department for
culture, media
and sport

Alternative methods of measuring participation in culture and sport

Analysis of the Taking Part Survey

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of life for all

Our aim is to improve the quality of life for all through cultural and sporting activities, support the pursuit of excellence, and champion the tourism, creative and leisure industries.

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Executive Summary

Background and aims of the research

This paper summarises a project exploring how alternative summary measures of participation in culture and sport might be constructed.

The Department for Culture, Media and Sport (DCMS) measure participation using the Taking Part survey. Participation is defined as taking part in two or more different cultural or sport sectors at the required frequency of participation:

1. Recreational physical activity and sport (participated in 30 minutes of moderate intensity level sport and active recreation on three or more days in the past week)
2. Arts activity (engaged in the arts at least three times in the past 12 months)
3. Museum and gallery visits (attended a museum or gallery at least once in the past 12 months)
4. Heritage site visits (visited at least two historic environment sites in the past 12 months)
5. Library visits (used a public library service at least once in the past 12 months)

The current summary measure of participation is fairly straightforward: every respondent is given a score between 0 and 5 based on the number of sectors in which he/she has participated. This summary measure is itself summarised into a single binary variable: does this individual meet the target criteria for at least 2 of the 5 sectors? Yes or no?

This paper explores alternative ways of measuring participation across the five sectors, and across the 112 culture and sport activities covered by Taking Part.

Summary of findings

All alternatives produce estimated population distributions that are highly inter-correlated. The natural premium placed on the variety of activity ensures this. Anyone engaging in more than a few activities will score highly on all measures.

Consequently, the value of this work is not primarily the alternative scoring mechanisms but the empirical findings used as a basis for the scores. We now know which activities are most closely associated with each other and we also have a record of the perceptions of the general public on the perceived creativity and commitment required to participate in each of 112 relevant culture and sport activities. These findings have their own value.

Chapter 1: The current sector-based measure of participation

Public Service Agreement (PSA) 21 is a government target, aimed at building cohesive, empowered and active communities. While Communities and Local Government is the lead department for PSA21, DCMS has responsibility for Indicator 6: to increase the percentage of adults (aged 16 and over) who participate in culture and sport by 2010/11.

For the purposes of the PSA indicator, participation is defined as taking part in two or more different cultural or sport sectors at the required frequency of participation:

1. Recreational physical activity and sport (participated in 30 minutes of moderate intensity level sport and active recreation on three or more days in the past week)
2. Arts activity (engaged in the arts at least three times in the past 12 months)
3. Museum and gallery visits (attended a museum or gallery at least once in the past 12 months)
4. Heritage site visits (visited at least two historic environment sites in the past 12 months)
5. Library visits (used a public library service at least once in the past 12 months)

DCMS uses the Taking Part survey to evaluate its performance in the five sectors. In the 12 months to December 2009, 67.3 per cent of adults participated in two or more different cultural or sport sectors.

The summary measure of participation is fairly straightforward: every respondent is given a score between 0 and 5 based on the number of sectors in which he/she has participated at the required frequency. This summary measure is itself summarised into a single binary variable: does this individual meet the target criteria for at least 2 of the 5 sectors? Yes or no?

Any scoring system – including this one – is the product of a series of weighting decisions. Is activity X more or less important than activity Y? How many units of activity X do you need to match one unit of activity Y?

There are no absolute answers to these questions. DCMS assigns an equal weight to each sector of activity despite the fact that the target criteria for some sectors are less demanding than for other sectors. For example, an individual gets one point for visiting a library at least once in the last 12 months and one point participating in 30 minutes of moderate intensity level sport and active recreation on three or more days in the past week.

Chapter 2: Alternative sector-based measures

An alternative summary measure of participation might treat 'activity events' as of equal value regardless of sector. One library visit would then equal one session of recreational physical activity. This might seem fairer but it would then be possible to reach a high score with activity focused solely on one sector. The current measure (meeting target criteria in at least 2 sectors out of 5) deliberately demands activity in multiple sectors as a departmental goal.

One solution might be to retain the equal weights for each sector but standardise the score for each sector.

Individuals could be split into percentile groups on the basis of the observed activity levels in each sector. For example, the sample could be divided into: (a) those who reported no recreational physical activity in the last 4 weeks (50%, score = 0), (b) those who reported 1-9 days of activity (25%, score = 1), (c) those who reported 10 days of activity (25%, score = 2). The mean score would be 0.75 and the standard deviation would be 0.69.

