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Highlights*

Physical Participation

How Active are We

- In 2007, 24% of the adult population could be classified as “Highly Active”, 28% “Fairly Active”, 30% “Just Active” and 18% “Sedentary”
- 33% played sport for at least 20 minutes during the previous 7 days
- 58% went for a recreational walk of at least 20 minutes during the previous 7 days

FITT Analysis

- There was variation by season: fewer people played sport towards the end of the year
- 68% of participants played more than once a week, 69% with high effort
- 62% played their sport in a non-organised setting, with family, friends or alone

Comparison of Social Groups

- People with high educational attainment, men, younger people and those on high incomes were much more likely to play sport and much less likely to be sedentary
- The estimated impact of income on the likelihood of playing sport was even higher than previously reported
- Non-Irish nationals from outside the EU and the English-speaking countries were approximately half as likely to play sport as Irish nationals

Comparison by County/Council

- Comparing the highest performing areas with the lowest performing areas, more than two-and-a-half times as many people played sport in the previous 7 days
- Controlling for population profile, Dún Laoghaire-Rathdown and Mayo recorded high participation
- Controlling for population profile, Dublin City, Limerick, Kildare, Offaly, Leitrim and Westmeath recorded low participation

Relative Popularity of Sports

- Personal exercise activities (going to the gym, fitness classes, exercise machines etc.) are now the most popular sport and exercise activity in Ireland, followed by swimming
- Soccer is by far the most popular team sport, but ranks poorly among women relative to other sports
- Combining volunteering, membership and attendance, Gaelic games remain the leading sports for social participation, but there are now more gym members than GAA members
Walking

- 14% of the population went for a recreational walk every day the previous week, while 42% did not take a walk at all.

- Women walk more than men and seem to be a strong influence, since men in couples walk much more than single men.

- 40% walk regularly for transport, although the figure is much lower in rural locations.

International Comparison

- Active participation in sport and exercise in Ireland is broadly in line with participation in other developed countries.

- Participation rates are nevertheless far behind those of the best performing countries, which are the Scandinavian nations and English-speaking Commonwealth nations.

- Participation rates are clearly ahead of the worst performers, which tend to be Southern European nations.

Social Participation

Volunteering

- 8% of adults had volunteered for sport-related activity in the previous 7 days, equivalent to 280,000 volunteers.

- Disabled people who said they could not actively participate in sport were more likely to be involved as volunteers than those without a disability.

- The average time devoted to volunteering in the previous 7 days was two hours, but women and, especially, men over 65 years of age devoted very much more time.

Club membership

- 32% of adults are members of sports clubs.

- Disabled people over age 45 who said they could not actively participate in sport were more likely to be club members than those without a disability.

- Club membership was strongly related to high income and educational attainment.

Attendance

- 17% of adults had attended a sporting event in the previous 7 days.

- Men were more likely to attend than women, but women with children under 18 were particularly likely to attend and more likely to attend two or three events.

- Attendance was strongly affected by income and social class.

*All figures are based on a representative sample of just under 10,000 adults aged 16 and over interviewed regularly throughout 2007.*
Part One:

Introduction
1. Background and Aims of the ISM

The Irish Sports Monitor (ISM) has been established as an ongoing survey of participation in sport in Ireland. This is the first annual report of the ISM, based on the data collected in 2007. The project involves the collection of over 9,200 questionnaire responses by telephone, from a representative sample of the Irish public aged 16 and over, and the monitoring and analysis of the resulting patterns and trends relating to participation in Irish sport. Although some sporting organisations operate on an all-Ireland basis, the ISM covers only residents of the Irish state.

Aims of the ISM

The primary aim is to measure participation levels with sufficient accuracy that levels and trends can be monitored over a number of years. This first annual report, for 2007, therefore acts as a baseline against which participation in future years can be assessed. In addition to this fundamental aim, the ISM has the capacity to further expand the available research on Irish sport, with a view to assisting both the policy making process and all those involved in the promotion and development of sport in Ireland.

The findings presented here should be viewed in the context of ongoing research that has made extensive use of previous surveys, most notably the Survey of Sport and Physical Exercise (SSPE) of 2003, the Survey of Schoolchildren’s Sport carried out in 2004, and the Quarterly National Household Survey (QNHS) Module on Sport and Social Capital, conducted by the Central Statistics Office in 2006. Where possible, we have cross referenced the results from the ISM with these previous surveys, although in some instances differences in methodology can produce quite large disparities (see especially the discussion on rates of walking in Chapter 2).

There is now a substantial body of research based on these nationally representative surveys (see Lunn, 2007b, for overview). Fahey, Layte and Gannon (2004) were the first to examine levels of participation using a large-scale national survey. Delaney and Fahey (2005) extended this analysis to cover the social and economic benefits of sport. Fahey, Delaney and Gannon (2005) produced extensive findings specific to schoolchildren’s sport. Lunn (2007a) examined the strong relationship between participation in sport and social disadvantage. Lastly, Lunn and Layte (2008) used the SSPE to reconstruct the recent history of Irish sport and thus to reveal trends in participation over recent generations and across the life-course.

In addition to providing a baseline for reference in future years, this present report adds findings to this body of work, based on the largest sample of micro-data analysed to date.

Questionnaire Development

The design of the questionnaire for the ISM is based on careful examination of similar ongoing participation surveys of sport and physical activity conducted in other countries. Questionnaires were collected and scrutinised from England, Scotland, Wales, Canada, Australia and New Zealand. We also consulted with researchers involved in their development and examined published analyses based on the data generated. In addition, previous Irish surveys of sport and physical activity were considered as possible templates for the ISM.

There would have been advantages associated with using a pre-existing questionnaire, including the ability to compare initial results with some previous findings. Some of these pre-existing questionnaires have also been tested for reliability and validity. It was decided, however, to develop an entirely new survey instrument for the ISM. This decision was taken for two reasons.
First, a new questionnaire could be designed specifically to measure participation in ‘sport’ as defined in Irish policy. The appropriate definition of sporting activity is provided in the Sports Council Act of 1999 (see below). The Irish Sports Council has responsibility for the promotion and development of a specific range of sports that fall under this definition. The Council also has a strategic commitment to raise the level of participation in ‘sport’, as defined. Pre-existing international questionnaires were not designed with this specific range of activities in mind, and hence their usefulness for monitoring activity in the Irish policy context would have been limited. The primary purpose of the ISM is to measure and monitor participation in a particular policy context and so a new instrument was preferable.

Second, a new questionnaire could improve accuracy relative to previous Irish surveys by asking respondents to recall their sport and exercise activities during only the previous 7 days. The questionnaires previously employed in Ireland used a ‘reference period’ (the period of time over which respondents are asked to recall their activities) of 12 months. Such a long reference period makes sense for one-off cross-sectional surveys, as it obtains more information about sporting activity per respondent. But when the primary aim is to improve the sensitivity of comparisons over time, a reference period of 12 months will introduce more error, since it is harder to recall activity accurately over the longer period. In order to make comparisons across years, participation levels need to be measured with the highest possible accuracy, so the 7-day reference period was chosen.

The questionnaire was piloted in late 2006 and went “live” in the first quarter of 2007. The telephone interviews were conducted by the ESRI Survey Unit. A full description of the survey methodology is given in Appendix A and the questionnaire is provided in Appendix B. The sample-size of the ISM for 2007 is 9,796 usable responses collected from a representative sample of individuals resident in Ireland and aged 16 and over. Details on weighting, response rates and other technical information are also provided in Appendix A.

Definition of ‘Sport’

The definition of sport adopted in the context of Irish sports policy is derived from the Council of Europe’s 1992 European Sports Charter and was adapted and established in the Irish context through the Irish Sports Council Act of 1999. It distinguishes between competitive and recreational sport:

“competitive sport” means all forms of physical activity which, through organised participation, aim at expressing or improving physical fitness and at obtaining improved results in competition at all levels;

“recreational sport” means all forms of physical activity which, through casual or regular participation, aim at expressing or improving physical fitness and mental well-being and at forming social relationships;

(Irish Sports Council Act, 1999, Part 1, Sect. 2(1))

Thus, the definition of sport with respect to Irish policy is very broad. It encompasses not only traditional competitive sport, but also exercise activities such as walking and cycling, plus a range of other exercise activities aimed at improving physical fitness. When we refer to ‘grassroots’ sport throughout this report, we are referring to both competitive and recreational sport played by the population at large.
Increasing Participation

Part 1, Section 6(1) of the same act, lists the statutory functions of the Council, of which two are particularly relevant in the present context:

(a) to encourage the promotion, development and co-ordination of competitive sport and the achievement of excellence in competitive sport,

(b) to develop strategies for increasing participation in recreational sport and to co-ordinate their implementation by all bodies (including public authorities and publicly funded bodies) involved in promoting recreational sport and providing recreational facilities,

(Irish Sports Council Act, 1999, Part 1, Sect. 6(1))

By measuring levels of participation over time in different kinds of grassroots sport, the ISM is designed to be part of the policy architecture, contributing to the evaluation of sports policy as defined.

