

Sport and Social Inclusion: Evidence from the Performance of Public Leisure Facilities

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Abstract In the UK, sport is increasingly recognized as a means for promoting social inclusion. However, evaluation, to date, is limited with regard to the achievement of social inclusion through sport. Based on the database of Sport England's National Benchmarking Service, this paper aims to investigate the extent to which public leisure facilities were used by socially disadvantaged groups in England over the past 10 years. The statistical evidence demonstrates the consistent pattern of numerical under-representation of the most disadvantaged socio-economic group and people aged over 60 years. Furthermore, there were significant and linear decreases in participation of young people aged 11–19 years and disabled people aged under 60 years. Finally, facility type and management type were found to be the main sources of performance gaps in certain indicators. In spite of these findings, further research is still required to investigate whether under-representation and the deterioration of performance are due to constraints or preferences.

Keywords Social inclusion · Sport · Leisure facilities · National Benchmarking Service

1 Introduction

In the UK, sport is increasingly recognized as a means for promoting social inclusion. It has been a strong tradition in UK local authorities' leisure provision, with 'Sport for all' policies tending to be interpreted as increasing opportunities for socially and recreationally disadvantaged groups (Gratton and Taylor 2000). Recently, with the publication of *Bringing Britain Together* and the 18 Policy Action Team (PAT) reports, including one on sport and the arts, the government required all the agencies and Lottery funds it oversaw to have a policy for combating social exclusion. The PAT for Sport and the Arts (PAT 10) suggests that sport can contribute to neighborhood renewal by improving communities' performance on health, crime, employment and education (DCMS 1999). Within the

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general purview of social inclusion, institutions have been exhorted to develop policies for sport that can assist in embracing sectors of society that generally have been considered to be under-represented in such activity (Curry et al. 2001). However, evaluation, to date, is limited with regard to the achievement of social inclusion through sport.

In England, swimming pools and sports halls are at the heart of local authority community leisure facility provision and a high proportion of local authority leisure expenditure goes on them. These public leisure facilities are provided by local government at subsidized prices. This is either because of a social equity concern to provide equal opportunities for all citizens irrespective of financial resources or because of presumed associated benefits (i.e. externalities) such as improved health or reduction in vandalism. In the case of social equity the assumption is that for many social groups the entrance cost is a major obstacle to participation and that the market would not provide a socially just distribution of opportunities (Coalter 1993, 1998). For equality of opportunity to exist for all, it is important that barriers are removed and opportunities maximized. One way is to measure how representative facility usage is.

The National Benchmarking Service for Sports Halls and Swimming Pools (NBS), provided for Sport England by the Sport Industry Research Centre at Sheffield Hallam University, is an appropriate tool to assess how representative public leisure facility usage by priority groups is. The NBS provides a set of performance indicators and benchmarks covering a broad range of performance dimensions, which allows individual facilities and authorities to select indicators appropriate to their different needs, circumstances and priorities. The indicators provided by the NBS fall into four groups: access, utilization, financial and service quality. In the NBS, social inclusion is measured through a set of indicators in a performance dimension labelled as ‘access’, representing the extent to which facilities are used by disadvantaged groups, particularly in the context of social inclusion (Taylor and Godfrey 2003).

Based on the NBS database, this paper aims to provide the evidence related to the outcomes of the participation of socially disadvantaged groups in public leisure facilities. Particular attention is paid to the measurement of how representative facility usage is and the trend of participation over the past 10 years. In the second section the theoretical context of sport and social inclusion and the measurement approach is examined. Research data and analytical approaches are described in the third section. Research findings are shown in the fourth section. The implication and conclusion are drawn in the final section.

2 Theoretical Context

2.1 Sport and Social Inclusion

The concept of social inclusion emerged in the context of the European social policy debates of the late 1980s in reference to overcoming the issue of social exclusion (Wilson 2006). As proposed by Berman and Phillips (2000, p. 332), “social inclusion/exclusion is connected with the principles of equality and equity and the structural causes of their existence. The goal is a basic level of inclusion with help of supportive infrastructures, labor conditions and collective goods in such a way that those mechanisms causing exclusion will be prevented or minimized”.