If the mean and standard deviation of other sector scores matched that of the recreational physical activity sector then the sum of scores across all sectors would be a fair summary measure that counts each sector equally and rewards diversity of activity.

Performance over time could be tracked by keeping the same objective score criteria, regardless of how the distribution changes. Although this is an interesting alternative measure, it perhaps places too high a value on activity in multiple sectors. A low level of activity in each sector might score more points than a very high level of activity in just two sectors.

No solution is perfect. The purpose of this paper is to explore alternative methods of categorising activity that leave behind the sector-based approach of the official measure. We have worked on three alternatives:

1. 'Natural' activity groups as an alternative to sectors
2. Scores based on the level of creativity demanded by the activity
3. Scores based on the level of commitment required to get the most out of an activity

Chapter 3: Natural activity groups

'Natural' activity groups are formed by linking together activities that are most commonly associated with each other. In this way, the 112 culture and sport activities covered by Taking Part can be reduced to a much smaller number of groups (e.g. 10-20) and a summary score formed by giving one point for each activity group.

This summary score will reflect real diversity by rewarding those who engage in a variety of activities and adding a premium for those who engage in relatively unusual combinations of activity. Rather than specifying the groups up front (as with sectors), the groups are formed empirically from the survey data.

We used a hierarchical clustering technique to form the natural activity groups. One of the advantages of hierarchical clustering over non-hierarchical clustering is that we can assess solutions for any number of groups and pick the solution that best satisfies a combination of objective and subjective criteria (see Appendix 1 for further details). This analysis identified a 14-group solution, as summarised in Chart 1.

The most noticeable feature is that activities in the same sector typically appear in the same natural activity group. To some extent this is to be expected. After all, the five sectors should reflect broadly associated activities. However, the 14-group solution also identifies natural sub-groups within each sector as well as the some cross-sectoral association. Group 6, is particularly diverse, with activities crossing all sectors, except libraries while Group 10 is the least diverse, only covering bowling.

Chart 1: Natural activity groups: the 14-group solution

Group 1 - Athletics, ballet & rugby

- ballet, triathlon, archery, gymnastics, track and field athletics, fencing, orienteering, American football, curling, Gaelic sports (e.g. camogie, Gaelic football or hurling), Lacrosse, Rugby League, Rugby Union

Group 2 - Dancing & yoga

- dancing (not ballet or just to get fit), dancing to get fit, aerobics or dance exercise (including exercise bike), yoga

Group 3 - Music & performance

- performing in a play, drama or opera, playing a musical instrument for your own pleasure or to an audience, singing to an audience, writing music

Group 4 - Craft & literature

- calligraphy, pottery, making jewellery or other craftwork, creating original artworks or animation on a computer, embroidery, crocheting, knitting or other textile crafts, making films or videos (more than just family or holiday shots), painting, drawing, printmaking or sculpture, photography (more than just family or holiday 'snaps'), writing poetry, writing stories or plays

Group 5 - Outdoor sports & woodwork

- angling or fishing, BMX, cyclo-cross or mountain biking, canoeing, climbing or mountaineering (including indoor climbing), cycling to get from place to place, motor sports, hill trekking or backpacking, shooting (as a sport), wood turning, carving, furniture making or other wood crafts

Group 6 - Arts, concerts, carnivals, swimming, cycling & gym

- buying any original craftwork or art for yourself, cycling for pleasure or fitness, going to a carnival, a crafts exhibition, a live pop or rock music event, an exhibition or collection of art, photography or sculpture, the gym or doing other fitness activities, watching a musical or pantomime, a play or other drama, indoor or outdoor swimming or diving, visiting a site of archaeological interest or a place connected with industrial history or historic transport system, watching street performers or going to a circus

Group 7 - Literature, film & history

- buying a novel or book of stories, poetry or plays for yourself, going to a library or a museum, reading books for pleasure, visiting a city or town with historic character, an historic building, an historic park or garden, an historic place of worship as a tourist, a monument such as a castle, fort or ruin, walking for pleasure or fitness, watching a film at a cinema or other venue

Group 8 - Festivals & dance

- going to a culturally specific festival (for example, Mela, Baisakhi or Navrati), an archive centre, an event connected with books or writing or which includes video or electronic art, going to watch a classical music , contemporary dance, jazz, live dance or an African people's dance or a South Asian or Chinese dance performance, going to watch an opera or ballet