Limitations of the ISM

As with any survey instrument, there are limitations associated with the methodology and subsequent analysis that should be borne in mind. Two issues are of particular relevance.

First, the survey reaches only people with a fixed line telephone, at home, who agree to take part. Hence, it is possible that these factors bias the sample. To counter this, the ISM employs a selection rule regarding which household member is asked to respond, based on gender, age and economic status. The data are reweighted by six socio-demographic and socio-economic variables to match a 2007 population profile supplied by the Central Statistics Office. Nevertheless, sample bias remains possible and is even likely with respect to certain hard-to-reach groups, such as non-Irish nationals (see Chapter 4).

Second, survey data rely on accurate responses from individuals regarding their own behaviour. There may be an incentive to misreport, especially if the behaviour in question could be seen in a judgemental light. One tactic for avoiding misreporting is to demand detail on activities, which the ISM questionnaire does. Nevertheless, potential misreporting is unavoidable.

A further research strategy employed to counter these limitations is to compare the findings here with those of other published surveys that used different methodologies. In that regard, many findings in this report are compared to the 2003 SSPE and the 2006 QNHS, each of which was a face-to-face survey. In general, there is close accordance in the results.
Part Two:

Physical Participation
2. How Active Are We?

Highlights

- In 2007, 24% of the adult population could be classified as “Highly Active”, 28% “Fairly Active”, 30% “Just Active” and 18% “Sedentary”
- 33% played sport for at least 20 minutes during the previous 7 days
- 58% went for a recreational walk of at least 20 minutes during the previous 7 days

Introduction

The aim of this chapter is to combine the information obtained on participation in sport and walking to provide headline figures for recreational physical activity among the Irish population. The concentration here is on recreational activities, although the ISM does include questions on whether people walk or cycle regularly for transport. There are, of course, other forms of physical activity (e.g. manual labour, gardening, housework etc.) which are not factored into the analysis.

Key Results

We classify the population into a hierarchy of four groups defined by levels of recreational physical activity during the previous week. Table 2.1 lists and defines these groups. The most active (“Highly Active”) corresponds to those people who through a combination of recreational walking and playing sport meet current WHO guidelines for physical activity, which recommend at least 30 minutes of moderate exercise five times a week (World Health Organisation, 2003). In the present context, “moderate” physical activity is defined as sport or exercise activity that “raises the breathing rate” or recreational walking at a “steady” pace or faster.

Table 2.1: A hierarchy of levels of physical activity based on the ISM questionnaire

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Highly Active</td>
<td>Participated in 30 minutes moderate physical activity at least five times during the previous 7 days (i.e. met WHO guidelines)</td>
</tr>
<tr>
<td>Fairly Active</td>
<td>Participated in 30 minutes moderate physical activity at least twice during the previous 7 days</td>
</tr>
<tr>
<td>Just Active</td>
<td>Participated in a sporting activity or recreational walking for 20 minutes at least once during the previous 7 days, or regularly cycles or walks for transport (at least once-a-week)</td>
</tr>
<tr>
<td>Sedentary</td>
<td>Did not participate (20 minutes) in recreational activity during the previous 7 days and does not cycle or walk regularly for transport</td>
</tr>
</tbody>
</table>

The figures throughout the report are given as percentages. For the adult population aged 16 plus in 2007, 1% is approximately 34,000 people.
A breakdown of the population into this hierarchical classification of physical activity levels is presented in Figure 2.1. Just under 24% of adults are classified as Highly Active, but over half of the adult population is either Highly Active or Fairly Active. Some 18% of the population is effectively Sedentary. Of note, however, is the large proportion of adults, very nearly 30%, who do a small amount of physical activity, walking or playing sport just once a week, or engaging in physical activity only for transport.

For the purposes of future comparison of levels of playing sport and walking, i.e. to define figures against which to judge future performance, we require thresholds for being counted as a participant in each of these activities. The ISM questionnaire asked respondents about the length of recreational walks and the duration of sessions of playing sport undertaken in the previous 7 days. Analysis of this data reveals a sharp step-jump in the distribution of both variables, which occurs between 15 and 20 minutes duration. Based on this analysis, we determined that a person is counted as a “player” or a “walker” respectively if they played sport (excluding walking) or walked for at least 20 minutes at least once during the previous 7 days.

In 2007, the proportion of Irish adults who participated in sport (excluding walking) for at least 20 minutes during the 7 days prior to the survey was as follows.

Players: 32.9%

In 2007, the proportion of Irish adults who participated in recreational walking for at least 20 minutes during the 7 days prior to the survey was as follows.

Walkers: 58.1%

Discussion

Since the questionnaire and methodology of the ISM is being used for the first time, it is not possible to compare the figures above with results from previous surveys, such that we can assess with any degree of precision whether active physical participation is rising or falling. Rather, we anticipate that these headline figures will provide a solid basis for comparison in future years.

Nevertheless, it is comforting to note that the numbers presented in this chapter are broadly in line with expectations based on previous surveys, more specifically the Survey of Sport and Physical Exercise (SSPE) of 2003 and the Quarterly National Household Survey (QNHS) of 2006.

Based on the SSPE, Fahey et al. (2004) estimated that some 33% of the population were active participants in sport more than once a month, while 22% were effectively sedentary. A precise comparison with the figures presented in this chapter is, however, not reliable, since the definitions of participation employed are not exactly the same and the minimum age of respondents is also different (it was 18 years in the SSPE). Still, despite the different methodology (telephone versus face-to-face) and reference period (7 days versus 12 months), the headline figures above are in close accordance with those recorded by the SSPE.

The QNHS data are more difficult to compare. In the QNHS survey, walking was included in a long list of possible sporting activities, rather than being examined via separate questionnaire items that presented respondents with a clear definition of recreational walking, as for the SSPE and ISM. Hence, the published headline figures for participation arising from the survey combine walking and playing other forms of sport (CSO, 2007). Furthermore, the proportion of the population estimated to have taken a recreational walk during the previous 12 months was just 25%. This figure is unrealistically low, both intuitively and in comparison to other estimates. Given the questionnaire design, it cannot be regarded as reliable. Still, it is possible to make a rough comparison between the ISM and QNHS data by removing the walkers from the QNHS participation rates. Unfortunately, the comparison can only be made by making some assumptions about the relative frequency, intensity and duration of walking sessions versus sessions of playing sport. Nevertheless, using this method we can determine that the proportion of the population participating in sport (excluding walking) at least once a week in the QNHS sample is approximately 30% and certainly unlikely to be greater than 33%. Although this comparison is approximate, the ISM figures again compare reasonably.
This chapter thus offers baseline figures for the levels of recreational physical activity and, more specifically, for playing sport and walking in 2007. Given the relationship with previous estimates of participation, we can have a degree of confidence in the reliability of the figures, which should serve as a benchmark against which future estimates can be compared.

A final point to note here surrounds the role of walking and cycling for transport, which previous surveys have not recorded. Although we have no information as to the frequency, duration and intensity of these activities, the ISM records that 41.1% and 10.4% respectively walk and cycle for transport, for at least 20 minutes every week. These figures contribute to the physical activity classification above, but they are arguably surprisingly high in their own right. While there can be little doubt that car usage in Ireland has greatly increased, walking and cycling to get from A to B appears still to make a substantial contribution to physical activity.
3. FITT Analysis

Highlights

- There was variation by season: fewer people played sport towards the end of the year
- 68% of participants played more than once a week, 69% with high effort
- 62% played their sport in a non-organised setting, with family, friends or alone

Introduction

This chapter analyses the responses of players to the FITT questions (‘Frequency, Intensity, Time and Type’). A separate analysis for walking is given in Chapter 7. FITT is a standard method for recording physical activity which takes account of the frequency of participation, the level of physical effort, the duration of activity and the type of activity undertaken. The ISM questionnaire records this information for up to three sports played in the previous 7 days. In addition, because the ISM collected data throughout the year, it begins by examining seasonal variation in participation – an issue that has not previously been possible to address.

Key Results

As detailed in Chapter 2, 32.9% of Irish adults played some form of sport for a period of at least 20 minutes during the previous 7 days. There was, however, significant variation across seasons, as Figure 3.1 shows. The slight drop in the proportion who played sport during the second quarter of the year is not statistically significant, but the more marked fall-off in the final quarter is.