Basically, social inclusion developed conceptually alongside social exclusion; however, certain commentators (e.g. Donnelly and Coakley 2002) argued that social inclusion should not be seen simply as a response to social exclusion, but as having a value on its own as

both a process and a goal. Nevertheless, in the context of UK government policy, the term social inclusion signifies the reversal of those factors considered responsible for social exclusion, such as unemployment, poor housing and high crime (Tacon 2007). The concept of social inclusion/exclusion entered British public policy debates somewhat later under Tony Blair's post-1997 New Labor governments, which sought to substitute Labor's traditional concern with addressing poverty and inequality with policies to tackle social exclusion (Collins 2004; Wilson 2006).

However, how does sport fit into conceptual discussions of social inclusion? Theoretical examination of the benefits of sport and leisure began in earnest with the review in the United States by Driver et al. (1991). They identified diverse benefits, such as the development of primary group relationships, improvements in physical health and the opportunity to acquire leadership skills. Within the leisure studies literature in Britain and Europe, there is a continuing debate about social inclusion and what contemporary public provision can do to enhance inclusion. The dominant view is that the state should be the provider of leisure for welfare reasons: welfare policy should correct inequalities in participation. Public provision also should be undertaken because leisure is a merit good—it is considered to good for people and therefore offers the potential to improve the health of the nation (Curry et al. 2001).

According to the Department for Culture, Media and Sport (DCMS), “the powerful impact which sport can have on social exclusion factors is increasingly recognized by all involved in regeneration and inclusion” (DCMS 2001, p. 8). Sport England (1999) also suggested that sport can make a contribution to the new policy agenda by contributing to a wide range of positive social outcomes, including reduced youth crime, improved fitness and health, reduced truancy, improved attitudes to learning among young people and the provision of opportunities for active citizenship. UK government policy-makers oriented specifically towards enhancing social inclusion have frequently made this assertion.

Perspectives of this sort reflect a broad shift from viewing sport via urban regeneration largely in economic terms to one which places more emphasis on people and the development of social capital (Bailey 2005). In the UK during the 1980s and 1990s, when economic concerns dominated, sport was considered almost exclusively in terms of its regenerative impact, i.e. how it could increase income and jobs. Yet in contemporary politics, sport is now also analyzed in terms of its potential to improve health, develop social skills as well as enhance social inclusion (Tacon 2007).

2.2 The Measurement of Social Inclusion

According to Duhaime et al. (2004), social inclusion is a measure of access to and participation in various networks of emotional, social and material support. Identifying potential domains of the elements of social quality, Berman and Phillips (2000) also pointed out that the distribution of access to leisure facilities and neighborhood services is an important indicator to evaluate the degree of social inclusion. In the field of sport research, Bailey (2005) proposed that access is a necessary condition of inclusion. If sport is to be involved in the process of social inclusion, it is essential that people have opportunities to participate. Previous empirical measurement of social inclusion have been of two main kinds- ‘outcome’ and ‘process’ studies (Nicholls 2001). ‘Outcome’ studies have focused on the distribution of various resources relative to the socio-economic characteristics of residents. ‘Process’ studies, in contrast, have been less concerned with who is or is not impacted by inequity, and more with the reasons underlying distributions

of resources. The NBS is a kind of outcome measurement, i.e. the outcome of the distribution of public leisure services is considered, in terms of variations between different socio-economic groups, rather than the processes underlying this distribution.

As part of 'Best Value'—a policy of the UK Labour Government aiming to improve local services, it was proposed that reporting for the culture block in the Comprehensive Performance Assessment should include seven of the NBS indicators—five relate to social inclusion and two relate to value for money (Audit Commission 2005). The target groups selected for analysis are therefore in line with this designation. The five target groups are: representativeness ratios for people from the most disadvantaged socio-economic groups (social class DE/National Statistics Socio-Economic classification [NS-SEC] 6&7); young people aged 11–19 years; people from black, Asian and other minority ethnic groups; people aged over 60 years; and the simpler share ratio of the percentage of facility use by disabled people aged under 60 years (excluding age-related disability). The rationale for selecting these groups is discussed below.