Group 9 - Racquet sports & sports tourism

- weight training (include body-building), horse riding, ice skating, jogging, or other cross-country or road running, badminton, squash, table tennis, tennis, visiting a site connected with sports heritage (e.g. Wimbledon) as a tourist

Group 10 - Bowling

- indoor or outdoor bowls

Group 11 - Cricket, football, pub sports & ten-pin bowling

- cricket, darts, golf, indoor or outdoor football, snooker, pool or billiards, ten-pin bowling

Group 12 - Boxing, martial arts & weightlifting

- boxing, judo, karate, taekwondo, tai chi or self-defence martial arts, weight lifting

Group 13 - Team sports

- baseball or softball, basketball, hockey, netball, rounders, volleyball

Group 14 - Water sports

- rowing, skiing, waterskiing, windsurfing or board sailing, yachting or dingy sailing

Once the 14 groups were identified, a summary score for each Taking Part respondent was computed. We gave a score of 1 for each group if the individual had engaged in any one of the contributing activities in the last 12 months and at any level. However, alternative scoring systems could be devised if required. Table 1 below summarises the distribution of natural activity group scores (the proportion of the population who participated in one group, two groups and so on out of the 14 identified).

Table 1: Distribution of natural activity group scores

Number of groups (out of 14)	Proportion participating (%)	Cumulative proportion (%)
0	2.3	2.3
1	9.2	11.6
2	16.6	28.1
3	19.5	47.6
4	18.0	65.6
5	13.7	79.3
6	9.2	88.5
7	6.0	94.5
8	3.0	97.5
9	15	99.0
10	0.6	99.6
11	0.2	99.8
12	0.1	100.0
13	*	100.0
14	-	100.0

Source: 2007/08 Taking Part
Notes:
*= less than 0.1%
-= zero
N= 25,720

This measure could be summarised further into a single binary variable, much like the current PSA 21 Indicator 6 '2 out of 5' measure. A similar division might be between 0-2 on the one hand (a 'fail') and 3+ on the other (a 'pass'). As expected this measure is fairly strongly correlated with the standard sector-based 'score out of 5' measure (R=.61). However, as Table 2 shows, a reasonable proportion of the sample would pass under one but not the other so the new measure does add value.

In total, 11.6% would pass under the 'natural activity group' criteria but not the 'sector' criteria (shaded orange) and 8.9% would pass under the 'sector' criteria but not under the 'natural activity group' criteria (shaded red)[1].

Table 2: Distribution of sample across sector-based criteria and natural activity criteria

	Sectors (%)						
Groups	**0**	**1**	**2**	**3**	**4**	**5**	**Total**
0	2.3	0.0	0.0	0.0	0.0	0.0	2.3
1	4.5	3.5	1.0	0.2	0.0	0.0	9.2
2	3.2	5.6	4.3	2.4	0.9	0.1	16.6
3	1.6	4.4	5.3	4.7	2.9	0.5	19.5
4	0.5	2.6	4.3	5.1	4.5	0.9	18.0
5	0.3	1.2	2.8	3.8	4.4	1.2	13.7
6	0.1	0.6	1.3	2.5	3.3	1.3	9.2
7	0.0	0.2	0.7	1.5	2.4	1.1	6.0
8	0.0	0.1	0.3	0.8	1.2	0.6	3.0
9	0.0	0.0	0.1	0.2	0.5	0.6	1.5
10	0.0	0.0	0.0	0.1	0.3	0.2	0.6
11	0.0	0.0	0.0	0.0	0.1	0.1	0.2
12	0.0	0.0	0.0	0.0	0.0	0.1	0.1
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	12.6	18.3	20.2	21.5	20.6	6.7	100.0

Source: 2007/08 Taking Part
N= 25,720

It ought to be possible to track performance on the 'natural activity group' measure alongside the standard measure although we may find that what counts as a natural activity group now ceases to count as a natural group in the future. If patterns change significantly, new baselines would need to be formed.

[1] 32% of those failing on the 'natural cluster' criteria would pass the 'sector' criteria; 38% of those failing on the 'sector' criteria would pass the 'natural cluster' criteria.

Chapter 4: Scores based on the level of creativity or commitment

While the natural activity groups described above are empirically derived, there is no way of objectively scoring an activity in terms of the level of creativity demanded or the level of commitment required to get the most out of an activity.

