental activity with a club from the set of those interviewed.

Participatory action research, where the researcher engages in interactive relationships with research participants in pursuit of the co-creation of knowledge (Silk et al. 2005), is increasingly recognised for the benefits it can bring to sports studies (Holt et al. 2013). The value of including the insights of those being studied has been established in other disciplines for a number of decades (Chalip 1997) and it is now an important methodology within qualitative social research (Bergold and Thomas 2012). The ability of the research strategy to offer reliable data and pertinent results is evident in the work of Frisby et al (2005) with a particular strength of delivering practical solutions to newly empowered practitioners (Koshy 2005). As Silk et al. (2005 p8) identify;

> The participatory paradigm suggests a participative, co-created, subjective-objective reality (ontology), an experiential, propositional, practical epistemology producing co-created findings, and a practical methodology centred on political participation in collaborative action inquiry and a language that is grounded within a shared experiential context.

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However, one of the challenges of communicating use of participatory action research within a research study is the activity's lack of common definition. Some authors suggest it is synonymous with 'action research' (Berg 2004, Koshy 2005) yet others consider these to be two separate forms of enquiry (Bergold and Thomas 2012). Brydon-Miller (1997) states it is an approach to research that seeks to create deep-seated change in the lives of subjugated groups. Crane et al. (2013) believe participatory action research is a methodology aiming to generate and transfer knowledge while empowering participants. For Savin-Baden and Wimpenny (2007) it is simply a method that sees a group of people tackling a problem that impacts their lives. There are many such variations in the description of a research mode that has no agreed origin (Charles and Ward 2007), uses similar names for ideas of completely separate history and meaning (Glassman and Erdem 2014) and witnesses a diversity of theoretical bases (Brydon-Miller 1997). McTaggart (1989) lists sixteen tenets that participatory action research upholds, Brydon-Miller (1997) identifies practitioners of participatory action research who draw on a wide range of sources including Marxism, feminism and critical theory, and Pain and Francis (2003) suggest the diversity of methods is growing.

'Action research', as envisaged by Kurt Lewin in the 1940s utilised both qualitative and quantitative research methods to identify situations where improvements could be made, using analysis to improve practice rather than simply generating knowledge (Savin-Baden and Wimpenny 2007). Lewin employed this particularly within discriminated against religious and ethnic communities (Glassman and Erdem 2014). It was a somewhat conservative approach (Stoecker 1999) as the aim of the work was to resolve conflict between groups and maintain the status quo in post war society (Glassman and Erdem 2014). Over time there were calls for the approach to be more emancipatory and to recognise the participants (Savin-Baden and Wimpenny 2007) causing variations in implementation of the method and by such a degree as to lead Fals-Borda to identify 36 different strands of 'action research' by 1995 (Charles and Ward 2007).

'Participatory research' emerged from work in the developing world in the 1960s, 1970s and 1980s (Glassman and Erdem 2014; Stoecker 1997), and comprised a more radical form of research, with an inspiration for social change and overthrowing the constraints of a colonial

past (Glassman and Erdem 2014). Although there were numerous researchers working in the field it was a relatively disparate community that created a strong movement based on shared social and economic circumstances rather than one universal discipline or theory (Glassman and Erdem 2014).

Who conflated the terms into 'participatory action research', and when this occurred, is disputed, from Foote Whyte's work in 1994 that reflected more Lewin's conservative position (Glassman and Erdem 2014; Stoecker 1997) to the more radical adoptions of Fals-Borda and like-minded colleagues (Hall 2005). This is not an issue to be resolved by this study, and as Stoecker (1997 p3) notes "activists are not nearly as concerned with the labels as academics". However, it is necessary to place the method adopted by this study in context, particularly given the flexible definition used in this area of investigation. For example, it would be difficult to argue that research involving a non-professional football club would reflect the subjugation noted in one particular summary of participatory action research; community based research among populations that have traditionally been exploited or oppressed, working to address their concerns and causes of oppression with the goal of achieving positive social change (Brydon-Miller 1997). Yet Greenwood et al.'s (1993 p177) view of participatory action research seems highly appropriate to a study seeking to identify challenges and opportunities for enhancing the activity of a group; "a form of action research in which professional social researchers operate as full collaborators with members of organizations in studying and transforming those organizations."

It is most useful to consider participatory action research as more of a research approach, a perspective rather than a discipline (Silver 2008), one where there has been agreement on particular features indicative of such practice but not to an exclusive or exhaustive extent.

McIntyre (2008 p1) lists these features as;

> A collective commitment to investigate an issue or problem, a desire to engage in self and collective reflection to gain clarity about the issue under investigation, a joint decision to engage in individual and/or collective action that leads to a useful solution to benefit the people involved, and the building of alliances between researchers and participants in the planning, implementation and dissemination of the research process.

From this it is clear that participatory action research is an approach in which the traditional roles of, and distinction between, research and research subject are challenged (Brydon-Miller 1997), where research is conducted with, rather than on, and the postulation that the academic is the expert is not assumed (Savin-Boden and Wimpenny 2007). Pain and Francis (2003) suggest it is not so much the methods and techniques employed that are of importance, but the extent to which participants are engaged both during and after the research. It is a situation where the researcher must be accountable to the community studied (Nygreen 2009), highlighting the contrast between the 'classical' investigative position of neutrality and minimal visibility with the radically different, immersive experience of participatory action research (Bergold and Thomas 2012). Glassman and Erdem (2014) suggest the researcher should not just be immersive, but actively seek to participate in the activities of the group being studied. This was the intention of this research, to utilise the participatory action research concept, using the features of the approach in conducting the investigation from within the chosen population to produce meaningful results towards opportunities for development and practical solutions to group challenges.

Initial activity in participatory action research should focus on the researcher establishing relationships with the community, aiming for trust and openness between those involved (Brydon-Miller 1997, Savin-Baden and Wimpenny 2007). Consideration and design of the research should follow (Brydon-Miller 1997) including assignment of roles amongst participants (Savin-Baden and Wimpenny 2007). These roles will, however, be fluid, not least because participatory projects may take many months or even years (Bergold and Thomas 2012). While ideally the request for activity comes from the community (Savin-Boden and Wimpenny 2007) it is likely that they will be involved much later than the initial stages of research question formation (Pain and Francis 2003) and Berg (2004) notes the acceptance of a researcher identifying an issue and bringing it to the attention of the community affected for action. While the research subjects should be in control of the direction the study takes (McIntyre 2008) data collection is necessary to fulfil academic requirements, particularly in the case of a time constrained PhD programme with a number of prescribed phases. How the data are collected is partly down to choice, partly influenced by any constraints or practicalities of the research setting and guided by the type of research question (Berg 2004). Amidst what could seem a

slightly chaotic approach to research, Berg's (2004) summary of the process can provide the necessary structure for the initial stages of the work; the identification of the research question, collection of data in respect of this question, analysis and interpretation of this data, sharing of the results with the participants.

Once results have been produced it is of particular importance within participatory action research to create a cyclical process (Glassman and Erdem 2014; McIntyre 2008; Savin-Baden and Wimpenny 2007) that provides for reflection, consolidation and re-examination of the situation (Brydon-Miller 1997). There are varying interpretations of how best to achieve this but the manner employed by this thesis is summarised in Figure 4.2 and discussed fully later in this chapter.

There are, however, concerns about the process to be noted and reflected upon. Firstly, participatory action research can be disruptive, not only to the participants but to the accepted procedures of academic investigation (Pain and Francis 2003). There can be implications for any data collected in a group situation given how personal views may change in the presence of others (Pain and Francis 2003). The question of power within the participatory activity is also an issue, as whilst all of a community may be invited to take part in an event there is a crucial distinction that should any invitees decline to attend sessions the research would likely continue, yet should the researcher abandon the study the project would typically end (Nygreen 2009). Ownership of the data is similarly problematic as any information generated by participatory action research is usually interpreted and presented by the researcher (Pain and Francis 2003) with the end goal of producing an academic text beneficial to themselves (Nygreen 2009). Such concerns regarding the relationships between researcher and researched in participatory action research prompt Nygreen (2009) to suggest it is an approach just as capable of exploiting and objectifying the research subjects as any methodology. Where participatory action research differs is in acknowledging these potential issues at the outset, noting the impossibility of any method undertaking work that is value free and embracing the political nature of any research process in order to produce better research (Brydon-Miller 1997).

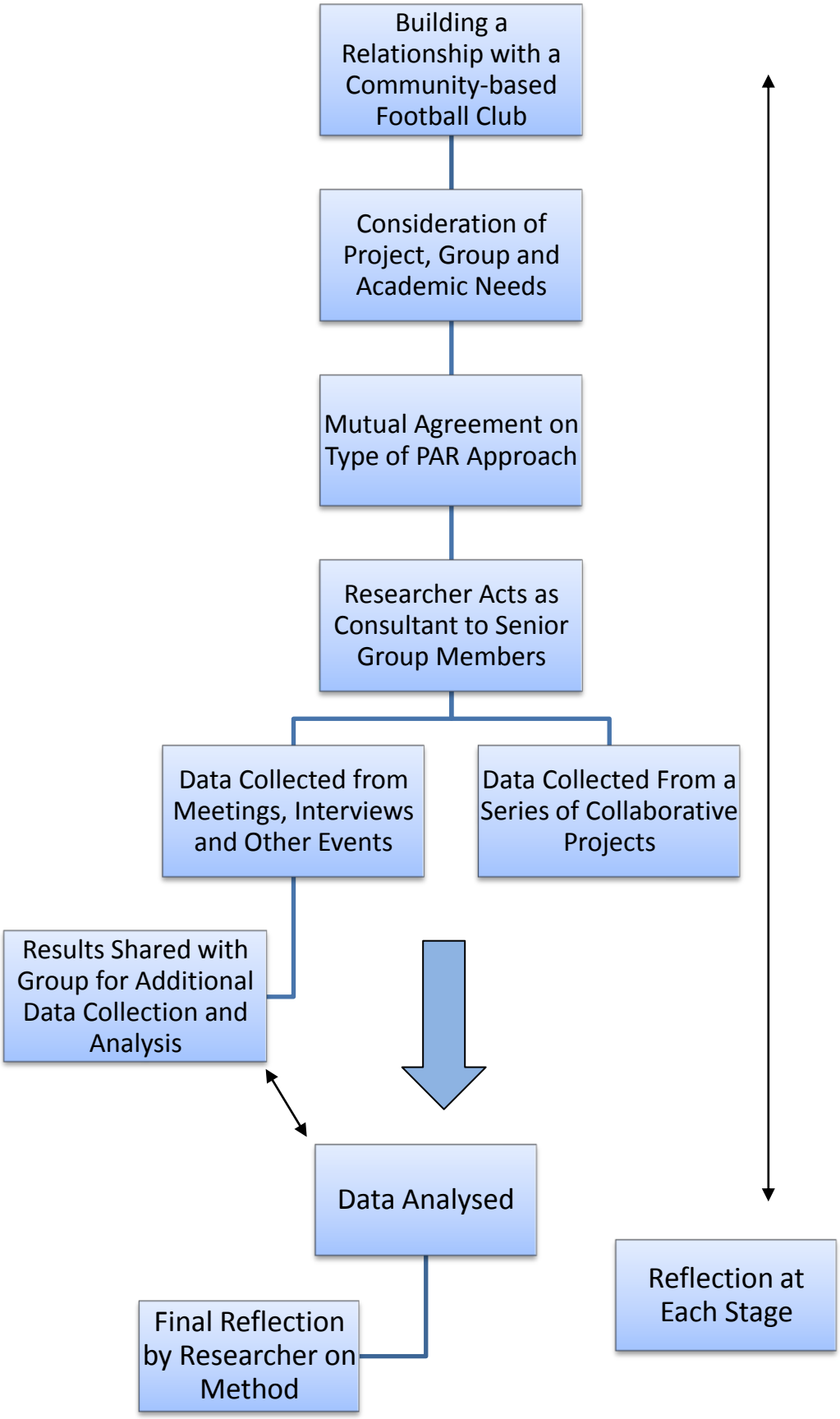

Figure 4.2 The Use of Participatory Action Research in the Thesis

Participatory action research was identified as an investigative approach for this study not only for the quality of data it can produce, but because it was a way of acknowledging my experience, awareness and attitudes, relating to both the environment and sport, and integrating it in the research. Participatory action research encourages particular transparency about these influences and requires greater reflexivity from the researcher than may be evident in other research approaches (Silver 2008). Moreover, whilst well established within social science there is a distinct lack of such research within sport studies, a situation that would benefit from redress given the ability of the work to identify deficiencies in accepted theory or modelling (Chalip 1997). Training courses with respected practitioners in the participatory action research field were undertaken prior to starting work with the club.

As was noted earlier in the chapter, participatory action research is a method with the potential for overcoming the misleading data that may be produced by the value-action gap within the research population. Moreover, as there is a lack of practical advice and accompanying activity on pro-environmental behaviour in community football there was a need to pursue a research agenda that did more than simply observe, something that sought to experience the life of a club volunteer and seek change. Prior to the semi-structured interviews participatory action research was of potential interest as a way of comparing the outcomes of different activities in a selection of football clubs and this approach was initially considered. For example, in one club an intervention strategy that invoked the psychological/internal paradigm with measures organised by the research group intending to alter the behaviour of individuals within the club, in another a social practices or external factor informed approach could have sought to adjust the infrastructure or ways in which activities were performed. However, the results of the interviews (discussed in Chapter Five) showed that the ability of clubs to act for themselves was restricted, that an internal strategy would encounter challenges from external constraints and imposed practices, possibly sufficient to render meaningful participatory activity impractical. There was also one particular club with a series of circumstances that appeared to singularly reflect many of the issues faced by the others collectively.

Once the relationship between myself and the club was established (a process discussed fully in Chapter Five), and approval received for additional research, it was appropriate to consider how best to implement that work. Stoecker (1999 p840) suggests the key questions to ask

before any participatory action research project are; "What is the project trying to do? What are the academic's skills? and How much participation does the community need or want?". The project from my perspective had to focus on providing answers to the research questions and allow production of this thesis. This was not a priority for the club I began working with, however they were keen to help me achieve my goal and appeared to consider my academic status and presence at the club of benefit in their discussions with both the FA and local authority. The club staff indicated, both in individual conversations and at regular meetings, that assisting them with their current situation in line with their policy of unpaid voluntary service would be of benefit. It was subsequently agreed by the group that my particular abilities would be best suited to an administrative role, rather than direct involvement in the playing and coaching of football, and I was happy to adopt this as it offered greater exposure to the aspects of the club relevant to pro-environmental activity. Stoecker (1999) also asks the researcher to consider the degree of organisation, existing abilities and roles available in the group along with the academic's time to devote to the work. While this was a highly organised club with skilled and knowledgeable staff the stage one interviews revealed they did not have specific understanding of environmental issues, the ability to initiate work towards improving this aspect of club activity, or the time to consider this area. These were all things I felt I could satisfy.

Stoecker (1999) notes the variation in the possible roles for the researcher in any participatory action research study. These are not at odds with familiar academic perspectives within research and the three potential positions outlined can be seen as having parallels in most community focused investigative work. Importantly, adoption of this interpretation of the role of the researcher would be a way of balancing the demands of the PhD with the need for collaborative group direction of participatory action research projects. By highlighting the possible ways in which the researcher could be of assistance to the football club, without an undefined, open ended remit, the group can decide on the most useful option for their collective development and the researcher can produce something for their needs. Stoecker (1999) labels the possible roles as; the initiator, the collaborator and the consultant.

The Initiator

Whilst participatory action research suggests that the research question should arise from within the community, as Pain and Francis (2003) note they are far more likely to be involved after the need has been identified and many projects would not happen without a professional researcher creating the situation and inviting participation (Stoecker 1999). The research process itself is managed by facilitation, allowing the community to take ownership of the work. However, over time the researcher must be an effective community organiser to maintain this role, something many academics are not suited for (Stoecker 1999).

The Collaborator

The collaborative position suggests that the expertise of the researcher may be matched by the community awareness of needs and perspectives (Stoecker 1999). Each works to their best ability on the things they know most about in an equal partnership. However, concerns exist as to the potential diversion of resources by the community to address a research question perhaps not a priority for them.

The Consultant

The premise of the consultant is as would be expected within other fields of work; the researcher undertakes a commissioned project whilst reporting, and being accountable, to the community requiring it. Stoecker (1999) suggests it is the role that has afforded him most success in research work. In terms of the needs of this study the arguments in favour of this option appear convincing; community members have limited time for managing the work (a factor clearly evident during attempts to organise interviews for this study), they may have more important activities to undertake (surrender of which would negatively impact the practical change aspect of participatory action research) and the resulting academic output may achieve more for the community than were they to produce something internally (Stoecker 1999). Consequently, it was this style of administrative role within the club that was chosen as being best suited to both parties.

Other authors produce similar role descriptions, for example Berg's (2004) 'technical, scientific, collaborative' participatory researcher who seeks to work with one key figure in an organisation,

that person then acting as the liaison between the researcher and the group. The academic is collaborating and facilitating but not directly with the majority of those in the project. This validation encouraged my choice of method as it was clear once I began to understand the way the football club operated that collective decision-making in the organisation was rare and while a monthly meeting open to all members of the football club was held the forum was often an information sharing exercise with managerial issues having been resolved outside of these times. This was understandable as the site was operational daily and it would be impractical to call meetings of voluntary staff for every necessary decision. Clearly this would cause challenges for the forms of participatory action research requiring regular and sustained input from the wider membership and it was relevant to reflect on Stoecker's advice (1999) about how the researcher may need to adopt a role appropriate to a situation where knowledge is generated, relationships are built and practical outcomes are achieved. This latter point was particularly apposite and a number of the techniques employed by previous participatory action research projects, for example participatory diagramming (Pain and Francis 2003) and arts-based activities (Fenge et al. 2011), would not have fitted with either the club's working practices or the time individuals had to devote to the work. The role of consultant was the most appropriate selection for the circumstances and ensured the collaborative process did not begin with the researcher seeking to impose a form of research method on a reluctant research group. Club staff were happy with this arrangement and it allowed the opportunity to suggest interventions reflecting aspects of the pro-environmental behaviour debate while remaining an active participant in a wide-ranging and diverse research methodology.

Data Collection

As previously mentioned in this chapter a research diary was maintained. This is an invaluable tool which shows the development of a researcher's thinking, aids reflection and can provide ideas for the direction of the work (Silverman 2000). This was particularly useful during the period of participatory action research where methods such as note taking or making audio recordings may have impacted the immersive experience and altered the perception of my role by participants. During more formal events and pre-arranged interviews I was able to collect data in these formats, club monthly meetings produced minutes and discussions with the local authority used circulated agendas and action plans. Due to the type of activity I was engaged in as a consultant at the club (discussed in Chapters Six and Seven) there was a significant

volume of documentation produced and subsequently available for analysis. At other times proceedings were observed or joined and the details transcribed immediately afterwards.

Data Analysis

Jackson (2008) notes that data analysis remains one of the aspects of the research process yet to fully embrace participatory methods. There are numerous reasons for this; the challenges in training people so they can undertake analysis, the difficulty in accommodating numerous people in the process and the time and resources needed to complete the task. A solution to this has often been that the researcher will produce results from data analysis and then relay them to the group for discussion and reflection. Whilst data relating to collaborative projects at the club, subsequently discussed in Chapter Seven, was shared with senior volunteers, a more participatory group data analysis, such as practiced by Jackson (2008), would not have been appropriate to the research setting of this thesis. The football club volunteers had many demands on their time, their own particular interests and ways of operating and it would have been an exercise of power to attempt to coerce the volunteers into participating, with the possibility the club could have withdrawn its support for the research should they feel pressured.

As with analysis of the interview data the information generated by the participatory action process was reviewed and coded in line with the recommendations of previous work (Biddle et al. 2001; Fielding 2008; Miles and Hubermann 1994; Saldana 2009; Silverman 2000). The data were organised into comparable themes and particular aspects relevant to the research question, the discussion of these forming Chapter Six in this thesis. This research's adoption of inductive study of the data and the cyclical process of coding (Saldana 2009) were well matched with the participatory action research approach.

Cyclical Research

Wadsworth (1998) describes how all research involves a cyclical form of action, reflection, questioning, investigating, analysis and conclusion but participatory action research differs in a number of ways. The cycle in participatory action research; is more explicit in identifying problems, more conscious that they are problems, deliberate in involving others in the inquiry, intensive and rigorous with attempts to develop deeper understanding and seeks to generate knowledge to better inform actions. In doing this it is less linear than more conventional

research. Pain et al. (2012) suggest the participatory action research cycle is one of planning, action, reflection and evaluation. It is a process that may be undertaken every time a group meets or timed to engage in evaluation only when the actions are complete. Savin-Baden and Wimpenny (2007) suggest the cycle is not as neat or self-contained a process, the stages overlapping and causing changes to plans. Given the demands on me as a PhD student, and the priorities of the volunteers at the club I was working with, I was mindful of the ad hoc situations that Savin-Baden and Wimpenny (2007) believed could be created by overlapping research stages but felt it was appropriate to attempt to follow Pain et al.'s (2012) advice and, in collaboration with the club, identified planning and action stages to be followed later by reflection and evaluation. These would minimise the potential disruption to the club's operations, something I was already impacting with the introduction of pro-environmental activity measures, and it would have been wholly inappropriate to attempt to force personnel to work entirely to an academic research agenda.

Reflection

Bergold and Thomas (2012) note four ways of reflecting on the participatory research process. One of these is not relevant to this singularly undertaken thesis as it considers relationships between researchers. The other three, however, offer a useful guide to how the researcher's experience may be influenced; through personal and biographical attributes and dispositions, particularly relevant to this thesis given my previous experience in sport and the environment, structural reflection on the environment of the research and reflection on the research process itself.

Positionality is an important consideration during research. The traditional view of the status of the researcher is that it is a dichotomy between being an 'insider' or 'outsider' to the study group (Crean 2018). The relevance of this to the work is that the objectivity, reliability and reflection by the researcher may be open to question if they are 'inside' and too close to the research subject, yet they have the advantage of familiarity, trust and less inclination to generalise (Kanuha 2000, Bonner and Tolhurst 2002). Being 'outside' may mean an inability to get close to the issue, people or culture being studied, given expected rather than accurate data, yet potentially greater objectivity and clarity (Bonner and Tolhurst 2002). However, this discussion has become somewhat supplanted in recent years, Dwyer and Buckle (2009 p60) typifying the

modern perspective that "to present these concepts in a dualistic manner is overly simplistic" and restrictive. The perception of being either inside or outside is the researcher's, and they may wrongly assume they are accessing information denied to others (Labaree 2002). Moreover, researchers may find themselves moving between perceptions of their status according to the context of the work throughout the study (Crean 2018). This could have been particularly true given my choice of the collaborative research method yet acting in a role that necessarily created a certain distance from daily operations of the football club.

Identity is of equal, if not greater importance, to the research process than structural positioning according to some (Brown 2012). Race, gender, class, age and personal experiences can be powerful forces in the collection and interpretation of data (Crean 2018), as well as contributing to what may be the perceived status. In this I was similar in many regards to the participatory research group; male, white, local to the area, involved in sport, but not in others, particularly that I had never played or worked in community-based football and had prior experience of the post-graduate research process. These considerations were of particular relevance as the research progressed as the discussion of data in Chapter Six shows. However, as this discussion of participatory action research has identified, the relationship between researcher and researched is not the same as within other research method studies and rather than deliberate for too long over positioning it was better to adopt the advice of Dwyer and Buckle (2009 p59); "the core ingredient is not insider or outsider status but an ability to be open, authentic, honest, deeply interested in the experience of one's research participants, and committed to accurately and adequately representing their experience".

The honesty of the research was part of a wider consideration of ethics, particularly given the unique perspective afforded by participatory research and the potential vulnerability of the researched group given a highly collaborative experience. As was identified earlier in this chapter when discussing data collection, participatory action research has a similar potential to exploit as any other method (Nygreen 2009), and I was aware I was not just part of the football club community, I actually lived in the community it served. This meant I could be included in discussions relating to people that I knew in other social circles. Consequently, anonymity and confidentiality were a highly prominent feature of my work, as indeed they should be, being "central to ethical research practice in social research" (Crow and Wiles 2008 p1).

The process involved in obtaining ethical approval for the doctoral thesis was useful in this regard as it was particularly specific about the potential identification of research subjects, informed consent and the protection of data. The guarantee of anonymity of respondents to all but myself was important in securing approval for the interview stage of research, and while the necessary open forum style of discussions for participatory action meant this could not be continued in the second research stage, agreement was made that anonymity would be preserved in the publication of this thesis and outside of the club environment. This could have caused a potential dilemma when one of the participants expressed a desire to be quoted using his real name, so strongly did he want his perspective to be communicated. However, while consent can be the subject of "an ongoing process of discussion, reflection and renegotiation of trust throughout the research" (Pilkington 2016 p21) I suggested that not only had I already agreed to a schedule that would have to be resubmitted to the ethical approval panel but it might be possible to relate his message in future work, via different means. There was clearly an element of self-preservation of my research about this suggestion but more importantly the consideration that the participant may come to regret the decision if it adversely impacted the club, and was thus a necessary part of my duty of care to all my research collaborators.

One feature I could not employ is that suggested by Crown and Wiles (2008) that gender, occupation or location be altered to improve the prospect of maintaining the respondents anonymity. Gender, and possibly occupation through its relationship with education, were considered potential contextual factors for pro-environmental thinking and would have therefore possibly confused the data. Location was a highly relevant feature across all interviewees given the role of local authorities in the process. Of most concern during the ethical approval process was the suggestion by the University of Central Lancashire panel convened to discuss the proposed study that I receive a letter of permission from the FA to undertake interviews with affiliated clubs. This official sanction from the governing body, and thereby association with their leadership could have completely undermined my status and credibility with interviewees and, converse to the panel's possible good intentions, could have harmed my research. My suggestion that they do not ask me for this permission was accepted by the panel on this basis.

Conclusion

It is appropriate to conclude that the particular research methods used allowed for the collection of rich data and a unique perspective on the research question. The semi-structured interviews themselves were different, and important, as they sought the views of those often marginalised or ignored in debates surrounding football. As such they might even help others to clarify what they mean when they discuss 'football' and its 'grassroots' as successive interviewees raised similar points concerning the state of the game at their level that have yet to be promoted in the literature. Using participatory action research deepened my insight, and over an extended period a fuller picture of the challenges and opportunities facing community-based clubs was revealed, something that interviews helped frame but could not have provided the time or forum to explore completely. I feel it was only due to the particular implementation of participatory action research, the researcher acting as a consultant, that this was possible, avoiding, as it did, excessive demands on the club volunteers and their management of their organisation. The club had control of the research agenda and used the opportunity to try and deliver practical solutions to environmental concerns whilst highlighting the reasons why such efforts were beset with challenges.

The following chapter, Chapter Five, details and analyses the data from the first stage of field research, the semi-structured interviews with volunteers from community football clubs and employees at local authorities. The results are compared with the points identified in the review of literature and discussion of sport, football, social practice and the environment in Chapters One, Two and Three. Themes relevant to the research aim and the second stage of field research are identified and discussed.

CHAPTER FIVE FOOTBALL AND THE ENVIRONMENT: LOCAL CLUB AND LOCAL AUTHORITY PERSPECTIVES

Introduction

This chapter describes the results of the first field-based stage of research, a series of semi-structured interviews with football club volunteers and local authority employees. The data provided by the interviews is critically analysed and themes relevant to the research question are discussed. Comparison is made between this original data and the points identified in the review of literature in Chapters One and Two, and the framework of football as a social practice proposed in Chapter Three. Conclusions are drawn as to the challenges and opportunities for pro-environmental activity in community-based English football afforded by this information. These informed the second stage of research, which is discussed in the following two chapters.