According to Sport England (2006a), many of the benefits of sport, for example, health, social regeneration, lifelong learning and reductions in criminal behaviour, cannot be realized if appropriate skills and a positive attitude to sport are not developed at a young age. It is also widely believed that young people are liable to engage in antisocial activities in their leisure time (Bailey 2005). Three recent UK policy-related reviews of the potential social value of sport all list the prevention of youth crime as an issue to which sport can make a contribution, reflecting a widespread belief in the therapeutic potential of sport (Collins et al. 1999; DCMS 1999; Sport England 1999).

The fact that sport is dominantly consumed by the more professional and managerial sectors of society in Britain is now well established. The Policy Action Team 10 report on Sport and Arts mentioned that people from lower socio-economic categories in general participate less in the arts/sport and therefore benefit less from Government support for the arts/sport (DCMS 1999). Collins (2003) also emphasized that poverty is the core of social exclusion. In addition, some previous research identified the relationship between occupational status and leisure participation. For example, Clarke (1956) and Burdge (1969) found that this relationship is especially significant with activities closely tied to social status and requiring financial resources. Kelly (1996) also pointed out that income and occupational status are related to opportunities and limitations to leisure participation.

Leisure policy for ethnic minority groups has tended to be oriented towards alleviating or compensating for general social deprivation or social discrimination (Veal 2002). Two contrasting explanations, ethnicity and marginality hypotheses, have been the dominant frameworks for explaining differences between ethnic groups in terms of their leisure involvement (Lee et al. 2001). The former suggests that ethnic differences in leisure participation are a function of minority groups, subordinate socio-economic status stemming from historical discrimination; whilst the latter states that ethnic differences in participation stem from a culturally based value system, norms and leisure socialization patterns.

According to Collins (2003), exclusion among older people comes from poor health, poverty and disability, all of which may be compounded by isolation and poor mobility. Sport England (2006b) also proclaimed that to achieve the government's target of 70% of the population being active by 2020, one of the key drivers is the ageing population, as by 2020 almost half of the UK population will be over 50-years old. Given the drop-off in participation associated with age, the ageing population phenomenon will have a significant negative effect on overall sports participation.

Finally, participation in sport has the potential to promote the social inclusion of disabled people and increase their self-esteem. Sport and exercise offer the possibility of overcoming the stigma often associated with disability. Participation can provide the context within which people exceed the expectations associated with their disability through demonstrations of physical skills or fitness, so emphasising an alternative, more positive, picture of the body and the self (Sport England 2001).

3 Methodology

Public leisure facilities, for the purposes of this study, are defined as swimming pools, sports halls or multi-purpose facilities that combine both 'wet' and 'dry' activities. In the NBS, the degree of social inclusion is measured mainly by 'representativeness' ratios (i.e. percent of visits from a specific segment of users divided by percent of catchment population of this type). A performance indicator of <1.0 indicates that the group is under-represented and over 1.0 indicates over-represented in their use of the centre in comparison with the catchment population. The other type of access indicator is a 'share' ratio (i.e. simply the percentage of visits of a type of users), which is used because the better alternative, the representativeness ratio, is not available. The percentage of total visits by disabled people is an example. Although higher score is better for effectiveness in targeting disadvantaged visitors, this kind of share ratio needs to be interpreted carefully since the percentage of visits by the target group may be low simply because this group is a low proportion of the local community.

One important part in the measurement of access is each facility's catchment area. The catchment area is determined by a 'distance decay' model which suggests a centre should be servicing, taking into account natural barriers and competition from other centres. Finally, for each indicator, the benchmarks employed are at the 25%, 50% and 75% points in the distribution of scores. In other words they represent the individual authorities at the quarter, half and three-quarters marks when all authorities are placed in order of performance according to the indicator (Sport England 2000a).

The five above-mentioned NBS access indicators were chosen as the research variables. Research data were derived from the NBS database, where the information about user profiles was generated by user surveys at totally 408 facilities in 1997, 2001, 2006 and 2007. On average, 350 questionnaires were collected from each centre. The survey was principally conducted over a standard survey period of nine consecutive days, including two weekends and at normal periods of operation, especially not in school holidays. The catchment data, for a specified population around the facility, was provided for the NBS by Planning Data Management Services, of Edinburgh University.

