

Sporting Capital Resource Sheet 11¹

Sporting Capital – testing and applying the theory - future research requirements

Introduction

This Resource Sheet¹ sets out a possible research agenda to further test and develop the theoretical concept of Sporting Capital. The theory of Sporting Capital is a new one. Like any good theory it needs to be road tested and challenged by empirical evidence. The analysis presented in these Resource Sheets has moved the evidence on by using a large scale cross sectional dataset (the Active People Survey) to establish markers of Sporting Capital across the adult population. The construction of a Sporting Capital Index and the population and social group analysis it has supported shows that the concept can be operationalised and provides strong evidence of a relationship between Sporting Capital and participation rates in sport. The evidence also supports a social stratification of levels of Sporting Capital with expected variations by age, gender and social class. This Resource Sheet discusses how further research designs are needed to test other aspects of the theory around for example sustained behaviour change and the ability to build levels of Sporting Capital through public policy intervention.

What is Sporting Capital?

Sporting Capital is analogous to the theory of Human Capital and may be defined as:

“The stock of physical, social and psychological attributes and competencies that support and motivate an individual to participate in sport and to sustain that participation over time”.

It is a theory that can help us to better understand and explain sporting behaviour across individuals, communities and populations. More information about the nature of Sporting Capital and its important characteristics is provided in [Sporting Capital Resource Sheet 1](#)

A future research agenda for Sporting Capital

The research agenda to further test and develop the concept of Sporting Capital may be split into three areas: a) further refinements and development of the population wide measures and construction of the Sporting Capital index; b) longitudinal survey designs to explore

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changes in Sporting Capital levels over the life course; and c) impact studies to explore the effectiveness of public policy intervention in building Sporting Capital levels. These three areas of research should not be seen in isolation but as an integrated strategy for research with the outcomes from each informing the research design in other areas and the results synthesised to provide a body of evidence. The research should include quantitative and qualitative designs to provide both statistical rigour and a depth of understanding of individual experience, process and outcomes.

Further refinements and development of the population wide measures

Translating Sporting Capital from a theory into a measured set of characteristics and attributes is difficult. The research reported in these Resource Sheets provides one way of measuring Sporting Capital. The measures are considered to be 'markers' of Sporting Capital and in combination create an Index that defines for any given individual their level of Sporting Capital on a scale from one to 10. The results are encouraging, providing internal consistency and associations that are in the most cases in the direction and magnitude that the theory would predict. However, although the measures included in this approach were drawn from previous research designs and in some cases validated scales – it is recognised that this is only one way of measuring Sporting Capital. Experience has shown that some of the measures seemed to work better than others and that there is potential for further refinements to the question design that could usefully be explored and tested in future cross sectional survey data such as that provided by the Active People Survey.

In creating the Sporting Capital Index decisions were taken on the preferred modelling approach. Again the outcome provided results that were plausible and consistent with theory expectations. However, alternative approaches may be possible that would either challenge or reinforce the existing profiles and associations and may be worth exploring further.

The current set of question items used to measure Sporting Capital work well in a large scale interviewer administered household survey but are not ideal for application where either survey question space is limited, alternative survey modes are required – such as telephone or online - or where respondent burden must be limited – for example in impact evaluation settings. Some preliminary work has been carried out to test and develop a 'short question' format for measuring Sporting Capital. This research could be further developed most economically by using the existing data collected from Active People or by the inclusion of questions in new survey approaches.

The current measures of Sporting Capital have been limited to adults aged 16 years and over. A crucial and unexplored aspect of the theory concerns Sporting Capital formation and

development amongst the young – with the theory predicting that early life experiences and socialisation processes are critical in forming and shaping Sporting Capital. Measuring Sporting Capital amongst the young – particularly those aged under 11 years - poses research challenges. It is likely that a combination of qualitative and quantitative methods would need to be applied – and it is suggested that initially this research should take an exploratory form to better understand the meaning of Sporting Capital as it applies to young people and potential ways of measuring it. A particular area that would benefit from further research is around the development of sporting skills. Current measures are respondent defined and hence subject to cultural and social pressures that affect perceptions. Research is required to obtain more objective measures of sporting competencies and skills, particularly amongst the young, when fundamental sport related skills are shaped and established.