The chapter begins with geographical and socio-demographic information on the region chosen as the location of the research, this offers context to the discussions that follow. The characteristics of the interviewees and their football clubs are then provided. Operations in those clubs, amidst a range of different working models, are documented and discussed, with the extent of pro-environmental activity within those operations being identified and examined. Other activities of the clubs and their ambitions are described before the views of a sample of the local authorities acting in the region are provided and analysed. The potential for developing opportunities for pro-environmental activity given the data identified is highlighted and, prior to concluding thoughts, the interviewees offer comment on any other aspect of community football of concern to them.

The Context of Community Football in North Country

North Country has a population of just over half a million, with a projection that this will increase by 4.2% by 2024 (ONS 2011). There are approximately 71,500 children aged between 5 and 17 years in the area, and this group is expected to rise by 7.6% over the same period (ONS 2014). The number of adults in North Country is expected to fall by 1.1% by 2024 (ONS 2014). The region is in the top 30% of most deprived local authority areas in England, with 10% of the population in the top 10% most deprived places in the country (DCLG 2015). There are particularly high levels of deprivation in income, employment and health in North Country

(DCLG 2015). Education deprivation includes almost 38% of the inhabitants of the region and approximately 20,000 children live in poverty (PHE 2015). 21% of year 6 pupils (10 and 11 years old) are classified as obese, that figure rises to over a quarter of all adults (PHE 2015). Alcohol related hospital stays, smoking and physical activity indicators are worse than national averages (PHE 2015). The impact of these data for community football in North Country is that there will be more young people in the region, with potentially a greater need to lead more active lives, such as in playing sport, with fewer adults available to organise this.

Every club interviewee was a member of their respective club management committees and had input into decision-making. The shortest time an interviewee had been involved with their club was four years, everyone else had been engaged between eight and fifty-three years. All of the interviewees were volunteers and all were male. Prior to their current position every interviewee had been involved with their club either as the parent of a child playing in a club team or playing for the club as a child themselves. These points were not only highlighted in Chapter Four's discussion of researcher identity, but may have been considered relevant to the data, given the work highlighted in Chapter One, particularly Stern et al.'s (1999) inclusion of altruism as a behavioural influence, and Kollmuss and Agyeman's (2002) summary of the relationship between gender and pro-environmental activity. However, as was noted there the relevance of such factors is disputed and at no club was the interviewed volunteer responsible for all decision making. I subsequently dismiss these factors as being cause of any pro-environmental activity, or not, later in this chapter.

All the community football clubs represented in the interviews had been in existence for a relatively long period of time and mainly provided for youth football (under 18 years of age). The most recently founded club was established in 2002, two clubs date back as far as the 1950s (see Table 5.1). The FA handbook, noted in Chapter Four as the means of identifying potential participants, does not provide this information so it was not an element of the purposive selection of clubs for interviews. However, a number of interviewees indicated it is very difficult to sustain a club over the first few years suggesting there was an increased probability of choosing a well established club for interview from the list of FA registered organisations. The situation was summarised by one interviewee;

there's a core of clubs who have been about for years...then you have ones that spring up for a while then fall away...it's not easy, there's a lot to be done (interviewee C, club 2)

The duration interviewees have been involved with their football club and the longevity of their organisation's existence may also be relevant to the data collected. McCullough and Cunningham (2010) report that the pressures and impetus to change could be lacking in established sports clubs. Their suggestion is that practices such as promoting a winning ethos may have become entrenched, with a lack of new stakeholders leaving the status quo unchallenged, helping perpetuate policy failures, such as poor environmental performance. Following this perspective, had these interviews been able to include a volunteer at a more recently established club they may have provided alternative thoughts on pro-environmental activity due to the absence of such institutionalised thinking. However, if it is as difficult to sustain a club as interviewees claimed, there has to be doubt as to whether a thriving, recently established club that does not pursue standard practices could be found. What McCullough and Cunningham (2010) may be observing, as seems to be the case in North Country, is not entrenchment by a club, but entrenchment of the club, in the elements and relationships that exist in the social practice of sport.

All of the interviewees identified their club as FA Charter Standard or FA Charter Community Standard. This was predictable because to be registered in the FA handbook, and in keeping with what Chapter Three identified as the FA's desire to 'professionalise' the community game, a club has to be either of these affiliations. It would also prove challenging to omit FA affiliation as an inherent feature in this research as not only would non-affiliated clubs not appear in the FA handbook they would not be permitted to play in organised leagues and consequently be difficult to identify, a clear indication of the meaning of community-based football being set. Community-based football clubs simply cannot fulfil their purpose if they do not affiliate. This imposed affiliation has implications for certain features of the club environment and organisation, the materials and competencies. For example, a club is compelled to play to the rules concerning the type and size of playing surface and is required to have personnel trained to FA specifications. However, the Charter Standard does not specify that a club must possess a particular organisational structure or relationship with their environment, how, and from where, the playing space is obtained is not dictated (the criteria for FA Charter Standard status are

documented in Appendix 6). A club that lives a 'nomadic' existence in terms of not having use of a regular 'home' pitch can satisfy the demands of Community Standard affiliation whereas one with its own modern stadium may not meet the criteria.

Despite the absence of land management criteria in FA affiliation, there is a link to the sport's pro-environmental activity as if not the clubs, somebody, somewhere still has to provide the "sportised" landscape (Bale 1994 p10) of highly regulated pitches created under what Chapter Two identified as the commodification of football (Bale 2001). Becoming standardised commits the club, and its environment, to any, and all, regulations introduced by the governing body. These regulations, though no doubt some are created with the good intentions of welfare, fair play and scrutiny, have other consequences for club competencies and the imposition of behaviour. Maintaining compliance and a continued presence in the FA register of clubs provides administrative challenges and the need for personnel, one of the clubs studied, for example, requires 43 volunteer coaches to maintain their teams in competitive football.

These considerations are highly relevant to social practice thinking. The clubs affiliated to the FA are not engaging in decision making regarding the form or timing of their activity. Requirements for being a football club and playing in competitions have been specified by others and club volunteers simply choose whether their club should exist in that environment. There is no means for them to change the conditions. It is, as was noted in Chapter One, individual behaviour as product of elements interacting and creating a practice. For Wilson and Chatterton's (2011) 'tea drinking' it is clear that a comparable relationship at community football level can be seen; between land, turf pitches and footballs (materials), football matches at specified times, in competitions for affiliates (meanings) and understanding to stay within the regulations and proffered advice (competencies). Individual behaviour in terms of football participation becomes a simple routine agreement to play or dissolution of the club.

The Operation of Clubs

Given the structural constraints of club affiliation and competition participation it was of interest to identify how clubs operated and if difference existed. Within interviewee responses regarding the organisation and management of their clubs there was a variety of organisational structures (n=4) amongst a relatively small group of clubs (n=7) (see Table 5.1). These I define as the

'club organisational model' and comprised: a charity; community association; constituent member of sports and social club and four not for profit, single sport clubs.

Club	*Founded*	*Number of teams*	*Club Organisation Model*	*Playing Fulfilment Model*	*Building Usage Model*
1	1957	20	Charity	At the clubs owned site	Shared use of a commercially rented building with full facilities managed by a paid employee
2	1955	23	Community association	At the clubs long term leased site	Use of a local authority owned large building with full facilities
3	2002	20	Not for profit single sport club	On pitches leased annually from the local authority	Minimal facilities at pitchside
4	1980	30	Not for profit single sport club	On pitches rented from a commercial provider	Commercial arrangement with education establishment with minimal facilities
6	1982	20	Not for profit single sport club	On a site provided through 'grace and favour' by the local authority	Shared use of small local authority building with minimal facilities
7	1998	21	Constituent member of sports and social club	At the clubs owned site	Shared large building with full facilities managed by a paid employee
8	Late 1990s	6	Not for profit single sport club	On pitches hired ad hoc from the local authority	Minimal facilities at pitchside

Table 5.1 Summary of Models Identified by Each Interviewed Football Club

(NB. Club '5' agreed to interview and was assigned a research subject number but was unable to organise a time for interview so could not be included in data).

These models of club meet their playing requirements through even more varied means, not one club sharing the same way of fulfilling fixtures with another (see Table 5.1). These I define as *'playing fulfilment models'* and witnessed club matches played according to six different arrangements (see Figure 5.1). It is difficult to conceive of any playing fulfilment model that is

not included in the arrangements described by interviewees. It is noted in Chapter Four that during the planning of the methods I sought to purposively sample from four perceived models of football club, the results showed there were actually a greater number of models than anticipated.

Figure 5.1 Club Interviewee 'Playing Fulfilment Models'

In addition all clubs utilised what are known as central league venues, designated sites that host matches for particular representative teams in a specific league. This may mean that a club has an entire age group never playing a home match as they are in the group scheduled for the central venue. Not only may this impact the relationships these groups have with their club, community and the land they use, it could cause logistical difficulties, particularly in relation to transport, if a family has two or more children of different ages involved in football matches. This in turn has environmental consequences.

Emulating the different club organisational and playing fulfilment models, the buildings found at each club studied varied, and quite substantially in both size and facilities (see Table 5.1). In

defining a *'building usage model'* I am identifying 'full' facilities as comprising a series of changing rooms with showers, toilets, a kitchen, communal areas and a meeting room, 'minimal' facilities represents the basic requirements that are mandated by the rules assigned to that competition's fixture (usually a toilet and changing areas). The examples given are highlighted in Figure 5.2.

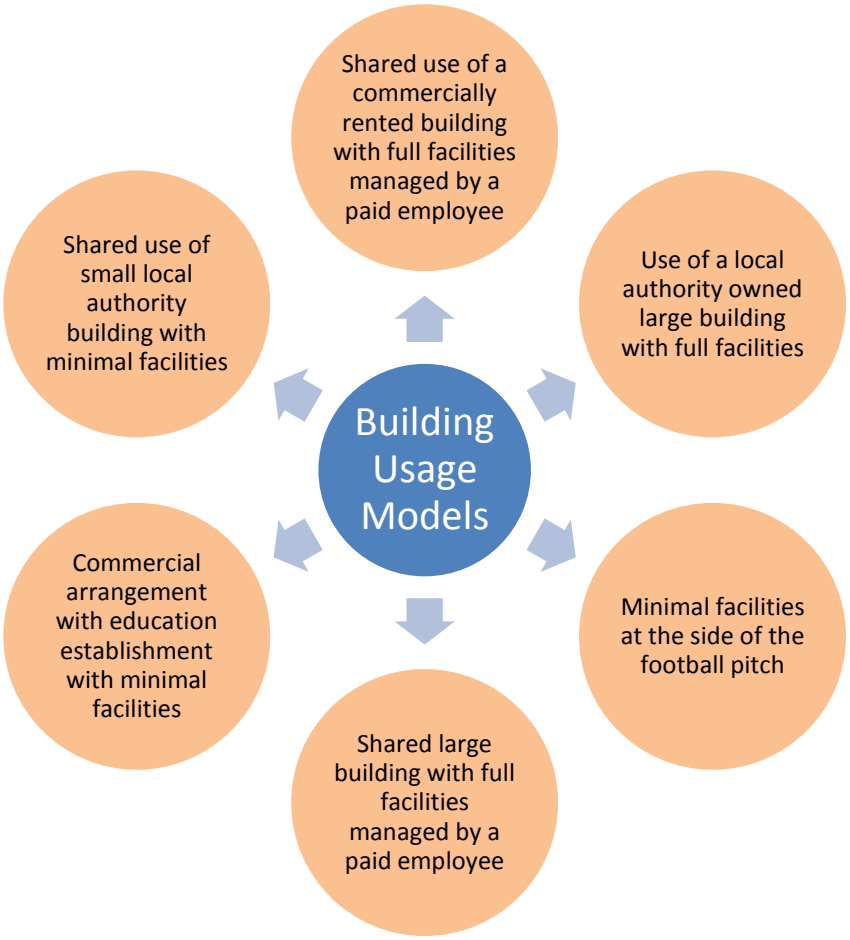

Figure 5.2 Club Interviewee 'Building Usage Models'

It was indicated that some fixtures are sometimes played at sites with no facilities. This is contrary to competition rules, an unusual example of non-compliance, and would be a reason for a local authority forbidding use of one of their sites. However, interviewees said that the demand for pitches may cause such private arrangements, the requirement of one element of the established practice outweighing another, not an individual club choosing to deviate from the norm. Again it is difficult to imagine a building usage model not covered by the responses in

the interviews and this variation in findings is reinforced by the *FA Best Practice Guidance for Changing Rooms and Showering Facilities* (FA 2016) a document that acknowledges not all clubs will have toilets and showers, confirming the necessary breach, and how best to manage the situation where children are involved.

The type and quality of pitch facilities offered by the land arrangements similarly vary because ownership impacts the resources available to manage them. For example, an infrequently used local authority owned grass pitch in a region with many natural turf amenity areas may be mown at a series of fixed intervals or as time allows, whereas a club owning a single pitch and no other land may have a volunteer groundsperson performing tasks more regularly. This is confirmed by both club and local authority interviewees;

> Each pitch is cut twice per week (Interviewee at Club 1)
>
> The pitch is cut every two weeks or so (Interviewee at Club 6)
>
> Smaller use sites may only be prepared on an 'as needed' basis (Interviewee B Local Authority 2)

Only at three of the clubs in the study were pitches managed wholly by the club. At another two there is club involvement in match specific tasks such as line marking but the turf maintenance, the work involving the practices necessitating fuel-driven machinery, discussed in Chapter Two as being damaging to the environment, is undertaken by the local authority. This is significant in terms of this thesis, as it means a majority of the clubs in these interviews cannot alter pitch-based environmental activity. Behaviour by individuals at these community football clubs does not have any impact on the environmental management of the pitches. The 'internal' factors that are believed to control this behaviour, rational choice, awareness, intentions, values and norms are all subject to the ability to exercise decision making, which clearly some clubs cannot do in respect of such work. External factors could possibly alter this situation as clubs are not mandated to utilise local authority pitch management, but the lack of alternative provision in the sport means currently any attempt to alter the use of fuel and the carbon emissions produced in the pursuit of a playable football surface for their teams is an aspect beyond their control.

Similarly, and common to all the building usage models identified, none of the arrangements for premises attached to playing sites provide any club with the power to act, making changes to buildings as they wish. While three clubs did at least enjoy responsibility for pitch management, no club owned a building or had licence to manage it. Again this is highly relevant to the research question as efforts to influence the rational choice, values, attitudes or other such internal considerations for club personnel would have no consequence for behaviour in relation to property management. The strategy of DEFRA, discussed in Chapter One, to identify headline behaviours and activities to be enacted by particular populations, is just one of a number rendered inoperable for this series of clubs due to their lack of power. For example, Club Two is unable to alter its gas consumption because their volunteers have no access to the heating system, it is remotely controlled by the local authority, nor are they permitted to make any structural improvements that might impact efficiency such as fitting new windows or doors. This situation, the routinised behaviour of individuals in an established structure, is best typified by the response by the interviewee of a club in such restrictive circumstances;

> Whatever the council say we've got to go with (Interviewee A Club 8)

Thus far the data identify that the interviewees in this stage of research are experienced football club volunteers, representing established organisations that have been operating via numerous different methods of owning, organising and playing football over many years. As such they offer a knowledgeable base of experience and a rich source of data across all conceivable models of club with their attendant challenges and opportunities relating to pro-environmental activity. The different examples of ownership, management and organisation of football clubs, and the land and facilities they use, are clearly integral to any attempts to initiate pro-environmental action change. If clubs had control over the decision making relating to the materials used for football then 'internal' theories of behaviour such as raising awareness of the issue of environmental damage and attempting to educate this particular football community might be met with varying responses because the models and contexts the clubs are operating in are diverse. However, as they do not own or control land or buildings this concept of individual behaviour is largely redundant, only a change in the existing external relationships and alteration to established practices could provide for the modification of activity the current environmental situation demands.

Yet the data does not completely exclude the possibility of a minor role for internal theories of behaviour, despite the fundamental barrier to meaningful change. For example, a club might not be able to do anything about the supply and nature of energy for lighting in the buildings they use, but they could remember to turn off the lights when not in use. Nor does it mean that altering the existing social practice in football will be a panacea as the ability to initiate more pro-environmental activity could encounter similar diversity in club circumstances and resources. However, the suggestion from the data on club operational models is that such activity would be very small and in no way sufficient to provide the variation in the way the sport is played. To better determine the factors that would present the greatest opportunity to increase pro-environmental activity, and thus the relationships within the social practice of community football worth targeting, the interviewees were asked about the extent to which their clubs currently engaged in such activity.

The Extent of Club Pro-Environmental Activity

After describing the operating structures of their clubs, the interviewees were asked about pro-environmental activity both personally and with regard to their club. Not only would a personal view of environmental activity offer opportunity to identify and compare the possibility of internal factors influencing any activity, but the responses would help eliminate any potentially anomalous data, something identified in a previous study investigating environmental behaviour when an interviewee happened to be both a sports club volunteer and senior official with an environmental agency (Carmichael 2011). In terms of personal activity, the phrase 'pro-environmental behaviour', as typically defined within the literature and discussed in Chapter One, was not familiar to any of the interviewees in this study. Some interviewees offered thoughts that appreciated the logical implication of the phrase, for example;

> It means doing what you can for the environment (Interviewee B Club 7).

One interesting suggestion came from an interviewee;

> I thought it could mean one or two things, pro-environment in terms of not the geographic environment, or the physical environment or whatever, but the environment of the running of the club (Interviewee C Club 2).

The relevance of this comment on the wider environment of the club became clear when interviewees offered additional thoughts on the challenges they faced and is discussed later in this chapter.

The idea of pro-environmental behaviour was explained to each interviewee with reference to both the positive interpretation (being more active with regard to the natural environment) and the idea of minimising impact on the natural environment as clarified by Kollmuss and Agyeman's (2002) definition noted in Chapter One. When asked if this information prompted any examples of self-initiated pro-environmental behaviour the interviewees' responses tended to be non-specific and defensive of their activities, for example;

> I don't go round destroying any of the natural environment (Interviewee B Club 2)
> I'd have as much renewables and things like that as I could (Interviewee D Club 1)
> Ideally on the days I'm over here I'd love to walk and not bring the van (Interviewee B Club 3)

Only one interviewee said they had never looked at anything relating to the concept and that person did not seem to share the same sense of responsibility as the others in regard to the environment, feeling any activity he undertook was mitigated by his employment in an outdoors industry.

This generalised and defensive response can be contrasted with the interviewees comments when asked about the extent of club pro-environmental activity. Not only were there more specific and numerous activities mentioned, the change of perspective from the individual to the collective aspect of the club appeared to make interviewees more comfortable and a number expressed what they felt was the relative lack of positive behaviour at their clubs, for example;

> There's a massive scope of what we could do that we don't currently do (Interviewee D Club 1)

I don't think we as a club does as much and society as much as we should really (Interviewee C Club 2)

As interviewees were free to respond in any manner to this question the activities with a positive environmental focus they felt their clubs did undertake were quite varied. These have been collated where the responses used different words to describe the same aspect, for example "motion sensors for lighting" is the same product as "PIR lighting" (passive infrared sensor, a motion detector) and are shown in Table 5.2.

Pro Environmental Activity	*Clubs (n=7)*
Car sharing	4
Motion sensors for lighting	2
Green waste recycling	2
Glass recycling	1
New boiler fitted	1
New windows fitted	1
Submission of a travel plan	1

Table 5.2 Club Interviewee Responses Regarding Football Club Activities Relating to Pro-Environmental Activity

Transport was the most frequently mentioned aspect of club environmental activity yet the suggestion was this was not something done for environmental reasons, more it was an attempt to reduce personal expenditure on fuel. Car use for matches was not only problematic in terms of the organisation of travel to locations but challenging for a number of interviewees in terms of parking at their home pitches. Trying to strike a balance between accommodating parents, avoiding disruption to the neighbourhood and reducing congestion was described by those with numerous representative teams and larger facilities. Mini-buses were cited by some interviewees as having been used in the past to reduce the number of cars needed but none of the clubs will use these now due to safety concerns, cost of insurance and the minimal impact they have on the number of vehicles travelling. Typical of interviewees responses was;

> If you said to me there's a free van for you I wouldn't want it as I wouldn't want the responsibility (Interviewee B at Club 6)

This appears to encompass all elements of a social practice; the materials of cars and car parking, the sense of place and meaning of the football club in the community and the competency of people in utilising alternative modes of travel. In terms of the theories of environmental activity, it reinforces the suggestion that in football it is social practices that create the barriers or, when the relationships become altered, opportunities for individual action. I explored this particular challenge in more detail during the participatory research, discussed in Chapter Seven.

A number of interviewees mentioned the change in family behaviour that occurs as children age. Younger players are often brought to matches by one or both parents with a sibling in the family car, but by the time the player reaches teenage years they might be sharing a car with friends and just a single adult driving. Again it is not a result of pro-environmental thinking but it is a change in activity that has implications for the environment. Interviewees seemed not to make such links and their comments suggested they viewed pro-environmental activity as something that required positive action; recycling glass bottles or installing particular fixtures in buildings, rather than reducing the consumption of a natural resource. There were no substantial variations in interviewee responses to suggest that personal factors were exerting any significant influence on the choice of activity. As they were a relatively homogenous group of people it cannot be said that personal factors have no impact at all in environmental theory. However, given that these are long serving volunteers, in well established community-based football clubs, affiliated to the FA, it suggests that the information-based strategy pursued by Sport England and the FA is not working in terms of awareness and appreciation of the opportunities for pro-environmental activity, or its ability to create change, among this research study group.

Given the lack of awareness of what may be pro-environmental, I considered whether there may also be club activities that caused unintended, yet negative, impacts on the environment. Consequently, interviewees were asked to discuss their pitch and buildings management in greater detail. As has been previously noted, this would be minimal for some clubs as the

facilities may be small and they have neither ownership nor management of them. However, just as clubs may behave positively independently of ownership, as with the example of turning off lights, they could also behave negatively, for example by not using appropriate waste disposal facilities that have been provided by the owners of a site. Table 5.3 summarises the activities described by interviewees that impact the environment.

Environmental Impacting activity	*Clubs (n=7)*
Car use for matches	7
Mowing of pitch (by club or other)	7
Energy use in buildings	3
Water use in buildings	3
Waste generation outside of recycling	3
Use of fertiliser on pitch	2
Use of chemicals on pitch	2
3G surface management	2
Floodlighting a 3G pitch	1

Table 5.3 Club Interviewee Responses Regarding Football Club Activities That Impact the Environment

Comparison of Tables 5.2 and 5.3 highlights the gaps between impacting activity and efforts to mitigate a club's environmental footprint. This is where possible opportunities for increasing pro-environmental activity may lie and could be the focus for changing relationships between elements. The clubs that had buildings obviously used them on match days, thereby consuming water and energy. Two buildings had motion sensors for lighting installed and one had seen heating efficiency measures introduced. However, these were the only attempts to reduce consumption, with none at all initiated at one club and none for any club in relation to water use. Glass and other waste recycling was similarly lower in practice than was potentially achievable, with some clubs seeing all waste, including that of spectators, being sent to landfill. It was an opportunity one interviewee had noted;

> Maybe we need to be more pro active in the small things, like I said about the plastic bottles, if we just had a bin outside that says put your plastic bottles in here please and they went to recycling. That's a start. (Interviewee C Club 2)

Yet despite this awareness nobody at the club had ever done it. The reason for this was later identified as that the club would be classed as a commercial waste producer in UK legislation and as such was charged for all waste collection. Having a separate recycled waste collection incurs a charge from the local authority with no discernible benefit to the club other than a feeling of positive action. Again the club cannot alter these conditions, it is an established aspect of not just the social practice of sport, but of the community group sector. As such, the outcome that plastic waste does not get recycled because of the associated costs, imposed from outside, is a highly transferrable piece of knowledge with potentially wide ramifications. The subject of what changes clubs could make to their facilities was subsequently considered by the participatory research stage and analysed in Chapter Seven.

It is difficult to advance the case for any other suggestion of individual behaviour being relevant to club pro-environmental pitch-based activities because of the third party (local authority) involvement in these. Whereas it is evident if a building has motion sensitive lighting, the club interviewees who played on local authority managed pitches did not know anything about the management of that land beyond the number of times the pitch was cut. It is possible that green waste recycling was undertaken at all of them, but no interviewee could confirm this, perhaps reflecting the low priority for environmental matters in the management of the club. While the activities undertaken on pitches varied, none of the practices described by clubs could reasonably be interpreted as intensive, particularly compared with the findings of Kong et al. (2014) on the extent of intensively managed urban turf areas, as noted in Chapter Two. The most frequent mowing of a pitch was twice per week. Chemical based activity such as using fertiliser and herbicide was infrequent, if at all, and only one pitch had ever been irrigated, a number of years ago during an untypically hot period.

Despite these data providing limited information about the opportunities available for pro-environmental behaviour in pitch management, of interest is the fact that none of the

interviewees mentioned changes to pitch preparation as a possible option in varying the relationship between their club and the environment. Clubs clearly impact the environment in more ways than they appreciate and mitigate. As was detailed in Chapter Four, this thesis is not aiming to provide an audit of football club activity, it is instead seeking to identify the potential to increase pro-environmental activity and the obstacles that may exist in attempting to do so. As the FA, in partnership with the Institute of Groundsmanship, offer advice on pitch management through their Pitch Improvement Programme (FA 2016) these responses show there is an opportunity to include the environment and pro-environmental activity within such competency advice.

Of significance, however, is that although these clubs may not be extensively impacting the environment with their pitch activities, particularly not compared to sports such as rugby and cricket where turf management may be more intense, that seems partly due to them not having the ability (competencies) or resources (materials) to impact the environment, rather than any particular awareness or disinclination. This would suggest that should clubs wish to act to alter their environmental behaviour, no matter how minor, it may be difficult for them to enact change. This is of concern not just from an environmental perspective, but in terms of the command football clubs, similar to those interviewed, have over their operations. This finding supports the idea that identifying the social practice of community football is conceptually relevant for other studies examining other aspects of football club activity.

Club Activities and Ambitions

To further appreciate the scale of challenges and opportunities for activity the interviewees were asked about their club work and experience in greater detail. Interviewees were asked about their club ethos and ambitions, their attitudes towards running the club, what they value and ideally would intend to do. All of the interviewees suggested altruistic reasons and none mentioned playing success. Offering children an opportunity to play and enjoy a sport in a safe and well run organisation was effectively the message of these comments, some being a little more blunt than others;

> To keep young children on the straight and narrow (Interviewee B Club 2)

> To get children off the street and off their computers, playing with their feet and not playing with their thumbs (Interviewee A Club 6)

As none of the clubs existed for profit, and they all emphasised participation for the communities they served above success, comments regarding ambitions were often quite basic, to simply remain in existence for some, or as one interviewee said;

> To tackle whatever is thrown at them (Interviewee A Club 2)

This challenge, he added, had altered dramatically over the last decade. Another interviewee linked their lack of a home pitch, the playing fulfilment and building usage models providing no club control of anything, as being fatal to any ambitions beyond survival. This seems a particularly strong piece of evidence for the operation of a social practice of community football and the negative impact that can have. Some clubs did suggest more specific aims, such as to grow the participation of girls in junior football, to run the organisation transparently and with financial sustainability and to develop people as individuals, not just footballers. Only one club specifically mentioned a business plan, a series of intentions to develop coaching provision, restore aspects of the surroundings and enhance community provision (they did not specify whether they had attained any of the objectives of the plan as it was still in its infancy). This was also the only mention of the environment by anyone in this part of the interview and came from the club who enjoyed possibly the most favourable models of playing fulfilment (owned pitches) and buildings usage (full facilities), perhaps giving them the increased security to make these longer term aims denied to the interviewees from other clubs.