The BMRB Telephone Omnibus[2] was used in an effort to develop an objective measure of creativity and commitment. Respondents (N=1,023) were asked to rate a group of five activities on a scale from 1 to 5 in terms of their creativity and commitment. The questions were:

***Question 1**: Here is a short list of recreational activities. I would like you to score each one on a scale from 1 to 5, where 5 means that you think the activity is a very creative one to do, and 1 means that the activity is not at all creative. You can answer 'don't know' if you like."*

***Question 2**: Here is that same list again. This time, I would like you to score each activity on a scale from 1 to 5 so that 5 means that you think the activity demands a great deal of commitment from the participant, and 1 means that the activity demands very little commitment. As before, you can answer 'don't know' if you like.*

The questions were rotated: half the sample were asked Question 1 first, the other half were asked Question 2 first.

The full list of 112 culture and sport activities was divided into five strata and each respondent was asked to rate one randomly allocated activity from each stratum. These strata were formed via an initial scoring procedure carried out independently by five TNS-BMRB researchers. Stratum 1 contained the activities with the highest aggregate creativity/commitment scores while stratum 5 contained the activities with the lowest aggregate scores.

[2] The BMRB Telephone Omnibus employs the Random Digit Dialling method to generate a random sample of telephone numbers which will include both numbers listed in the telephone directory and those that are not. Interviewers make calls on Friday, Saturday and Sunday evenings each week. Quotas are set to ensure a demographically balanced sample. These quotas are based on sex, age, region and social grade. Although the resulting samples are not probability samples, in the opinion of TNS-BMRB researchers, these findings are unlikely to suffer from substantial sampling or non-response bias.

In this way, each activity was scored by around 46 individuals ((1,023*5) / 112) although some answered 'don't know' so the real number was a little lower than that. Nevertheless, this is sufficient to establish a mean score for each activity and a reasonable estimate of variance.

The mean scores for each of the 112 activities are shown in Appendix 2. High scores were given to participation in arts activities and relatively low scores to arts attendance activities. Most sports were clustered in the middle but some high intensity activities (e.g. triathlon and gymnastics) scored very highly on the commitment metric.

Across all activities, there was a substantial correlation (R=.25) between commitment and creativity scores, reflecting a view that the two often go hand in hand.

While it is relatively straightforward to calculate the creativity and commitment required to undertake specific activities, it is rather more difficult to compute creativity and commitment scores for each Taking Part respondent. One solution might be to give each respondent the mean score for each relevant activity and then sum the total[3]. The weighted distributions for creativity and commitment are shown in Table 3.

Table 3: Distributions of commitment and creativity scores

	Commitment	Creativity
Mean	30.1	32.1
Std. Deviation	21.8	22.6
10th percentile	5.7	6.2
20th percentile	10.9	11.8
30th percentile	15.7	16.9
40th percentile	20.5	22.3
50th percentile	25.9	28.0
60th percentile	31.8	34.2
70th percentile	38.4	41.6
80th percentile	47.1	50.7
90th percentile	59.9	63.5

A number of observations can be made from Table 3. First, the mean values for both commitment and creativity scores are very similar (30.1 and 32.1 respectively). Second, the distribution pattern of both scores is a near exact match – the standard

[3] In this context engagement in a relevant activity encompasses any level of engagement in the last 12 months.

deviation is almost the same (21.8 for the commitment score and 22.6 for the creativity score).

The correlation between an individual's creativity and commitment scores is R=.99. This is due to the equal weight given to all activities. Respondents who do a variety of activities – regardless of how creative or demanding – score highly on both measures.

We can show this by computing the separate correlations between the creativity and commitment scores and a simple variable summing the number of activities attracting a score. This is very high (R>.99) for both scores.

Ideally, the correlation with the number of activities ought to be reduced if these scores are to provide any additional value in segmenting the population. One possible solution is to revise the score so that the premium placed on the number of activities is reduced: *Revised score = original score / (FUNCTION(number of activities))*

At its most extreme, the FUNCTION term might be *1 which would provide the mean score per activity with no premium placed on multiple activities. The correlation with the number of activities attracting a score would reduce to R=.25 (commitment) and R=.19 (creativity). However, it still makes sense to apply at least a bit of a premium on variety. A suitable function might be to raise the number of activities to a power value <1. For example: *Revised score = original score / number of activities* $^{0.8}$

This would loosen the correlation between the scores and the number of activities from R=.99 to R=.77 (both) and the correlation between the two scores from R=.99 to R=.88.