Figure 3.2 reveals that the seasonal variation was not consistent across different kinds of sports. Over the year, more than two and a half times as many people played individual sports (26.2%) as played team sports (9.7%). But the end of year fall-off was due to a drop in individual sports, which was consistent across many activities. It is not clear what caused it or, indeed, whether the effect is merely seasonal or more enduring. Data from 2008 will help to assess this.
As shown in Figure 3.3, over 7% of adults had played more than one sport in the previous 7 days, with 1.7% playing three or more sports. The proportion playing more than one sport equates to one quarter of players. This contrasts with Fahey et al. (2004), who found just over half of players participated in more than one sport. But the reference period for that study was 12 months, whereas here it is 7 days. It is likely that some players switch between sports by season. Another possibility is that a substantial number of players participate in one sport regularly and another occasionally.

As Figure 3.4 shows, more than two-thirds of players took part in sport more than once during the previous week, with almost one quarter playing four times or more. Most people who engaged in multiple sessions of sport performed the same activity on each occasion. This indicates that there is a substantial degree of polarisation in participation in sport. The large majority of sporting activity is not that of "occasional players", and some 8% of the adult population plays sport on more days than they do not.

The majority of sessions of playing sport lasted between 30 minutes and one hour (Figure 3.5). This distribution is partly explained by the popularity of individual sports, for which almost two-thirds of sessions take up to an hour (golf being the exception). In contrast, 60% of team sport takes longer than an hour to play. This is in keeping with evidence suggesting that the growing popularity of individual activities reflects the ease of fitting them around other time commitments, such as work and family (Lunn and Layte, 2008).

As shown in Figure 3.6, almost 86% of players said their exertions in a typical session were sufficient to raise their breathing rate noticeably, with 69% saying a session usually left them out of breath or sweating. Playing a team sport is more likely to involve high levels of effort, but players of team sports also tend to be younger. For individual sport, which is more likely to be played by older adults, 83% of sessions still involve sufficient effort to raise people's breathing rate noticeably.
Figure 3.7 shows that less than 40% of sport was played in organised sessions, the majority of that being in organised training or classes rather than a competitive setting. More than a third of sporting activity took place with family or friends, which was the most common context for sporting activity. Lastly, more than a quarter of sporting activity was solitary, almost all of which was accounted for by personal exercise activities, swimming, cycling and running. Of course, much of the “non-organised” sport may have involved facilities provided by a club or sports centre, or a suitable public space.

The analysis thus far has looked at each component of FITT (fitness, intensity, time and type) in isolation, rather than the relationship between them. Given the many different types of activities, one might not expect to find strong general relationships between different components of FITT, yet there are regularities regarding what types of participation are likely to be most intensive.

Figure 3.8 reveals that those who take part in more sessions per week are also more likely to do so intensively. Just over half of those who played just one session in the previous 7 days put in enough effort to be out of breath or sweat. For those participating more than every other day, the figure is more like 80%. This finding suggests further polarisation in the degree of physical activity associated with participation in sport.

There is also a relationship between the intensity of playing and the context in which the activity takes place, as Figure 3.9 makes clear. Activities undertaken with family and friends tend to be less intensive, perhaps because children are also involved. Activity undertaken by people on their own tends to be as demanding as that undertaken in competition, primarily because the solitary activities undertaken tend to be geared towards personal fitness.

Discussion

The seasonal variation in sporting activity identified in this chapter is sizeable. Further analysis (not shown) reveals no distinct pattern in the end of year fall-off by gender, age or socio-economic group. Rather, it seems to have a broad impact across those who play individual sports. This effect does not, therefore, have an obvious explanation. It is possible that a number of seasonal influences are involved, such as the weather, the approach of Christmas, upheaval associated with the new academic term, and so on. An intriguing alternative is that the effect is not seasonal but is associated with the rapidly deteriorating economic climate during late 2007. If so, we might anticipate a continuing impact on participation in sport in 2008. From the 2007 data alone, it is not possible to test this.
Previous research has shown that the biggest disparity in health status occurs between people who participate in no sporting activity and people who play at least some sport, rather than between those who play sport to differing degrees (Fahey et al., 2004; Lunn and Layte, 2008). In keeping with this, it is a primary focus of policy to concentrate on getting people who do not participate actively in sport and exercise to take up some form of activity. The analysis presented in this chapter supports this as an appropriate goal for policy. Once an individual is engaged in a sport or exercise activity, there is a good chance they will participate more than once a week, for longer than half-an-hour and that they will do so sufficiently to get out of breath or sweat. Thus, most participants would be likely to get some degree of health benefit from their participation. The key issue remains whether they are an active participant in the first place.

Nevertheless, the findings with respect to the context in which people play sport are also noteworthy as regards policy that aims to increase participation. The majority of sporting activity is occurring beyond or on the fringes of official sporting organisations. This strongly implies that policy mechanisms that rely on the pre-existing sporting bodies have limited scope unless those bodies can reach out beyond the sporting and social networks they currently engage with.

As regards the social benefits of sport, the fact that 27% of activity is undertaken by people on their own is striking. The individual sporting activities involved (going to the gym or other similar exercises, swimming, running, cycling) are forms of participation previously identified as the fastest growing sporting and exercise activities over recent decades (Lunn and Layte, 2008).

Previous research has also identified that the primary reason cited by non-participants for not playing sport is lack of time (Fahey et al., 2004; CSO, 2007). The solo activities identified are highly efficient forms of exercise, which take up little time and do not require much in the way of coordination between people. There may therefore be a trade-off between the health benefits that such solo exercise activities bring and the social benefits that accompany other types of participation.
4. Comparison of Social Groups

Highlights

- People with high educational attainment, men, younger people and those on high incomes were much more likely to play sport and much less likely to be sedentary

- The estimated impact of income on the likelihood of playing sport was even higher than previously reported

- Non-Irish nationals, from outside the EU and the English-speaking countries, were approximately half as likely to play sport as Irish nationals

Introduction

Research has shown substantial differences in rates of participation in sport and recreational walking by social group (Fahey et al., 2004; Lunn, 2007a; CSO, 2007). In this chapter, we concentrate on how two of the headline statistics defined in Chapter 2 vary by social group: active participation in sport (excluding walking) and being sedentary. These are selected because the greatest differences in health benefit are found between those who do no sport or physical activity and those who do at least some (Fahey et al., 2004; Lunn and Layte, 2008). However, the social gradients reported below do not vary greatly whichever measure of activity is employed. All the findings reported derive from multivariate models, an example of which is given in Appendix C.

Key Results

Data from the ISM confirm the findings of Lunn (2007a) that the four most significant factors associated with playing sport are educational attainment, gender, age and income. Figure 4.1 shows that people with higher educational attainment were much more likely to have played sport for at least 20 minutes during the previous 7 days, and were significantly less likely to have been sedentary (not played sport, nor taken a walk, nor walked or cycled for transport). The role of educational establishments in promoting and aiding sporting activity is particularly highlighted by the results for current students (final column).

Previous research has also shown interesting interactions between age and gender – the likelihood of playing sport or being sedentary follows a different pattern across the life courses of men and women. The large sample of the ISM allows a more fine-grained analysis of these effects.

Participation rates for playing sport are higher among men and decline with age. But the gender difference is not constant, as Figure 4.2 reveals. The gender gap narrows during early adulthood and is narrowest for the 46 – 55 age group. However, participation is again lower for older women.
Figure 4.3 reveals an even more complex pattern by gender and age with respect to being sedentary. Although less likely to play sport, young women are significantly less likely to be sedentary than young men. For both genders, the likelihood of being sedentary rises, falls and rises again across the age categories, albeit at slightly different stages. Women are generally less likely to be sedentary than men until old age, when the effect reverses.

These interactions between gender and age are easier to explain for playing sport than for being sedentary. Following the sporting life-course analysis of Lunn and Layte (2008), the pattern of Figure 4.2 probably results from the combination of two separate effects. First, men are far more likely to play team sports during earlier adulthood, while women are more likely to play individual sports, for which the drop-out rate is considerably lower. Hence, men drop out more quickly, causing the gender gap to narrow towards middle-age. Second, the lower level of participation among older women is probably a cohort effect, rather than an age effect. Many of the current generation of older women left school prior to the expansion of Irish education in the late 1960s, which increased greatly the opportunities for females to play sport. The participation rate of this group has been low throughout their lifetimes and many have never played any sport at all. Once both these factors – the high drop out of young men from team sports and the cohort of older women who have never played sport – are taken into account, the pattern in Figure 4.2 makes sense: the gender gap first narrows with age and then widens again. Note that it is therefore unlikely that the gender gap evident among these older age-groups will continue, as current middle-aged women play much more sport than their mothers’ generation did.