Asking the interviewees what would encourage or enable them to act more pro-environmentally brought a clear division of responses. For those clubs who can be classed according to the playing fulfilment and buildings usage models as being without a 'home' ground or facilities the consensus was that, as with wider ambitions, there was little that could be done. With no land under their control they believed they had no means of impacting the level of pro-environmental activity;

> I don't think there's anything I can think of (Interviewee A Club 6)

> To have our own pitch and clubhouse, that's the only way, but that's not going to happen (Interviewee A Club 8)

This reflects the previously suggested idea that pro-environmental behaviour is seen as relying on physical changes to the existing facilities, whether it may be aspects such as energy efficient devices, installing litter bins or management of the pitches. This is infrastructure and could be viewed as an external factor of behaviour, or the materials that contribute towards a practice. The internal factors of behaviour seemed not to matter as interviewees had low expectations about the things they could achieve. It would seem entirely inappropriate to attempt to educate people, aiming to alter attitudes and values without first providing clubs with the means to enact change. The majority of the interviewees felt they did not have this means.

Those clubs with the playing fulfilment and buildings usage models that do have a 'home' ground with facilities offered possible solutions. These ranged from changes that would be considered both 'internal' and 'external' in the pro-environmental behaviour change models. Knowledge and awareness were mentioned by some;

> Someone to come down and explain the whole process and how it would benefit us (Interviewee D Club 1).
>
> I have to say it's not something I've given a lot of thought to (Interviewee C Club 2)

But such suggestions that information provision may help were always followed by questions as to what benefit the club would accrue from such activity and caveats pointing out that an appreciation of the possibilities of pro-environmental behaviour would not independently offer opportunities for that behaviour;

> The only issue would be financing it (Interviewee D Club 1)
>
> Whether it would cost more to use the environmentally friendly material that may be an issue, if the costs went significantly up (Interviewee B Club 2)
>
> The site lends itself, absolutely, for wind and solar power...[but we need]...money, and a willingness from the council to share a long term plan with us (Interviewee A Club 2)

As interviewees mentioned the perceived financial implications of pro-environmental behaviour, and they all assumed change would require additional costs not savings, they were asked about club finances, particularly income. Membership fees for club players were between £12 and £16 per month once advance payment discounts offered by some clubs were calculated. As the playing season typically lasts for nine months at the lowest rate this is an income of £108 per player. Therefore, a relatively well established club having around 300 players (based on the FA handbook team listings) would receive an income of £32,400 if all players pay, which some interviewees suggested is another challenge they face. This figure was confirmed by one of the clubs as being "about right" (Interview C Club 2).

The total costs associated with having a home ground vary depending on the facilities but examples of the type of work given by interviewees in this position included a sum of between £8,000- 11,000 per annum for turf pitch maintenance (club 7), a building rental cost of £30,000 per annum (club 1) and £84.50 per month for waste collection (club 2). For one club, the cost of waste collection for the year was equivalent to the revenue raised by subscriptions from ten players. The income earned from those wanting to play football simply does not cover the cost of providing that football in these club models. Interviewees were defensive of their membership fees, every person making a comment to the effect that they represented good value or were the lowest in the area and they are sensitive to the prospect of having to raise them.

Despite the costs associated with a home ground there are clearly opportunities to create additional revenue via those models, for example sales of food or sponsorship displayed on buildings. Raising those sums, however, adds another series of tasks to the workload of the volunteers. In contrast the costs provided by those interviewees without the home ground were significantly lower, just £200 per team per annum for one club operating under the hired pitch from the local authority model. Yet such clubs are unable to alter their costs and have limited ways of raising income beyond membership fees making them very susceptible to the undesirable need to raise those fees. Indeed one interviewee asked to keep the interview relatively short as the club was charged on an hourly basis for the venue they utilised. It is little surprise this group do not feel able to raise club ambitions beyond survival.

None of the interviewees said their clubs were registered as a Community Amateur Sports Club (CASC). This is a status recognised by HM Revenue and Customs and can impact the duties liable from an organisation as well as featuring in considerations by other bodies (for example the local water company provides a rebate on surface water drainage charges to CASC registered clubs). Such benefits could not only reduce expenditure, freeing revenue for possible projects, but they can be relevant to funding applications that would include environmental schemes. One club was a CASC but decided to discontinue the registration. One club was a charity, and you cannot be both a CASC and a charity. A number of interviewees said that their clubs had investigated CASC status and found it was of no benefit to them. This was a surprise, given my experience working with cricket clubs where the majority I had encountered were CASC registered and it was something I determined to investigate more fully within the participatory research. The reason for this state appears to lie in the use of buildings and highlights an important distinction between the culture of football, and its particular social practice, at this level and that of some other team sports. Rugby and cricket, for example, may enjoy traditional 'clubhouse' premises at a long term leased ground within their playing fulfilment and building usage models and often have a social aspect to their clubs with the hosting of functions and use of a bar regardless of the sport. They generate income outside of match days and even when this is returned to the club in a not for profit manner it is of merit to apply for CASC status due to the ability to generate additional revenue via grants and potentially reduce costs through concessions such as surface water drainage rebates.

Only one of the football clubs utilised any form of licensed venue and that was purely because it was a member of a larger sporting and social club. A volunteer at a different club expressed the view;

> We want the rugby model (Member of assembled meeting, club 4)

However, the 'rugby model' (described by the interviewee as a site hosting not just playing facilities but social, revenue generating aspects such as a bar and function rooms) appears atypical at this level of football. Whether it is undesirable, or impractical due to the costs of provision, interviewees suggested alcohol is not often served in the presence of junior football teams and as adult players may only comprise a single team their numbers would not sustain

bar facilities. This undoubtedly impacts both club income and the funds available when considering behaviour change. However, not only may there be significant social benefits to this situation, it also potentially reduces a club's environmental footprint as they have no need to heat, light, and refrigerate bar areas.

Such indirect, minor successes, in terms of reduced environmental impacts encapsulate the situation being related by the interviewees. There is some negation of potential environmental harm by clubs, but only because they do not have either the facilities in place or the control over those facilities to engage in more intensive operations. It is difficult to ascertain what clubs would do were they to have that ownership but the data suggests they would continue to be challenged by both finance and the prioritisation of other aspects of running a football club. When set against the challenges of maintaining solvency, ensuring compliance with regulations, prioritising child safety and attempting to secure a home, pro-environmental activity does not feature highly. Clubs do not set out to harm their landscapes but in contrast to work emphasising the urgency of the issues of climate change and environmental damage (Vlek and Steg 2007), the interviewees taking part in this stage of research simply see other concerns of greater importance. As the data suggested it is the lack of land ownership, alternative demands and existing social practices experienced by clubs that are acting as a barrier to increasing pro-environmental activity it was appropriate to widen the scope of interviews to include those who did own the sites and controlled some of the resources, the local authorities.

Local Authorities

There are seven local authorities operating in the North Country area. As different organisations have varying structures and job descriptions I contacted each and asked to speak to the person with responsibility for football pitches and facilities. This resulted in me being directed to different departments and levels of seniority, possibly indicative of the debate about what sport and leisure means and how it is organised in a community (Wainwright and Ansell 2008). This may contrast with the experience of asking to speak with the person responsible for waste or street lighting, for example, where there may be fewer stakeholders involved in the decision-making. The positions ranged from managerial to assistant sports officer grade, and across departments such as Culture and Sport Services, Community and Environment, Green Space, and Parks and Cemeteries.

Despite multiple attempts, using different forms of communication, two local authority personnel suggested as the appropriate person to speak to could not be contacted. They did not decline to be interviewed, they simply did not respond. One additional local authority employee was initially receptive to the project and positive about organising an interview, but was denied permission by their manager and told to inform me the organisation would not be able to participate. Only securing four local authority acceptances (five interviewees in total) was disappointing, but the absences were perhaps useful in terms of revealing the pressures on staff, low priority given to sport and the environment and, despite the guarantee of anonymity, reluctance to go on the record about decision making. Possibly they simply indicate people did not have the time or inclination to assist a researcher with nothing tangible to offer in return. Two of the four interviewees requested not to be recorded so the transcript of their responses entirely relies on field notes and confirmation of accuracy afterwards. Neither of these individuals requested changes, additions or deletions from the transcripts they were sent.

As with the club interviewees, some context was sought prior to discussions of local authority activity in respect of football and pro-environmental activity. The majority of the interviewees were experienced local authority employees, but with one exception it is probable that their job role precludes them from involvement in determining departmental policy. It is, therefore, possible there may be an alternative perspective on the organisation's intentions with regard to football facility management, something that was explored more fully in the collaborative work with a club in stage two research. This suggestion was supported by a number of comments from interviewees about 'they' and 'managers' indicating a level of oversight in their job. When speaking of their local authority's sport action plan formulation one interviewee remarked;

> That's probably a few grades above our level (Interviewee A Local Authority 2)

Regardless of their seniority in an organisation all interviewees spoke at length on the challenges they faced in the implementation of strategies to manage football facilities. This perspective of activity 'at the sharp end' is potentially more useful to this study than the thoughts of those having little contact with club personnel and the opportunities that may exist to work towards increased pro-environmental activity.

There were quite wide variations between the four organisations in the extent of area covered, number of electors, size of the council and legal status of the authority. There were also features of history and landscape that impact resources and decision-making. For example, one authority had a notable number of parish council and 'colliery welfare' locations, sports facilities that derived from links to a mining heritage that may be run under charitable status, another had none at all. One had a coastline featuring a large number of leisure attractions, one had a coastline containing sites of special scientific interest (SSSI), another was landlocked. Even within a local authority one interviewee reported a significant difference between the facilities hosted in the east of the region and those in the west due to historical inequalities based on geography and population. Additionally the presence and proximity of a professional football club (two of the four local authority areas host these) may impact the development of strategy for the sport as there are increased opportunities for partnership. All these factors influence the assets available to manage football provision and provide a useful point of comparison as to whether they see different authorities manage facilities differently or if they act in accordance with a prevailing practice.

To allow comparison with the information provided by club interviewees on playing fulfilment models local authority interviewees were asked about the facilities under their control and specifically whether the data the researcher had obtained from the Sport England Active Places database (discussed in Chapter Two) were accurate. All four of the interviewees indicated that the figures seemed relatively correct, but factors such as the varying ways organisations classify pitches and uncertainty of ownership might result in small discrepancies. Three of the interviewees suggested they would have exact figures when their latest Playing Pitch Strategy (PPS) documents were produced. The PPS is an indication of how the local authority intends to manage its provision of sports facilities and meet its delivery obligations. One interviewee told me it is typical for the production of the document to be undertaken by a commercial organisation due to resource constraints. This was confirmed by viewing all of the authorities current PPS documents, noting they had all been written by third parties. It is significant that the meaning, and priority, given to community-based football provision by a local authority does not entirely originate from within the authority, it is being stated by another body.

The indication of the playing fulfilment model based on club interviewee and Sport England Active Places data is that there is a very high percentage of local authority ownership in North Country. This was confirmed by the local authority interviewees, one of them saying he could only think of one club within his authority's area who actually owned their pitches. These local authority owned facilities differ so significantly in size, aspect and amenities that one interviewee identified the existence of different price structures according to the state of the facility. Thus, it may cost one club more to play a 'home' fixture than another. Kokolakakis et al. (2014) observed that sports facility provision does not significantly impact the participation in sport within an area and that regional variations in participation between local authorities are more due to socio-demographic factors. However, the high degree of disparity within football facility provision, identified in both the club and local authority data from the research for this thesis, must surely reduce the ability of local authorities, football governing bodies and other interested parties to formulate strategies to improve club environmental interactions.

For the clubs with longer-term rental arrangements, all interviewees agreed there was an absence of common lease agreements. Such documents may be more likely in the future as interviewees said their local authorities have begun introducing standard terms, but at present arrangements considering historic, local and contextual factors persist. Two of the interviewees noted the contrast with other sports in the area, particularly rugby and cricket, where there may be a broader range of facilities on the site. This confirms the suggestion received from clubs, of alternative, more desirable, models and practices to the ones experienced in community football. As one local authority interviewee stated of bowls and cricket clubs;

> They've got the changing rooms we offer but they've also built their own pavilion on the site, they've got the best of both worlds....it just seems to work better (Interviewee A, Local Authority 2)

For the shorter-term rental arrangements, pitches are typically maintained on a rota basis, one local authority interviewee admitted that infrequently used ones may even be managed on an 'as needed' basis, contrary to recommended practice from within the sportsturf industry (FA/IOG 2009), but a necessity with limited resources.

The ownership and management of football pitch facilities appears to be a difficult situation for local authorities. Exacerbated by current financial pressures, continued provision of sites to play the game was challenging for all interviewees. One interviewee said he knew of pitches that were not being used due to flooding which the local authority could not afford to address, another spoke of a high quality pitch site that could not be used as the changing facilities had been vandalised and there was not the funding to restore them. While the FA has recorded its intention that football will "remain a low cost sport" (FA 2013 p21), this is not a situation recognised by the local authority employees interviewed. A managerial level interviewee (Interviewee A Local Authority 3) had calculated the cost of football to his authority and was keen to share the results. Based on estimates from two to three years previously the local authority earned £1900 per annum from hire of its football pitches, yet spent £250,000 per annum maintaining them to a playable standard. The number of participants using these pitches represented 17% of the area's population and in his calculations this put the cost of provision of football per annum at £5 for every adult in the authority's area. He compared this with the potential investment that could be made in more accessible sports and leisure such as increasing the budget for walking trails.

In response to this challenge, all interviewees indicated there would be consideration of asset transfer; pitches and facilities moving out of local authority management to the control of a group such as a football club. Some of the interviewees said this arrangement was being pursued more keenly than others. Two interviewees (Interviewee A at Local Authority 1 and Interviewee A at Local Authority 2) identified a strategy of actively pursuing asset transfers and both organisations had their own methodology for managing the process. A third (Interviewee A at Local Authority 4) said their local authority needed to consider asset transfer due to the lack of resources available to maintain them, they said they would personally like pitches to remain as a public facility, but the reality is that having them adopted by a club avoids losing the facility completely. However, one of the problems this interviewee noted with the asset transfer policy is that clubs typically only want sites that can be fenced and secured as without this they would be unlikely to qualify for national governing body funding towards improvements. Thus a direct consequence of these stipulations is the enclosure and restriction of land. It moves from public ownership into private and access is restricted. The fourth interviewee felt there was no pressure on the number of pitches in the authority, but they do look at asset transfer on an

individual case basis rather than as a deliberate policy. His particular problem on this issue was the sense of entitlement some clubs had over particular sites, describing it as;

> That's my home pitch, my granddad played on it (Interviewee A Local Authority 3)

This reluctance to play anywhere other than the place offering them a feeling of 'home' is a direct link to the proposed framework of community football as a social practice in Chapter Three and necessarily makes the organisation of pitches less efficient than it could be. Moreover, it was responsible for the rejection of a scheme to provide a centralised venue for matches with free travel facilities provided for teams. This could have directly impacted the environmental footprint of football in the area. Any proposals that neglect this 'sense of place' and simply provide football pitches in what Bale (1994 p101) suggests is "the ultimate form of modernity, mass produced and international in style" could encounter strong opposition from those taking part. The meaning of football to them is producing a behaviour that seems almost certainly detrimental to their long-term status, if not in terms of the planet but the very provision of the pitches they need to play.

All interviewees recognised the process of asset transfer was not as simple as a change of name on the ownership deeds. This resonates with Findlay-King et al.'s (2018) findings that recent asset transfers have moved away from the creation of trusts and volunteers acting as trustees, while public sector employees manage the process to adopt the approach that those involved in the organisations should plan, undertake and govern the changed body. Clearly, this would amount to a big commitment for the volunteers and one that would potentially force change in their competencies should they wish to supplant services provided by the local authority. One interviewee from this stage of research said their local authority would consider assistance in the early years of any transfer, such as paying energy bills on the club's behalf, such was the desire to reduce the burden of the asset. Another interviewee felt the role of the local authority was to offer support and enable clubs to see the self-sustaining model as a better option than funding, something he noted as being difficult to encourage as clubs recognise the advantage of current arrangements. This acceptance by clubs of the practice as a status quo to be maintained was not reflected in the data from my own interviews with club personnel. Yet the interviewees were particularly voluble on the fact that their local authorities are having

difficulties in simply managing football facilities in their current state, let alone being able to invest resources in enhancing them to provide for increased pro-environmental activity. A club wanting to take ownership of a local authority site with that self-sustaining and positive agenda would likely be received very warmly.

Two of the four interviewees highlighted the potential pressure that could be exerted on facility management by clubs engaging their local councillors in discussions. As some of the junior football clubs taking part in these interviews have in excess of 300 players, that equates to a relatively large number of parents in the local electorate with an interest in any decisions. It was suggested that if there is strong opposition to a proposal then it will potentially fail, and one interviewee in particular noted how other interested parties within the local authority, such as property services, may become involved in negotiations sometimes without the knowledge of the department with direct responsibility for sport. Personal endorsement by councillors and their association with a particular club development or the progress of football within the area can be an important factor in the prominence of a proposal. This is difficult to measure and discussion of this was noticeably uncomfortable for some of the interviewees. However, their comments were later confirmed by volunteers at the club that was to provide the base for Stage Two research (see Chapters Six and Seven) and Findlay-King et al. (2018) similarly noted the impact of a local politician in their study of sport asset transfers in an area closely resembling North Country. This perhaps offers support to the theory of Kollmuss and Agyeman (2002), noted in Chapter One, that an environmentally motivated population could exercise pressure for change but also that the meaning of football to a community is complex and can produce action that may not otherwise be seen.

In response to the challenges of facility management, the local authority interviewees were asked about their relationship with the football governing and funding bodies, with particular reference to sections of the FA's National Facilities Strategy (2013). All interviewees seem content with their relationship with the sport's organisations, particularly from the point of strategic decision-making. One interviewee suggested the local authority's regional action plans for football site development were organised to closely reflect the aims of the FA. A note of caution was struck by one interviewee, however, stating that the emphasis on compliance and having standards for clubs does not equate to sustainability nor provides a solution to the need

for sport to pay for itself. The same interviewee described funding arrangements as challenging, noting the emphasis on sharing out money between developments meant that a number of sites received a relatively small sum to use when it would be more successful if a few sites received a greater percentage of the investment offering opportunities to maintain and grow those facilities. Receiving funds for site development in their current arrangement appears to create challenges for both sets of interviewees; club interviewees with the annual renovation cost of 3G pitches they may be required to fund and local authority interviewees noting the difficulty in trying to retain a sinking fund (money put aside on a regular basis to pay for an eventual replacement of an asset) for the inevitable decline of the surface some years hence. The impression is that not enough consideration is given to the long-term sustainability of the funded work and that there could be opportunity for more helpful types of funding supporting the ongoing management of sites.

In response to a question about their relationship with other local authorities facing similar challenges, none of the interviewees felt they had much contact with people in similar roles. Typical of this feeling was the comment;

> It happens above us but probably doesn't happen enough with us on the ground (Interviewee A Local Authority 2)

One interviewee contrasted the situation for sport with his responsibility for other green spaces which sees him attend regular meetings with other local authorities. Possibly the lack of collaboration in football is a pressure of time, but it would seem a potential opportunity for useful discussion when clubs play in leagues operating across local authority boundaries and so encounter shared challenges and potential solutions. No interviewee mentioned the cost to the authority of having their pitch playing strategy written by a third party, but sharing information and strategy with fellow local authorities could lead to greater understanding of the needs that ultimately all fall under the jurisdiction of North Country FA.

None of the local authority interviewees raised the subject of the environment in relation to football. This may have been partly due to my questioning, having been informed by club interviews I pursued what seemed the central feature of facility ownership and management.

However, even when asked a specific question about how sport is integrated with council environmental plans, and for comment on sections of the FA's *National Facility Strategy* (FA 2013) concerning sustainability and efficiency, interviewees provided little information. This lack of response was a surprise, more so than the similar lack of discussion in the club interviews, as I had anticipated elements of local government policy would be required to include environmental considerations and be promoted as such. It appears that the pressures upon these interviewees is focused more on the delivery of services and meeting targets for provision of community facilities and development than any particular reference to the impact on the environment of such development or the contribution the environment can make to wellbeing and a sense of place.

Developing Opportunities for Pro-Environmental Activity

As mentioned in Chapter Three, the FA has begun work on the creation of football hubs, the 'Parklife' project, an attempt to alter the current relationships between the provision of materials, the meaning of a home for football and the need for competencies of voluntary staff. The report leading to the development of hubs aimed to identify the reasons for a lack of English players in the highest English league. The answers they provided placed an emphasis on facilities at the non-professional level, something that did not satisfy one of the club interviewees in this research and highlighted just how differently the practice of elite football is to that of the community;

> The FA have this opinion that the failure of the national system is down to the failure at grassroots level....and I think the two of them don't relate, the only common denominator between the two is that the ball they use is round (Interviewee A Club 2)

While this thesis is not concerned with the development of skills to an elite level, the FA's reasoning that clubs lack security of tenure and the ability to manage facilities to the desired standard (FA 2013) seems commensurate with the data obtained from the interviewees in this research. It is also highly relevant to the research question posed by this thesis, namely that interviewees see these features as barriers to activity which may include a changed relationship with the environment. Different ownership and playing arrangements, a changing of the

established practice, may offer opportunities for greater expansion of pro-environmental activity, more so than any attempts to alter factors internal to individual club volunteers.

To gauge whether the FA's centralised hub idea may be that opportunity, both club and local authority interviewees were asked whether they were aware of the project and, due to the limited information in the public domain on this, if they had any thoughts on the concept of football hubs utilising mainly artificial grass pitches. Club interviewees provided a varied range of personal opinions on artificial grass pitches, from very positive to one person not liking them at all. When speaking from a club perspective, there were a lot of favourable comments particularly in relation to the ability to train throughout the year and use the surface more frequently than they could natural turf pitches;

> We've obviously got a service to provide as a club and without that artificial pitch, that 3G surface that we've got we wouldn't have been able to provide that service from say November time. That's been a real lifeline of the club (Interviewee D Club 1)

One interviewee mentioned the impact this additional use had on the revenue earned from their catering facilities and hiring of the surface to non-club users. A number of the interviewees from clubs that did not own an artificial grass pitch highlighted the money paid by the club in order to hire similar facilities, £22-23,000 per annum in one case. This is 67-71% of the annual membership income calculated earlier in the example 300 player club. Unsurprisingly, the interviewees in this category would all like an artificial pitch of their own and one interviewee from a club already owning one would welcome an additional one, such is their perceived value. However, a club interviewee with a number of years grounds maintenance experience raised some important points in relation to the management of the surfaces. Firstly that a perceived lack of respect from players towards the facilities was seeing them fail to follow guidelines about cleaning their boots before using the pitches. Soil ingress can be a significant problem for artificial grass pitches and can hasten the need for their renovation. Additionally he had struggled to perform regular maintenance on the artificial surface due to what he believed was an increasingly wet climate, again this would reduce the lifespan of the pitch. It meant, he believed, that the expectations of what artificial pitches could provide were unrealistic and should be lessened due to the changing climate and the activity of the site population. The

competency needed to manage the artificial environment is higher than seems to be the prevailing view.

Local authority interviewees were generally positive about artificial pitches, but offered yet more caveats regarding their use. While stating that the 3G surfaces were a huge factor in growing the sport, one interviewee suggested their high initial costs and the additional security, lighting and logistics for opening them to the players meant that, for his authority's requirements, in the current financial circumstances, natural turf pitches were more suitable. Another supporter felt the placement of artificial surfaces was crucial if seeking to maximise the benefits, they were not to be installed at every club, they should be placed to offer the highest return on investment possible, however that may be measured. A blend of natural turf and artificial surface was the preferred option of a third interviewee. The final interviewee had little positive to say about artificial surfaces, believing them to impart more of a negative impact on the environment and cost more to manage than natural turf. However, the interviewee admitted it was not that they did not believe the 3G pitches would not do the job intended, it was simply a personal dislike, one that contrasts with the proposals noted in Chapter Two of this thesis.

Opinions on the specific FA proposals provided a noticeable shift in the previously positive attitude from some club interviewees. Only one was aware of the suggested development and the FA's intentions. Once a brief summary (taken from the FA Chairman's England Commission Report) of 'Parklife' was provided to club interviewees, the suggestion of travelling to a centralised venue to use such a pitch, for all that it might assist with the parking issues a number of them had reported, was not welcome by those already using a home ground. The majority of complaints about a hub facility related to the possible location, either an urban area requiring significant travel to reach or the prospect of it being based at a rival club's site, and the management of the facility, that it may somehow become selective and not appropriately controlled. Typical of the negative feelings was;

> I think that could be to the detriment of young children wanting to play football if you have to travel from wherever to this one particular hub (Interviewee B Club 2)

Other club interviewees were positive, however, particularly those who organised their clubs under the playing fulfilment models involving rented or ad hoc pitch hire. For them, without a 'home', there would be little to sacrifice in playing at a hub venue;

> Great if they're going to take on the responsibility of maintaining and looking after these things (Interviewee A Club 3)

> I'd go along with that (Interviewee A Club 8)

The local authority interviewee views on the idea of football hubs were similarly mixed. While acknowledging the value of concentrating resources and providing for ways to manage travel and parking, there was recognition that the asset transfer process could see sites lost before new development could be initiated and a question of who would pay for the construction and maintenance of the hub, particularly if the financial adjustment resulting from an asset transfer had already been accounted for;

> I had a sort of vision of one of our bigger sites...we'll use that as a hub but it's sort of been superseded by one of these asset transfer deals (Interviewee A Local Authority 4)

A comment by one of the local authority interviewees, about the specific FA proposals, aptly summarises the reaction to the lack of public information currently available;

> If I'm honest...I probably don't know enough about the Parklife to give you a good answer on that...in theory it's probably a great idea (Interviewee A Local Authority 2)

This suggestion is a relevant summation of the question of whether Parklife, the FA's solution to the perceived player development problem, might also be an opportunity to enhance pro-environmental activity in football. Building new facilities and operating a different model of ownership and playing fulfilment could clearly alter existing practices and give opportunities for work towards positive environmental development, but there are questions regarding the specific organisation of such venues and the role for all the agents expected to utilise them. Moreover, some club volunteers, with their own home grounds, suggested opposition to the

proposals, which would surely need the support of at least a majority of organisations in the sport if to attempt to maintain participation levels. Yet the opportunity to reduce the number of environmentally impactful community football sites, staffed by volunteers who, on the evidence of these interviews, have neither the power, competencies or incentives to improve the ecological footprints of their clubs, exists.

The Organisation Of Community Football in North Country

Both types of interviewee were given opportunities to provide their views on any other aspect of the organisation of community level football. Despite being at the end of the interview and beyond my prepared questions, these responses were of far greater significance than I anticipated because they allowed interviewees to be more relaxed and gave them a platform for offering comment on the issues important to them. No interviewee offered positive thoughts, without exception they all provided negative remarks about the state of football as they currently experienced it. The social practice of football was, for them, operating contrary to their needs.

The common theme was the difficulty in running a football club, from the cost of the sport;

> The future of grassroots sport on the whole is in danger unless the government and the Premier League teams, especially the Premier League teams, start filtering money down to grassroots level and giving us a chance (Interviewee B Club 7)

to the lack of awareness of this cost by parents seeking to involve their children;

> I don't want to tar all with the same brush but at least half [of parents] don't know what goes on (Interviewee D Club 1).

Every club interviewee acknowledged that without sponsorship and fundraising they simply would not be able to continue. There was real sensitivity to the amounts asked from players and their parents, two interviewees making particular comments about football being a 'working class game', a highly emotive meaning attached to the sport, and the difficulty in keeping it affordable and inclusive.