The correlation with number of activities is still high but the more we raise the power value (i.e. to a figure higher than 0.8) the less of a premium is placed on variety.

This examination of the creativity and commitment required to participate shows that any scoring system that places a premium on the number/variety of activities is likely to be very highly correlated with a simple variable such as the total number of activities. Yet a scoring system that ignores this variety seems inherently unfair. For example, the way to score highest on a simple mean creativity score is to write music and do nothing else.

Perhaps the most interesting finding from this study is the better understanding we now have of people's perceptions of creativity and commitment. The high value placed on music and a variety of other arts activities is particularly noticeable.

Chapter 5: Conclusions

Many alternative methods of scoring activity can be devised but these scores will be highly correlated if the principle of placing a premium on the variety of activity is retained. Consequently, they have limited value as alternative ways of segmenting the population.

Nevertheless, this work has exploratory value. The hierarchical cluster analysis showed us which activities are most closely associated with each other irrespective of sector boundaries.

The creativity and commitment analysis has given us valuable information about how DCMS activities are perceived by the general public. These findings have their own value, not least as a prompt for further research into the social merit attributed to sporting and cultural activity.

Appendix 1: Details of natural activity group formation

There are countless ways of measuring similarity between two binary variables (e.g. between (a) whether visited a museum, and (b) whether watched ballet). All measures are based on the following simple contingency table:

		Activity B	
		Yes	No
Activity A	Yes	A	B
	No	C	D

A simple matching formula would take the form (A+D)/(A+B+C+D). However, this can produce very similar answers in lop-sided distributions. In this case, the majority of individuals will be found in cell D for any one pair of variables (i.e. they do neither activity: a negative match). Consequently, we have used the *Jaccard* formula which records positive matches as a proportion of cases where at least one activity is recorded: A/(A+B+C).

There are also many different 'agglomeration' methods that determine the hierarchical cluster structure. Each has their pros and cons but we selected *Ward's method* because of its tendency to produce clusters of more even size than those produced by other methods. A cluster solution with one or two very large clusters and a large number of tiny clusters is not particularly good for our purposes.

We inspected the results for all solutions of between 10 and 30 clusters, using both subjective and objective criteria.

The objective criteria were:

a) activities should be reasonably evenly spread between clusters, and
b) a small number of clusters is better than a large number of clusters.

A single metric was formed from these criteria:

S^2*(number of activities per cluster)* * √*(number of clusters)*

The best solution on these grounds (i.e. the lowest score) was a 14-cluster solution. We read that cluster 'for sense' to make sure that there were not too many strange combinations but there was no bar on unexpected combinations since this is an entirely empirical method with only vague preconceptions of what counts as a reasonable combination.

The natural activity groups are shown in Chart 1 (in the main report)

Appendix 2: Mean scores for creativity and commitment

ACTIVITY	CREATIVITY (mean of 1-5)	COMMITMENT (mean of 1-5)	OVERALL RANK
writing music	4.6	4.4	1
performing in a play or other drama	4.3	4.3	2
playing a musical instrument to an audience	4.2	4.3	3
writing any stories or plays	4.4	4.0	4
wood turning, carving, furniture making or other wood crafts	4.5	3.8	5
playing a musical instrument for your own pleasure	4.1	3.9	6
performing in an opera	3.5	4.4	7
doing a triathlon (running, swimming and cycling)	3.2	4.6	8
dancing ballet	3.7	4.1	9
calligraphy, pottery, making jewellery or other craftwork	4.3	3.5	10
singing to an audience	3.9	3.8	11
doing gymnastics	3.3	4.3	12
painting, drawing, printmaking or sculpture	4.3	3.3	13
creating original artworks or animation on a computer	3.8	3.6	14
photography (more than just family or holiday ‘snaps’)	3.8	3.7	15
writing any poetry	3.9	3.4	16
dancing (not ballet or just to get fit)	3.6	3.6	17
embroidery, crocheting, knitting or other textile crafts	4.1	3.2	18
playing Rugby Union	3.1	4.0	19
climbing or mountaineering (including indoor climbing)	2.7	4.4	20
doing tai chi or self-defence martial	3.1	3.9	21