The patterns for being sedentary (Figure 4.3) are more complex. The same kind of cohort effect may well be at work for older women – a generation for whom regular physical exercise was simply not the norm. For other age groups, women are less sedentary on account of the fact that they do much more walking, even in the youngest age group (see Chapter 7). But the pattern whereby the likelihood of being sedentary first rises then falls, before rising again in old age, is harder to fathom. It seems to result from a combination of effects that impact upon walking, which is related to a broader range of background characteristics than playing sport, including partnership and labour market status, (see Chapter 7).

Figure 4.4 presents a striking picture of the socio-economic gap in sport and physical activity. People on low incomes were two to three times more likely to have been sedentary in the previous 7 days than to play sport, while those in the richest group were four to five times more likely to play sport than be sedentary.

The pattern revealed by Figure 4.4 is even more arresting than the impact of income reported in previous research (Lunn, 2007a). That is, the gradient of activity with income is stronger than had been found in the SSPE data. It is very unlikely that this results from a change in the behaviour of different income categories since 2003, when the SSPE was conducted. Rather, it probably stems from the fact that the income question in the present survey was answered by a higher proportion of people and therefore probably measured household income more accurately. Lunn (2007a) commented that the measurement error associated with income would be likely to result in an underestimate of its true impact. The current findings appear to confirm that hypothesis.
Lunn (2007a) found no impact on playing sport of occupational class, for a given level of educational attainment and income. With the larger sample of the ISM, however, it is possible to find an effect. As Figure 4.5 charts, those in manual occupations play less sport. Multivariate analysis shows this to be true even once the impacts of educational attainment and income are controlled for, though the effect is not as large as for those two factors. This finding could be due to people in manual jobs being disinclined to further physical activity. The similarity in behaviour to those who have no occupation suggests, however, that membership of a lower social class may be behind the result (see Discussion).

The large sample-size allows us to estimate participation among non-Irish nationals. The results must be treated with caution, however. In the sample, 7.7% of respondents were non-Irish, which compares to 11.3% in Census 2006. Predictably, with a telephone-based survey, nationalities whose citizens are likely to be non-English-speaking are those most underrepresented. For these nationalities, the people sampled are probably those with better English. It is a reasonable (though arguable) hypothesis that they would find it easier to be socially active and hence to play sport. Thus, the figures below probably underestimate the impact of nationality.

Figure 4.6 details variation in levels of playing by nationality. The results need further qualification, however, as the demographic profiles of the groups are different. In particular, British nationals have an older profile, while other nationalities have a younger profile. Once these factors are accounted for in multivariate analysis, the only significant difference is that those in the category ‘Rest of World’ (RoW) are less than half as likely to play sport.

(Although the survey sampled a reasonable number of non-Irish nationals, the sample-size is still too small to examine sedentary behaviour, which has a lower incidence than playing sport and results in unreliably small cell-sizes.)

In addition to the social groups considered above, there are a number of other significant findings with respect to social groups and the likelihood of playing sport. People who are disabled, people who do not own a car (especially older people) and people who are unemployed were less likely to have played sport in the previous 7 days. Retired people were more likely to have played than people of the same age still working, as were people in home duties.
Discussion

The analysis presented in this chapter is in keeping with previous analyses of playing sport and physical activity by social groups, yet the larger sample size of the ISM permits additional insights.

Educational attainment, gender, age and income are the most powerful factors associated with having played sport in the previous 7 days. The gradient of participation with educational attainment is very striking and the particularly high levels of activity among the workable sample of almost 400 students in the data-set confirms the hypothesis that continuing education plays an especially important role in adult sporting participation (Lunn, 2007a).

The pattern by age and gender is in keeping with previous findings, although with the larger sample size of the ISM it is possible to discern greater variability in physical activity across the life-course of women than is the case for men.

Compared with previous research, the importance of household income emerges more strongly from the ISM, probably because it was measured with more accuracy. This does not necessarily mean that expense is a reason why people do not participate, although it may imply that. High income is associated with many factors that could influence whether an individual plays sport or is sedentary, including living in better local environments, with better transport connections and access to local organisations and facilities.

Two new findings reported in this chapter concern the association between participation and occupational group, and between playing sport and nationality. Dealing first with the former, although previous cross-sectional analysis failed to find a significant impact of occupational class, survival analysis conducted by Lunn and Layte (2008) found that those in professional occupations were more likely to take up sports as adults. Given this and the similarity between rates of participation for those in less skilled occupational groups and those with no occupation, it is perhaps more likely that the association between occupational group and playing sport is primarily due to the advantageous social networks and associated opportunities enjoyed by those in higher occupational groups, rather than to the demands of manual jobs.

Turning to the issue of nationality, despite the fact that the participation rate recorded for non-EU and non-English-speaking nationalities is probably an overestimate, adults in this category, mainly Asian and African immigrants, are considerably less likely to play sport. It is interesting to note, however, that there is no evidence here that non-British immigrants from the EU play less sport.

Overall, the patterns of playing sport and physical activity by social group remain dramatic and suggestive of powerful social forces that determine people’s opportunities. These disparities therefore remain one of the major challenges for sports policy.
Figure 5.1: Proportion playing sport by county/council

Figure 5.2: Likelihood of playing sport by county/council, controlling for social background
5. Comparison by County/Council

Highlights

- Comparing the highest performing areas with the lowest performing areas, more than two-and-a-half times as many people played sport in the previous 7 days.
- Controlling for population profile, Dún Laoghaire-Rathdown and Mayo recorded high participation.
- Controlling for population profile, Dublin City, Limerick, Kildare, Offaly, Leitrim and Westmeath recorded low participation.

Introduction

There is considerable variation in the level of playing sport across Ireland by county. Raw participation rates are provided in this chapter, but this is not the best way to compare, because counties have very different socio-demographic and socio-economic profiles. One cannot expect a poor county with an older population to have the same number of people playing sport as a rich county with a young population. Hence, the better comparison is one that takes account of these differences. From a policy perspective, a comparison that controls for such factors indicates each county's sporting performance relative to what can reasonably be expected.

Key Results

The survey collected information about which county respondents lived in. Those in Dublin were further asked which of the four Dublin local authorities they lived in (Dublin City Council, Dún Laoghaire-Rathdown, Fingal, and South Dublin). Those in Tipperary were also asked whether they lived in North or South Tipperary. Hence, the results compare across 30 areas. Ideally, the survey would also have distinguished between certain cities and counties (e.g. Cork, Galway, Limerick, Waterford), but limitations of survey space prevented further refinement by geographic area. Participation rates by county are provided in Figure 5.1, which employs the county abbreviations from vehicle registration plates.

Fingal and Dún Laoghaire-Rathdown have participation rates of over 40%, well above the national average of 33% and ahead of a clump of areas with participation rates in the high thirties. At the other end of the spectrum, Tipperary North and Westmeath are the only counties in which less than 20% of respondents had played during the week prior to the survey. Furthermore, there is an asymmetry in the raw data. The areas with the lowest participation rates are further below the average participation level than those with the highest participation rates are above it.

It is important to note, however, that there is a relatively high margin for error on these raw estimates. The average sample-size for each area is 325, but for those outside Dublin, Cork, Limerick and Galway it is only 224. Nevertheless, in some areas more than two-and-a-half times as many people were recorded playing sport as in others. Even with the low sample sizes, it is possible to test for the statistical significance of such large differences.
As stated above, however, it is important to note that these raw figures do not take account of the population profile differences between areas. The analysis presented in Figure 5.2 does, but requires some explanation. The figures given are odds ratios. They express the relative odds that an individual in each area plays sport, controlling for population profile. The numbers are expressed relative to County Sligo, which is the median area (i.e. the middle-ranked one) and takes the value 1.0. Hence, we estimate that a person of a given gender, age and socio-economic status living in Sligo is three times as likely to have played sport in the past 7 days as someone with the same characteristics living in Westmeath. Similarly, a person with those characteristics living in Dún Laoghaire-Rathdown is more than half as likely again to have played sport in the previous 7 days as the person in Sligo, and almost five times as likely as the person in Westmeath.

These odds ratios are estimated using the multivariate statistical model presented in Appendix C, which estimates the relationship between playing sport and a large range of socio-demographic and socio-economic variables: educational attainment, age, income, employment status, occupational group, disability, whether the family has children, car ownership, urban-rural location and nationality. Thus, the figures compare areas while controlling for all of these factors.