In response to this, I asked all interviewees if they felt clubs could merge and pool resources. Some clubs collaborate on aspects such as grounds maintenance, it being in everyone's interest to play on the best standard of pitch achievable, and one interviewee was very active in attempting to improve quality by encouraging relationships between themselves, other clubs and the governing bodies. However, while some of the interviewees, both club and local authority, acknowledged there were probably too many teams at present in their area no-one believed mergers would either work or be desirable. This is of interest if in terms of the perception of the organisation of football and the relative lack of power that even larger clubs, with greater resources and numbers of staff would have. Isolating this was difficult though, because the feeling was more related to personalities, of a reluctance in forging closer ties and in some cases hostility towards their neighbours, considering them to engage in practices unacceptable to themselves. Every club interviewee was keen to emphasise the inclusive nature of their club, and the promotion of playing and developing, rather than simple quests for success, and they were all keen to suggest that not all clubs pursued this approach and were only aiming to win trophies. As I maintained confidentiality of interviewees I was unable to cross-reference and identify if any club may have a different reputation to their own perception but the point remains that none of them would actively seek to merge for any perceived benefit to their players, the sport of football or the environment.

Discontent was also directed towards national governing body decisions, not the local North Country FA who tended to be more positively spoken of, but the people altering the practices relating to funding and coaching. Subjects spoken of were; the financial implications of a decision that football shirts should be numbered, changes to player registrations, the rules introduced to regulate players appearing for their club, school or professional club academy, it all contributed to what one interviewee declared was;

> Taking the smile away (Interviewee A Club 8)

Certainly there was a feeling from some interviewees that there had been a rise in the levels of competition and an accompanying development of unrealistic expectations on children. Some parents' behaviour when spectating was seen as poor and unnecessarily aggressive , what one interviewee called;

Alarming levels of disrespect (Interviewee C Club 2)

This is the same interviewee who believed the phrase 'pro-environmental behaviour' may relate to the "environment of the running of the club", the attitudes and activities of those using the site, something he believed had reached such a point that it was worthy of study and proposed action. Other club and local authority interviewees provided similar suggestions of a poorly behaved minority of spectators, with both groups providing examples of when certain facilities and services had been withdrawn due to threatening behaviour from the parent of a footballer. Blame was ascribed by numerous interviewees to the examples set by professional football and the potential rewards offered should a player reach elite level, a situation of one perceived social practice of football impinging on the meaning of another. One interviewee indicated he was close to withdrawing from his voluntary service because of these issues. This was to prove valuable insight when considering collaborative initiatives in stage two research. Not only could this impact the extent to which these volunteers wish to further their service by adopting pro-environmental changes, but any initiatives that rely on individual-centric, parent or spectator involvement, such as alterations to transport or match day waste recycling, could be undermined by such responses to club efforts.

One FA decision that appears to be causing particular challenges to the relationship between the club and their environment is the introduction of nine player team football. As Chapter Three noted, this was part of the developmental plan identified by the FA's drive towards higher standards. Created to develop better players (FA 2013) these matches are mandatory at under 11 and under 12 age groups and optional at under 13, acting as a bridge between the young children's mini-soccer games and playing on full sized pitches in later teenage years. The size of pitch the FA specify must be used for matches is unique and it is this regulation and control of the playing environment that causes challenges. Due to the variable nature of recruitment and populations a club may only have one team in a nine per side age group therefore a piece of land must be found to host a small number of matches per week whilst potentially more numerous teams in other age categories have to be organised on what land remains. To try and adapt alternative sized pitches to the dimensions mandated for nine players would result in wear across certain sections of the pitch and near constant re-marking of the lines. According to

the interviewees what typically happens is that nine player teams play on hired sites or central venues, never appearing at their own home ground or the same location as their fellow club members. Not only does this create a sports landscape that in Bale's (1994 p10) words is 'not natural', the nine per side pitch is an imposition on football clubs, creating numerous logistical difficulties for organisers and diluting any link that group of young players and spectators may have with the land.

Conclusion

Chapter One identified that alternative pro-environmental perspectives exist. The data provided by these stage one research interviews suggests that elements familiar to all of those ideas are present in community-based football. One of them, however, social practice theory, the perspective supported by initial desk-based research in Chapter Two and developed in Chapter Three as the perceived way community football operates, exercises far greater impact than the others. Some club interviewees believed there were things their clubs could potentially do to enhance their environments and a lack of awareness or knowledge may be preventing action. This could be exacerbated by entrenched attitudes and a lack of external pressures on clubs in relation to environmental work. However, the interviews also revealed that the ability of the clubs to effect change, in more than just environmental activity, was highly restricted by the existing models of land management and impositions from national and local governing bodies. Clubs operate amidst an array of established practices and have new ones, such as the nine player football matches, imposed on them without opportunity for influence. There is a 'macro' level of factors and decision-making that have repercussions for the environment of far greater significance than any 'micro' level of individual, club centric, behavioural intervention could achieve.

Additionally, while I initially thought interviewees were telling me about things outside of my research question, whether it be complaints about the influence of professional football on player and spectator behaviour or the need to complete tasks in respect of the club's FA status, it became evident that these responses were very much relevant to consideration of pro-environmental activity as they were a list of the attitudes, pressures, priorities and state of football. By allowing interviewees to introduce additional topics it showed where they believed their efforts had to be directed and the pressures upon them. Behaviour in respect of the

environment did not feature at all, it simply does not exist in their regular considerations. These considerations are: child welfare, compliance with the law and governing body regulations, finance and trying to remain solvent, the organisation of pitches and where they are going to fulfil playing fixtures. This has parallels with a survey of professional sports organisations (BASIS 2011) where it was found that, for the majority of respondents, operational requirements take precedence over environmental concerns. For someone engaged in an environmental movement or producing environment-based literature there may be no bigger issue than the future of the planet, but for the interviewees it is clearly not foremost in their minds. While it may be argued that protecting children necessarily means managing their environment to a more sustainable state, that is not something these clubs appear to have opportunity to do.

For a majority of the clubs, there is no link with the land used for football, a suggestion that Relph's (1976) idea of 'placelessness' has already taken hold. Even the clubs that either own or have a long lease on their pitches have no ownership of their buildings and that seems to foster a sense of helplessness in the face of dependence on others and financial pressures. This feeling is exacerbated by governing body decisions on the administration of the game. Yet the local authorities who own most of this land appear to be keen to transfer some, if not all, of the responsibility for the management of the land to the clubs, with established methodologies for simply giving it away. Even then local authority interviewees say clubs will not accept it. The clubs cannot afford to manage football sites, yet local authorities are finding it increasingly hard to fund them and justify that funding. This situation seems remarkable given two points; the urgency of the environmental crisis and the wealth of our national game. Thus far it appears there is an opportunity to change the situation by addressing some of the fundamental issues around the ownership, management and demands of playing football.

This opportunity to alter the way football, and potentially other sports, are organised is explored in detail in the following chapters, Six and Seven. By spending a period of participatory action research as a voluntary consultant, within a community football club, the theories of pro-environmental activity and some of the solutions to environmental problems they suggest, are examined. The results of attempting to pursue an environmental agenda and initiate change while experiencing the work, that many of the interviewees in the current chapter describe, are discussed.

CHAPTER SIX FOOTBALL AND THE ENVIRONMENT: A PARTICIPATORY ACTION RESEARCH ACCOUNT

Introduction

This chapter examines the challenges that prevent football clubs adopting measures that enhance their pro-environmental activity. It analyses why they exist and if there are opportunities for overcoming these or alternative strategies that may be pursued. This it does by discussing a period of participatory action research in a community football club engaging in work to increase that activity. The chapter provides contextual information regarding the football club, its organisation and management. The club's ownership and playing models, identified in Chapter Five as being of particular relevance to the activities of the club volunteers interviewed, are detailed. It identifies and discusses how these models impact both practice, and the modification of activity, particularly in respect of the environment. A series of meetings both internally at the club, and between the club and the local authority, form a narrative of the negotiations over attempts to alter these models and are analysed for their consequences for environmental activity.

The Context of Clifftop Football Club

The second stage of research was a period of participatory action research in one of the community football clubs that took part in the stage one research. The football club, Clifftop FC (an anonym), was of particular interest to this research as the club individually faced a series of circumstances that appeared to reflect many of the issues faced collectively by the other clubs involved in interviews for stage one research. Not only did members of the club seem to be challenged in their work by a number of sport, governmental and socio-economic barriers, but they appeared to be in a position to potentially capitalise on opportunities in respect of their site and personnel to enhance their pro-environmental activity. This suggested that different aspects of the pro-environmental activity debate; the existence of social practices, the role and alteration of individual behaviour and how to achieve change, could be analysed through the example of this club and its volunteers. While it is not possible to generalise about the activity at all community football clubs from the research undertaken at this one, what is provided is a rich series of data, from direct experience as a volunteer in the type of organisation currently under-represented in discussions of the sport's environmental efforts.

Clifftop FC is well established in North Country. In existence for over sixty years, it has attained a number of national awards and provides approximately 300 children in the local community (7 to 17 years old) with the opportunity to play organised football. An estimate of 49,000 visitors to the club per annum has been registered with Sport England. The club is a constituent member of a wider community association, other members include martial arts clubs, a nursery and fitness group. These groups operate from a former school site hosting an original multi-roomed building, newer changing and storage facilities and seven natural turf football pitches alongside a 3G surface. The community association is the tenant of the site with work pertaining to the location undertaken in their name. They possess a constitution and elect a management committee to oversee activity under supervision of a number of trustees. In effect the football club is the driving force of the association as they have the large number of members, income and volunteers needed to support the activities on the site.

The club is situated within a densely populated local authority ward (Local Authority 2015) with 9696 residents (ONS 2011) living in an area of 2.3km^2. Of these people, 26.5% (n=2569) are under the age of 20 years, 61% (n=3695) of the working age population are in employment (ONS 2011) and 51.4% of housing is rented from the local authority (Local Authority 2015). Health data show 18% of the ward's adult population are obese, 35% smoke and 35% are classified as binge drinkers (NHS 2012). 16% of school aged children in the area have a special educational need (Local Authority 2015), child obesity in school year 6 is 35% (NCMP 2014) and 35% of children are regarded by HMRC (2014) as living in poverty. The ward tends to occupy an extreme, negative, position for all data recorded within the borough, including crime rate and antisocial behaviour (Police Force 2017). The Index of Multiple Deprivation (DCLG 2015) records 51% of the population living within an area among the most deprived 10% of locations nationally. The social, environmental, economic, health and quality of life benefits of sports facilities as outlined by Strandberg et al. (2012), and discussed in Chapter Two, are of note in relation to these data. There are no green spaces larger than the site of the Community Association in the ward, and few in total.

As Chapter Four noted, a research diary was maintained throughout this study. The diary was particularly useful when reviewing the manner in which the participatory action research

progressed along with my thoughts on the developing relationship with the club. My notes from the first meeting with Tom (an anonym), the leader of Clifftop FC and head of the Community Association management committee, record surprise at the size of the club, both geographically and the number of volunteers and the impact this had on my research plan;

> Very informative [conversation], sufficiently so to alter the scope of my research sample as it is now evident that the clubs with larger facilities and numbers of personnel are those that serve junior football. Adult based football tends to be team orientated, whereas younger players belong to clubs (Research diary 13 February Year 1)

I have always been an enthusiastic follower of football and the club lies within walking distance of my home, yet, though I knew matches were played there I had no idea the scope of the activity or level of local involvement. It made me consider if my lack of awareness of the extent of this community-based sport was replicated elsewhere. It was established in Chapter Two that there was an absence of non-professional sport references in the literature, and this may well be due to the lack of publicity for this sector amidst the pervasiveness of the professional game.

Following the conclusion of stage one research, I discussed the possibility of collaboration with the club in participatory action research. Tom was very keen for the club to be part of the study, being quick to offer numerous suggestions as to the issues facing the sport. The wider membership similarly approved the proposal, immediately discussing club matters in my presence. To qualify my enthusiasm at having such a willing group of participants I reviewed the aspects of the club that initially made me consider it valuable towards investigation of the research question. It was a high use location with lots of features that could be subject to pro-environmental activity (for example turf pitches, buildings and car parking), it had a large membership, was a well-known club with credibility at a national level, enjoyed a highly organised leadership, an enthusiastic gatekeeper (Tom) and there was local authority involvement in the site. Of concern were only two points; the strong personality of the gatekeeper potentially obscuring other perspectives and the possibility that local authority involvement in the site would preclude attempts to change some practices within the club. On this latter point, however, Chapter Two notes the high level of football pitch ownership by local authorities, rendering them integral to any pro-environmental analysis, particularly of

behavioural barriers from an 'external' perspective and the interactions beyond individuals that would contribute to a practice. Data from stage one research had also identified the lack of independence from local authority decision making of all of the clubs interviewed so it was representative of my findings overall to include a role for local government in stage two work. Additionally, should I need to explore the local authority relationship I was fortunate in that the member of staff responsible for contact with the club was the same representative I had already interviewed during stage one research and with whom I had established a level of trust. Throughout the period of participatory action research I was present at club monthly meetings and was also invited to attend their meetings with the local authority. These two forums provided what was effectively the narrative of the club during the period of research.

Club Monthly Meetings

The club monthly meetings provided a considerable volume of high quality data and allowed a much deeper understanding of the administration and management of a community-based football club. In attending 25, regularly, scheduled meetings I would echo Hargreaves (2011 p80) reflection that " close examination of behaviour change processes as they occur in situ reveals many more aspects and complexities of daily life than existing approaches capture". I witnessed discussions, heard perspectives and learned of the challenges facing those responsible for club operations. I was also able to contribute my own thoughts and discovered how the environmental subject of my research question related to existing club considerations. There were three particular themes that emerged from this two year period, namely: there is no broad membership involvement in club administration and management, these tasks fall to a small group of long-serving individuals; while club members do not actively seek to harm the environment they are not particularly interested or engaged in pro-environmental activity and have many other concerns to attend to; and, in the management of this football club, these concerns are of higher priority than pro-environmental activity. The discussion of the club meetings identifies how these conclusions can be drawn and what this means for the potential for pro-environmental activity at this, and similar, clubs.

The club monthly meetings were open to all members. I was invited to attend initially as an observer while the decisions on the extent of my involvement were being clarified, and then took a more active role once stage two research work began. This early exposure to club activity was

very valuable as it allowed me to become familiar with the organisation, its members and their discussions, and gave them chance to become comfortable with my presence and aims. The point was made in Chapter Four that trust and transparency between those involved is crucial to the success of participatory action research (Brydon-Miller 1997, Savin-Baden and Wimpenny 2007). The time, dates and locations of meetings were consistent but the number and identity of attendees were relatively fluid. A core group of volunteers attended nearly all meetings, these people were typically in administrative or senior coaching roles within the club. They were joined by a varying number of volunteer coaches at the club whose presence typically depended on the agenda, work or family commitments. Of a total of 43 volunteers at the club in designated roles the number present for meetings was never lower than seven, nor higher than nineteen, with an average of ten persons per event.

Club members not in appointed positions, such as parents and supporters, were always welcome to attend monthly meetings, but none did during the research period. I was told this was typical and contrasts with some of the other clubs I visited during stage one research, where the parents of players were both present at meetings and vocally involved in club business. Clifftop FC's parental members had the opportunity to attend and express views, the community association constitution gave them voting rights, it simply appeared they did not wish to do so. Possibly this was due to Clifftop FC having a large number of non-parent volunteers they could call on, parents simply did not need to get involved the way they had to at other clubs and Tom favoured using independent coaches so as to avoid any potential disputes relating to their child's inclusion in a team. At Clifftop FC, parents tended to approach the coach of their child's team, or Tom directly, to raise any issues of concern to them. Numerous times officials in monthly meetings would reflect a parental view based on a conversation outside of the group meeting. This had a major impact on my consideration of the implementation of participatory action research as, although I would be working with the officials of the club, I had no regular means for collaboration with the majority of users of the club site and would need to exercise caution over any messages being relayed via third parties. Berg (2004) notes that when a group is large it is usually impossible to include all its members in research activities, so the researcher should make every effort to provide information on what is occurring and how people may provide their own comments for inclusion. Consequently, I publicised my presence via the various club noticeboards and started attending football match days just to ensure there was an

alternative channel of communication should it be desired. I also added parental interviews to my research plan.

I interviewed one parent, in a semi-structured, pre-arranged format, and a number of others on a more conversational basis while visiting the club on match and training days. Rather than confirming they did not wish to attend, all of the parental interviewees said they were unaware of the monthly public meeting and a few suggested the club's communications could be improved. The absence of parents from the discussions was a point I raised during two semi-structured interviews I held with senior club officials, Tony and Geoff (both anonyms). The aim of these interviews was to reflect on themes emerging from my collaborative work in a setting that might elicit more open discussion, reflecting Bergold and Thomas's (2012) suggestion that dissenting views may fail to be voiced in a group forum. While both staff acknowledged that the lack of parents at meetings would impact on the club's information provision and consideration of views, Tony suggested that the need to discuss sensitive matters, such as child protection, meant they were cautious when considering alternatives. As such issues would still need to be considered it would likely lead to there being two monthly meetings, one for public information and the other restricted to approved personnel. This in turn would place additional strain on volunteer workloads. Tony also mentioned that the club had previously employed parental and player representation in club management forums, something he personally favoured for enhanced communication, but there was difficulty in confirming that attendees spoke with accurate reflection of the views of the sector they represented. Consequently, interaction with parents and players via the coaching staff was "unofficial club policy", they were not barred from attendance but nor were they encouraged, a position confirmed by Geoff.

Like Tony I was inclined to think parental appointments would be beneficial and outweigh the club's concerns, particularly as any sensitive matters could be left to the end of an agenda when non-club personnel could be asked to leave. As Chapter One noted, raising awareness of environmental issues is not a panacea for a lack of pro-environmental activity and involvement of parents in the club's management meetings would not eradicate the 'value-action gap' (Blake 1999). However, the club was reducing its supply of information through the exclusion of parents and their remote 'policy' of messaging via coaches. This is not just an environmental concern but it may potentially impact the financial and material support given to the club by

parents, offers of voluntary assistance and identification of particular expertise amongst the club's members. Moreover, as Lucas et al. (2008) note in their review of UK government policies, the practices of a group are more likely to be altered if that group has been involved in the formulation of the policy, a point reinforced by Steg and Vlek (2009) who emphasise the need to listen to the public expected to enact the change. There was no potential way for the parental-club relationship, an aspect of the club's social practice, to change. The club had no means of determining if material or competency assistance could be provided from their supporters. There was no existing environmental policy at the club, but in the current situation any that would be created would arise without that involvement and would thus, according to the literature, be likely to suffer reduced impact.

In addition to the relevancy of club membership participation to the research question there was the extent of the club meeting agenda. Pro-environmental activity was only ever mentioned in reference to me and the work I was doing, it was never discussed as a subject at a club meeting. Even interviews with three of the staff who regularly attended the group events failed to prompt its consideration. There was much discussion of football pitches, their allocation amongst teams, their current state and future needs. This is highly relevant to the club's environmental footprint and a key feature of the interview data with regard to playing models and the ability to enact change to activity. Yet the discussion of these features never moved from the subject of play and provision of football to specific consideration of aspects such as increasing the biodiversity of the site or reducing the consumption of resources. This finding echoes that of a BASIS (2011) survey of professional sports organisations, where just under half of the respondents stated they never discussed sustainability at board room level. While not comparable in many other ways, it appears the priorities, intentions and attitudes of sports clubs may be similar on the subject of the environment regardless of professional status.

Many other subjects were discussed at monthly meetings, the conversations would typically last for 75 minutes and covered; team performances, coaching arrangements, child protection issues, financial information, FA regulations, changes to competitions, discussions with the local authority and any other matter of importance to any of those present, from a serious incident caused by a player from a visiting club to the desire for new team clothing. At one meeting it was agreed to open a food bank to help support the local community. This showed that the club

is sensitive to its position in the neighbourhood and is aware of its ability to assist the local population. As was noted in Chapter Five, altruism was the main reason volunteers interviewed by this research offered their service to a football club, something supported by, perhaps most notably, the work of Nichols (2005) on sport and volunteering. This suggests the volunteers may display characteristics suggested as relevant to pro-environmental activity by individual behavioural models. Chapter One noted altruism as a potential antecedent of raised environmental consideration, particularly by Stern et al. (1999). Yet the lack of pro-environmental discussion at the club shows the environment is not considered in the same context as organising football teams, or positive community activity such as the food bank. Numerous possible reasons could be suggested; the low profile of environmental concerns, the immediacy and urgency of other issues (in what the statistics showed was a socially challenged area) compared with the longer time period of environmental decline, and the fact the club clearly has a lot of matters to attend to, each subject to the interests of, and demands on, the volunteers. These are considerations beyond the individual, they are contributors to the elements of social practice. The meaning of what the club does, and is there for, does not include the environment. The lack of materials, in terms of human resources, and the competencies of the people the club does have (and relative to other voluntary groups they may be very well provided for in this) cannot get the environment on the agenda. The 'demonstration of leadership in environmental sustainability' claimed by the FA (noted in Chapter Two) is far from being heard and adopted at the club. Even when given promotion by the presence of the researcher, pro-environmental activity is simply not an individual or collective priority. Volunteers have, it seems, developed the "routinized behaviours" spoken of by Reckwitz (2002 p249) and environmental management of their sport is not part of the routine.

This observation was supported by the responses of both Tony and Geoff when I queried the club's lack of interest in the environment. Despite suggesting "we should be positive about it, I suppose it's our responsibility to think about the next generations down the line", Tony added "I'm falling asleep now" and made mock noises of boredom. Light-hearted it may have been, but it did indicate the depth of the challenge in adding pro-environmental activity to the club's agenda. Geoff ascribed the situation to "tunnel vision" and that people within the club view activity through their particular narrow lens, giving the example of coaches querying why games may be postponed in adverse weather without consideration of the potential damage to pitches

should they be allowed to play. Tony concurred, suggesting the "dots don't connect" between football activities and the environment with people simply seeing the need to have a pitch to play on and a car park for players and spectators to use. My notes from the first club meeting I attended record;

> A few voices very much dominated proceedings....with the rest being more coaching focused (Research diary 30 March Year 1)

Many times Tom would reflect on people not seeing what he called "the bigger picture" of club activity and the variable attendance at meetings is a consequence. This implies that rather than a negative attitude, a lack of incentives or other person-specific considerations mentioned by a number of the theories outlined in Chapter One, that a significant barrier to any club-based environmental initiative is getting people to recognise the link between their sport, their activities and the landscape, effectively the social practice of their football. I noted in a later club meeting;

> What was also noticeable was the lack of appreciation some personnel seemed to have towards facilities, that some considered Tom sometimes overemphasised the need to preserve pitches and not play on them too often (Research diary 1 June Year 1).

This also suggests that the sense of place at the club, or at least the sense of preservation of the place, is not universally strong, and that for some of the volunteers it is their role that matters, and the work they have to do.

Every official of the club is a volunteer with no payments provided to anyone. Nichols et al. (2005) identified three types of volunteer within their study of non-professional sports clubs; those who shared an enthusiasm, social benefit and desire for the club to succeed, those motivated by the opportunities for their children or themselves, and younger volunteers who displayed interest, altruism, and the desire to enhance future employment prospects. Of the 43 volunteers only two people at the club could be considered in Nichols et al.'s (2005) "younger" category and, while most people did enter their position due to their children's playing involvement, the majority are now of an age where their children have left the club and the

description of a common enjoyment in the work and progress of the club seemed an appropriate reflection of their participation.

My interview with Tony, who has coaching responsibilities in addition to his managerial role, confirmed this opinion. The priority for him is promoting equality of opportunity, encouraging children from different backgrounds to socialise and make friends with those who might otherwise not be within their social network. While Clifftop FC may lie in a local authority ward with numerous socio-economic challenges, a number of volunteers, including Tony, suggested the club attracts players from other wards with more positive lifestyle indicators. Tony continues to volunteer at the club as he remains passionate about the benefits the club can offer, not only helping develop the children, but also the adults. They feel that every person is volunteering for their own reasons, and as a senior figure it is their role to find out why that is and manage them to maximise the impact that person can have. Geoff no longer coaches, but echoed this positive view of the impact of the club on lives, feeling it is a "leading light" with the right aims and values. He continues to volunteer as he "loves the work" at "a great club".

Nichols et al. (2005) note the numerous pressures on such personnel; the competing demands of other activities, national governing body initiatives that require club implementation, the need to adopt new technology to improve communications, the desire to avoid risk and maintain qualifications that help avoid sanction. For Tony at Clifftop FC, this in the past meant being active on club matters "four or five times a week including most of the weekend" and such demands were what caused Geoff to reduce his role to purely administrative tasks. Coates et al. (2014) found that financial pressures exacerbate the challenge of managing sports club volunteers. As Clifftop FC was transparent with all its financial matters, and made this information available at its public meetings, I was able to confirm it was not under excessive financial strain, although all income was reinvested in the club, and there were concerns about the extent of future funding.

In discussion of the relationship between sport volunteers and the administration of their sport, Nichols et al. (2005 p41) highlight the "tension" that exists in a system that rewards national governing bodies with public funds for developing their sport, but sees such development managed via a largely voluntary workforce who do not measure their efforts by the same

performance indicators as the policy developers. This is echoed by Schulz et al. (2010) who note that people managing voluntary organisations often have limited practical experience or training relating to the task. Consequently, they adopt popularly believed ideas of how to succeed in business and enterprise, assuming that what may work for profit-based concerns can transfer to a voluntary environment. The bodies they interact with, such as local authorities, offer guidance and make judgements on the organisation's relative success according to their own standards and measurements, things that may be very different from the volunteers' ideas. In time, those managing the voluntary organisation can find the task beyond their expectations and capabilities. Findlay-King et al.'s (2018) study of sport and library assets transferred from local authority to voluntary control confirms these concerns; a lack of guidance in how to manage facilities once ownership has changed, excessive demands on volunteers' time and a priority of trying to reduce financial burdens on the local authority rather than a desire to empower the community.

Clifftop FC did not feel like an organisation lacking in experience, ability or a realistic approach to the challenges faced. Among the volunteers there were many professions and professional qualifications. However, a comment was made in a conversation with me by Peter (an anonym), a senior figure at the club, regarding the status of volunteers, not just at this club but all enterprises, that many of them "sign up to be volunteers, they do not sign up to manage a business". This echoes previous suggestions (Findlay-King et al. 2018; Nichols et al. 2005; Schulz et al. 2011) of different aims and motivations between the voluntary club and those who can impact its situation. The volunteers at Clifftop FC were not motivated by increasing the size of the club, winning every trophy or making a financial profit, things that may register as 'sustainable development' by some measurements. Instead they sought to operate the club to a high moral standard, for example they would not countenance a bar serving alcohol on the site, and this potentially added to the demands on them and the difficulties encountered when discussing the future of the club with governing bodies.

The club supports 23 football teams in official competitions, with all the attendant regulation required, as well as being the de facto tenant of a large site with responsibility for safe operation of the building and maintenance of numerous football surfaces. Tom is retired from a senior project management role and appears in good health. However, he is unique at the club in

respect of his knowledge, availability and ability to undertake work, the majority of volunteers at the club are constrained by one or more of these aspects. Without his management it is difficult to imagine how the organisation could co-ordinate its current efforts let alone introduce another consideration in the form of pro-environmental behaviour. Both Tony and Geoff acknowledged this suggesting there is no clear plan as to what might happen should Tom retire yet one clear and immediate impact on the club would be that the effort and cost expended on pitch management would rise as they would have to seek contracted expertise. The lack of succession planning around this prospect is a "delicate" question, said Tony, one that can arise, according to Schulz et al. (2011) when sustained voluntary activity, or 'career volunteering', can see a person build up expertise and experience, binding their own identity with the organisation very strongly and displaying great loyalty to the cause. The very strength of Tom appears to also carry inherent challenges for the club and any pro-environmental strategy.

Osterlund (2013 p160) in a study of Danish voluntary sports clubs identified the following strategies as being of use in recruiting and retaining volunteers;

> to involve members in major decisions, to delegate decision-making and tasks across multiple committees and volunteers, to recognize volunteers by granting them perks and material incentives, to formulate a specific strategy describing how to recruit volunteers, and to employ electronic modes of communicating.