Sporting Capital has many similarities to human capital in both its definition and attributes. The theory also predicts that there are elements of transferability between Sporting Capital and human capital. The most obvious link is between Sporting Capital, volunteering and future employment prospects. Initial research using the Active People Survey dataset could explore this relationship by establishing how levels of voluntary activity in sport are associated with different levels of Sporting Capital. Further exploration of links to future employment would need to adopt a longitudinal research approach (see below)

The theory of Sporting Capital is concerned with the attributes and competencies relevant to an individuals' capacity to take part in sport. The probability of participating is predicted by a combination of both the level of Sporting Capital and the external barriers that constrain participation (**see Resource Sheet 9**). We now have measures of Sporting Capital (the Index) and participation behaviours (type, frequency, intensity and duration) but as yet no validated measure of a 'sporting barrier index' exists. To create such a measure may pose even more challenges than creating the index for Sporting Capital but it is worthy of further exploratory discussion.

The relationship between participation in different types of sport and levels of Sporting Capital was explored in **Resource Sheet 6**. This a potential fruitful area for future research that could initially build on the current analysis using the Active People dataset.

Variations in the levels of Sporting Capital are touched on in **Resource Sheet 3**. An interesting area for future research would be to explore the extent to which Sporting Capital levels do vary internationally – and their correlation with variations between countries in the levels of participation in sport.

Longitudinal survey designs to explore changes in Sporting Capital levels over the life course

By its nature Sporting Capital is a dynamic, fluid concept. The theory predicts that Sporting Capital levels are durable but can change – either appreciate or depreciate – over time. Sporting Capital levels are impacted by education and sporting experiences – both good and bad – but also by the inevitable ageing process, changes in health status and changes in family relationships and friendship networks. External environments and context is also important with changes in participation behaviours taking place through a complex interaction of Sporting Capital levels (affecting motivation) and the barriers and constraints that restrict opportunities.

The only way this dynamic process can be explored fully is through a longitudinal research design which follows the same individuals over time. The longitudinal design can take the form of a large scale population panel survey or smaller scale panels linked to project and programme evaluation (see below). A mixed cohort research design would allow Sporting Capital levels to be measured over the life course and when linked to actual measures of participation behaviours could explore the theoretical proposition that people with higher levels of Sporting Capital are more likely to return to sport following period of drop out than those with low levels. Longitudinal research could also explore the rate of depreciation of Sporting Capital with inactivity and age – and how quickly it can be re-built with renewed activity. Research could also explore how life transitions interact with Sporting Capital to affect participation behaviours.

Impact studies to explore the effectiveness of public policy intervention in building Sporting Capital levels

The critical question that policy makers and practitioners are interested in addressing is 'can we intervene in cost effective ways to build Sporting Capital levels to increase current and future sustained participation in sport?' The ideal research design to address this question is an experimental one using a randomised control trial (RCT). In a RCT the eligible population is assigned at random either to an intervention group or to a control group. The control group is denied the programme and treated, as far as is possible, as if the programme did not exist. This kind of research is the 'gold standard' and has many practical limitations.

An alternative approach to the above – but still an experimental one - is to use a matched area comparison design. In this design, a new programme or policy is piloted within a small number of selected pilot areas (typically about 10). These areas are then matched to a set of 'control' areas, usually, although not always, on a one-to-one basis. The control areas are

carefully selected to match the pilot areas on a range of relevant characteristics such as social class, population density, age profile, levels of employment etc. This approach is only relevant if the intervention is widespread across the community and not limited to a small number of contained projects.