How significant are the differences? Not all of the differences between counties are statistically significant, in part because some of the differences are small, but also because the sample size for each county varies and so the estimate is less accurate for the areas with lower populations. The different colours of the columns identify those areas where the difference in levels of participation is statistically significant (at the 10% level) compared with the median ten areas – that is, the ten areas in the middle of the range when all 30 areas are arranged in order of likelihood of participation. The two orange columns, for Mayo and Dún Laoghaire-Rathdown, indicate that both areas had significantly higher participation in sport in 2007. The green columns for Dublin City, Limerick, Kildare, Offaly, Leitrim and Westmeath, indicate that these areas had significantly lower participation. The greater number of areas significantly below median performance confirms the asymmetry suggested by the raw data in Figure 5.1.

Discussion

It is important to note that the ranking of counties given here does not necessarily imply anything about the success or otherwise of local sports policy, or the performance of Local Sports Partnerships and local authorities more generally. Clearly, a successful local sports policy is one important factor in determining the level of participation in a given area, but it is only one among many other potential influences on the numbers playing sport. Other important factors may include transport infrastructure, long-standing tradition, the prevalence of recent arrivals in the area, the number of new developments, the likelihood of people staying in the area after leaving school, the presence of third-level institutions and so on. These factors are planning and demographic issues that are largely or entirely outside the scope of sports policy.

The comparison between counties and councils is nevertheless very useful from the point of view that it allows policy makers to identify areas where there is likely to be considerable opportunity to raise participation rates. Areas with low likelihoods of individuals playing sport are more likely to be home to people who are interested in sport but currently do not play. Thus, those areas with the lowest likelihoods of playing should be considered areas likely to have high levels of untapped interest and hence where the most rapid rises in participation might potentially be achieved.
6. Relative Popularity of Sports

Highlights

- Personal exercise activities (going to the gym, fitness classes, exercise machines etc.) are now the most popular sport and exercise activity in Ireland, followed by swimming.

- Soccer is by far the most popular team sport, but ranks poorly among women relative to other sports.

- Combining volunteering, membership and attendance, Gaelic games remain the leading sports for social participation, but there are now more gym members than GAA members.

Introduction

The size of the sample, at nearly 10,000, allows a fairly precise ranking of individual sports by participation rate for the four primary forms of participation: playing, volunteering, club membership and attendance. (See Part Three for details on these later forms of participation). This analysis differs from previous analyses (Fahey et al., 2004; CSO, 2007), however, in that the reference period is one week instead of one year. Thus, seasonal sports are likely to register at a lower participation rate than activities that are played consistently all year round.

Key Results

Table 6.1 lists the most popular sports (excluding walking) according to the percentage of the population that played the sport in the previous 7 days. Those who played more than one sport are counted under each sport they played. The ‘Personal Exercise’ category is mostly made up of people “going to the gym” or “working out”, but it includes aerobics and fitness classes. ‘Swimming’ includes aquarobics; ‘Soccer’ includes five-a-side; ‘Golf’ includes pitch and putt; ‘Cycling’ includes cycling for leisure (but not for transport); ‘Rugby’ includes tag rugby. In fact, these broad definitions make little difference to the results and no difference to the ordering of sports, although if cycling for transport were included, cycling would top the table at 11.7%.

Table 6.1: Most popular ten sports for active participation

<table>
<thead>
<tr>
<th>Sport</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Exercise</td>
<td>7.3</td>
</tr>
<tr>
<td>Swimming</td>
<td>6.7</td>
</tr>
<tr>
<td>Soccer</td>
<td>5.9</td>
</tr>
<tr>
<td>Golf</td>
<td>5.2</td>
</tr>
<tr>
<td>Jogging</td>
<td>3.1</td>
</tr>
<tr>
<td>Cycling</td>
<td>2.5</td>
</tr>
<tr>
<td>Gaelic football</td>
<td>2.3</td>
</tr>
<tr>
<td>Dancing</td>
<td>1.9</td>
</tr>
<tr>
<td>Hurling/Camogie</td>
<td>1.3</td>
</tr>
<tr>
<td>Rugby</td>
<td>0.9</td>
</tr>
</tbody>
</table>
As Table 6.2 reveals, there are considerable differences in the ranking of sports for each gender. Of particular note is the importance of soccer in men's sport and the dominance of women's sporting activity by individual sports – only one team sport, Gaelic football, makes it on to the list and at a very low level.

Table 6.2: Most popular ten sports for playing by gender

<table>
<thead>
<tr>
<th>Male</th>
<th>%</th>
<th>Female</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soccer</td>
<td>11.4</td>
<td>Personal Exercise</td>
<td>8.5</td>
</tr>
<tr>
<td>Golf</td>
<td>8.7</td>
<td>Swimming</td>
<td>7.9</td>
</tr>
<tr>
<td>Personal Exercise</td>
<td>6.2</td>
<td>Dancing</td>
<td>3.0</td>
</tr>
<tr>
<td>Swimming</td>
<td>5.5</td>
<td>Jogging</td>
<td>2.0</td>
</tr>
<tr>
<td>Jogging</td>
<td>4.2</td>
<td>Golf</td>
<td>1.9</td>
</tr>
<tr>
<td>Gaelic football</td>
<td>3.9</td>
<td>Yoga</td>
<td>1.3</td>
</tr>
<tr>
<td>Cycling</td>
<td>3.8</td>
<td>Tennis</td>
<td>1.2</td>
</tr>
<tr>
<td>Hurling</td>
<td>2.3</td>
<td>Cycling</td>
<td>1.2</td>
</tr>
<tr>
<td>Rugby</td>
<td>1.9</td>
<td>Gaelic football</td>
<td>0.8</td>
</tr>
<tr>
<td>Dancing</td>
<td>0.8</td>
<td>Horse riding</td>
<td>0.5</td>
</tr>
</tbody>
</table>

There are some notable differences between the results reported here and those reported previously. The analysis confirms the finding of the CSO (2007), based on the 2006 QNHS, that personal exercise activity is now the most popular form of sport and exercise in Ireland. Fahey et al. (2004) had found swimming to be the most popular, based on the 2003 SSPE. But historical trends constructed from recall data by Lunn and Layte (2008), show a dramatic rise in personal exercise activity, beginning in the mid-1980s. A continuation of these trends predicted that it would surpass soccer and swimming within a few years of the 2003 survey on which the trends were based. This prediction has come to pass. These trends also explain the higher ranking of jogging and yoga seen here, which are also fast growing individual activities.

Two other specific sports are worthy of mention in the context of previous work. First, although the margins of error involved make it difficult to be sure, the presence of rugby in the list of most popular sports may indicate that the common perception of its rising popularity is accurate. Rugby did not even feature in the top 15 male sports in Fahey et al. (2004), although the presence of 16 and 17 year-olds in the present survey could also be an important factor. Second, it is worth noting the popularity of dancing, among both genders, which was not included under the definition of sport and exercise in the previous studies.

Overall, however, the results confirm the observations of Lunn and Layte (2008) that individual sports are outpacing team sports in popularity, with soccer being the traditional team sport that comes closest to keeping up.

Turning to social participation, given the reference period of just 7 days, it is not possible to produce a full ranking of sports for volunteering, as the samples for each individual sport are too small. It is nevertheless clear from the data that the GAA remains the outstanding example regarding sports-related volunteering, with 3.6% of the population having volunteered in some way during the previous 7 days. It is interesting to note that as many adults volunteer for the GAA each week as actually play Gaelic games. The only other sport to register a significant number of volunteers in the survey was soccer, at 2.2%. These figures are clearly related to the dominance of Gaelic games and soccer in children's sport, which accounts for a substantial amount of volunteering activity.

Table 6.3 ranks sports according to the prevalence of club membership. Almost 10% of adults are now members of a gym, fitness centre or health club. Unsurprisingly, there is a strong correlation between club members and active participants. Yet it is interesting to compare Tables 6.1 and 6.3. A sizeable proportion, though not all, gym members had used the facility during the previous week. Meanwhile, the GAA has many more club members than players – doubtless linked to its high rates of volunteering and attendance (see below).
Table 6.3: Ranking according to club membership

<table>
<thead>
<tr>
<th>Sport</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Exercise</td>
<td>9.8</td>
</tr>
<tr>
<td>GAA (Football/hurling)</td>
<td>8.4</td>
</tr>
<tr>
<td>Golf</td>
<td>5.8</td>
</tr>
<tr>
<td>Soccer</td>
<td>4.1</td>
</tr>
<tr>
<td>Swimming</td>
<td>1.9</td>
</tr>
<tr>
<td>Rugby</td>
<td>1.5</td>
</tr>
<tr>
<td>Tennis</td>
<td>1.2</td>
</tr>
<tr>
<td>Mixed sports</td>
<td>0.7</td>
</tr>
</tbody>
</table>

One point to note is that two of the more popular sports stand out, in that they mostly require facilities or appropriate public space, yet have considerably lower membership rates than active participation rates. For swimming this probably reflecting the prevalence of pay-per-use pools, but perhaps also the number of gyms/health clubs that have pools. But it is also true of soccer, especially in comparison to Gaelic games and rugby. The social structure surrounding soccer is clearly much more informal. Although other interpretations are possible, it seems reasonable to suggest that there is scope in both these sports, especially soccer, for improved social organisation.