Clifftop FC fulfils the majority of these (the giving of perks and material incentives would run contrary to the ethics of the organisation) and I did not feel the club lacked personnel. Yet, my impression was that even if a volunteer were recruited to specifically attempt to foster pro-environmental change, the prevailing attitude within the club, their existing methods and the pressure of other duties on club personnel would prove a challenge to the adoption of initiatives.

All of the identified themes from my participation in club meetings; the limited involvement of the membership, the lack of interest in pro-environmental efforts and the low priority assigned to such efforts, appear within the club's control. They could be identified as 'internal' factors of behaviour, as discussed in the literature reviewed in Chapter One. A more inclusive approach to members of the club, a greater awareness of environmental issues, and their impact on the

club's future, and promotion of pro-environmental activity are strategies that might be suggested to address this situation. However, this is superficial and ignores the pressures and relationships that shape these. The wider membership is primarily not involved in club discussions due to concerns about privacy and sensitive information. Child protection is a legal and moral requirement and is never going to be outweighed by the prospect of identifying additional resources to help the club. Limited interest in the environment is not due to volunteers being hostile to ecological concerns, it is the pressure of other duties, the routines they have become established in and the lack of impetus to change that status quo that is relevant. The status of environmental matters is so far down club priorities because the meaning of community football for them does not include pro-environmental work. There may be a need for place, and a sense of a home, for their provision of community football but it feels more linked to financial, operational and symbolic considerations. How that home relates to the natural world, and the requirement for humans to consider how we are living our lives, and playing our sport, has yet to feature.

The benefit of using the participatory action method in this research was demonstrated further when it led me to becoming involved in discussions and considerations beyond the internal club meetings, namely my participation in meetings with the local authority site owner. This significantly impacted my understanding of the challenges faced by the club and reinforced this perspective of structural and entrenched practices that cause pro-environmental activity to be limited. This can only be redressed by alteration of the elements and relationships that exist in football and at clubs such as Clifftop FC.

Club and Local Authority Meetings

Having identified in stage one research data that a key factor in football club decision making is the ownership of a site, the research undertaken at Clifftop FC was particularly timely and illuminating. Discussions regarding the future of the facility were at an early juncture when stage two research began, and due to the trust I had built with the club I was able to record data immediately with no objections from any of those involved. I attended 11 meetings between the Community Association and the local authority within a two year period. As with internal club meetings there were a number of people who were ever present at these events; Tom, the local authority sports manager and a representative from their property department, with others

joining as they were able or required for a specific input. Only one non-football club person from the Association ever attended, and Tom always led the discussion, reinforcing the idea that providing the sport was the driving force of the tenancy.

There were, again, a number of clear points to emerge from my recording of these discussions. The local authority was actively seeking transfer of the ownership of the site, because of this they were keen not to commit any more funding to improving the facility. The club, however, felt unable to accept ownership of the facility until improvements had been made, and in their view there were many required. Discussions relating to this impasse and concerning the future of the site did not include pro-environmental considerations, even when their inclusion may have been relevant to the cost of managing the facility.

The club have not always played at the site, they took up occupancy 17 years ago following the partial demolition of the school that once stood there and with the encouragement of a local authority keen to install a new tenant. By agreement of both parties, the school building left to serve as host to Community Association activities has never been ideally suited for purpose, intended as it was for a different function and being of significant age. Shove (2010b) has written on the challenges faced in the water industry where private companies operate using infrastructure constructed to meet historic demand and provision rather than existing needs. On a much smaller scale a Community Association was attempting to provide football and other amenities at a site built for entirely different purposes. However, it provided greater floor space and facilities for Clifftop FC than any other club premises I visited during stage one research, and this allowed for use of the site for multiple activities. According to the local authority sports manager, there was now a need for the Association to take ownership of that site due to changes in government funding and priorities for community development.

At the first meeting the local authority outlined their financial situation and the reductions in expenditure they needed to make across numerous services. They said they recognised the value of the Association in helping meet targets for participation and community development, and a business plan formulated for the site noted that the aims of the Association met aims included in the local authority's "Sustainable Community Strategy" within the 'Active and Healthy', 'Volunteering' and 'Sustainable' criteria. The plan also noted the benefit in working with

a multiple interest community association in contrast to single sport-based clubs. However, overriding all these considerations was a need for the site to be managed independently of council funding. This was not specific to Clifftop FC, a report by a third party organisation engaged by the local authority to assist with the development of football strategy notes the aim of a zero subsidy level for the sport by 2020 (Knight et al. 2016). Thus discussions began with a position that suggested either financial savings were a higher priority than the benefits the Association brought to the area, or that the local authority believed they could continue to experience these benefits without expense to themselves. This echoes Findlay-King et al.'s (2018) research that found the transfers of sport and leisure assets in their study were similarly motivated by local authority budget reductions rather than the intention to empower communities.

The Association position was, that while they had taken over responsibility for the management of the playing surfaces from the local authority some years previously, including all expenditure in pursuit of appropriate standards, the remaining infrastructure, particularly the main building, would be unmanageable for them in its current state. Subsequent meetings sought to resolve this impasse, a process described by the senior club member Tony as a game of "call my bluff", two extreme positions seeking to gain concessions from each other by threat of withdrawal, but ultimately an outcome, he felt, that would involve contributions from both parties.

Findlay-King et al. (2018) discovered that despite the existence of supporting documentation, such as the FA's guide to asset transfer, there was no standard response to the process by the local authorities involved in their research. In some cases, local authority employees assisted with planning the transfer, others had commissioned a volunteer agency to support the process, and in others the volunteers did all the work themselves. This was supported by the findings in Chapter Five of this study, where all the local authorities interviewed wanted the burden of assets reduced, but only two of them had what they called "a methodology" for the process and all noted the flexibility, or lack of fixed terms, for the negotiations. This was reinforced by the discussions witnessed by myself in the meetings between the Association and their local authority. While there may have been an outcome in mind, the means of arriving at it were not clear, it was, as Tony surmised, a gradual consideration of terms and renegotiation of position from one meeting to the next.

At the heart of the discussions between the two parties were two documents; the lease of the site and a partnership agreement between the Association and the local authority. The lease pre-dates the agreement but the agreement supersedes the lease if the two do not correspond. The club provided access to the documents and it was noted that when the agreement was drawn up in 2008 there was provision for its review five years hence but the only way of ending it was if the club contravened a particular set of rules or requested termination. Neither of these things had happened. Consequently, the Association believed the provisions of the partnership agreement still stood, namely that the local authority was responsible for payment of utility bills and maintenance of external aspects of the building. During the discussions the local authority confirmed in writing the agreement was still valid but suggested it was intended to be a temporary arrangement whilst the parties were working towards the aim of the Association acquiring the asset and all associated aspects of its management. This did not seem an argument that would stand up to legal scrutiny and was surely an oversight by the person who created the original agreement. It did, however, support the findings of the interviews in stage one research that identified the difficulties for local authorities in managing a range of historical and highly localised tenancy arrangements across North Country's community football club operation.

Since 2008 there have been very few repairs to the building used by Clifftop FC and no improvements that Tom could identify. He confirmed that the Association would have been more amenable to the transfer of the asset had the building been in an acceptable state, however, they felt years of neglected maintenance, of an already unsuitable facility, meant they could not currently undertake the management of the site. Nor did Tom believe that he could attract possible investment or sponsorship for a building in such a poor state and clearly not comparable with purpose-built sporting amenities elsewhere in the region. The state of the facility was confirmed by a local authority condition survey (Local Authority 2014) that concluded; external walling "is in poor condition, difficult to maintain and thermally inefficient", windows require replacement to prevent "water ingress, draughts and heat loss", there is a "lack of insulation" and a potential "danger" to users. Despite their desire for financial austerity the local authority had to act on safety concerns and sought to install new windows in the gymnasium area of the building, an application by the club to Sport England for funding such an

improvement having been rejected a few years prior. However, work was halted almost immediately when asbestos was found and only began a number of months later after appropriate treatment. This was despite local authority surveys and works previously declaring the building asbestos-free. This increased Tom and the Association's unease about the prospect of the club being given managerial responsibility for a site now known to have greater problems than were officially recorded.

The deeper understanding of the challenges of managing sites such as Clifftop FC's gained due to this period of participatory action research allow greater reflection on the results of stage one research, described in Chapter Five. The financial position of the local authority and the limited resources of Clifftop FC highlight that simply wanting a 'home' to play football at is not sufficient to succeed. A perceived sense of place is not enough, it has to be underpinned by sound reasoning. Football club ownership of an unsuitable site is an unsustainable model, regardless of how individuals may behave within that model. Clifftop FC recognised that acquiring their home at this time, in this state, was unwise. If a practice is built on materials, meanings and competencies, you cannot simply isolate competencies as a factor to act on if the materials are failing, or the meanings offer unreasonable expectations. The club operates from an old school building that has numerous failings and costs too much to support. For example, there is a heating system that does not allow for the temperature to be regulated, it is either on or off and is operational for periods the building is unoccupied. This is both financially and environmentally damaging. However, the cost of demolition and rebuild would be prohibitive so improving the existing structure appears the only option. Yet funding for those improvements is not easily obtained given the challenging financial circumstances of local authorities, limited revenue raised directly from community-based football and the conditions of grant awards often being dependent on security of tenure. Those 'nomadic' clubs interviewed in stage one research, with neither tenancy of a site or regular playing location, said that they would like a facility of their own. However, were they to inherit a site such as the one Clifftop FC received, it could prove more difficult to maintain the solvency of their club. Consequently, it would be sensible to consider only those assets for transfer that have been properly surveyed for sustainability, where all elements of their operational practices are sound and a pro-environmental approach can be enacted.

In contrast to the suggestion that the environment be placed central to asset transfer, discussions between the Association and the local authority hardly referred to the subject. Priorities for the site business plan were termed 'short', 'medium' and 'long term'; the short term priorities were almost entirely financial, the medium term priorities proposed widening volunteer recruitment, but did include exploration of a travel plan and land use issues and long term the aim was for the Association to be financially self-sustaining. However, everything relating to site improvements and discussed in the meetings, for example replacement of windows, a more efficient heating system and management of the site towards a reduction in resource consumption, was pro-environmental. It was surprising to me that there was no mention of any merit or performance indicator within local authority policy that would make application for finance towards works that made environmental improvements more likely to succeed. The site business plan included recommendations for building renovations and improvements with potential costs of work included. It estimated a saving of ten to twenty percent on gas consumption following this work. Yet the emphasis was on the reduction of expenditure, whether due to attitudes, habits, practices or the priority of economic considerations, the environmental benefits of the building improvements were never mentioned. Just as analysis of internal meetings suggested many club staff did not make the link between activities and the landscape, so too did local authority staff seem to fail to correlate changes to buildings and pro-environmental achievements.

The subject of photovoltaic panels (solar energy) was raised by one of the Association members at an early meeting, the site being exposed on all sides to the sun and possessing a very large roof on the building seemingly making it ideal for such development. The suggestion was dismissed by the local authority as requiring too long a time period for a return on investment. My diary records Tom, a keen supporter of the idea, as conceding;

> To make progress then we'll knock the solar panels on the head (Research diary 24 May Year 2)

Speaking to him later, he was surprised at such swift dismissal of a popularly known and promoted measure. I agreed and felt it was a case of short term economic decision-making triumphing over longer term resource consumption reduction and environmental improvement.

This attitude towards aspects of facility development brought to mind the view of the Football Foundation, noted in Chapter Two, who said while they would like to support a reduction in car use, it could negatively impact participation, so was not a policy. This promotion of participation to make sports clubs sustainable is a narrow definition of sustainability if it ignores the consideration of the environment. The rejection of renewable energy by Clifftop FC's local authority and the absence of encouraging public transport use in the Football Foundation's policy appear similarly immune to environmental considerations.

A comment I believed marked a major shift in the emphasis of negotiations was made at a meeting twelve months into the discussion. The property representative of the local authority said it was "the partnership agreement that's keeping the council involved in the running of Clifftop FC". This implied it was viewed as a negative involvement, a burden to be fulfilled due to legal obligations rather than a positive opportunity for community development. It made me consider whether all parties at the meetings shared the same stake in the outcomes and with the exception of the manager responsible for sport, I could not conclude they did. Chernushenko (1994) notes that when a sport becomes a business the considerations of the competitors, spectators, and community become secondary to economic aims. The meaning of the sport effectively changes. For any of the local authority employees without the sport, health or community performance indicators in their employment remit, Clifftop FC's site seemed to be simply a cost that was also restricting the potential income from alternative use. If the provision of sport, and its associated benefits, has a lower priority than reduction of expenditure by the local authority, and that appeared to be the case, then the lack of any pro-environmental considerations seem to indicate the environment is a lower priority still.

The Local Authority Perspective

In order to qualify the progress of my research, challenge the data I had identified, and allow for an alternative perspective, I arranged a semi-structured interview with the leading local authority representative in these discussions, Graham (an anonym), a person previously interviewed during stage one research. Graham suggested Clifftop FC was unique in some ways and quite typical of football clubs in the area in others. The club was the first in the area to operate with this specific ownership model, in a period when local authority funding allowed greater flexibility in arrangements and the partnership agreement was "right for the time". Although other clubs

may similarly lease council-owned sites, no other club continues to be provided with local authority services on the terms Clifftop FC does. This has provoked envy and resentment from some people at these other clubs despite Graham suggesting there is limited benefit in such a model, with a far better experience potentially being available from the use of independent hub sites with good facilities. Again this reinforces the evidence identifying community football club sites as a challenging mixture of ownership and tenancy contracts and offers support to the 'nomadic' model from a local authority perspective.

The negotiations for the Clifftop FC site were taking up "too much" of Graham's time, and he echoed Tony's comments about the solution lying in contributions from both parties. Graham saw himself as "the balancing act" between the club and more senior management at the local authority who may be less amenable to the current use of the site. He felt that currently there was a lack of trust on behalf of some club personnel regarding the aims of the local authority, but confirmed they had absolutely no intention of forcing the club away from the site. However, he did acknowledge that there are choices that have to be made due to major reductions in local authority budgets, with the representative from property services having a straightforward need to reduce costs across the buildings owned. With hindsight, the wording of the partnership agreement was clearly a mistake, but Graham felt discussion between the Association's legally qualified trustees and the council's solicitors would quickly resolve any impasse. In due course, with no immediate solution likely, Graham became less visible in communications as the process resorted to negotiation over the transfer of a publicly owned site rather than the development of a community sports venue.

The budget for the club building was identified by Graham as £35,000 per annum but he added that often people do not realise that the money that goes towards investment is borrowed and has to be paid back over a specified term, it is not simply a matter of spending cash reserves. The local authority has to judge if investment in that property is needed. Graham stated that if there is a health and safety issue it will be acted upon, such as occurred with the gymnasium windows, but simply improving things is not a priority, summarising the sentiment as "the heating might be poor but does it work?". In the current period of pressure on local authority finances, this seemed a fair reflection, however it has to be noted that the local authority's own

survey contained errors and the potential "danger" to users was highlighted some two years prior to remedial action.

Though there is agreement on the unsuitability of the existing building the preferred solution of each party differed as in contrast to the club, seeking to safeguard the space available to members of the Community Association, Graham would close parts of the structure and focus resources on a smaller area. He felt that the best option would have been to build an expanded version of the new changing rooms, funded by the Football Foundation a number of years ago, and to simply have abandoned the old school premises. He was critical of the FA for their stance on these type of negotiations, suggesting they resort to the threat of removing Football Foundation money from projects should the local authority fail to offer financial support. Similarly, when the 3G pitch was installed at the club it was done so on the basis of it being used for 80% of its availability. Given the opening hours of the club he felt it must be "more like 30% of the time". It is vital to his playing pitch strategy, he said, that facilities are used with a higher frequency and support for other sports needing to use them is provided within a commercial arrangement. There should be more emphasis on the club being used outside of Saturday and its status as a central venue for hosting league matches. This reinforces Chernushenko's (1994) view that these are seen as commercial matters which run very much contrary to the meaning accorded to the non-profit making club by its community members. Yet were the facilities able to support more football it would afford the opportunity to reduce the number of football sites and potentially the impact of the sport on the environment.

Despite this criticism of the FA, and the indication that flaws lay in the provision of the buildings the club worked from, Graham suggested it should be the clubs who initiate pro-environmental schemes in site works. Asked why there was no environmental consideration mentioned during negotiations, he said that in every bid for local authority funding there were a range of factors to consider, but ultimately finance will always be the main one. The solar energy proposal at Clifftop FC just had too great a duration to return on investment. The local authority is, he added, dealing with the "here and now", by 2020 they have to be self-sufficient. He felt the FA could take the lead to "put the theme out there" but that each project would have to supply its own ideas. It appears that the weight of evidence indicating climate change and a deepening crisis in the environment have yet to make an impact at this level, particularly if they are not

considered part of the 'here and now'. This would suggest that if internal factors of behaviour were a relevant focus for strategy it is the local authority who should be targeted for greater awareness, education and an alteration of attitude. However, as Graham mentioned numerous times, the local authority is not autonomous and subject to many external pressures, particularly from central government and, within sport, the FA. Thus it appears the individual behaviour models are over-simplified in this case, that 'nudging' one group or another would not have the desired impact. No less an approach that considering the entire structure and management of funding, football and the provision for community activity would begin to resolve the challenges identified by the actors involved in the future of the club and their site. Clearly it is examination of social practice that is key to this and the potential solution to providing pro-environmental change.

Reflections on Club and Local Authority Meetings

It was important to remember when reflecting on this narrative that my observations were very much from the football club's perspective, while I enjoyed communication with the local authority I was not a regular visitor to their offices or exposed to their private thoughts in the way I was with people at Clifftop FC, particularly Tom. This put me at risk of seeing negotiations from only one perspective, a point noticeable after arranging the interview with Graham and gaining a different interpretation of the discussions. However, I do not think this undermined the research because the football club is the organisation targeted by current pro-environmental advice, the volunteers there are the ones expected to deliver change and thus their experience and responses are central to the research question. The local authority may be an important partner in the process but they are actively seeking to dispose of community football sites, they do not seem to want to be part of the environmental solution, even if it is practices at their level and beyond that have major implications for the activity on those sites. This meant approaching participatory action research at the club with uncertainty surrounding what may be achievable, knowing there may be little opportunity to alter interactions beyond the club that, according to social practice thinking, are crucial determinants of pro-environmental activity. However, collaborating with the club and working from within their perspective was the only way to examine these early thoughts and analyse the practical implications for such organisations. Moreover, if something was impossible to pursue from a club perspective it increased the evidence for failures in the operational environment the club found itself in.

The following chapter, number seven, describes and analyses the collaboration between myself and the club. After consideration of the theoretical implications of different roles in a participatory action research framework, the practical consequences of each of those roles for the football club and my own research needs, a position as a voluntary consultant was considered the most appropriate one for me to take. The experience I had, the opportunities encountered, challenges faced and results achieved are discussed.

CHAPTER SEVEN FOOTBALL AND THE ENVIRONMENT: CONSULTANCY AND COLLABORATION

This chapter expands upon the research by describing the particular form of participatory action research employed in the community football club. It documents and discusses the experiences of the researcher acting as a volunteer in the club. A range of collaborative activities between the club and researcher are reviewed and analysed in respect of the theories of pro-environmental activity and the community football social practice framework. The outcomes of these activities are evaluated in terms of their implications for the challenges and opportunities for pro-environmental activity in English football.

The chapter initially reviews my voluntary role, reflecting on the discussion in Chapter Four about the choice of methods and specific aspects of the research approach. The attempt to create a pro-environmental agenda in this role is detailed, with a description and analysis of both planning and enacting a series of environmental initiatives within the club and the results of their efforts. These initiatives encompassed different perspectives in the pro-environmental debate and were crucial in determining that the prevailing theories in both the sport environment literature, and governing body initiatives, fail at this level of community football and change in the existing social practice is necessary to develop pro-environmental activity. I follow this with both personal reflection and the thoughts of volunteers at the football club, relating to the research experience and pro-environmental activity at the club.

As Chapter Four described, the most appropriate participatory role for me to take at Clifftop FC was as a consultant to senior club officials. Alternative options would have required greater commitment from club volunteers when, as Chapter Six highlighted, they felt they had many tasks to complete and higher priorities than the environment. The way the club was led by Tom and a small group of individuals supported this more detached position from the majority of members as it would place me at the heart of issues and decision making. I did not want to hinder the club in its staging of football by asking them to reorganise their operations to accommodate my research. Stoecker (1999 p849) suggests that the level of participation by the group in aspects of the research need not be total, and that "having an outside researcher facilitate and even do the research does not hinder them from learning any new skills and does

not maintain knowledge inequality". After reflection and evaluation of the situation, the decision was made by the group and myself, at a club monthly meeting, that they did not need a high degree of participation in all aspects of the work, that the contribution I could make to the development of the club was paramount, that I could co-ordinate my efforts via Tom with the group being available for interaction as required.

There is a potential conflict between the participatory action research tenet of allowing the group to lead the research, choosing a role that meant minimal disruption to their operations and the suggestion that external pressure is needed to develop pro-environmental change. Similarly, by being an advisor within an existing structure, following established practices, I was potentially limiting the impact I could have on the interactions of materials, meanings and competences. The concern was that I could only investigate aspects of environmental activity linked to individual-centric theories of behaviour. However, there was also a feeling I needed to understand the management of the club before I could seek to initiate activity, that the research question was about the situation community football clubs find themselves in and what they can do about their environment. Trying to force ill-informed change would be of no benefit and could lead to unintended consequences for both club and my research position with them. Additionally, if practices were the barrier to progress this would be revealed in our collective inability to alter them. If we altered our behaviour and found little change then the solution had to lie beyond this.

In the role of consultant, I found myself increasingly associated with Tom. Often I felt something of a sounding board for his ideas, a welcome 'independent' view of club matters. However, I was aware at the time that it would be important to reflect on this exposure to one individual's perspective more frequently than others, a consideration I raise in Chapter Four's review of positionality. Our discussions did feel productive, a number of proposals emerged from our meetings, some partly his initiative, others having arisen during conversations he had held with others and some as a result of my experience. In terms of conducting this role I felt the club had come to trust me sufficiently to allow me what could have been free reign in the work, something I believed stemmed from Tom's endorsement and the esteem in which he was held by the other volunteers. My proximity to him helped develop my position in the organisation in relation to the concept of insider status. This was confirmed by both Tony and Geoff in my

interviews with them (previously noted in Chapter Six), where it was indicated there was a feeling among the staff that Tom always undertook due diligence on any proposal. However, there was a danger that I remained an outsider to anyone who perhaps did not concur with Tom's approach, and a risk that our one to one discussions swayed my thinking at the expense of the group's. Consequently, I felt it was important to work within an established framework, indicated in Chapter Four (Figure 4.2), as much as possible so as to maintain the structure, integrity and reflexivity of the research while minimising any excessive influence from my proximity to Tom.

Planning and Action

The ownership of the club site by the local authority meant the proposals for collaborative activity could not examine every aspect of the pro-environmental debate as external factors, the current meaning and the practices of affiliated, competitive football had effectively removed some possible strategies. This, however, is in itself informative of the challenges faced, and opportunities present, for community football clubs and highlights the inherent flaws with some of the pro-environmental behaviour models. It is simply not accurate, with examples such as Clifftop FC, to suggest that pro-environmental behaviour can be increased by pursuing strategies focused purely on altering the characteristics of individuals. While it was noted in Chapter Six that awareness of, and attitudes to, environmental issues within the club could be the subject of intervention, the discussions between the club and local authority showed volunteers would remain powerless to change behaviour that related to any structural alterations, at least while the asset remained in local authority ownership, and likewise alter any aspect of the club environment that was mandated by FA regulations. In this regard the social practice of community football had been established and was not going to change without external changes to the elements of the practice; the materials needed for football, the competencies required to provide football and the meaning of what community-based football was. As the collaboration between myself and the club had to focus on producing positive results, it was appropriate to first identify any aspects of club operations that could be changed. I was aware this would not produce the significant change in consumption and way of living, working and playing that the global environmental situation demands, yet it was important to confirm the extent to which anything at the club could be changed and where the relationships between elements of the practice barred activity.

Audit of the facilities

Whilst the club's monthly meetings may have not raised the environment as a subject, Tom certainly did in conversations with myself, and ultimately he made changes to his personal routines (for example no longer driving to the club) to lower his environmental footprint. He asked me on a number of occasions if I felt there was anything the club could be doing in relation to the site environment that it was not. My belief was that the existing relationships and practices significantly limited the club's independent management of the site, but to confirm this I offered to undertake an environmental audit of the club building, in line with my accreditation as an ISO14001 associate environmental auditor.

I decided to base the audit of the building on the recommendations from Sport England's 'Sustainable Clubs' Green Club tool, highlighted in Chapter Two as their response to the challenge of pro-environmental change. This tool creates an example of a sports club building and highlights possible improvements to the resource management and environmental footprint of the structure. Not only might this be more relevant to the club situation, but it would allow examination of one of the theoretical responses to environmental challenges. Clifftop FC's main building was a relatively similar construct to the 'large sports club' envisaged by Sport England with nine of the eleven example rooms being comparable. There were 39 potential recommendations listed by Sport England within this construct, some of these were duplicates as they were universal to all rooms (for example lighting controls). The audit was completed by myself, unaccompanied and with access to all rooms on 30th June 2016.

Of the 39 recommendations only two actions were identified as things the club could undertake without external assistance; increased waste recycling and continued efficient use of electronic equipment. All other recommendations suggested by Sport England required remedial building works or installation of devices. As alterations to fixtures was the responsibility of the building's owner, the local authority, and subject to the agreement provided by them, the club was powerless to act, even though, as Chapter Six highlighted, all parties were aware of existing issues such as inefficient energy use and a lack of insulation. I could only confirm to Tom that nothing more in respect of building management could be done independently by the club.

Some months later, after hearing of the club's challenges, a former player freely offered the services of his energy management company. He commissioned a survey and advised that changes to energy consumption could be made, some of them potentially cost-free and offering immediate reductions in the financial burden of the site. Confirming my own audit, he noted that all of them were beyond the current ability of the club to initiate. His report explained that the local authority paid for energy under the Crown Commercial Service, a centralised purchasing mechanism for obtaining a single rate for all the authority's energy use. However, he believed the sum being paid was higher than the existing market rate and immediate savings could be made. Similarly, the metering of the building dated back to the site's use as a school, when, echoing Shove's (2010b) comment about unsuitable water infrastructure (noted in Chapter Six), user needs and energy consumption were different. This meter continued to attract a large standing charge and could be replaced. While these were not proposals to improve the efficiency of the heating system, and thus impact the environment, the money saved could potentially be put towards longer term changes with respect to energy use. It was surprising to me that these unnecessary costs had not been considered in the many years since the Community Association moved to the site and suggested there could be similar overspending occurring across the numerous sporting venues identified as having similar historic arrangements in Chapter Five. Local authority manager Graham's comment, noted in Chapter Six, about the existing heating system remaining because while it is poor it is operational, sheds light on the challenge. The club is not permitted to change it, the local authority cannot afford, or does not have the impetus, to change it, money is wasted and ultimately environmental improvements are not made.

This is clear evidence of external factors frustrating change and established practices creating routines that do not work in the best interests of the site owner, football club and the environment. Yet the review of current advice aimed at community sport clubs by Sport England rather assumes a freedom to make individual decisions in a rational choice scenario, flawed thinking based on an incomplete view of pro-environmental theories. Ultimately, the club building was, however, improved later on in the research period as the local authority agreed to changes funded by a third party. External doors, windows and walls, all providing environmental benefits, were replaced thanks to a grant from a multinational company, under their Communities Trust Fund. The application for funding was initiated by the club and written by a

senior member of their staff alongside an employee of the local authority, a positive example of co-operation between all parties to enhance the environment.