Furthermore, in order to prevent comparison against dissimilar organizations or against organizations with dissimilar customer profiles, the results of the NBS are structured by four 'families' of centres representing major influences on performance. They demonstrate the validity and value of an extensive and 'like for like' measurement of performance. Each facility can thus compare their performance with the benchmarks for other facilities in the same family types. The four NBS families are: facility type (dry, wet and mixed-both dry and wet); facility location (percentage of centre catchment area population in DE social classes: $<15\%$, 15% to $<20\%$ and $20\%+$); facility size (the internal floor space of centres: <1500 , 1500 to <3000 and $3000+$ m²) and management type (in-house, commercial contracted and trusts) (Robinson and Taylor 2003; LIRC 2002). The feature of research sample is illustrated in Table 1.

Table 1 Feature of research sample

	% of facilities within family				Total (<i>n</i> = 408) <i>n</i> (%)
	1997 (<i>n</i> = 99) (%)	2001 (<i>n</i> = 103) (%)	2006 (<i>n</i> = 102) (%)	2007 (<i>n</i> = 104) (%)	
Type					
Dry	28	20	21	17	88 (22)
Mixed	40	45	53	45	186 (45)
Wet	32	35	26	38	134 (33)
Location					
DE <15%	20	15	19	26	80 (20)
DE 15% to <20%	42	35	41	30	152 (37)
DE 20%+	38	50	40	44	176 (43)
Size					
<1500 m ²	24	25	11	11	72 (18)
1500 to <3000 m ²	33	33	48	38	156 (39)
3000+ m ²	33	42	41	51	171 (43)
Management					
In-house	n.a.	53	40	27	124 (40)
Commercial	n.a.	13	25	36	75 (25)
Trust	n.a.	33	35	37	109 (35)

In terms of the analytical approaches, descriptive statistical analysis (e.g. mean, quartile and coefficient of variance) was first applied. ANOVA with Tukey's HSD post hoc tests were then used to test whether significant differences could be found between different years and family categories. To evaluate the changes over time, ANOVA with post hoc polynomial trend analysis was also adopted. According to Campbell and Soeken (1999), change can be viewed as incremental—that is, as the difference between points in time—or as a continuous process. With the ANOVA trend analysis, it is allowed viewing change as a continuous process rather than as incremental or as a tied to the measurement points. We tested whether the values showed a steady increase or decrease across time (linear function) or a single bend upward or downward (quadratic trend). These linear or quadratic trend components were tested post hoc using a set of special contrast coefficients. The post hoc analysis to assess the presence of a trend in the means was calculated by first controlling for the differences in time interval. Polynomial weights were set at 1, 5, 10 and 11, representing the time spans between samples.

4 Results

The descriptive statistics and ANOVA for the five access indicators were shown in Table 2. The survey results collected from four points of time were demonstrated separately. The first four indicators were measured by representativeness ratios. For disabled under 60 years, representativeness ratio was not available, so performance was measured more simply by percentage of visits. 25%, 50% and 75% percentile scores represent three levels of benchmarks. Percentage of well-represented centres signifies the percentage of centres with a score equal to or >1. The degree of dispersion was examined by coefficient of

Table 2 Descriptive statistics and ANOVA for five indicators

	Year	Percentiles			% of well-rep. ^b	Mean	C.V. (%)	F-value
		25%	50%	75%				
11–19 years	1997	0.86	1.26	1.66	64	1.33	53	16.17**
	2001	0.53	0.80	1.12	35	0.96	67	
	2006	0.68	0.91	1.19	40	1.00	52	
	2007	0.51	0.75	1.01	26	0.78	46	
	<i>Average</i>	0.64	0.93	1.24	41	1.02	54	
Social class DE/NS-SEC 6&7 ^a	1997	0.20	0.35	0.60	5	0.42	70	n.a.
	2001	0.20	0.30	0.40	0	0.33	53	
	2006	0.38	0.56	0.74	7	0.60	51	
	2007	0.44	0.56	0.68	2	0.57	34	
	<i>Average</i>	0.31	0.44	0.60	4	0.48	52	
Ethnic minorities	1997	0.36	0.74	1.28	35	1.17	137	5.33**
	2001	0.77	1.17	2.53	64	1.92	95	
	2006	0.89	1.14	1.57	67	1.61	94	
	2007	0.85	1.19	1.68	65	1.32	45	
	<i>Average</i>	0.72	1.06	1.77	58	1.50	92	
60+ years	1997	0.29	0.52	0.71	10	0.54	62	2.61
	2001	0.29	0.43	0.60	2	0.46	51	
	2006	0.34	0.45	0.58	2	0.47	46	
	2007	0.40	0.53	0.63	2	0.53	39	
	<i>Average</i>	0.33	0.48	0.63	4	0.50	50	
Disabled, <60 years	1997	4.50	6.14	8.53	n.a.	6.69	47	3.26*
	2001	4.99	6.15	7.78	n.a.	6.43	32	
	2006	4.57	5.94	7.08	n.a.	5.91	38	
	2007	4.04	5.19	6.74	n.a.	5.68	48	
	<i>Average</i>	4.53	5.85	7.53	n.a.	6.18	41	