Table 6.3 is in close accordance with the SSPE findings for membership rates (Delaney and Fahey, 2005) although, again, the growth in personal exercise activities is reflected. In 2003, GAA clubs had the highest rates of membership of all sports clubs. Now, they have been surpassed by gyms and fitness centres. There is little overlap here: less than 5% of gym members are GAA members.

Table 6.4 confirms the important role of Gaelic games in communities, showing that Gaelic football and hurling/camogie account for a large proportion of attendance at fixtures and sporting events. Indeed, it is the traditional team sports that dominate for spectators. This is doubtless due to the fact that many individual sporting activities are less of a spectacle, but it is also because parents like to watch their children play sport and the traditional team sports continue to be among the most popular children’s sports, albeit primarily with respect to boys. Again, these patterns are in accordance with previous findings (Delaney and Fahey, 2005).

Table 6.4: Ranking according to attendance

<table>
<thead>
<tr>
<th>Sport</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaelic football</td>
<td>6.3</td>
</tr>
<tr>
<td>Soccer</td>
<td>4.5</td>
</tr>
<tr>
<td>Hurling/camogie</td>
<td>3.8</td>
</tr>
<tr>
<td>Rugby</td>
<td>1.1</td>
</tr>
<tr>
<td>Golf</td>
<td>0.3</td>
</tr>
<tr>
<td>Swimming</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Discussion

Apart from providing further evidence of the dramatic increase in personal exercise activities, the figures presented here for volunteering, club membership and attendance do not add much to our previous understanding of how these forms of participation vary across the range of sports. The 7 day reference period employed in the questionnaire is a superior data collection method for gauging the level of active participation in sporting activities (i.e. playing), but perhaps not such a good one for examining other forms of participation, which tend to be more infrequent and so register only at low levels for most sports.

On the other hand, for measuring the participation rate for playing each sport, the data generated here are probably the best indication of the relative participation rates across sports that have been made available in Ireland to date. Although the CSO (2007) figures are based on a larger sample, the published figures do not take account of the significant number of people who play multiple sports. They are also based on a less accurate 12 month reference period.

Nevertheless, the results from the ISM are not out of line with previous work. With the exception of soccer, it is individual sports, especially personal exercise, swimming, golf, jogging and cycling that dominate grassroots participation in adult sport and exercise. Given the emphasis placed on traditional team sports in both the media and policy, in part driven by the understandable popularity of these games as spectator sports, there remains a real challenge for sports policy to promote activities that are more popular among adults and also likely to be of greater health benefit to people as they get older.

Another important aspect of the results presented in this chapter is the comparison of active participation and club membership. For swimming and soccer, but perhaps especially the latter, it suggests the possibility that the social organisation could be strengthened.
7. Walking

Highlights

- 14% of the population went for a recreational walk every day the previous week, while 42% did not take a walk at all
- Women walk more than men and seem to be a strong influence, since men in couples walk much more than single men
- 40% walk regularly for transport, although the figure is much lower in rural locations

Introduction

The ISM records more detailed information about the walking habits of Irish adults than has been collected previously. Respondents are asked whether they have taken any walks for exercise, recreation or leisure in the previous 7 days. They are then requested to give the approximate number of minutes for each walk and to describe their usual walking pace.

Key Results

In 2007, 58% of people had taken at least one walk of over 20 minutes or more for recreation or leisure, within the previous 7 days. There was, however, considerable seasonal variation, as depicted in Figure 7.1. In the second quarter of the year, the figure reached as high as 62%, while in the final quarter it fell to 54%. Given that 2007 had a particularly poor summer, it is possible that the seasonal variation in the proportion of people walking will, in general, prove to be greater still.

The mean number of walks per person per week was 2.3, but the distribution of the number of walks across the population was polarised (Figure 7.2). Some 14% of the population walked at least 20 minutes for recreation every day. Thus, a majority of the population either walked every day or not at all. The large majority of walks lasted between half an hour and one hour and a quarter, with most people describing their walking pace as “steady, average” or “fairly brisk”.

Analysis of walking by socio-demographic variables reveals that the influence of social background on whether people walked is fairly weak – much weaker than in the case of playing sport (excluding walking). The implication is that individual differences and other factors not addressed in the survey have a significant impact on walking behaviour. Candidates for such influences might include dog-ownership and the attractiveness or feasibility of local walks. Nevertheless, there are some statistically significant effects worth highlighting.
The likelihood that people had taken at least one recreational walk in the previous 7 days displays a strong pattern by gender and age. As Figure 7.3 shows, middle-aged and, particularly, young women were much more likely to have taken a walk than their male counterparts, whose likelihood of having taken a walk increased fairly steadily with age.

One interesting driver of male walking behaviour appears to be whether the man is single or has a partner. Even controlling for age and other background characteristics, single men were far less likely to take a walk than married or cohabiting men, as Figure 7.4 indicates. Furthermore, habits formed during partnerships appear to be lasting – divorced and separated men continue to take walks. Young single men, meanwhile, are the least likely demographic group to take walks.

A number of smaller but statistically significant factors also influenced walking for recreation. People of higher educational attainment and higher income were somewhat more likely to have walked during the previous 7 days. Retired people were more likely to have taken a walk. People with small children were less likely to have walked, as were non-Irish nationals. However, all of these differences are smaller than those reported above. The complete picture, which is more difficult to convey presentationally, is that recreational walking is not as strongly related to people’s background characteristics as other sport and exercise activities.

Respondents indicated separately whether they undertook regular walks for transport, as opposed to for recreation, exercise or leisure. ‘Regular’ was defined as at least once a week. Of the total population, 40% undertook regular walks for transport. Once again, the differences between individuals based on social background were relatively small, but some were statistically significant.

The most significant differences in walking for transport were associated with residential location. People living in more densely populated areas are much more likely to walk for transport, as shown in Figure 7.5. There is clearly a greater degree of car-dependency associated with living in rural Ireland, which has an impact upon levels of physical activity.

A number of other characteristics increase the likelihood that individuals walk to get from A to B. Students, non-Irish people, single people (never married), people living in social housing and those who have no car are all more likely to walk regularly for transport.
Discussion

Because walking accounts for such a large amount of physical activity, the factors that influence whether people walk for recreation or for transport are likely to have significant effects on people's health.

However, it appears to be much less straightforward to identify strong factors that determine whether people do or do not walk, especially influences that potentially fall within the remit of policy. Of those factors that can be identified, walking behaviour appears to be most influenced by weather, gender and partnership status.

Nevertheless, the simple fact that the standard background characteristics account for so little of the variation in walking behaviour, unlike the case for active participation in sport, is itself instructive. It implies that the likelihood that people walk may well be governed by lifestyle, choice and environmental influences that are largely unrelated to socio-economic standing. Future research might aim to identify such influences more precisely.
8. International Comparison

Highlights

- Active participation in sport and exercise in Ireland is broadly in line with participation in other developed countries
- Participation rates are nevertheless far behind those of the best performing countries, which are the Scandinavian nations and English-speaking Commonwealth nations
- Participation rates are clearly ahead of the worst performers, which tend to be Southern European nations

Introduction

It is natural to ask how Ireland compares with other countries in terms of participation in sport. However, although this task appears straightforward, it is notoriously difficult to make accurate comparisons. In addition to methodological differences in the collection of survey data across countries, there is no agreed definition of “sport”. For instance, the European Commission has published results based on the Eurobarometer surveys (European Commission, 2004), which suggest that Ireland has higher participation rates than the EU average, especially Southern European nations, such as Spain, Greece and Italy, but lower than the leading countries, which are Finland, Sweden and Denmark. Yet this survey simply asks people “How often do you exercise or play sport?”, translated into each of the European languages, without in any way defining what counts as “exercise” or “sport” and what does not. In particular, respondents are given no guidance as to whether recreational walking or cycling should be included. The Eurobarometer reports that 53% of Irish adults exercise or play sport every week. This is an unrealistically high figure for participation if walking is excluded, and an unrealistically low one if it is included, suggesting that different people responded to the question in different ways. The results must therefore be regarded as, at best, very approximate.

In searching for a better international comparison, the most robust estimate we could find comes from the Carter Report in the UK (Carter et al., 2005), which employed a definition based on participation in all sport or exercise, including walking, to a given level of intensity, for 30 minutes or more, three times a week. Carter's commission assembled information based on recent surveys for nine countries. Even so, the comparison remains approximate, given the different survey methodologies, dates of fieldwork and linguistic idiosyncrasies surrounding definitions.