However, this route to building improvements was partly a fortunate consequence of geography and should not be seen as a definite solution to environmental needs. In order to be eligible for funding a community site has to be within three miles of one of the company's facilities. The club was, and was made aware of the fund by the company's advertising. The local authority did not commit funds, nor did they have a role in the management of the project but they had provided initial quotations for the work. Tom supervised competitive tendering and awarding of contracts to suppliers after learning that local authority quotations for the improvements were exceeding the grant provided by more than nine thousand pounds, with the club liable to fund the shortfall. The estimates he obtained were twenty thousand pounds cheaper, the difference suggested by him due to a combination of the personnel involved, awareness of the needs and an approach by some companies that saw council contracts as an opportunity to inflate pricing. This competency failure of the local authority in the market mirrors the report on energy charges and suggests they are ill-suited to manage sites such as Clifftop FC. By appearing better at the job, Tom was strengthening the case for asset transfer or new-build third party sites. However, the audit, the energy survey and the funded works showed that the site provided many challenges and significant sums of money would be required to alter many of the factors that had an impact on behaviour and environmental performance. The collaborative work undertaken via the participatory action research could not redress these fundamental issues, they were simply too big and entrenched in the relationships that exist in the social practice. Instead these developments showed the research work had to comprise a series of administrative and practical initiatives that aimed to either directly increase the club's pro-environmental activity within the external constraints they experienced or provided them greater support for developing this area in future.

Collaborative Projects

Creation of charitable status

As noted in Chapter Five, I had asked during stage one interviews whether clubs were either a Community Amateur Sports Club (CASC) or a charity, a status relevant to grant applications, income and certain environmental considerations, such as rebates on surface water drainage

charges. It is not pro-environmental in itself but it has the capacity to allow for, or impede, pro-environmental activity via its financial implications. I was surprised to learn Clifftop FC and their Community Association were neither, given the club's need for finance towards either facility improvements or ownership of the building. I learned that the club had been CASC registered and withdrew from the scheme as there was a perception of limited benefit. I disagreed with this perception based on my previous experience with other sports clubs and subsequently contacted the local authority to ascertain whether obtaining charitable status would assist with those aspects of the asset transfer plan relevant to funding applications and independent revenue. They said it would. Without my knowledge the local authority then communicated this information to Tom and he approached me with a request that I register the club as a charity. Not only did this give me cause to reflect on how ideas may be generated and given impetus, but the importance of what I said and to whom during this research, as while I may be bound by confidentiality they were not. I was clearly receiving information from, and being trusted by, various parties in a situation highly beneficial for first hand research data, but potentially damaging should I disclose something unwittingly. My research diary records the dilemma of being both consultant and researcher;

> I was keen to say something about this but did not due to my status. Having interviewed the relevant person at the authority it is difficult to be present with knowledge but be unable to comment. (Research diary 9 November)

Identifying what needed to be done for registration was not difficult as there is clear guidance available from the Charity Commission and it confirmed the club was eligible. If attaining charitable status aids a pro-environmental strategy it seemed simply an 'internal' factor to be tackled in that it just required someone to take the initiative to complete an application. However, matching the requirements for creating a charity with the existing governing structure of an established club proved challenging and what might have proved a relatively quick task for one person became quite a drawn out process of extracting information from different people. The process would likely be much more straightforward were this a newly formed organisation who could create a body with charitable status in mind. In Clifftop FC's case, the football club is a constituent member of the community association, the site leaseholder, so it was in the association's name that the application had to be written. The association's most recent

constitution was drafted in 1999 and is quite different from documents recommended by the Charity Commission. Furthermore, a particular category of charity had to be chosen from the various legal models available and the trustees were keen to ensure this did not transfer financial liability to them. This meant the application required significant re-writing of existing procedures and a lot of detailed explanation of how the association would comply with legal requirements.

Additionally, the Charity Commission application procedure must be completed online and documents can only be supplied in 'pdf' format. Yet the age of the association meant everything relevant to the application was held on paper. Thus external forces were being applied; electronic signatures had to be obtained from trustees, a document scanner had to be used and computer software to convert documents had to be sourced. This was clearly a practice that had been constructed by the Commission to ensure that all the submissions it receives are similar. It is obviously important to verify that applications for charitable status are genuine, provide the correct information and reduce the time spent considering them, however, it was a time consuming and technical process for the club requiring some expenditure and expertise.

Charitable status was subsequently approved and the club have estimated the financial benefit to them will be significant. This has the potential to transform aspects of the site. Yet had I not had previous experience of such applications I believe I would have found the process daunting, particularly as I am neither legally nor financially trained. Subsequently, when a request for annual submission of the accounts to the Commission was received Tom was somewhat flustered, imagining a lengthy report was needed, rather than a simple declaration. Were I also involved in coaching, managing or administering any other aspect of the club I do not know if I would have had time to complete the application and I can see why such persons at the club had not previously taken the job on. It is a substantial effort on top of volunteers' existing work and far removed from the interest of running a football team. Initially it does require individual behaviour to achieve this but once that is underway, there are so many more broader factors and established practices to contend with as to render them significantly more relevant to change.

Grounds consultation

On my visits to the club I regularly spent time discussing the state of the pitches and any issues that had arisen with the playing environment. This was understandable given my knowledge and the range of issues faced by volunteer groundstaff, it was exactly the sort of situation in which the consultant approach of participatory action research is most effective. Moreover, with the club building subject to numerous restrictions in terms of alterations the wider landscape of the site could potentially be an opportunity to focus on the seemingly easier individual behaviour change agenda.

To identify the standard of playing surface being produced and whether it could be impacted by changes to natural resource inputs, and thus environmental behaviour, I undertook a 'performance quality standard test' of the pitches, a scoring system utilised by sport national governing bodies including the FA. I have previously conducted, externally examined and critiqued these tests in my education and employment. It is not a perfect system and recommendations towards improving it have been suggested (Bartlett et al. 2009), however they remain the field assessment incorporated in grounds improvement applications with the FA.

The performance quality standard test took place during the summer of 2016 when no football matches were taking place. The result was that the pitches were of 'good' quality, from three overall grades achievable, with a number of individual areas scoring higher and a few lower. For a non-professional club managed by volunteers, this is a positive result. The areas that were marked low would be difficult for the club to redress, such as a lack of grass cover on drainage lines due to dry weather and an excess of native soil clay content. The test does not explicitly mention any pro-environmental consideration, for example a club may use large quantities of fertiliser to achieve a uniform appearance across the turf and would score highly for the result without penalty for the environmentally damaging manner in which it was achieved. However, I was able to confirm the club was avoiding such harmful practices; potable drinking water is not used on the surface, application of manufactured fertilisers and chemical sprays is infrequent and grass height is not being cut to unsustainable levels. While the pitches at Clifftop FC do remove an area of land from public benefit they use relatively few resources and are likely to have a positive carbon sequestration value. Yet the positive environmental approach has to be

qualified as being heavily influenced by external factors in addition to any attitude, intention or habit of the voluntary groundstaff. Mains water supplies are simply not available for pitch use, decisions about fertiliser application are financially motivated according to Tom, and chemical spraying was not undertaken as none of the volunteers were licensed to do so and the training required for accreditation is expensive. Individual decision-making about pitch management is being made within a highly restrictive combination of materials available, FA demands for play and the competencies of club staff. Thus what may seem a simple matter of encouraging pro-environmental activity is not related to individual choice, it is routine that has been established within a practice framework.

Tree planting

The topography of the club site meant that not all of the land hosted football, there were numerous areas of wild grasses, hedging and inclined turf unsuitable for sport. Tom and I believed these could be made into beneficial wildlife corridors, with the addition of some trees and shrubs, as we sought to enhance the biodiversity of the location. Tom had contacted the Woodland Trust, to enquire about their schemes for community tree planting, but had been uncertain that the generic guidance received would produce the desired outcome. Based on my studies of ecology within sportsturf management, I concurred that the suggestions received were not likely to produce the most effective results and that acquiring different tree species would be more suitable. I suggested the work be added as one of the collaborative projects and he agreed. Knowing experts within this area of land management, I consulted them, describing the site and intention. Their advice, freely given, concurred with my initial assessment and made additional recommendations which I was able to use towards an application to the Woodland Trust's scheme.

As with the charity application, the process was online and required identification of the grid reference of the location, explanation of the site, the intention for the trees and supporting information such as the benefit to the community. It was not as demanding as the charity application, but it did require evidence of knowledge and research. It is also a highly specific scheme, species of trees are grouped into suitability for an area and distributed in fixed numbers, due to the economics of provision. The choice is between a small number (n=30) or much larger (n=420); one likely to have little impact on a landscape the size of the club's, the

other requiring a considerable effort to plant. The proposal I submitted, after consultation with Tom, was that every player at the club would take responsibility for one tree, planting and caring for it, thus not only increasing the biodiversity of the site, but lessening the burden on club staff and offering the younger members a stake in their environment. Such a scheme could embrace many of the aspects proposed by both internal and external factors of behaviour theories; information provided to children, development of an attitude, intentions, a locus of control over the management of the site, economic and infrastructure solutions by the free provision and delivery of the trees and an on-going study of practices relating to the care of the trees. It could offer a specific examination of the competing claims of pro-environmental activity perspectives.

The first challenge to this aim was that the scheme was usually over-subscribed and the Woodland Trust warned that not every applicant was likely to succeed. Once again external factors make internal considerations secondary, no matter how relevant individual actions may seem. Fortunately, the club was one of the successful applicants and the chosen number of 420 trees were to be delivered within a four day time period in November 2016. Yet the conditions for receipt of the trees, what is effectively the Woodland Trust's established practice, made for additional demands; the date of delivery could not be specified by the club, had to be to an address where someone was present for up to eight hours for delivery, with the advice that the trees be planted within a week of arrival. Whilst necessary, because it involves live entities, the requirement for the tree planting project to be managed to the Woodland Trust's timescale rather than the club's proved challenging due to factors such as the reliance on volunteers and uncontrollable weather conditions.

Tom and I discussed the best ways to manage the scheme and brought the successful bid to the attention of club volunteers at the next monthly meeting. A suggestion came from the group that the trees could be sponsored, a thought not entirely dismissed but because they had been supplied without charge by the Woodland Trust it seemed unethical to do so. Instead the plan was to ask coaches to inform parents of the activity and ask them to join us in planting the trees. As the results of my interviews suggested communications between the club and parents could be improved this did not feel a method guaranteed to confirm participation, consequently I suggested email communication with parents to the same effect might be appropriate.

Foreseeing the potential for logistical problems given the number of people likely to be in attendance on the intended planting day Tom suggested excavating the holes the day before. This seemed a sensible idea as it would reduce the effort required and equipment needed by parents and echoed findings in the literature that pro-environmental interventions may be more successful if the action required is relatively easy and of little cost to those involved (Steg and Vlek 2009). However, external factors overtook this when I received communication from the suppliers that the trees were being delivered early, with no specific time given. This meant someone had to wait at the club, ultimately myself, for four and a half hours in the event, a task that added to the feeling that despite the generosity of the Woodland Trust and their scheme this was an initiative that demanded significant sacrifice from at least one club volunteer and, like the charity application, conformity to established practice.

The planting of the trees was similarly impacted, and, as feared, it was due to adverse weather conditions. A series of very cold, wet days meant all football was cancelled and fear of damaging pitch surfaces led to the decision for a small team of Tom, myself and three volunteers, to plant half of the trees midweek when we were the only users of the site. Worsening forecasts necessitated the remainder being planted as soon as possible and illness and employment meant only Tom and I were available to undertake the work. Baldwin (2010) noted the lack of interest in environmental behaviour amongst spectators at the football club he based his research on. I was hoping to test this through the tree planting project at Clifftop FC, but the combination of the amended delivery and adverse weather meant I never had chance. The email to parents was never sent as the trees would have likely been in a poor condition before a suitable weekend had arrived. What I was able to confirm was little interest in the work from coaching staff, reflecting the thoughts of both Tony and Geoff (described in Chapter Six) about the extent of volunteers' concerns and the lack of awareness of the playing landscape echoed in stage one research interviews (Chapter Five). However, it is not possible to isolate this as an individual behavioural factor, whether ascribed to awareness, belief, interest or the lack of connection between the wider environment and the pitches they use, because the full time employment of the majority of people involved in what is a volunteer-led system of football meant there was little prospect they could have assisted. Ultimately, this was the most successful of the pro-environmental initiatives as the trees were planted and the landscape

modified to a small degree. However, once again, what seemed a relatively simple behavioural initiative was frustrated by the materials, meanings and competencies of existing practice.

Creation of a Machinery Group

As part of grounds management strategy Tom regularly asked my opinion about aspects of turf machinery. It is a subject in which I did not consider myself expert but, relative to volunteers without the same level of training, I am better informed. One idea that emerged was to set up a machinery group for the purposes of sharing ownership and use of particularly expensive pieces of equipment. This type of arrangement can be found in other land management practices such as farming where they are known as 'machinery rings'. Through my membership of a County Cricket Board I had experience of a similar enterprise. While the immediate benefit is financial, there are also positive environmental consequences in terms of the reduced use of natural resources to manufacture, transport and power numerous individual machines. This approach of seeking to increase pro-environmental activity as a positive consequence of decisions made for economic reasons seemed to represent an effective means to enact change given Clifftop FC's site ownership and pressures. It would also offer the opportunity to introduce the subject to other community football clubs.

The FA had recently concluded a commercial partnership with a machine manufacturer providing clubs with discounted pricing should they enter the national governing body's pitch improvement scheme. The response from a senior FA figure to Tom's suggestion of a shared ownership group taking advantage of this pricing was to suggest that the proposal could be incorporated into a pitch development scheme planned for the area thus allowing for direct FA support. The six clubs that Tom sought to join the group were enthusiastic, particularly as the difference in costs between use of one shared machine and owning or hiring one each were many thousands of pounds. It highlighted that managerial challenges could overcome traditional rivalries, even if some of those interviewed in stage one research (detailed in Chapter Five) had indicated such co-operation unlikely. My role was to attend meetings with group members and the FA to make them aware of the barriers that had been encountered operating the scheme elsewhere, an information provision exercise that led to a number of procedural decisions. Thus there were both internal and external factors involved in the work and a practice created; the economics of the FA/manufacturer scheme making the idea feasible, the direct involvement

of the FA encouraging development of the proposal and my education helping inform the awareness, attitudes and intentions of the group. The scheme's aim might not have been environmental, but its successful conclusion will integrate all those factors in producing a positive outcome for pro-environmental activity.

A feature of this collaboration was that it was all Tom's initiative. While the FA had organised a commercial partnership, thereby impacting the relationships between materials, meanings and competencies, they had not created a framework to follow, no particular advice in place from any football bodies, and outside of my input, no sharing of information across sports. That it was an idea only produced by the self-help of clubs seemed a missed opportunity by the governing bodies, particularly as they had initiated a discounted machinery programme and the FA representative was keen on the plan. The cricket authorities could have been consulted for advice, particularly when, as Chapter Two noted, there is an existing guide for the management of dual use cricket and football pitches. Similarly, there could have been a role for the local authority as their considerations extend to many grass surface based activities, not just football or indeed sport. This absence of leadership on such matters, replicated in local authority manager Graham's comments, noted in Chapter Six, about individual clubs needing to be the instigators of ideas, prompted me to ask the FA about the seeming lack of pro-environmental schemes within football. The FA employee rightly pointed out the work at Wembley and St George's Park, highlighted in Chapter Two, and identified two other schemes the governing body supported; to replace inefficient lighting on 3G pitches and to recycle any redundant 3G surfaces. However, they acknowledged the lack of inherent consideration for the environment in their planning, suggesting, as Graham had, that any ideas for integrating pro-environmental initiatives had to come from the clubs themselves during development work, where they would be considered on a case by case basis.

As with the findings of Chapter Three, when reviewing the FA's reports in support of the 'Parklife' initiative, this evidence seems to confirm the FA does not consider the environment to merit the attention given to player development and participation. It barely merits the attention to accuse the FA of 'greenwashing', noted in the review of sports-environment literature in Chapter Three, such is the limited number and minimal 'green' content of their policies. When combined with the local authority attitude that other considerations are of greater concern, it is perhaps to

be wondered who exactly will prioritise the environment. It should not be for a club volunteer, such as Tom, to devise, organise and manage a major scheme that would provide both financial and environmental benefits for football in North Country. Moreover, the conditions in which clubs operate have been imposed on them, the social practice of community football has been established outside of the volunteer level. It is not possible for individuals to change the relationships between materials, meanings and competencies by drafting a proposal for one club to act on one idea of how to improve their environment. It needs a sport-wide response.

Cars and Cups

Given the inability to implement the tree planting project as intended I considered alternative schemes that could attempt to enhance pro-environmental activity without the external restrictions of ownership and building management rights. Having observed match days at the club site there were two aspects that seemed to be of negative impact on the environment and offered potential intervention; car usage and the waste generated by sales of drinks. Both were sensitive issues for different reasons. When observing club home matches I witnessed verbal abuse and threats to volunteers by visitors from other clubs in relation to car parking spaces. Demand for spaces always exceeds the club's allocation, and they have to stop access to the car park mid-way through events, causing dissatisfaction for all. The club regularly examines the situation but have yet to discover a solution. During my interview with Tony he outlined an idea for a parking voucher scheme that seemed well-considered and potentially workable. An interview with a parent of a player at the club identified they "mostly" drive to the venue, despite living around 500 metres from the site. The reason for this, they explained, is they are often in a hurry to get there. They felt it would not be an issue if they were unable to park at the venue as they would walk but clearly it is not a preferred option. This suggests the club may be able to pursue a parking scheme that seeks to impact internal factors of behaviour but there are clearly other considerations. Chapter Five highlighted that those parents with children playing at two venues have logistical issues and car use is potentially the only solution. Tony also queried whether enforcing rather than inviting change was a sensible idea, such was the history of incidents relating to the practice. In these circumstances I considered the risk to both the club and myself from trying to pursue this issue was too great and that change had to come from examination of why people used their cars for often short journeys, and became so aggressive about parking them, a study of practices rather than pursuing an individual club approach.

Similarly, the sale of food and drink was the club's largest revenue stream and could not be risked by any proposals that would alter consumption habits. However, I noticed that the polystyrene cups used for liquids were disposed of in general waste and thence landfill sites. I considered a collaborative intervention that introduced a specific waste receptacle for these cups could serve as a useful assessment of the relevance of competing pro-environmental theories to the football club. McCullough (2013) found the reduced provision of recycling bins impacted perceived behavioural control and consequently recycling rates at a sports venue. The test would remove the external criteria of providing the infrastructure for a behaviour change, with no financial impact or other influences beyond those considered relevant to individual actions. The waste bins would be next to each other so it would be a simple option of dropping the cup in one of two places, again reflecting the finding of Steg and Vlek (2009) that actions need to be easy and inexpensive.

However, after agreeing to attempt the scheme with the senior volunteer responsible for club catering I could not obtain confirmation that the cups could be recycled, nor who would take possession of them, despite contacting a number of organisations advertised as operating in this area on a number of occasions. According to the manufacturer of the cups they are not biodegradable, compostable, recyclable nor do they contain recycled content (Dart 2016) despite other manufacturers (Styropak) of similar materials suggesting it can be reused. The discrepancy seems based on the difficulty of recycling the material and the low demand for the recycled product. Even if this confusion was to be clarified, I learned that collection of the cups would be chargeable, a fee the club simply could not accept. Consequently, the idea of separate waste and the test of theory had to be abandoned. An alternative scheme whereby people brought their own cup and received a discounted price on drinks was considered. However, this idea was similarly rejected when it emerged the club paid their supplier less than two pence per cup and the prospect of offering users of the scheme a single penny rebate would have been open to ridicule. I did not consider there to be merit in simply asking people to bring their own cup for purely environmental reasons as the site already experienced a waste problem, despite repeated requests for users to dispose of litter appropriately. It appeared a dilemma that required more than awareness and information, with potential solutions rendered victim of economics, infrastructure and existing practices.

Reflections on the Collaborative Activities

Alongside my research diary I maintained a contemporary account of the collaborative activities so I could review both the challenges and opportunities encountered as well as my thoughts regarding the progress of the research. Some key themes emerged, however in keeping with a participatory action research approach (Brydon-Miller 1997; McIntyre 2008; Savin-Baden and Wimpenny 2007) it was important to reflect upon and evaluate these findings with my collaborators at the club. Stoecker (1999 p844) suggests "getting community input at each stage of the research project" but notes Gaventa's (1993) claim that the role of consultant may never fully embrace the participatory action research approach due to the power inherent in the consultant's knowledge and their ability to simply walk away from the group. This, however, appears to understate the extent to which I, the researcher, as a consultant, would share information and understanding with the group, working towards shared goals and my personal investment in terms of needing their collaboration to answer my research questions and produce this thesis.

Pain and Francis (2003) describe the way they managed the reflection and evaluation process when presenting their academic findings to a project group; initial collection of group based materials and interview notes; verification sessions where collaborators were able to expand upon, challenge or prioritise the key points from data analysis; circulation of reports to collaborators asking for responses; and finally qualitative analysis in respect of the initial research questions, themes in the literature and the current policy context. While the subject of their work was very different from this thesis, the research methods would be a suitable model for my interactions with the football club not only from a theoretical perspective but in being compatible with the existing meeting arrangements and time pressures on volunteers.

Presentation of my findings was organised for the end of club monthly meetings to avoid impacting on volunteers' time and duties. Representatives from both the management and playing functions of the club were in attendance and after relating the information I had gathered I asked for comments. My findings noted;

1. The club volunteers have little control over the building in terms of repairs and, crucially in respect of pro-environmental activity, improvements.
2. Whilst highly qualified in other areas, the club does not have the expertise to deal with all the issues raised by building management.
3. The club volunteers do not have the time to devote to all the issues raised by building management.
4. The club volunteers do not have the inclination to risk personal liability in certain aspects of building management.
5. The playing facilities are of sufficient quality that I am unable to recommend any improvements given the club's resources, however I am concerned there is insufficient planning for Tom's eventual retirement.
6. Becoming a charity is a positive step, but will provide additional work and considerations.
7. Club volunteers have interests and priorities, pro-environmental activity is not highly ranked among them.

The responses of the group supported these findings. One comment that appeared to summarise the mood was "overwhelmingly yes" to these suggestions. In relation to the interaction between volunteers and the building all present concurred with my interpretation of the situation, that they had little control over repairs and improvements and, crucially, little or no expertise, time or inclination in respect of liability to enact changes to the building should they have that control. This suggests that internal factors relating to an individual behaviour approach are not relevant due to the existing social practice and relationships that operate in relation to the materials, meanings and competencies of site ownership and management. The identification by Shove et al. (2007) of a relationship where the 'having' of materials and the 'doing' of activity is out of balance feels an accurate reflection of the club's situation. Volunteers have neither the tools to act or the ability to use the tools. Altering these to allow the club an opportunity to develop pro-environmental activity would need to occur before the volunteers could act differently.

While the responses reassured me I had not misinterpreted the situation I was mindful of the potential for some members not to vocalise thoughts or to defer to other members of the group

at the public meetings. Nygreen (2009) has written of a sense of false egalitarianism in participatory action research projects and I believe that Tom's presence and contribution to club life did accord him a certain authority in group discussions. This was balanced by the previously mentioned semi-structured interviews with Tony and Geoff, informal discussions with club staff as they went about their work and on other occasions I simply observed activity on match days. As confidential encounters, these would, I believed, be more effective at providing data than formally requesting responses to circulation of my findings, something echoed by Pain and Francis (2003). I did, however, continue presenting findings at monthly meetings until the end of the project to enable greater distribution of the acquired knowledge.

Additionally, I sought to reflect upon some of the data I had gathered with another key population, the parents of young players. A parent who had been using the site with their child for two years agreed to a semi-structured interview. Their feelings towards the club were positive and they felt their child had a good experience when they attended training and matches. The costs involved were considered "reasonable" and they felt the site was a good place to be, something they struggled to put into words, but suggested "as a parent you just know". However, they felt they had limited interaction with the club, mainly through choice, and tended to simply turn up for training and matches rather than being involved in it as a community or with a positive sense of place.

There was a familiar response in my more informal conversations with other parents, that their participation in club life tended to be the hours of playing and training, with little involvement outside of that. Some parents sponsored football shirts or had greater awareness of the situation at the club due to friendships with volunteers or direct contact with Tom, but generally the impression given was that it was a place to take their children for football rather than having any shared ownership of the site or particular connection with the location, despite a number of them having attended the school that formerly occupied the space. This echoes the description of most club volunteers given by Tony and Geoff in Chapter Six, in so far as they have a narrow view of what the club offers, what is needed to sustain it and the impacts it can have. This is not criticism of the personnel and parents, simply an acknowledgement that the challenges to promoting a pro-environmental agenda are many, complicated and lie beyond simple encouragement of individuals to act.

Conclusion

The collaborative activities within the period of participatory action research provided a unique insight into the challenges and opportunities for pro-environmental activity at Clifftop FC. It was impossible to test if internal factors of behaviour could be managed to be of significance at this site as the ownership and management of the location did not allow for a comprehensive examination of interventions based on their thinking. That itself is revealing about the impact of such factors and individual behavioural models; in this club and the sport of community-based football they are not the barriers to pro-environmental activity, nor the solutions for overcoming them. The impression received was that raising interest, awareness, attitudes and intentions could eventually be altered as part of an environmental management plan, but they are bound to social practice, the status of materials, meanings and competencies, and not independent forces to be nudged or directed. And yet, those individual behavioural strategies are the interventions promoted by advisory bodies such as Sport England. The evidence from this research is that those theories that focus on internal factors of individual behaviour are dealing with a restricted perspective of the challenges faced, whereas the difficulties the club encounters, such as site ownership, finance, FA and local government practices and the meaning of community-based football, are much broader and carry ramifications for all activity. They dictate, and habitualise, the behaviour of football club volunteers. The operations of community-based football clubs may be of environmental concern but isolating one aspect of behavioural theory to use as a template for action will not remove the barriers to change, only alteration to the structure and social practice of community-based football will do that. So far this appears to be a question that has, to paraphrase Shove (2011b) not yet been asked of sport.

CHAPTER EIGHT CONCLUSION

This chapter concludes the thesis. The proposal for increasing pro-environmental activity within community-based football clubs in England, by altering the existing social practice, is developed with respect to the data provided by the research. Recommendations are provided; for the sport national governing bodies, community football clubs and those engaged in their work, based on critical analysis of this data. I further reflect on the research experience. The contribution offered to the literature by this research thesis, and where further research is required, is identified.

Sport and the Pro-environmental Perspective: Actuality and Practices

Analysis of the pro-environmental activity debate in Chapter One showed that there are numerous different perspectives on the causes of, and strategies to increase, pro-environmental activity. Some of these are quite diametrically different, and advocate alternative solutions to environmental challenges, because they represent varying interpretations of the causes of human behaviour and the practices people undertake. As with the debate on climate change, where the disciplines of science and economics garner government and popular support, so in the environmental activity debate do certain paradigms receive greater attention, namely those socio-psychological theories advocating an individual behaviour focus for policy and intervention. There is an opportunity for the work of social practice theorists, that suggests a need to examine the entire structure, and meaning, of social activity, to be more widely acknowledged and studied.

The desk-based study of sport, football and the environment in Chapter Two identified that, while it may have many socio-economic advantages, sport, and particularly organised, codified, community-based football, has negative impacts on the natural environment. Not only is there an implication for climate change from the emissions of machinery and demand for synthetic fertiliser products, but natural resources are consumed to support facility activity and part of the landscape is changed forever. As a large area of land is used to host the many participants in this form of football in England these are significant impacts. Yet, it is not impossible for football to mitigate some of the effects of its playing requirements. It will never eliminate its footprint as the sport requires an entirely artificial form of land management, but environmental damage can

be reduced, consumption lessened and positive measures introduced and increased if there is an examination of the demands and practices of codified football.