Note: * $p < 0.05$; ** $p < 0.01$

^a Social class DE is used in 1997 and 2001; NS-SEC 6&7 is used in 2006 and 2007. They are not directly equivalent

^b % of well-rep. = percentage of well-represented centres, which signifies the percentage of centres with a score equal to or >1

variance (CV) rather than standard deviation. Since the representativeness ratio (the first four indicators) and share ratio (the last indicator) have different units, adopting CV allows keeping the law of commensurability. Finally, ANOVA was conducted to assess if there were significant differences in the mean values across the four points of time.

First, examining the percentiles, percentage of well-represented centres and means of the four representativeness ratios, ethnic minority was the only one indicator with an average 50% benchmark higher than 1.0 (median = 1.06) and a relatively high 75% benchmark (1.77). Ethnic minority also had the highest proportion of well-represented centres (58%), followed by 11–19 years (41%), 60+ years (4%) and social class DE/NS-SEC 6&7 (4%). The whole industry had a mediocre performance in 11–19 years with average 75% and 50% benchmarks equal to 1.24 and 0.93, respectively. 11 to 19 years also had average representativeness ratios above 1.0 in 1997 and 2006 (1.33 and 1.00

respectively). By contrast, social class DE/NS-SEC 6&7 and 60+ years were well below population parity in their level of representation (mean = 0.48 and 0.50 respectively). Even at the 75% benchmark level, absolute representativeness was not achieved for these two segments. Generally speaking, it was not difficult for ethnic minorities and 11–19 years to reach representativeness in visits. However, the comparative difficulty of attracting other market segments was reflected in the preponderance of mean values of <1 for 60+ years and DE/NS-SEC 6&7 social groups.

Second, the distributive patterns of the five indicators were assessed by CV and inter-quartile range. On average, disabled under 60 years gave the lowest variability (CV = 41%) followed by 60+ years (CV = 50%) and social class DE/NS-SEC 6&7 (CV = 52%). They can be considered as relatively non-volatile indicators. This finding further confirmed the consistent under-representation of 60+ years and social class DE/NS-SEC 6&7. The highest variability was exhibited by ethnic minorities (CV = 92%) and was more than double that of disabled under 60 years. Examining the inter-quartile range, on average, there was a difference of 0.29 and 0.30 in social class DE/NS-SEC 6&7 and 60+ years between the 25% and 75% benchmarks. On the other hand, the difference between the 25% and 75% benchmarks for ethnic minorities was a huge 1.05. One possible reason to explain the variation in ethnic minority is that, according to Sport England's 2000 survey (Sport England 2000b), there is a considerable variation in the levels of participation between different ethnic groups. Some ethnic groups are notable for their under-representation while others have relatively high participation rates. As such, if a centre is located in an area gathering certain ethnic groups with higher participation rate, it may result in a very high performance value.

Third, the year-to-year changes of the mean values were examined by ANOVA with post hoc polynomial trend analysis. It should be noted that, since the national statistics socio-economic classification used in 1997 and 2001 (social class DE) and 2006 and 2007 (NS-SEC 6&7) are not directly equivalent, ANOVA and trend analysis are not applicable for this group. In the first place, examining the quartiles and means across the four points of time showed that the patterns of 11–19 years and disabled under 60 years were quite similar to each other, with three quartiles and means were all worse off at the end of the research period than the start. Furthermore, according to the *F*-values shown in the final column of Table 2, there were significant differences between the mean values of 11–19 years ($F = 16.17$; $p < 0.001$), ethnic minorities ($F = 5.33$; $p = 0.001$) and disabled under 60 years ($F = 3.26$; $p = 0.021$). To detect the nature of change and to investigate whether the falling-off between 1997 and 2007 indicates deterioration in participation of 11–19 years and disabled under 60 years, post hoc polynomial trend analysis was conducted.