Key Results

To make the comparison, a total of walks and sessions of sport was compiled from the ISM, in close accordance with the definition employed by the Carter Report. The following criteria were applied. Walks over 29 minutes by respondents who described their walking pace as either “Fairly Brisk” or “Fast” were counted as contributing to the total. Sessions of sport of over 29 minutes involving enough effort to make them out of breath or sweat were also counted.

The proportion of respondents whose combination of walks and sessions of sport was three or more was then calculated and compared with data for the nine countries compiled by the Carter Report.
The results are presented in Figure 8.1. According to this comparison, Ireland is firmly in the middle of the range, but well behind the leading nations for participation in sport and exercise. (Note that the figure of 26% for Ireland is not comparable with the activity levels given in Chapter 2, because the comparison employed by the Carter Report stipulates higher effort levels).

However, it is quite possible that the picture presented here is on the optimistic side regarding Ireland’s participation rates. This is because the figures for other nations were all compiled from surveys conducted prior to 2005, and mostly around 2002. If the pattern of increasing participation in Ireland identified by Lunn and Layte (2008) is replicated in other countries, which given the common social forces involved is quite likely, the figures may underestimate participation in the comparison countries by as much as several percentage points.

Discussion

The results presented in this chapter must be treated with caution. The comparison is imprecise, for the reasons described in the introduction. However, for two reasons, the broad pattern contained in the results can be considered to be indicative of the international picture. First, the differences in participation rates recorded between some countries are very large. Second, the broad pattern produced by this comparison is consistent with that indicated by the Eurobarometer findings.

Hence, the following conclusion may be drawn. Active participation in sport and exercise in Ireland appears to be roughly in line with many other developed countries. Yet participation is clearly well behind the leading countries, which tend to be the Scandinavian nations and English-speaking Commonwealth nations. It is also well ahead of the backmarkers, which tend to be the Southern European nations.
Part Three:

Social Participation
9. Volunteering

Highlights

- 8% of adults had volunteered for sport-related activity in the previous 7 days, equivalent to 280,000 volunteers

- Disabled people who said they could not actively participate in sport were more likely to be involved as volunteers than those without a disability

- The average time devoted to volunteering in the previous 7 days was two hours, but women and, especially, men over 65 years of age devoted very much more time

Introduction

In addition to asking respondents about active participation in sport and recreational walking, the ISM questionnaire also asks about the social side of sport, including voluntary activities associated with sport, membership of clubs and attendance at sports events. This chapter examines patterns of volunteering.

Sport in Ireland is supported by significant amounts of voluntary activity. Without this work, which provides transport, coaching, officiating and many other activities, it is likely that less sport would be played and that the quality of the sporting experience would be diminished. The results show that levels of voluntary activity vary significantly, both seasonally and across the population.

Key results

In 2007, 8% of people were involved in a voluntary activity in the previous 7 days, equating to almost 280,000 people. This is less than the 15% reported in Delaney and Fahey (2005) on the basis of the 2003 SSPE. The difference probably reflects the longer reference period of 12 months employed in the earlier survey, as opposed to 7 days in the ISM. Reported volunteering was higher among men (10%) than women (6%), a ratio similar to that previously reported. There was also marked variation across the year, as shown in Figure 9.1, with the proportion volunteering peaking in the third quarter of the year. It is likely that this peak reflects the course activity of late summer, the beginning of the academic year (see the effect of children below), plus the fact that autumn is the start of the season for many sports.

![Figure 9.1: Volunteering by gender and season](image-url)
Volunteering associated with sport is higher among men across all age groups, with the largest difference between men and women occurring for those aged 55 to 64 (Figure 9.2). Nevertheless, the pattern of volunteering across the life course is similar for men and women. It rises substantially after age 35, before falling away again among older age groups. This patterning by age reflects a number of processes, including the type of connection that individuals have to sport.

For example, the probability of volunteering is enhanced by having a family member who participates in sport. The pattern across age groups is strongly related both to the likelihood of having children and the age of those children, as can be seen from Figure 9.3. The proportion volunteering is always highest among those with children, particularly children under 18. Interestingly, older parents of younger children may be more likely to volunteer than younger parents, although the relationship falls short of statistical significance.

There is an interesting relationship between volunteering and disability. We might anticipate that poor health and/or disability would be an impediment, but it is also possible that being unable to participate actively in sport may lead to higher rates of volunteering if there is a strong desire to be involved. Respondents were asked whether they have any long-standing illness, health problem or disability that limits daily activities or work. If so, they were also asked whether this prevents them from taking part in sport or exercise. Figure 9.4 shows that, above age 44 at least, those who have a health problem and are prevented from active participation are more likely to volunteer than those who are healthy. Interestingly though, those with health problems, but who are not prevented have a lower level of participation.

Previous research on volunteering associated with sport has shown that those with higher educational attainment and income are more likely to have a voluntary involvement in sport, although the relationship between volunteering and socio-economic factors is not as strong as that found for active participation (Lunn, 2007a).

Figure 9.5 shows volunteering is moderately associated with reported household income. The chart displays the odds of volunteering, controlling for gender and age, relative to the poorest income group (which takes the value 1). As income increases, so does the likelihood of volunteering. Analyses show, however, that this relationship is not consistent with age. Up to 35 years, it is actually reversed, with those of lower income being more likely to volunteer. Hence, the relationship depicted only applies after age 35. Higher income groups may be less likely to find time for volunteering as young adults, only beginning involvement once they have children.
Figure 9.6 shows that volunteering is also associated with educational attainment. More educated people are more likely to volunteer, although the probability for those with a third level qualification is somewhat lower than for those with “Other 2nd level” (even controlling for sex and age). These gradients for income and educational attainment confirm previous findings in the Irish context and also underline the important relationship between disadvantage and involvement in sport. One example of the way in which economic advantage increases volunteering is in ownership of a car. Those who have access to a car are three times more likely to volunteer.

The types of voluntary activities carried out over the previous week varied widely (Figure 9.7). The most common activity was coaching, which accounted for 34% of volunteering, followed by providing transport (29%) and being a club official (21%). However, the most common forms varied significantly by gender. Men were much more likely to coach than women (45% v 15%), while women were more likely to provide transport (45% v 19%). Men are also more likely to take on the position of club official, whereas women are more likely to be activity organisers.

Although our analyses so far show that men and those in the 35 to 44 age group were more likely to do voluntary activities related to sport, among those who do volunteer, the average number of hours devoted to it varies significantly. Of all volunteers, half do two hours or less, but 5% report 21 or more hours in the last week. Figure 9.8 shows average hours volunteered by age and gender. Women who volunteer do over one hour more than men who volunteer, although the overall proportion of women volunteers is lower. Meanwhile, men over 65 years are particularly likely to devote a high number of hours to volunteering.

Discussion

This chapter provides further evidence of the substantial voluntary activity associated with sport in Ireland. Our results show that around 8% of adults volunteered during the previous 7 days, providing coaching, transport, officials and organisation, among other functions. Although this level of volunteering represents a very considerable contribution to Irish sport, comparing levels of volunteering with levels of active participation, the present study falls some way short of the conclusion reached by Delaney and Fahey (2005), that there are three volunteers for every four active participants who play with enough regularity and effort to derive physical benefit. The difference reflects the different reference periods used for the SSPE survey and the ISM, implying that volunteering is somewhat less regular than playing.

Volunteering is strongly related to the context of people’s lives. Having children increases the probability of volunteering while children are of school-going age. After this, the difference between those with and without children falls away. High educational attainment is associated with an increased probability of volunteering. This may stem from the better educated having stronger links to sporting networks. Also, while higher incomes are not essential to voluntary activity, it may help to have a car and to be able to contribute with one’s own resources.
There are major gender differences in voluntary activities undertaken. To generalise, men tend to take official roles, while women are more likely to carry out tasks that, while essential to the operation, entail less influence over how sporting organisations are run. The data cannot determine what impact this gender divide has, nor whether those involved perceive any unfairness in this distribution of voluntary labour. But it clearly raises questions about the social position of women within sport.

The variation in time spent volunteering means that some people contribute to sport in a form equivalent to an unpaid part-time job. On average, volunteers reported two hours of time spent volunteering, but 1 in 10 provided ten or more hours and 1 in 20 reported twenty-one or more hours.
10. Club Membership

Highlights

- 32% of adults are members of sports clubs
- Disabled people over age 45 who said they could not actively participate in sport were more likely to be club members than those without a disability
- Club membership was strongly related to high income and educational attainment

Introduction

Sports clubs are the scaffolding within which much sport and exercise in Ireland takes place, but clubs vary dramatically in the extent to which they are market orientated (as say in the case of gyms) and formally structured (e.g. a five-a-side soccer team versus a GAA club). This chapter examines the pattern of club membership in 2007.