Chapter Two further identified that the sport literature, sport governing bodies and activity within football, does not consider the range of perspectives within the wider pro-environmental debate. With a few notable exceptions, the theoretical position adopted for many of the studies, reports and recommendations in sport generally, and football specifically, is that activity is a behavioural phenomenon and the way to encourage more positive environmental work is through changing individuals' actions. The management of non-professional, community-based, sport facilities is rarely represented in the literature. This undermines claims of how 'sport' may be reacting to environmental concerns and the value of adopting measures identified by case studies of the elite and well-resourced. The work undertaken on social practices and the environment is almost entirely ignored and goes without consideration in the majority of suggestions for developing the pro-environmental agenda in sport.

And yet, as Chapter Three highlights, the playing of football, the hosting of the sport and the following of the game, *are social practices*. People engage in habitualised routines derived from the relationships and interactions between materials, meanings and competencies. Those of professional football are different to that of community-based football, consequently it has to be seen as a different forum of study, and examples used from the elite cannot be simply transferred to the voluntary, not-for-profit sector of the sport. While materials and competencies vary to a lesser degree between the two codes, it is the meaning of each format of football that is particularly different, and it is this that is key to changing the social practice of community-based football.

This thesis thus highlights all three ways in which a social science based study, that suggests social practices are of relevance to the management of non-professional, community-based football clubs, is marginalised by all aspects of the popular debate. In climate change and the environment research by science and economics agendas, in pro-environmental discussions by the dominance of socio-psychological modelling of individual behaviour and in academic, and governing body work on sport and football in favour of the professional and elite. Sport sector initiatives to tackle the significant environmental challenges the world faces fail to consider

social practices and the role of materials, meanings and competencies in creating existing behaviour. They promote strategies that make assumptions about habits, with what Hargreaves (2011 p80) calls " a narrow view of social change", wrongly according to the data identified by this thesis. By considering broader perspectives of the causes of pro-environmental activity, basing the research within the relatively silent majority of the sport as far as previous work is concerned and selecting a research approach that provides a unique insight into the challenges faced by those being studied, this thesis provides innovative suggestions on how to introduce changes to how we 'live, work and play' football and a unique contribution to the literature.

The depth and quality of responses from interviewees, both club volunteers and local authority employees, offer sufficient evidence to produce a report identifying the barriers to, and opportunities for, pro-environmental activity in English community-based football. Having additionally spent 24 months volunteering at Clifftop FC, a club that appears to encapsulate many of the challenges faced by community-based football organisations, and observing, discussing and attempting to introduce pro-environmental change, the conclusions I draw from the data collected feel particularly informed and of importance to the literature. Three points emerge repeatedly from both interviews and attempts to introduce change at Clifftop FC, there is; a shortage of resources, human and financial, to manage club work; an absence of governing body programmes or initiatives to promote the environment; and, most importantly, a lack of control over the club environment. When combined with a local authority ownership model that is under pressure financially it is a social practice that is currently unable to provide for the significant changes needed to the way we play sport in the world's changing climate. Chernushenko (1994) suggested similar interactions were hindering the greening of sport more generally; people lacking the knowledge and tools to change, the failure to see that concepts relevant to environmentalism can also apply to sport, and the institutions that made sport what it is being uninterested or incapable of change. Consequently, the contextual example of community-based football may be well placed to provide solutions for other sports seeking to pursue a pro-environmental agenda. While Tom and the football club were the lead organisation in their Community Association, the group also included the martial arts clubs, the fitness class and the nursery, who, research might show, may feel similarly disempowered by current practices. The scale of the problem, and the potential benefits achievable, may be much greater than is currently understood.

The Social Practice of Community-based Football

If the social practice of community-based football, and the elements that make it (the materials, meanings and competencies) are acknowledged, then it is possible to suggest measures to alter the relationships between them and consequently change the practice. It is evident from the data provided by the research in this thesis the extent to which each element of the practice operates, validating the framework of the social practice of community-based football identified in Chapter Three.

Materials

At the heart of many of the challenges facing community-based football clubs is the money they have to manage their clubs. All the club volunteers interviewed spoke of surviving financially, rather than investing, and discussions of income from subscriptions showed this is a sensitive and pressing concern. Anything that cannot be paid for by external funding needs serious consideration, particularly if it does not directly affect the ability of the club to play football fixtures. The materials required for playing football do not differ significantly according to the level of play. A pitch that complies with competition regulations, goals, balls, football strips, facilities for players and spectators, they are all essential features. Environmental improvements are non-essential features. They are not the reason for the club's existence and potentially divert expenditure from other concerns. The elite may have social responsibility, reputation management or 'greenwashing' motives for introducing pro-environmental initiatives. For the community-based club, environmental, self-help schemes that may only offer altruistic rewards, or at best financial savings in the longer term, cannot supplant the necessary, and immediate, need for spending on, for example, football match fees.

Community football clubs could be provided with more resources. They could receive additional funding or be given help with materials, linked to the PQS pitch management scheme for example. Football is a wealthy game, yet the concentration of this wealth is in the small minority in the sport. Yet redistribution of financial resources would still fail to change some of the issues within the social practice of community football. The environment would still not be the main priority for clubs as, if the data in this thesis reflects, there is not the connection between the activity of the club in hosting football and the impact on the landscape. It is a variation on the

paradox suggested by Giddens (2009) in so far as environmental damage does not cause a direct, short-term, influence on a community football club's purpose, and therefore, even if club volunteers are aware of the consequences of their actions, redress does not warrant a higher place in club considerations. And these other considerations are many; child protection, compliance, organising teams and fixtures. The period of participatory action research revealed where the club and volunteer focus lay, and how, for the most part, it was a small, dedicated group of senior people carrying out the work. Community-based football clubs are not just inactive on environmental matters due to a lack of finance, they are inactive as they have so many other commitments and pressures on their human resources that there is not the capacity to add to volunteer duties.

Competencies

Change to the social practice of community-based football could potentially focus on the volunteers, and their competency in hosting the sport. The individual socio-psychological behavioural theories support this approach and it is the approach favoured by the sports industry initiatives highlighted in this thesis. However, applied to the clubs involved in the research of this thesis, such ideas will fail to create any meaningful alteration to consumption of resources, environmental pollution or the way in which community football operates. Club interviewees identified they have very little control over the sites where they play their matches, meaning they simply do not have the ability to act independently. If they are the long-term tenant of a location they face third party restrictions, if they rent annually they usually have no involvement in management decisions, and then there are those who do not even have a regular home to manage.

Very little of the activity that occurs at community football sites could be classed as pro-environmental. Some rented football pitches may have few facilities and beyond the mowing of the turf, sometimes on an ad hoc basis, there is almost no work being undertaken. At other, tenanted, football club homes, pitches and buildings are being managed but without particular regard for best practice in relation to the environment. The data suggests there is a lack of awareness of what could be done, information on how to do it and what is required. However, it is only when those factors, that could initially be accepted as internal barriers to individual behaviour, are analysed more closely that it becomes evident that a lack of control remains the

fundamental problem. People can be told what can be done, shown how they can do it, but if they are not empowered to do so, or are undermined by a series of regulations and established procedures then the effort is for naught. These people are simply undertaking established routines within a practice they cannot change.

Adding to the challenge is that the people who do usually have the control, the local authorities, with their ownership and management responsibilities, are not undertaking the work, and in the current financial circumstances are probably not best suited to undertake the work. As all of the local authority staff interviewees highlighted, football is an expensive sport to host and there are many competing demands on their resources. There is no immediate incentive for them to put additional effort into making the hosting of football more environmentally responsible, the rewards are potential long term fiscal savings from the reduction in natural resource use and possible mitigation of environmental harm. Again it is a variation on the Giddens (2009) paradox. Long term considerations seem particularly difficult for local authorities at the present time and the promotion of asset transfer by all of those involved in this research highlights the prevailing feeling of actually reducing, let alone increasing, their involvement in sport provision.

Whether the question is pro-environmental activity, pitch management, facility alterations or raising revenue through increased social offerings, clubs are unable to independently govern their sites and determine their future. This, therefore, suggests that the structure and governance of English football, and the role of clubs as actors within this, hinders development requiring a self-help approach. This feels particularly frustrating as there is potential for increasing pro-environmental activity in community-based football. Not only is it known that natural turf and buildings used for sports facilities can be managed with a smaller environmental footprint, but the ways of doing this are identified by Sport England. The problem is identifying them is simply not enough, the barriers to implementing such activity need to be acknowledged and solutions to them found.

Meanings

The existing initiatives to encourage pro-environmental activity within community-based football are both few and insignificant in relation to the scale of the problem. There are two schemes run by the FA directly relating to the environment; the recycling of 3G pitch materials and more

efficient floodlight improvements. These fail to address the question of football's place in the environment, and importantly what football is prepared to give up to safeguard the environment. Clubs have no reason to question what they are doing and no lead on why change may be needed. Increasing participation and development of an elite appear the only priorities for governing bodies. The FA receives public money to develop its sport and they rely on volunteers at non-professional level to do this. At the same time the current economic climate means local authorities would like these volunteers to also manage and monetise assets. Trying to add responsibility for environmental management is too demanding of volunteers, particularly when neither the FA or the local authorities have a plan, or even suggestion, of promoting environmental activity. Moreover, the FA can worsen the situation by introducing initiatives such as nine player per team football, increasing the volume of regulation or changing the focus of funding. Chernushenko (1994 p96) believes that "no group should be given the chance to opt out" of greening sport, in football's case it seems like there is very little to opt in to.

However, the meaning of community-based football represents the way to change this. The sense of place identified by Bale (2000) can be questioned in the data provided in this thesis. While interviewees expressed an undoubted feeling about their football club, an idea of what it should be within the community, its function and ambitions, this was not inextricably linked to a physical site. All of the interviewees expressed aspirations to help children, to offer them a chance for activity, to provide a positive experience in their lives. The person who spoke of keeping children "on the straight and narrow" (Interviewee B Club 2) volunteers at a club site completely different in its facilities, management and potential of that of Interviewee A at Club 6 who wanted "to get children off the street and off their computers, playing with their feet and not playing with their thumbs". While a home ground, owned by the club and earning sufficient revenue for them to invest in site development is an ideal, absence of it is not a barrier to these wishes. Indeed it may be helpful towards it if it means volunteers have more time to devote to the sport as they are spared the burden of complying with facility requirements.

While asset transfer could be the solution to a number of the issues raised by this thesis, particularly the constraints of tenancy rather than ownership, it also creates issues, not least of which would be addressing the materials and competencies shortfall for the new community club owners. The FA would need to introduce a programme that gives meaning to pro-

environmental work in order to make it a relevant part of those elements of practice. The participatory action research period of this thesis clearly showed the challenges asset transfer involves. Clifftop FC's local authority were keen not to commit any resources towards improving the facility and indeed it was alleged they had not undertaken basic maintenance for a number of years. Yet, far from welcoming the possibility, Clifftop FC felt unable to accept the transfer of ownership because such were the building costs, and improvements required, that it would threaten their very existence as a football club to incur these burdens. Moreover, many interviewees did not identify their impacts on a site, did not see the link between them and the place they operated, Clifftop senior officials spoke particularly of some of their volunteers as not seeing the bigger picture. And yet, they are all well established clubs, successful in terms of their position in the community. The more than forty thousand football pitches registered by Sport England must all be managed to the same basic requirements, just a small sample of them, as identified by this thesis, shows that clubs cannot in their current state undertake this, nor do they want to and such an arrangement is not essential to their existence or the meaning of their work. Perhaps it is better to build upon the work of community-based football clubs by talking more of a 'sense of role' rather than a 'sense of place'.

The FA's Parklife schemes could be the opportunity to change the existing relationship between the sport and the land, a movement away from physical place which seems already absent for some clubs and barely evident for others. The establishment of partner operated facilities could be a way to lower the overall footprint of the sport, particularly if the cost and emphasis of activity is not placed on either volunteers or the local authorities, and pro-environmentalism is built into contractual obligations. Davis (2010) suggests that the solution to climate change and environmental degradation may be the urban landscape itself. A shift towards the "public affluence" (Davis 2010 p43) of expanded parks, open spaces and other social meeting places rather than the private enclosure of the landscape. The desire to have a home ground for football is in effect restricting the use of that land to members of the football club. In the Netherlands, a nation the FA (2014) identifies as having a desirable provision of playing facilities, 99% of community-based pitches are owned by the local authority (KNVB 2018). Individual clubs could be encouraged to forego tenancies they cannot develop to allow management of their existing sites for the collective good, of football and the wider public.

However, the environment is currently absent from any of the information being communicated about the Parklife ventures, very few interviewees in this research thesis even knew of the scheme. While the quality of the facilities, and the boost these could offer to participation and skill levels, are heralded, there is no discussion of the impact the developments will have on the landscape or management of resources. This is despite a guide released by Sport England (one of the partners in the scheme) suggesting an added interest in new Parklife facilities making a "wider impact on people's lives in terms of physical wellbeing, mental wellbeing, individual development, social and community development and economic development" (Sport England 2017b p6). It seems quite a feat to list such positive features without reference to the natural environment but it would be in keeping with the approach found in the review of football literature, noted in Chapter Two, the self-help agenda promoted by Sport England and the low priority the FA places on the environment within its club programmes. It would also prove relatively easy to include the environment in future.

The Sport England Parklife guide (Sport England 2017b p2) suggests it is "very unlikely" that localities of fewer than 200,000 residents, and organisations other than local authorities, would have sufficient impact to be accepted by the scheme. Consequently, it appears that the FA is not seeking to replace existing provision across the country with Parklife schemes, rather they are to supplement facilities in larger areas, helping increase participation. Club-hosted, community-based football thus appears, for the moment, to remain part of the plans for the landscape. As such, there are things that could be done to overcome the current impasse, to change the social practice of community-based football, and deliver the meaningful reductions in consumption of resources and climate change emissions needed.

Recommendations for Increasing Pro-environmental Activity in Community Football

In the introductory chapter I asked whether pro-environmental activity can be delivered through a 'bottom up' movement. The answer to that, based on the data identified, is no it cannot. This thesis gives voice to those who consider themselves often overlooked, under-represented, ignored and marginalised in discussions relating to football. What the representatives of the majority in this research are saying is that there needs to be a concession to their needs. Community-based football clubs, if they are to continue to host football and be a central plank of the FA's participation strategy, need change, not just to adopt pro-environmental programmes,

but to survive. The findings convey that those theories that focus on socio-psychological models of individual behaviour, and solutions advocating encouraging, exemplifying and nudging such behaviour, are dealing with a more micro view of the challenges faced by clubs. In actuality, it is a macro scale problem. The words used in the discussion of the response to environmental problems in the Introduction; "profound and immediate" (Anderson 2015 p898), "dramatic changes" (Szerszynski and Urry 2010 p1), "new forms of living, working, and playing" (Shove 2010a) emphasise the major policy decisions required. As Hargreaves (2011 p83) observes, "generating more sustainable practices calls for the links and elements of existing, unsustainable practices to be challenged and broken before being replaced and re-made in more sustainable ways". Solutions have to question the status quo, they will require "fraction and dissolution" (Shove 2011b p281). With this in mind, I propose three recommendations to create that change and develop pro-environmental practices in community-based football.

1. Materials; A Change in Allocation

The time spent as a consultant with Clifftop FC was a research approach that differed significantly from previous forms of research in sport and football, particularly those considering sport organisers relationship with the environment. Not only was data collected from within a community-based football club but efforts were made to act upon existing advice and supposed opportunities for pro-environmental activity, using the resources that the club had access to. Those efforts were less than successful. Clifftop FC expended finance on meeting their playing commitments and maintaining a home for their club, they simply could not speculate on anything that would not return immediate benefit in keeping with their purpose to host football. In this, they at least had the potential of generating income, unlike the volunteers in stage one research interviews whose clubs had no home and no prospect of development. Clifftop FC was not short of volunteers, again they seemed better placed in this respect than other clubs, but those volunteers were always occupied with meeting playing requirements for their teams. I believe the reason I ended up becoming more closely linked with Tom was because he no longer coached and consequently was the only person ever likely to have any time to devote to other considerations. Without him it is clear the club would struggle. There are simply too many demands on scarce resources, whether they be volunteers, finance or time. Strategies considered suitable for development of pro-environmental activity from within community-based clubs are constrained by the pressures of time, knowledge, priorities, and what would be an

increased workload on volunteers who join clubs, not to take on site management roles and liability but to help organise football matches. Either more resources need to be directed to community-based football clubs from the wealthy elite side of the sport, (an idea suggested by one of the club interviewees was for a part-time employee at each community club, paid for by the professional game), or the burdens on clubs need to be reduced in order to make those resources more able to deliver what is needed.

One way of providing more resources to clubs who host football at a regular home site would be to reduce the number of sites in existence. Forty thousand pitches, an area twice the size of Jersey, surely this is too many given the urgency of the environmental challenges faced and the current inability of football to provide solutions. This would be a controversial move, not least of which because it seems to run counter to the idea of increasing participation in football, but as one of the local authority interviewees for this thesis highlighted, some sites are not operating anywhere near the capacity for which they were constructed. Club interviewees spoke of the flawed strategy that sees funding provided amongst numerous clubs in an area, rather than concentrated at sites that may represent the most suitable location for expansion. The sense of place is not universally strong in community clubs. Sites are falling into obsolescence because there are not the resources to maintain them, it would be better for closures to be planned and matched by improvements to other retained sites that could increase their standard and hosting of the sport.

2. Competencies; Empowering Clubs

Asset transfer could be a positive policy in enabling clubs to enhance their environment. However, as Findlay-King et al. (2018) showed recently, and the thoughts of members of Clifftop FC reinforced, it has to be undertaken with a long term sustainable model in mind, which means providing assistance to the new voluntary owners, not simply removing the burden from the public purse. If clubs are to thrive they need to be able to access specific FA advice and support in relation to various matters, not just the environment, are we not to see ad hoc examples of pro-environmental activity enacted alongside continued harmful operations. The suggestion that individual clubs should produce the ideas that initiate increased pro-environmental behaviour is misplaced. The majority of challenges faced by clubs are not internal, they can only be overcome through actions by the civic and sport governing bodies.

Football needs to be examined in terms of its relationships, between the groups involved in its organisation and its place in the environment.

If the asset transfer process is managed well, however, the sense of place, and care for the environment, in those sites retained because of their development potential may be reinvigorated. The sense of role could be matched by a new found importance of the site. It lies some significant distance away, but clubs could at least be given the opportunity to account for their actions, a position that would encourage future research into this subject.

3. Meanings; A Co-ordinated Approach

Geeraert (2016), in investigating EU sport policy, notes the authority for sport decisions lies at different levels and solutions can only be generated with government policies that integrate the environment within all sport-specific objectives. Isolated advice will not work. This is the challenge for the FA, and ultimately Sport England and the UK government, if they are to make good on their claims of environmental leadership and responsibility. Pro-environmental activity must be introduced as a central theme in sport, and specifically football, development. To adapt Auf der Maur's (1976) comment on the need for an Olympic games to fit the host city and not the city to fit the games, the governing bodies should be asking how they can shape football (and indeed other sports) to match the environment and not how they can shape the environment to match the sport. Given that competitive, codified football imposes itself on the environment, the question again has to be what football is prepared to concede to be pro-environmental. This equates to what the elite minority and the leadership of the sport are willing to concede to reduce the impact of hosting football and enable the majority, the community-based club volunteers, to carry out the work needed. If the statements of intent and example in FA publications are well-intentioned then the governing body needs to add specific programmes on what it means to host community-based football to make good on the claims.

If, as appears the case with the move towards asset transfer, that non-professional sport has to become commercialised to survive amidst the current financial climate then pro-environmental practice has to be integrated as part of club viability. One of the most obvious ways to do this would be via the funding of the sport. Currently, participation drives funding, for all parties. The level of participation is, according to both Sport England and the FA's own research, linked to

facilities. Facilities have been shown by this thesis to be inseparable from environmental management. It is this link with the environment that is currently absent from funding considerations. The responsibility approach towards the environment, that the FA considers it demonstrates in case studies of Wembley, absents itself in favour of promoting pitch quality when discussing mass participation and attempts to raise standards in the sport. The FA highlights its Parklife hub scheme and artificial surfaces with no mention of the environment. The Football Foundation says car use has priority over sustainable transport. The local authority rejects proposals for solar energy and schemes with longer term returns. All of these examples, and the experience of community-based clubs with a multitude of priorities, show the extent of the challenge. Yet, as Urry (2010a p194) we cannot carry on "with business as usual".

The existing models of community football club ownership and management appear fundamentally broken and require replacing. The current mix of historical, ad hoc and under-funded provision ill serves the sport let alone the environment. Reducing the number of sites for football, introducing asset transfer backed by better allocation of resources, and the Parklife programme, are a possible solution. It means challenging the existing relationship many volunteers currently have with their club sites but some would see themselves greatly empowered and others would have the burdens they find onerous removed.

Changing practices within football would be challenging as it would require FA support, and there have been repeated accusations of intransigence and out-dated thinking at the governing body by both former leaders of the organisation and members of parliament (BBC 2017). Future research could seek to assist the change process but first it feels necessary to simply add the pro-environmental debate to the academic study of football. Existing work offers neither the detail, nor the scope, that examination of the environment and football as a sport, or the relationship community-based clubs have with their environments, could provide. Practices, and the relationships between materials, meanings and competencies, at all levels of football need to be questioned and subject to broader, and potentially more radical proposals, if those involved in its organisation really want to offer leadership in the provision of an environmentally responsible sport. As the largest participatory team game, with the greatest number of facilities and most land used in the country, community-based football has the potential to be at the forefront of a new movement in how we organise sport.

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Appendices

Appendix 1 The Creation and Management of Football Pitches and the Consequences for the Environment

A number of grass species are considered to have the properties suitable for hosting particular sports, for example golf course greens may be composed of fescue (*Festuca* sp) and bent grasses (*Agrostis sp*) as their fine leaved structure aids ball roll. Football requires a grass that is tolerant of wear, grows at low temperatures, is compact and recovers well (Adams and Gibbs 2004). Disease resistance, shade tolerance and colour should also be considered as beneficial properties (FA/Institute of Groundsmanship (IOG) 2009). The most suitable provider of these is dwarf Perennial ryegrass (*Lolium perenne*) and no benefit would be gained by using any other species when pitch use is intensive (Adams and Gibbs 2004). Such a monoculture of one single grass species across an area the size of a football pitch is not a scenario that would be found without human intervention. As grass plants set seed and spread vegetatively as part of their lifecycle landscapes are subject to the fluctuations of species competition. The other grasses that would likely occur in the natural landscape differ in both their anatomy, growth habit and physiological requirements to the recommended species and left unadulterated would make for a surface of variable characteristics and suitability (Adams and Gibbs 2004). Consequently, the manager of a football pitch will seek to establish as high a content of Perennial Ryegrass on the surface as possible, even on the smallest budget. As Chernushenko (1994) highlights, the 'natural' surface of a football pitch is clearly nothing of the sort, it is shaping nature and imposing a will on it.

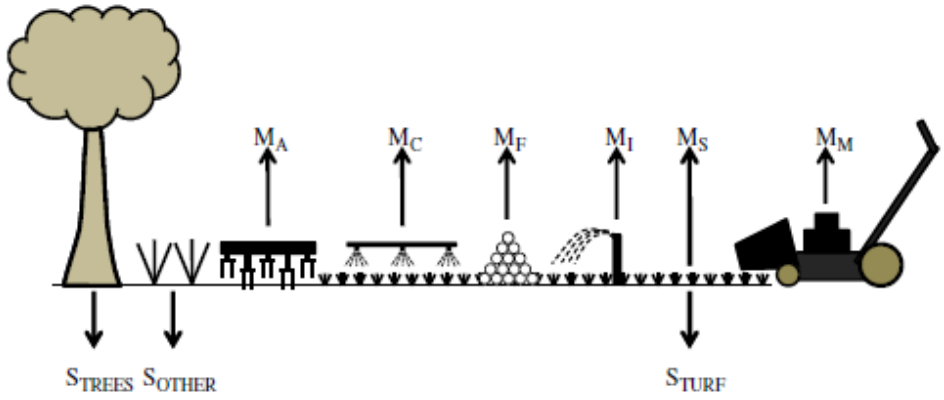
Similarly, the soil used as the growth medium for a football surface will be manipulated towards an ideal. The components of soil (minerals, air, water and organic matter) fluctuate across the landscape to leave different types of native soils on which a club tries to maintain a pitch. As soil composition directly influences the behaviour of the pitch, for example where the mineral fraction is more clay based the soil will have a tendency to retain water, compact readily, but be rich in the nutrients that grass plants require (Puhalla et al. 2010), managers will seek to alter the balance of components. A soil with a higher sand content will drain more rapidly and resist compaction better, but also experience less chemical activity compared to clay, a feature that

can impair plant growth (Beard 1973). Despite the implications for irrigation and plant nutrition the drainage potential and compaction resistance means sand is consequently considered the ideal material for football (Baker and Richards 1995) to the extent that Sport England (2011 p28) state "turf must be grown on light sandy topsoil". If the native soil is not of this composition then importing sand and altering the profile of the land is the only way to achieve this standard.

At the professional level of football when creating a pitch it is usual to remove the native soil in order to construct a rootzone rather than ameliorating the existing growing medium. This type of rootzone construction is typically modelled on what is known as a 'USGA profile', after the United States Golf Association design first introduced to aid management of golf greens more than forty years ago (USGA 2004) and contains a minimum of 70% sand. At the very highest level of football competition there may be even greater sand content in pitch constructions as well as artificial enhancements embedded in the rootzone such as Polypropylene and Elastane fibres (Mansfield Sand 2015). However, as large scale soil movement is difficult and expensive at non-professional levels of football the soil used as the base for the pitch may have to be whatever soil is native to the area of the club, managed to the best situation possible.

In order to maintain the resulting pitch to the best condition additional resources are required. A cylinder mower is advised for cutting the grass and other operations are suggested at different times of the year; scarification of the surface, aeration of the rootzone, irrigation of the grass plant, fertilising, pest and disease treatment, seeding and top dressing (FA/IOG 2009). Just one of these requirements causes multiple impacts on the environment; the relatively low recommended height of the pitch surface (25 - 35mm, FA/IOG 2009) necessitates the natural growth habit of the grass plant to be reduced, this not only removes the ability of the plant to set seed, prompting purchase of commercially produced seed, but is undertaken using machinery that typically burns fossil fuels and produces greenhouse gas emissions. Bartlett and James (2011) calculated an average figure of 8.047 litres of fuel per hectare of grass cut using a triple cylinder mower. The cutting of leaf tissue reduces the plant's ability to photosynthesise and consequently fertiliser needs to be applied to maintain turf health (the volume of fertiliser used may vary according to the type of soil under the pitch). The manufacture of fertiliser consumes energy, approximately 1.2% of world energy usage (Swaminathan and Sukalac 2004), releases carbon dioxide and other greenhouse gases. A study of carbon sequestration within intensively

managed urban turf sites (Kong et al. 2014) showed that within 5 to 24 years any carbon storage offered by the vegetation and soil was offset by the turf maintenance regimes making the sites a net provider of sources of carbon. Bartlett and James (2011) confirmed this feature of turf maintenance with their greenhouse gas emissions model (Figure 1.5) that noted how typical practices such as turfgrass thatch removal (the reduction of decaying organic matter) and the aeration process of hollow coring (extracting plugs of soil to allow gas exchange and water infiltration) combined to disrupt sequestration.



^{S}Trees	Tree sequestration of GHG
^{S}Other	Other vegetation sequestration of GHG
STurf	Turf sequestration of GHG
M_A	Emissions of GHG from turf aeration
M_C	Emissions of GHG from chemical applications
M_F	Emissions of GHG from fertiliser use
M_I	Emissions of GHG from irrigation
M_S	Emissions of GHG from basal respiration rate of microbial community in soil
M_M	Emissions of GHG from mowing

Figure A1.1 The components of greenhouse gas (GHG) sequestration/emissions from turf management (adapted from Bartlett and James 2011 p3).