The linear contrasts, which assessed if there were a linear relationships among the means, were significant in 11–19 years ($F = 36.60$; $p < 0.001$) and disabled under 60 years ($F = 9.50$; $p = 0.002$), but the quadratic contrasts were not significant for these two indicators ($F = 3.25$; $p = 0.072$ and $F = 0.24$; $p = 0.627$ respectively). These testes, associated with the evidence from the mean values shown in Table 2, indicated that there were significant and linear decreases in participation of 11–19 years and disabled under 60 years. By contrast, for ethnic minorities and 60+ years, there were significant quadratic trends ($F = 15.57$; $p < 0.001$ and $F = 6.70$; $p = 0.010$ respectively) but not linear trends ($F = 0.35$; $p = 0.556$ and $F = 0.27$; $p = 0.604$ respectively). Means for ethnic minorities increased from 1997 to 2001 with a decrease from 2001 to 2007, and showed an arching configuration. Although 60+ years failed to demonstrate significant change across time ($F = 2.61$; $p = 0.051$), a significant quadratic trend was detected. Comparing with ethnic minorities, overall means on 60+ years showed the reverse pattern, decreasing from time 1997 to 2001, increasing from 2001 to 2007, and

demonstrating a V-shape configuration. In a word, the access of 11–19 years and disabled under 60 years were significantly worse off over the past 10 years. However, the access of ethnic minorities and 60+ years oscillated from year to year and no clear patterns of increase or decrease were found over the course of this study.

The next set of results tried to identify whether performance differences existed between facilities with different profiles. The analysis was based on the four NBS families and the survey conducted in four points of time was pooled. First, based on the comparison of the mean values (see Table 3), it appears that no specific kind of facility outweighed other kinds of facility in all indicators. For instance, dry facilities under-performed wet and mixed facilities in 60+ years and disabled under 60 years, but attracted more 11–19 years, social class DE/NS-SEC 6&7 and ethnic minorities. Further statistical tests (ANOVA) revealed significant performance differences due to facility type in 11–19 years, 60+ years and disabled under 60 years; due to facility location in disabled under 60 years; due to facility size in 11–19 years; and due to management type in ethnic minorities and 60+ years. Post hoc analyses (Tukey's HSD) were then conducted to identify whether certain facility profiles outperformed significantly others. The results were summarized as follows.

Generally speaking, the variations across facility type and management type were greater than the other two family influences. An important implication of this finding is to demonstrate the complexities of what is meant by equity. Different sports and different settings seem to have their own and different concerns. In terms of facility type, wet and mixed facilities (with swimming pools) were conspicuously successful compared with dry facilities (sport halls) in attracting more 60 years ($F = 37.63$; $p < 0.001$; mean = 0.61, 0.50 and 0.33 respectively) and disabled under 60 years ($F = 10.34$; $p < 0.001$; mean = 6.81, 6.17 and 5.22 respectively). By contrast, dry facilities outperformed significantly mixed

Table 3 Performance differences among families

	Mean values and ANOVA				
	11–19 years	DE/NS-SEC 6&7	Ethnic minorities	60+ years	Disabled, <60 years
Type	$F = 20.53^*$	1.87	0.37	37.63**	10.34**
Dry	1.35	0.51	1.56	0.33	5.22
Mixed	0.97	0.49	1.54	0.50	6.17
Wet	0.86	0.44	1.42	0.61	6.81
Location	$F = 1.15$	0.26	0.83	0.06	5.66**
DE <15%	0.92	0.46	1.32	0.50	5.69
DE 15% to <20%	1.04	0.48	1.57	0.50	5.86
DE 20%+	1.03	0.49	1.54	0.51	6.66
Size	$F = 8.96^{**}$	0.19	1.08	0.44	0.29
<1500 m ²	1.24	0.47	1.59	0.52	6.39
1500 to <3000 m ²	1.02	0.48	1.63	0.49	6.20
3000+ m ²	0.90	0.49	1.40	0.51	6.11
Management	$F = 1.56$	0.85	4.33*	3.61*	0.17
In-house	0.93	0.48	1.53	0.48	6.05
Commercial	0.82	0.53	2.03	0.54	5.85
Trust/others	0.96	0.50	1.44	0.46	6.01

