

(SP) BENCHMARKING THE EFFECTIVENESS OF EQUITY PROMOTION THROUGH COMMUNITY SPORT FACILITIES

Yi-De Liu & Peter Taylor,
Sheffield Hallam University, UK

Introduction

In England, sports facilities are an important aspect of local government provision. For equality of opportunity to exist for all, it is important that barriers are removed and opportunities maximized. One way to ensure this equity is by measuring how representative facility usage is (Sport England, 2006). In the new Comprehensive Performance Assessment (CPA) framework, which is now the performance management framework used by the UK government to measure local authority performance, a higher concern has been put on the achievement of equity promotion through community sport facilities. Five performance indicators were used: the representative facility use by people from the most deprived socio-economic groups as well as black and minority ethnic groups; young people aged 11-19 years and aged over 60 years, and the proportion of facility usage by disabled people aged under 60 years, have been included in the Service Assessment Framework launched by Audit Commission in 2005 (Audit Commission, 2005). In response to this appeal and tendency, this paper intends to benchmark the effectiveness of equity promotion through community sport facilities by assessing the participation across social class, ethnicity, age and disability.

Methods

It has been traditional in the UK public services to take a piecemeal approach to measure the performance, relying on a set of partial indicators (PIs) that capture particular aspects of performance. However, regulators are increasingly attracted to the development of global measures of organizational performance. This study tries to apply one of the most widely used global measure approach – Data envelopment analysis (DEA) to benchmark the performance of 87 English public sport facilities in 2001 (LIRC, 2002). Based on the framework of CPA and Sport England's National Benchmarking Service, five output variables are selected to run the DEA model, i.e. the visits of 11-19 years, +60 years, social class DE, ethnic minority and disabled under 60 years. This study also considers DEA in a broader context by developing an effectiveness measurement model, where we assume that the input is constant at level 1 and the outputs are the level of target achievement based on five above-mentioned PIs.

Results

The overall results show an average DEA effectiveness score of 0.763, with a standard deviation of 0.173. There are 11 facilities (12.6%) deemed as 100% effective, which could be ideal benchmarking partners for other facilities. This study further classified these 87 facilities in accordance with different facility type, location, size and management type to investigate whether there are differences among these categories. As shown in Table 1, the results of ANOVA revealed that there is no significant difference in equity effectiveness due to facility type, size and management type. However, there is significant difference due to differences in facility location. On average, facilities categorized as wet, DE 15% to 20%, <1500

sq.m., in-house and other management type have higher DEA effectiveness scores. In contrast, facilities categorized as dry, DE <15%, 3000+ sq.m. and commercial contracted have lower DEA effectiveness scores. Finally, a correlation analysis is conducted to investigate whether there is consistency between DEA and PI-based measures of performance. As shown in Table 2. The Pearson's correlation coefficients are all positive and statistically significant at 0.05 level. This indicates that DEA and individual PIs rank these facilities in the same direction and the association is quite strong whichever the PI.

Table 1: Difference verification of the equity effectiveness among 87 community sport facilities

Classification		Sample size	DEA effectiveness	Standard deviation	ANOVA (<i>p</i> -value)
Facility Type	Dry	20	0.738	0.172	0.823 (0.714)
	Mixed	39	0.767	0.170	
	Wet	28	0.774	0.182	
Facility Location	DE <15%	15	0.726	0.188	2,968** (0.016)
	DE 15% to 20%	33	0.780	0.181	
	DE 20%+	39	0.762	0.162	
Facility Size	<1500 sq.m.	21	0.834	0.143	0.630 (0.892)
	1500 to <3000 sq.m.	29	0.748	0.156	
	3000+ sq.m.	37	0.742	0.190	
Management Type	In-house	43	0.773	0.145	1.127 (0.430)
	Commercial contracted	13	0.722	0.195	
	Trust	21	0.740	0.220	
	Other	10	0.822	0.145	

Note: * Denotes significance at the 0.1 level; ** Denotes significance at the 0.05 level.

Table 2: Correlation between DEA scores and five equity PIs to evaluate equity

	Social Class DE	Ethnic Minority	11-19 yrs	+ 60 yrs	Disabled < 60 yrs
Pearson's correlation coefficient	0.502**	0.442**	0.352**	0.392**	0.493**
(<i>p</i> -value)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)

Note: * Denotes significance at the 0.1 level; ** Denotes significance at the 0.05 level.

Discussion

The implications of this study are threefold. First, eleven 100% effective facilities identified by DEA can provide good references for other ineffective facilities in terms of target settings and investigate the reasons for performance gaps. Second, investigate the performance differences are statistically significant due to the feature of catchments population. Facilities located in the area where social class DE between 15% and 20% outweighs other facilities in equity effectiveness. It is also suggested to

benchmark against facilities with similar location to get a more accurate and reasonable comparison. Even though, the differences are insignificant in terms of facility type, size and management type, the mean DEA scores still indicate that dry, 3000+ sq.m. and commercial contracted facilities are inferior to other facilities to promote sport equity. Third, a high consistency between DEA and five PIs helps to justify the methodological appropriateness of this study. That is, even though DEA and ratio analysis are based on different benchmarking theories, DEA can be a good complement or proxy of ratio analysis to benchmark the effectiveness of equity promotion in English community sport facilities.

References

Audit Commission (2005) *Service Assessment Framework: Technical Guide to CPA 2005 for Single Tier and County Councils* London: Audit Commission,.

LIRC (2002) *Sport England Benchmarking Service for Sports Halls and Swimming Pools: National Benchmarks 2001* Sheffield: University of Sheffield.

Sport England (2006) see

http://www.sportengland.org/index/get_resources/local_authorities/comprehensive_performance_assessment.htm

E-mail: Yi-De.Liu@student.shu.ac.uk