Football pitch management can create a cyclical pattern of environmental problems, remedies and unavoidable consequences from hosting the sport. Machinery use compacts the surface over time requiring further mechanical operations to redress the issue. In combination with the consequences of playing football this can be a significant burden on the landscape. As the aim of football is to put the ball between the goalposts, an area 7.32m x 2.44m in the centre of each goal line at the ends of the pitch, the play that develops sees an estimated 70% of the activity occur on approximately 30% of the playing surface as a pattern of wear in each goalmouth

develops (Adams and Gibbs 2004). This was estimated at 250,000 foot imprints per ninety minute match (Adams and Gibbs 2004), which on a pitch measuring 7314m^2 is 34 imprints per m^2 per match, provides many hundreds of imprints per season on a small area. In football there are numerous rapid starts and changes of direction causing highly localised mechanical stress on the surface (Puhalla et al. 2010). A trial by Baker and Canaway (1991) showed grass cover on a pipe drained football pitch with a topsoil rootzone dropped from 88% to just 4% after a period of eight weeks simulated playing wear.

Sport England (2011) suggest an annual maintenance cost for this type of pitch of between £5000 - 10,500 (Table A1.1). By contrast the same pipe drained pitch employing sand slit drains (a mechanical intervention improving drainage characteristics) saw ground cover only reduced to 48% in Baker and Canaway's trial (1991). However, Sport England (2011) estimate the construction cost of this type of pitch as between £70,000 - 100,000 and a maintenance cost of £7500-12500 per annum. Where aeration is employed on football pitches followed by a top dressing to enhance the soil the guidelines (FA/IOG 2009) give a figure of 60 to 100 tonnes of sand being applied at any one dressing. Moreover Adams and Gibbs (2004) suggest that a sand slit drained pitch construction will not be useable beyond ten years without major renovation work. Deterioration in the ideal physical characteristics of the soil due to play and maintenance derived compaction sees not only ground cover lost but soft, slippery surfaces of untrue ball bounce and roll develop. Thus creating a football facility in the landscape could see a club incur the costs of constructing a pitch, be required to fund an annual maintenance programme and still be required to spend a large sum of money on renovating or even replacing the pitch within a decade.

Pitch type	Recommended maximum adult weekly use (hours)	Construction and/or improvement works (£)	Annual maintenance costs (£)
Undrained	Under 2	15,000 up to 45,000 (regrading)	5,000 - 10,500
Pipe drained	2 - 3	40,000 (drainage) up to 70,000 (drainage and regrading)	5,000 - 10,500
Pipe drained with mole drains	2 - 4	42,500 (drainage and mole drains) up to 72,500 (drainage, mole drains and regrading)	6,000 - 11,000
Pipe drained with sand grooves	3 - 6	72,500 (drainage and sand grooves) up to 102,500 (drainage, sand grooves and regrading)	7,500 - 12,500
Pipe drained with slit drains	3 - 6	70,000 (drainage and slit drains) up to 100,000 (drainage, slit drains and regrading)	7,500 - 12,500
Pipe drained with top soil and drainage layer	3 - 6	145,000 (drainage and reuse of topsoil from site) up to 240,000 (drainage and importation of topsoil)	5,000 - 10,500
Pipe drained with suspended water table	4 - 6	380,000 up to 510,000	10,500 - 20,000

Table A1.1; A comparison of construction and maintenance costs for football pitch types (taken from Sport England 2011 p27)

The Guidelines for the Preparation and Maintenance of football pitches (FA/IOG 2009) offer a specific breakdown of each cost for maintaining one pitch comprising an area of 6,000 m², an area already identified as a relatively small dimension pitch (Table A1.2).

Maintenance product	*Volume and Cost (£) (2008 pricing)*
Top dressing	40 tonnes required @ £40 per tonne £1,600
Grass seed	17g/m2 = 4 x 25kg bags; @ £95 per bag £380
Fertiliser	25g/m2 = 6 x 25kg bags; @ £25 per bag £150
Turf for goalmouths	6 yard (5.5m) x 8 yard (7.3m) = 40m2 £320
Top dressing for remainder of year	20 tonnes @ £40 per tonne £800
Fertiliser (second application)	25g/m2 = 6 x 25kg bags;@ £25 per bag £150
Diesel for machines	£5.20 gallon x 40 gallons £208
Sulphate of iron	4g/m2, 1 x 25kg bag, @ £12.50 per bag £13
Line marking	40 occasions £9 per full overmark £360
Overmarks	20 @ £3 each £60
Herbicides	per application for the whole pitch £100
Insecticides	per application for 1/3 of the pitch £75
Irrigation water	$36m^3$ per week x 10 weeks = $360m^3$ £522
Total cost	£4738

Table A1.2; Estimates of annual resources and costs of maintaining a football pitch ($6000m^2$) FA/IOG (2009)

Not only are the nature and dimensions of the football pitch specified, and the construction and maintenance of it highly recommended, but the aspect in the landscape is given. Suggested gradients to facilitate water runoff are 1:80 min length and 1:40 min width which will cause a gradual slope across the land, with an ideal pitch orientation to avoid glare from the sun at 285 degrees North West to 20 degrees North East in a North/South direction (FA/IOG 2009). For anyone seeking to create an environment for the sport of football there is no aspect of the process or finished surface without recommendation or order of compliance from the game's advisory and organising bodies.

FIFA's Laws of the Game also refer to non-turfgrass, artificial surfaces. There is sometimes confusion over the specific reference to these surfaces with '3G' (Third Generation), 'MUGA' (Multi-Use Games Area), 'AGP' (Artificial Grass Pitch) and 'FTP' (Football Turf Pitch) terms in popular use. They are not interchangeable and represent different things. There are three types of non-turfgrass, artificial grass pitch surface commonly available; 3G surfaces (a construction of synthetic fibres on a sand base backfilled with rubber crumb), a sand filled or dressed synthetic fibre pitch and a water based synthetic fibre pitch (Sport England 2010). There are numerous variants of these types and 4G, 5G and 6G surfaces are now being advertised (without any confirmed standard yet) but the preferred surface for football is a long pile (55-60mm fibre) 3G surface (Sport England 2010) with enforcement of FIFA's standards for games to be permissible in specified football competitions. In the National Facilities Strategy 2013-15 the FA noted (based on Sport England data) a total of 491 modern full sized artificial grass pitches and over 1500 of the older sand/water based pitches in England.

To be awarded a FIFA recommendation a pitch design must be tested against numerous criteria (for example durability, player/surface interaction and strength) both in the laboratory and when installed. There are two levels that can be awarded and the FA has determined that "where sanctioned by the competition rules, 3G Football Turf pitches may be used in FA competitions, as long as the pitch is listed on the FA's Register of 3G Football Turf Pitches" (FA 2012a). To continue to use the approved pitch it is necessary for it to be retested every three years in accordance with FA requirements (based on the FIFA Quality concept and IATS).

FIFA claims that the new generation of artificial surfaces are easier to maintain, require less time to manage and provide fewer costs than natural grass fields. They add that a near permanent availability of twenty four hours per day, seven days a week reduces the need for playing surfaces. This would seem a positive suggestion towards reducing the impact on the landscape of natural turf based resource use but rather overlooks the likely times of both supply of, and demand for, the artificial surface. Nor should these surfaces be considered 'all-weather' (James and McLeod 2008) as they can be unavailable if frozen for example. The FA does not engage in such hyperbole and instead seeks to counter a number of what they describe as "myths" (FA 2012a p3) in their information for clubs. Particularly they note; that the game does

not change significantly whether played on natural grass or 3G football turf surfaces, there is no significant difference in the types and number of injuries between natural grass and 3G football turf surfaces (unspecified FIFA commissioned research) and that 3G football turf pitches need a regular maintenance schedule (approximately 1 hours maintenance for every 10 hours of use). The FA particularly emphasise the latter point about management of the facility, that clubs "make their own risk assessment of whether long term compliance with the FA competition rules is realistic given their individual circumstances. In particular they need to consider the need to retain a level of performance that meets the exacting standards of FIFA One Star certification verses the risk of deterioration in performance through the high levels of use and or inadequate maintenance often associated with community use" (FA 2012a p7).

Not only should clubs consider the future status of the pitch, James and McLeod (2008) report that a Cranfield University study in 2003 found that average annual expenditure on synthetic turf maintenance amongst independent schools was £8000 per pitch, compared with £7500 for natural turf. Maintenance would typically include brushing with machinery, replenishing the infill and cleaning, which alongside possible floodlight energy use and the manufacture of the pitch and rubber crumb produce ecological impacts. This suggests that replacing natural turf with a 3G surface is not a panacea for resolving the environmental cost of football. However, the James and McLeod (2008) study adds that the 2003 findings revealed the typical weekly usage of the synthetic turf to be 44 hours compared with 4.1 for natural turf. This could of course be a function of respective pitch locations rather than type but the FA estimates a full size floodlit artificial grass pitch can accommodate the training needs of up to 60 teams a week (FA 2013). Maintenance on a per hour of use basis is thus significantly lower for synthetic turf. Moreover, a modelled scenario suggests a 15 year old, well maintained synthetic pitch, used for 2000 h/yr (of which 1000 h/yr are rented externally), would return £133,000 over its lifecycle (James and McLeod 2008). Both environmentally, financially and in participatory terms a 3G surface looks of significant value, and the FA Chairman's England Commission (FA 2014) noted the link between development of young players and access to such surfaces. However, the cost, both in monetary and ecological terms, of replacing 1500 unsuitable sand and water based pitches could clearly be considerable and even more so to bring the number in England (491) on a par with Germany, a nation highlighted as a model by the FA Chairman's England Commission (FA 2014). Germany has 3735 artificial pitches.

It is also of note to examine the debate about the health and ecological costs of artificial surfaces. Whilst modern artificial turf may offer "improved safety, playability, appearance, durability, with lower annual operating costs and maintenance requirements" (Cheng et al. 2014 p2114) there have been sufficient concerns regarding the possible impact of the product on human health and the environment as to warrant a number of studies (Toronto Public Health 2015). Serensits et al. (2011) examined claims concerning the impact on participants of surface temperatures of synthetic pitches. They found that the average temperature of a range of trial constructed non-turf sport surfaces was 20 degrees Celsius higher than that of an adjacent natural turf field. However, they described their data as erratic and noted how results could be influenced by cloud cover, more so than the practice of applying water to the synthetic pitches. Nonetheless they concluded that sports organisers should note the heat levels and consider adjusting playing schedules to limit exposure to the higher temperatures. This finding was echoed by the Toronto Public Health review (2015 p7) that noted the increased surface temperatures of artificial turf may increase the risk of heat related illnesses and injuries, particularly for younger players, yet they concluded "playing on third generation artificial turf does not result in a higher risk of injury than playing on natural grass". Serensits et al. (2011) also addressed suggestions that artificial turf may harbour the *Staphylococcus aureus* bacteria and lead to user infection. Testing 20 sites they found no evidence of the bacteria on any playing surface yet did find *Staphylococcus aureus* colonies on equipment generic to many sports environments such as towels and weightlifting equipment. A field trial by McNitt & Petrunak (2011) examining the survival of *Staphylococcus aureus o*n both natural and artificial turf found the rates to be comparable.

Cheng et al. (2014) addressed both the health and the environmental impact of artificial surfaces via a critical review of existing work. Noting that artificial turf has been in existence since the 1960s and the potential savings on water and fertiliser use Cheng et al. (2014) expect manufacturers to keep improving the environmental benefits offered by the product. It is, they believe, widely accepted that artificial turf is "an ideal replacement for grass playing surface in cases where natural grass cannot grow, or where maintenance of natural grass is expensive or undesired" (Cheng et al. 2014 p214). Noting the particular concerns of the creation of rubber infill made from discarded tyres in some surfaces (itself promoted as an environmental benefit

over alternative means of disposing of the tyres) and the artificial plastic fibres of the surface Cheng et al. (2014) dismissed the health risks as insignificant. Regarding the potential pollution from the degradation of the rubber they concluded that the concentrations of hazardous substances in drainage water from artificial surfaces and those in the atmosphere around them were sufficiently low to be of no significant concern. The production and transportation of artificial turf is highlighted as releasing large amounts of greenhouse gases, with a largely non-recyclable entity at the end of its lifespan but natural turf's maintenance emissions and associated management product ecological costs are similarly noted. The conclusion of the review is generally very positive for artificial turf, nonetheless Cheng et al. (2014) believe results may vary across locations, and importantly the types of infill material, with the cumulative impact of the release of contaminants and heavy metals over the lifetime of the surfaces may potentially be of greater significance.

The Toronto Public Health (2015) review considers additional aspects of the debate, a city wide, environmental landscape view rather than individual site or product testing outcomes. Natural surfaces they believe are important features, not only for their potential to act as carbon sinks, rainwater absorbing areas and counterbalances to what they call "urban heat islands" (Toronto Public Health 2015 p23) but they reduce light and noise reflection and offer "restorative qualities" (Toronto Public Health 2015 p48). Yet they note the lack of research comparing different types of green space and whether these benefits may be achieved by hosting a community garden in place of a grass football pitch. Also of significance was the potential access to play for children from communities of lower socio-economic status offered by each type of surface. Artificial turf's greater capacity for hosting events is of note but not if the costs of use, or location of facility, exclude sections of the population. Clearly the considerations go beyond a scientific measurement of inputs and outputs.

Appendix 2 The FA's Step 7 minimum ground grading guidelines

1. Ground

1.1 security of tenure

Where a club does not own the freehold of their ground then evidence of adequate security of tenure must be provided.

1.2 ground share

Ground sharing would be at the discretion of each league within the national league system, taking into account local circumstances. Where ground sharing is permitted the club must have sole control over and use of facilities on match days. Ground sharing must not be allowed in order for a club to gain promotion.

1.3 capacity

There is no stated ground capacity.

1.4 boundary of ground

There is no requirement for a ground to be enclosed in any way.

1.5 clubhouse

A clubhouse facility, whilst being desirable, is not compulsory. If a clubhouse facility exits either on or adjacent to the ground, this should be open on match days to provide refreshments to spectators.

1.6 car parking

There should be adequate car parking facilities on or adjacent to the ground.

1.7 pitch perimeter barrier

As a minimum, there must be post and rope surrounding the pitch on all those sides that may be occupied by spectators. The barrier, if other than solid wall type of construction may be infilled. Advertising boards may be acceptable as a means of infill. Ideally, there should be a minimum of 1.83 metres, ideally 2 metres between the touchline, goal line and the pitch perimeter barrier.

1.8 pitch standards

The playing surface will be grass, unless otherwise authorised by the respective league rules and must be of an acceptable standard. It must be free from surface depressions and excessive undulations. The maximum slope allowable shall not exceed an even gradient of vertical to horizontal 1 : 41 in any direction.

1.9 playing area

The playing area is to be in accordance with the requirements of the laws of the game. Law 1 states that the length of the touchline must be greater than the length of the goal line.

Length - minimum 90 m (100 yds) maximum 120 m (130 yds)

Width - minimum 45 m (50 yds) maximum 90 m (100 yds)

It should be noted that at grade h the playing area must be a minimum of 100 metres x 64 metres.

Goal posts and goal net supports should be of professional manufacture and conform to the current safety requirements and to the requirements of the laws of the game. Reference should be made to the goalpost safety information booklet published by the football association.

1.10 technical area

Portable trainers' boxes are permitted and must be securely fixed when in use.

It is desirable for a technical area to be marked out in accordance with the guidance contained in the 'laws of the game' booklet.

1.11 secure walkway

A secure walkway is not a requirement.

1.12 floodlighting

Floodlighting is not compulsory at this grade.

However, where it is provided it must be to an average lux reading of 120. No single reading can be less than one quarter of the highest reading so as to ensure an even spread of light. Reading shall be on a grid of 88 markings (8 across, 11 down) evenly spaced with the outside readings falling on the pitch boundary line. The average of all the readings is taken to be the average illumination level in lux of the floodlighting installation. The lux values must be tested every two years in accordance with current guidelines by an approved independent contractor. When new or improved installations are being planned, an average lux. Reading of 180 should be provided.

1.13 public address system

A public address system is not compulsory.

1.14 entrances

There is no requirement for fixed entry points. However, where a turnstile is installed, it must be fully operational and of the controlled revolving type.

1.15 exits

Where fixed exit points are provided, there must be sufficient to ensure the safe evacuation of the ground if necessary. All exits must be clearly signposted.

1.16 emergency access

Access for emergency services should be provided.

2. Spectator facilities

2.1 seated accommodation

Seated accommodation is not a requirement.

2.2 covered standing accommodation

Covered accommodation is not compulsory.

Hard standing is not compulsory.

However, where it is provided it must be a minimum width of 0.9 metre, measured from the spectator side of the pitch perimeter barrier where provided.

2.3 toilets

Provision should be made for adequate toilet facilities.

2.4 refreshment facilities

Refreshment facilities for spectators are not compulsory.

3. Dressing room facilities

All dressing rooms must be secure and suitable for purpose.

3.1 players

Separate dressing rooms must be provided for both teams. Existing dressing room dimensions will be in order, provided that they are of a minimum of 12 square metres, excluding shower and toilet areas.

However, clubs wishing to progress should be aware of the need to increase to a minimum of 18 Square metres. Where clubs are planning to build new changing rooms, these must be planned to be a minimum size of 18 square metres, excluding shower and toilet areas.

Each dressing room should have the following:

A shower area comprising of at least 3 working showerheads for each team – if not located in The dressing room then they must be located adjacent to it.

Adequate toilet facilities exclusively for the use of players - if not located in the dressing room, then they must be located adjacent to it and must not be accessible to the general public.

Hot and cold running water

Shared shower facilities are not acceptable.

Ideally separate toilet facilities should be provided for each team. It is not acceptable for players and match officials to share toilet facilities.

In order to be considered for promotion to step 6, clubs must have en suite shower and toilet facilities with a minimum of 4 showerheads.

3.2 match officials

Separate dressing rooms must be provided for match officials, the minimum size of which shall be 4 square metres excluding shower and toilet areas.

Each match official's dressing room should have the following:

At least 1 working showerhead.

Adequate toilet facilities, exclusively for the use of match officials, which must be separate From those provided for the players. These do not necessarily need to be situated in the Dressing room but must not be accessible to the general public.

Hot and cold running water

Provision should be made for changing accommodation for both male and female match officials.

When new changing rooms are being planned or existing changing rooms refurbished an area of 6 square metres and facilities for mixed gender match officials should be provided.

In order to comply with the g grade after promotion to step 6, clubs must provide en suite shower and toilet facilities for the match officials.

All dressing room areas to be maintained to a high level of cleanliness and secure on match days.

4. Medical

There must be a suitable qualified person (minimum FA save a life) in attendance.

All clubs must provide first aid equipment at their ground.

[Available at http://www.thefa.com/my-football/club-leagues/ground-grading] (accessed 6.10.15)

Appendix 3 The Institute of Groundsmanship Performance Quality Standards Measuring System

1. Structural Quality

Performance Standard	Quality Standard		
	High	**Standard**	**Basic**
A. Herbage			
i) Length of herbage during the growing season	25 to 40mm	25 to 50mm	30 to 60mm
ii) Length of herbage during the non-growing season	20 to 40mm	20 to 60mm	20 to 70mm
iii) Bare area.	Max. 10%	Max. 15%	Max. 25%
iv) Total ground cover	Min. 90%	Min. 85%	Min. 75%
v) Desirable grass species	Min. 80%	Min. 70%	Min. 60%
vi) *Poa annua*	Max. 10%	Max. 20%	Max. 30%
vii) Other undesirable grass species	Nil	Max. 5%	Max. 10%
viii) Weeds - Large-leaved	Nil	Max. 2%	Max. 10%
ix) Weeds - Small-leaved	Nil	Max. 5%	Max. 5%
x) Moss	Nil	Nil	Max. 2%
xi) Algae and Lichen	Nil	Nil	Nil
B. Pests and Diseases			
i) Diseases	Nil	Max. 2%	Max. 2%
ii) Earthworms	Max. 1%	Max. 5%	Max. 10%
iii) Pests	Nil	Nil	Max. 2%
C. Profile			
i) Root depth	Min. 150mm	Min. 100mm	Min. 75mm
ii) Thatch depth	Max. 5mm	Max. 10mm	Max. 15mm
iii) Rootzone medium	Min. 200mm	Min. 150mm	Min. 100mm
iv) Rootzone silt &clay content	Max. 6%	Max.17%	Max. 25%
v) Infiltration rate (only measured during the autumn/winter period)	Min. 10mm/hr	Min. 5mm/hr	Min. 2mm/hr
vi) Evenness using a 2m straight edge	± 15mm	± 18mm	± 25 mm
vii) Evenness using a 0.5m straight edge	± 8mm	± 10mm	± 12mm

viii) Soil pH	6.0 - 7.0	5.8 - 7.5	5.8 - 7.5
ix) Soil nutrient level: P_2O_5	Index 2	Index 2	Index 2
x) Soil nutrient level: K_2O	Index 2	Index 2	Index 2
xi) Gradient: Length ways	Greater than 1:200	1:200 – 1:100	1:100 – 1:80
xii) Gradient: Across the pitch	1:150 – 1:100	1:100 – 1:80	1:80 – 1:50

2. Presentational Quality

Performance Standard	Quality Standard		
	High	**Standard**	**Basic**
i) Appearance	100% uniform texture	Min. 90% uniform texture	Min. 70% uniform texture
ii) Surface debris	Nil	Nil	Nil
iii) Sward colour	100% uniform	90% uniform	70% uniform
iv) Pitch line markings	Visible from a min. 60m	Visible from a min. 45m	Visible from a min. 30m
v) Goal posts (see note below)	a) Uprights b) Crossbars	a) Uprights b) Crossbars	a) Uprights b) Crossbars

Goal posts note:
(a) Uprights are to be at right angles to the surface of the pitch (taking into account the gradient of the pitch).
(b) Crossbars are to be at right angles to the uprights.

3. Playing Quality

Performance Standard	Quality Standard		
	High	**Standard**	**Basic**
i) Ball roll	7 to 10m	4 to 12m	2 to 16m
ii) Hardness	65 to 120 gravities	55 to 140 gravities	35 to 200 gravities
iii) Traction	Min. 40 Nm	Min. 30 Nm	Min. 20 Nm
iv) Vertical ball bounce	32 to 42%%	25 to 45%	20 to 55%

Appendix 4 Research Stage Timing and Participation Numbers

Research Stage	Timing	Participants
Pilot Interview outside of North Country	Sept Year 1	Club volunteer (n=1)
Semi Structured Interviews in North Country	Sept Year 1 - Jan Year 2	Club volunteers (n=11 + group session) Local authority employees (n=5)
Participatory Action Research Developing Relationship	Feb Year 2 onwards	Clifftop FC volunteers (n=43)
Participatory Action Research Consultancy	Mar Year 2 - Jan Year 4	Clifftop FC Tom and senior volunteers (n=6)
Participatory Action Research Interviews	Sept - Oct Year 2	Clifftop FC volunteers and parents of players (n=9)

Appendix 5 Semi-Structured Interview Templates

For Club Volunteers

About the Club	
Club ID number;	Person ID;
Date	
Time	
Location if not club site	
Please just confirm information about interview process has been read and consent given	
Held with (position) What that role entails Length of volunteering Reasons	
Years active (club)	
FA affiliation	
Ground and tenure	
Are you a CASC?	
Management structure	
Membership fees	
No. of Sr/Jr teams and fixtures	
No. of pitches	
Any other information relevant to club status?	
PEA - personal	

Are you familiar with any aspects of Pro Environmental Activity? What are your thoughts regarding PEA? Do you do anything outside of the club relating to PEA? If you wanted information on PEA do you know who you would approach?	
Grounds activity - Opportunities	
Playing surface management What is the history of the site? Who manages pitches? Do you know anything about pitch activities? Cultural; Water; Chemical; Storage; Disposal; Costs? Fixture/Pitch Issues?	
Facilities - Opportunities?	
Clubhouse?	

What is the history of buildings? Who manages them? Costs?	
Do you know of any energy & saving measures?	
Do you know of any water & saving measures?	
Do you know what happens with waste? (incl transfer notes)	
Do you have any flood issues?	
Transport (onsite and to away games)	
Any other relevant information?	
Causes of PEA - Challenges?	
What are the key determinants of club activity?	
What are the club ambitions?	

Relating to PEA do you think there is more you could do?	
If so; What would help you?	
What is stopping you ?	
What are your views on AGPs? (Parklife?)	
Can football pay for itself?	
Should clubs collaborate or even merge to pool resources?	
Is there anything else you would like to add?	

For Local Authority Employees

About the LA	
LA ID number; Person ID;	
Date	
Time	
Location if not LA site	
Please just confirm information about interview process has been read and consent given	
Held with	
What does that position entail?	
Facilities	
The Active Places Power Database provides these number of facilities for the local authority (n=x) - are these accurate?	
Do you know how many are L.A owned/controlled?	
Is there a difference between sites of similar status? ie. are some sites managed by the club despite being owned by the L.A?	
(If the interviewee is aware of pitch maintenance) How do you organise management of pitches? - eg. is it on rota? or as they are booked?	

What activities do you undertake on pitches?	
Environment	
How is sport/football integrated with council environmental plans?	
FA National Facilities Strategy	
p9 "*The FA has always recognised the important role that local authorities and schools play in supporting the National Game and over recent years we have started to work much more closely with these partners in helping to identify and support local priorities for football."* How/Have they done this?	
p15 "*The FA recognise that with more than 30,000 affiliated adult 11v11 teams, large local authority based multi-pitch sites will be important in sustaining the game. The FA will invest more time working with local authorities to help identify those sites considered to be the most important priorities for improvement. This will involve closer involvement in the development of new playing pitch strategies and planning work with local authorities to ensure that investment decisions can be co-ordinated to ensure the greatest possible*	

outcomes for football." Has this happened? Are you involved in the organisation of the playing pitch strategy?	
p19 "*Opportunities for clubs to take on long-term leases and acquire football facilities through 'asset transfer' will increase over the coming years. This process will present many clubs with a good opportunity to set down roots and develop a permanent base."* Is the local authority looking at asset transfers?	
p21 "*Local Authorities will seek to improve the efficiency of their footballing facilities and look increasingly (especially in urban areas) towards central venues and central footballing hubs with concentrated and sustainable activity. This, in time, may open opportunities for clubs to take on longer term leases from local authorities on smaller sites*." Has this happened? Are you looking at centralised hubs?	
Challenges	
The 2011 football survey noted 84% of respondents said 'poor facilities' were the most pressing issue. Do you have challenges with pitches/buildings?	

p21 FANFS "*Football will remain a low-cost sport*" (for players) How much does football cost the local authority? Is this expensive?	
Future	
Do you/the LA have a preference for natural turf or AGPs?	
What are your thoughts on the Parklife Hubs idea?	
Is there any other relevant information you would like to add?	

Appendix 6 FA Charter Standard Criteria

For Application:

• Have a designated FA Charter Standard Co-ordinator

• To be formerly constituted

• Require a set of recent Committee meeting minutes

• Be affiliated to a County FA

• Have at least one team playing in an FA sanctioned League

• Have a bank account in the club's name

• Provide a balance sheet and profit and loss account

• Have a Club Equality Policy

• Implement The FA Respect Codes of Conduct

• Have a club link to recruit and/or progress players

• A good disciplinary record

• Club officials with clear job descriptions

• A minimum of 90% of all coaches to be members of the FA Licensed Coaches Club

• A Club Safeguarding Policy

• All Team Officials to have an FA Enhanced CRC check

• Minimum of one FA Level 1 coach with an in-date FA Emergency Aid and Safeguarding Children certificate with every team

• Minimum of one FA Youth Award Module 1 coach for every four teams

• Coach:Player ratio of 1:16 max

Annual Commitment:

• Complete the annual health check

• First aid kit at all training sessions and fixtures

• Organise an FA Respect briefing for all officials, managers and spectators

• Attend one County FA in service event

• If the senior team plays in the National League System (steps 1-7) one coach to attend a six hour or two, three hour coaching workshops annually.