Note: * $p < 0.05$; ** $p < 0.01$

and wet facilities in attracting more 11–19 years ($F = 20.53$; $p < 0.001$; mean = 1.35, 0.97 and 0.86 respectively). In terms of facility location, only one access indicator—disabled under 60 years—had systematic variation due to the percentage of social classes DE in the catchment population. That is, for disabled under 60 years, the centres in higher DE (i.e. 20%+) areas performed significantly higher than those in lower DE (i.e. 15–20% and <15%) areas ($F = 5.66$; $p = 0.004$; mean = 6.66, 5.86 and 5.69 respectively). Similarly, size of centre only had impact on the access performance of 11–19 years, where smaller centres (i.e. <1500 m²) attracted more users from a younger age group than larger centres (i.e. 1500 to < 3000 and 3000+ m²) ($F = 8.96$; $p < 0.001$; mean = 1.24, 1.02 and 0.90 respectively). Finally, clear differences were apparent in the access of ethnic minorities ($F = 4.33$; $p = 0.014$; mean = 2.03 [commercial], 1.53 [in-house] and 1.44 [trust] respectively) and 60+ years ($F = 3.61$; $p = 0.028$; mean = 0.54 [commercial], 0.48 [in-house] and 0.46 [trust] respectively) as a result of management type influence. Surprisingly, given that the access of socially disadvantaged groups has been a long-term focus of local authorities, commercial contractors outperform significantly in-house facilities in two of the five access indicators.

The evidence that dry facilities and wet/mixed had a better performance in 11–19 years and 60+ years respectively coincides with some previous survey findings, but further qualitative research is required in order to explain the other results. According to the 2002 General Household Survey, the highest rates of participation in the previous 4 weeks (excluding walking) in the 16–19 age group were found in dry types of activity. In terms of 60+ years, at the other end of the scale of the same survey, the highest rates of participation in the 60–69 and 70+ age groups were found in swimming (7% and 3% respectively) (Sport England 2004).

5 Discussion and Conclusion

Although policy-makers have begun to stress the social dimensions of sports participation, evidence is limited with regard to the evaluation of the extent to which people might become ‘socially included’ through sport. Adopting an ‘outcome’ measurement approach, the results of this paper provide one of the most authoritative evidence to date about the participation in public leisure facilities. The implications of this paper are discussed as follows.

Despite the encouragement and grant aid of the UK Government to promote access, the statistical evidence above confirmed the consistent pattern of numerical under-representation of the older people and the less well off. It appears that achieving visits by ethnic minorities and 11–19 years that are representative of their numbers in the catchment population is feasible, but achieving representativeness for 60+ years and social classes DE/NS-SEC 6&7 is not likely to be feasible. Furthermore, the decline in the use of public leisure facilities in the past 10 years was pronounced amongst the younger age and disabled groups, despite the 11–19 years group was relatively well-represented in the use of public leisure facilities. These cause particular concern and disappointment given the focus of public policy on these target groups for a long time.

At the core of the debate about public leisure provision to enhance social inclusion, an important issue lies in whether those who are observed to be under-represented can be considered to be socially excluded or not. Some seem to take the absence of certain groups from leisure participation as evidence of exclusion (Collins and Kennett 1998). However, some argue that social inequalities have not been reduced by state leisure policies simply

because of a preference by apparently excluded groups not to, rather than any lack of means on their part to participate (e.g. Curry 1994). Coalter (1998, 2000) also pointed out that many of those who do not use publicly provided leisure facilities are not 'constrained' or 'excluded', they simply do not wish to use them. It is therefore important to ask: how far can under-representation or decline be overcome by innovative management (e.g. pricing, programming, transport provision) and how far is it due to other reasons which are out of the control of facility managers (e.g. consumer preferences, wider social pressures)?