A third and usually more realistic approach, is to use a programme evaluation research design which would explore both process and outcomes over time usually within the framework of an agreed logic model. Measures would be taken both before, at intervals during and after the programme. This kind of design has inevitable limitations in terms of measuring cause and effect due to the fact that there is no control group. However, a combination of quantitative and qualitative measures can be used to build the evidence that would support not only the achievement of outcomes but also indications of what types of approaches work best and in what context. In this case we would establish levels of Sporting Capital of participants recruited to the programme, their exposure to different aspects of programme intervention and experience of it, any observable/measurable changes in Sporting Capital during the programme, changes in the frequency, type and intensity of participation over the programme period and ideally a post intervention follow up to establish sustained behaviour change associated with increases in Sporting Capital.

Conclusions

Sporting Capital as a theory is in its infancy. The research that has informed these Resource Sheets provides promising results – but it is very early days. If Sporting Capital is to fulfil its potential as a guiding and influential framework for public policy and sport development further research is required. Much of this research could be incorporated into existing commitments for programme evaluations. However, other major new areas of research are needed that reach outside the existing frameworks for programme evaluations to include for example large scale survey methods and experimental research designs. These come at some cost – but the potential prize of a sound well tested theory that can underpin public policy to ‘shift the curve’ of participation in sport is a big one that could more than justify the significant investment required.

ⁱ This is the final ‘Sporting Capital Resource Sheet’. The Resource Sheets are organised in way that move from the general to the more detailed and specific. The common thread is the theoretical concept of Sporting Capital and its application to public policy and practice.

Each individual Sheet has been designed to be freestanding and to make sense in its own right – the series of Sheets has been designed to provide a logical progression that builds knowledge and understanding about Sporting Capital, its characteristics, the relationship it has to participation in sport, its distribution in the population, its variation across different social groups and its potential to influence and shape future sports policy and practice.

The Sheets have been purposefully designed to be succinct and selective rather than long and comprehensive. Each should leave the reader with an interest to think further about Sporting Capital as an idea and what it may mean for their work in sports development whether at the higher strategic levels of policy making or delivering localised programmes on the ground.

All the analysis in the Sheets draws from empirical data collected by Sport England's Active People Survey (6). The analysis in these Resource Sheets is carried out on the household survey sample collected in APS6 (October 2011 to October 2012) of the APS6 survey period. The sample size used in this analysis was 4,527 cases. For more information about the methodology see the full Technical report available from StreetGames.

These Sheets build on earlier thinking and analysis in work carried out for StreetGames and available in the following publications:

Sporting Capital – a new theory of sport participation determinants and its application to 'Doorstep Sport' Nick Rowe, Sport Research Consultant, September 2012, A report commissioned by StreetGames

Part 1. What is Sporting Capital and how can its principles be applied to create a new generation of sustained sports participants?

Part 2. The Sporting Capital Index – exploring the levels of Sporting Capital in the English population and its variation across different social groups.

The following Sheets are available in this series:

Sporting Capital Resource Sheet 1: Sporting Capital – what is it and why is it important to sports policy and practice?

Sporting Capital Resource Sheet 2: What is the relationship between Sporting Capital and participation in sport and why does it matter?

Sporting Capital Resource Sheet 3: Are we a sporting nation – what are the levels of Sporting Capital in England?

Sporting Capital Resource Sheet 4: Sporting capital and gender – mind the gap

Sporting Capital Resource Sheet 5: Sporting capital and inequality – does social class make a difference?

Sporting Capital Resource Sheet 6: To what extent do levels of Sporting Capital impact on the frequency of participation and vary by the type of sport people play?

Sporting Capital Resource Sheet 7: Sporting Capital and ethnicity

Sporting Capital Resource Sheet 8: Sporting Capital amongst the young – a focus on 16 to 25 year olds

Sporting Capital Resource Sheet 9: Sporting Capital - why it is important to public policy – a strategic perspective

Sporting Capital Resource Sheet 10: Doorstep Sport - building Sporting Capital to increase participation in sport – applying the theory to practice