arts			
making films or videos (more than just family or holiday shots)	3.5	3.5	22
skiing	2.9	4.0	23
dancing to get fit	3.4	3.5	24
doing judo	2.8	4.2	25
windsurfing or board sailing	2.8	4.1	26
doing track and field athletics	2.6	4.3	27
playing Rugby League	2.4	4.5	28
ice skating	3.1	3.6	29
orienteering	2.9	3.8	30
doing weight training (include body-building)	2.3	4.3	31
fencing	2.8	3.8	32
visiting a site of archaeological interest (e.g. Roman villa or ancient burial site)	3.4	3.2	33
doing karate	2.7	3.8	34
playing outdoor football	2.8	3.7	35
yachting or dingy sailing	2.6	3.8	36
indoor swimming or diving	2.8	3.5	37
waterskiing	2.7	3.7	38
cycling for pleasure or fitness	2.8	3.6	39
BMX, cyclo-cross or mountain biking	2.8	3.6	40
hill trekking or backpacking	2.5	3.8	41
doing yoga	2.9	3.4	42
doing taekwondo	2.7	3.6	43
horse riding	2.7	3.6	44
playing hockey	2.5	3.7	45
going to the gym or doing other fitness activities	2.5	3.8	46
jogging, or other cross-country or road running	2.4	3.8	47
playing Gaelic sports (e.g. camogie, Gaelic football or hurling)	2.4	3.8	48
doing motor sports	2.2	4.0	49
playing netball	2.4	3.8	50
boxing	2.2	4.0	51
cycling to get from place to place	2.7	3.4	52

doing archery	2.4	3.8	53
doing weight lifting	2.0	4.2	54
doing aerobics or dance exercise (including exercise bike)	2.7	3.5	55
canoeing	2.7	3.4	56
playing tennis	2.6	3.5	57
outdoor swimming or diving	2.9	3.2	58
walking for pleasure or fitness	2.8	3.2	59
rowing	2.0	4.0	60
playing American football	2.0	4.0	61
playing table tennis	2.6	3.3	62
playing volleyball	2.3	3.6	63
playing baseball or softball	2.4	3.5	64
playing golf	2.5	3.4	65
playing cricket	2.5	3.3	66
reading books for pleasure	3.5	2.3	67
playing squash	2.4	3.4	68
going to an exhibition or collection of art, photography or sculpture	3.5	2.3	69
visiting a city or town with historic character	3.1	2.7	70
going to watch a play or other drama	3.1	2.6	71
going to an event connected with books or writing	3.3	2.4	72
playing basketball	2.5	3.1	73
playing Lacrosse	2.1	3.5	74
going to watch an African people's dance or a South Asian or Chinese dance performance	3.1	2.5	75
going to a museum	3.2	2.2	76
playing ten-pin bowling	2.6	2.8	77
playing curling	2.4	3.0	78
playing badminton	2.3	3.1	79
playing snooker, pool or billiards	2.6	2.8	80
buying original works of art for yourself	2.7	2.6	81
angling or fishing	2.3	3.0	82
buying any original craftwork such as pottery or jewellery for yourself	2.8	2.5	83

visiting an historic park or garden	3.2	2.0	84
going to watch a musical or pantomime	2.7	2.6	85
going to watch a contemporary dance performance	2.9	2.4	86
going to a culturally specific festival (for example, Mela, Baisakhi or Navrati)	2.8	2.4	87
visting a place connected with industrial history or historic transport system	2.5	2.6	88
playing indoor football	2.2	3.0	89
playing outdoor bowls	2.2	2.9	90
playing rounders	2.4	2.7	91
going to a library	2.7	2.4	92
visiting an historic building	3.0	2.1	93
going to a crafts exhibition	2.9	2.1	94
going to an archive centre	2.5	2.6	95
visiting an historic place of worship as a tourist	2.8	2.2	96
playing indoor bowls	2.1	2.9	97
buying a novel or book of stories, poetry or plays for yourself	2.6	2.3	98
going to an event which includes video or electronic art	2.7	2.2	99
going to watch a classical music performance	2.6	2.2	100
visting a monument such as a castle, fort or ruin	2.5	2.3	101
shooting (as a sport)	1.7	3.1	102
watching street performers or going to a circus	2.7	1.9	103
playing darts	1.9	2.7	104
going to a live pop or rock music event	2.5	2.0	105
going to watch ballet	2.4	2.1	106
visiting a site connected with sports heritage (e.g. Wimbledon) as a tourist	2.1	2.3	107
going to a carnival	2.2	2.1	108
going to watch an opera	2.1	2.1	109
going to watch a jazz performance	2.4	1.8	110

watching a film at a cinema or other venue	2.2	1.8	111
going to watch a live dance event	2.4	1.5	112

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