Causes of under-representation and decline are not clear and can only be hypothesized at this stage. More 'process' oriented and qualitative studies are required in the future to investigate whether under-representation and decline are driven by preferences or constraints. However, it is worth referring to other previous researches so as to flesh out the statistical analysis and to draw a meaningful conclusion for policy purposes.

According to Collins (2003), overall leisure facilities and services are overused by those with above average incomes, a situation that has not changed over 20 years. During the same period, the disparity of participation between professional and social class DE changed from 13% to 32%. From Collins' point of view, poverty is the core of exclusion. However, a research conducted by Coalter (1993) proposed that the importance of entrance cost appears to be relative rather than absolute. That is, for the actual and perceived cost of sports participation is not simply money but time. Whether the under-representation of lower socio-economic groups is driven by overall price increases or by work pressures in the UK's long-hours economy, is thus open to speculation.

In terms of the 60± years, a review of the NBS database shows that almost 9 out of 10 facilities offered concessions for people aged over 60 years, and 72% claimed specific policies for over 50 years, but only 18% had specific targets. Only 4% of hall users were senior citizens with discount cards, and 6.7% of swimmers. Veal (2002) also stressed that the facilities are often available, but the challenge for management is to provide programs at the right time, in the right place and at the right price to attract this market segment. Many of the elderly can use services at times when facilities are relatively underused (e.g. during the weekday daytime), promotion and programming are therefore useful approaches to increase the participation of older people.

The decline in usage of public leisure facilities by 11–19 years reflects probably the overall participation in sport and physical activity in the country. According to the UK General Household Survey, the decline in participation from 1996 to 2002 is primarily focused in the younger age groups, traditionally the highest participants (Sport England 2004). According to Collins (2004), decline may be related to more competing demands on younger people's time or more leisure choices available (e.g. video/DVD, computer games, internet). Decline may also, however, be connected to the declining quality of the infrastructure available to sport—a consequence of the lack of investment in maintaining the condition and quality of community sports facilities over the last 20 years. Better designed programs and better managed facility catering for the special needs of young people seem to be vital for the management of existing facilities to attract more younger people.

To address the falling attendance of disabled people, it is relevant to examine some past interventions aimed at increasing their participations in sport. A survey conducted by Sport England (2002) indicates that, although still important, rather than concentrating on increasing the supply of suitable facilities or providing adapted equipment, more needs to be done to provide people with a disability with credible information on the sports and physical activities that they might be able to do given the nature of their disability without unduly limiting their horizons. In addition there needs to be a greater focus on providing competent support, e.g. trained sport centre staff to enable people with a disability to have

the confidence to take part in sport or to try new sports. Another Sport England's (2001) research also shows that a significant proportion of young disabled people consider themselves to be limited because of their health or disability. However, lack of money and problems with transport are also cited as significant barriers.

As suggested by Collins (2004), several disadvantaged groups face similar constraints. For instance, poor public transport constrains all groups who cannot walk to their leisure or who have no transport of their own. Providing free public transport can therefore benefit more than one target group. Similarly, modifying physical access to facilities for the disabled people will also benefit older people and mothers with prams and small children to supervise. Furthermore, in research investigating the centres that participated in the NBS and achieved top-quartile scores in access performance, Taylor (2004) noticed that common successful factors include: appropriate location near to large numbers of the relevant target groups, low prices (e.g. extensive use of leisure cards and possibly some free usage) and specific programming for target groups (especially young people, 60+ years, and health and disability targets). As such, if under-representation or deterioration of performance were due to misguided policy or implementation failures, the experiences of good practice will be valuable for benchmarking purposes.

Finally, representativeness ratio is common approach used to evaluate the degree of social inclusion. Obviously, purely mathematical standards are not very realistic guideposts for assessment. Concern about relatively low rates of utilization by social class DE/NS-SEC 6&7 and 60+ years, it may not be appropriate to set 1.0 as a target. As emphasized by Gratton and Taylor (2000), it is not necessarily realistic to expect socially disadvantaged people to be well-represented in the usage profiles of local authority leisure facilities. Many constraints other than price prevent them from participating, some of which may be beyond the reach of public policy. Consequently, targets should be challenging but feasible and benchmarks are important reference points helping to identify what fits these criteria. It is also important to examine patterns over time and use the past as a benchmark for assessing the present.

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