Key results

Overall, 32% of respondents report being a member of a club or other organisation that provides an opportunity to engage in physical activity for recreation, exercise or sport. Figure 10.1 shows that across all age groups men are more likely than women to be a member of a club. The proportion who are a member of a club is also highest in the youngest age group at 47%, declining to 17% among those aged 65 or more. These figures are in close accordance with previous findings (Delaney and Fahey, 2005).

Figure 10.2 shows that there is seasonal variation in club membership. It is highest for both men and women at the beginning of the year, at 40% and 23%, with the proportion falling in quarter 2 before rising again in quarter 3. This variation largely reflects the twin periods for joining clubs: the beginning of the year for gyms and exercise, the autumn for team sports such as GAA, soccer and rugby.
Figure 10.3 shows that whereas the probability of club membership falls with age among those without disability, it increases among those with a disability, reaching a peak in the middle age groups before falling thereafter. Above age 45, disabled people are actually more likely to be members than the non-disabled. This is similar to the pattern found for volunteering and suggests that those unable to participate in sport because of physical constraints are still active members of the sporting community, albeit in another form.

Previous research has shown that club membership is significantly influenced by socio-economic factors (Lunn, 2007a). This is unsurprising, since membership can often involve quite substantial fees, particularly in private gyms, golf or tennis clubs. Those groups with less disposable income will be less likely to spend their limited resources on memberships.

Figure 10.4 shows, as expected, that there is a simple and graduated relationship between household income and the probability of being a member of a sports club. Those in the highest income group are over six times more likely to be a member of a club than those in the lowest income group. Analyses controlling for education, employment status, age, sex and children shows this strong relationship between income and membership is robust.

Figure 10.5 shows that club membership is also quite strongly related to educational attainment. Those with higher levels of education are significantly more likely to be a club member. Analyses show that even if we control for the individual’s level of income, those with higher levels of education are still more likely to be a member of a club. Hence, differences across educational groups do not appear to be due to income differences alone. Lunn and Layte (2008) show that the sporting opportunities enjoyed by those who remain in education can have lasting effects on later participation, probably including the likelihood of club membership.
One of the main determinants of an individual’s level of income is their job. Thus, it is unsurprising that an individual’s occupational class is also a very good predictor of whether they will be a member of a club. Those who are employed or self-employed have a high probability whereas those who are unemployed do not. However, this effect is not simply a function of income differences between the employed and unemployed. Even controlling for income, being employed seems to increase the probability of being a member. It may be that being employed offers access to social networks, which may increase the likelihood of being a member of a club. Another interpretation is that those who are working require the structured opportunity to exercise which gyms and clubs offer. The availability of time also plays a role in club membership. Analysis of membership by employment status also reveals that the retired are more likely than the employed to be club members.

Many individuals are members of more than one club, as shown by Figure 10.6. Over 25% of men have two or more club memberships. Analysis shows that the number of memberships held also increases with income, but only up to the middle income groups.

Discussion

Sports club membership is an important element in the institutional structure of sports participation in Ireland. This chapter shows that almost one-third of the population aged 16 and over are members of a sports club. This proportion masks overall variation within the population, however, since almost half of those under the age of 24 report being a member of a club, a proportion which falls to 17% among those aged 65 or more.

As with sports participation or volunteering, club membership is also more common among men, with the biggest gap in membership between the sexes appearing in the youngest age group. The results here also underline the importance of socio-economic factors in shaping club membership with income, education and employment status all important determinants.
11. Attendance

Highlights

- 17% of adults had attended a sporting event in the previous 7 days
- Men were more likely to attend than women, but women with children under 18 were particularly likely to attend and more likely to attend two or three events
- Attendance was strongly affected by income and social class

Introduction

The ISM survey asks about attendance at any sporting fixtures or events in the previous 7 days, as a spectator or supporter (rather than as an active participant). While attendance is strongly influenced by age, with younger age groups more likely to attend, parents in middle age groups have particularly high rates of attendance, presumably to watch their children.

Key results

Some 17% of adults had attended an event during the previous 7 days. Figure 11.1 reveals some seasonal variation. Attendance increased from 15% in the first quarter to 21% in the third quarter, before falling back at the end of the year. The peak coincides with the beginning of the season for many team sports. The seasonal profile varies by gender, suggesting that the kinds of events attended by men and women were different. The narrowing of the gender gap in the second quarter may reflect the greater popularity among men of traditional team games, which are least likely to be played at that time.

Figure 11.2 shows that men were more likely to attend an event than women (20% versus 12% overall). Analysis by age group shows that the youngest age group are significantly more likely to attend an event (32% of men and 16% of women). For men the pattern as age rises is fairly flat at around 20% until the oldest age group among whom less than 10% attended in the last 7 days. These findings are consistent with previous research (Delaney and Fahey, 2005).

This pattern for men is confirmed by multivariate models controlling for a large number of other factors. These show that those older than 25 are around half as likely to attend an event as the youngest age group and those in the oldest age group 40% as likely.
For women the pattern is more complex, with those aged 35 to 44 more likely than either older or younger age groups to attend. Multivariate analysis shows that this pattern reflects the likelihood of having children under 18 years. Figure 11.3 shows this effect, by providing figures separately for women with and without children under 18 years. For the latter, attendance peaks in the youngest age group and decreases thereafter. For those with children, attendance peaks in the 35 to 44 age group, before decreasing thereafter. (Women with children over the age of 18 have an attendance pattern similar to women with no children). There is a somewhat similar though less striking pattern among men, with the peak for those with children under 18 years between 45 and 55.

Previous research on attendance has shown significant differences in the frequency of attendance by educational attainment, with more education being associated with higher levels of attendance (Lunn, 2007a). Figure 11.4 shows that the ISM data reveal a different effect. People with leaving certificate level education are more likely to have attended a fixture in the previous 7 days than those with a third-level qualification (or another second level qualification). Again, this difference may well be due to the difference in reference period (12 months versus 7 days). It could be that people with higher educational attainment attend fixtures less frequently, but that a higher proportion would attend at least once over a longer period. It is difficult to test this theory directly. Another plausible explanation concerns the interactions of age, education and social class. Multivariate analysis suggests that in the youngest age group, lower educational attainment may increase attendance, because many of those not in higher education have jobs and thus higher personal incomes also. As age increases, however, this effect disappears. Yet patterning by social class also contributes. Farmers, self-employed and other non-manual class groups are likely to have leaving certificate qualifications and also have relatively high rates of attendance. Interestingly, women in the farming category have particularly high rates of attendance. Indeed, once we control for age and social class, differences across the educational attainment groups are no longer statistically significant.

Figure 11.5 shows that, as with volunteering and membership of sports clubs, attendance at a sporting event is strongly influenced by the income level of the individual involved. Higher income is associated with higher attendance, although Figure 11.5 shows that the relationship is not entirely simple. The probability of attendance does increase with income, but peaks in the second highest category before decreasing in the highest. This pattern remains even after controlling for a large number of other variables.
There are also some other significant determinants of having recently attended a sporting event. Disability has important consequences for patterns of attendance. As found in club membership and voluntary activity in sport, those with a disability that discounts them from active participation were actually more likely to have attended a sporting event than those without a disability. However, those with a disability but who perceive that they are not prevented from participating in sport were less likely than the able bodied to have attended a fixture. Once again, this suggests a disability that prevents participation in sport actually increases the probability of trying to find another form of sporting involvement such as attendance. Car ownership also emerges as an important factor. As found for voluntary activity, those with a car or access to a car were almost twice as likely to have attended an event in the last 7 days than people without a car.

Almost one-quarter of those who had attended an event in the previous 7 days had attended more than one (Figure 11.6). Interestingly, women attendees were more likely to have attended two or more events than their male counterparts. Analysis shows that this difference reflects the attendance of mothers of children under 18 at children’s sporting events.

**Discussion**

The results presented in this chapter show that attendance at sporting events is far from being a random process, but is strongly influenced by factors such as age, gender, presence of children and socio-economic factors such as education and income.

The findings are in keeping with previous research, which has shown that the type of event attended and specifically whether it involves adult or child participants is an important determinant of the patterns observed. In the present case, parents of children aged under 18 were far more likely to attend sporting events than others their age without children under 18 and, indeed, more likely than much younger age groups who have higher rates of attendance overall.

The findings also confirm that attendance at sports events in Ireland is highly structured by socio-economic factors such as income and education. However, our results suggest that the reference period is crucial, as those with third level qualifications attend less frequently, but are more likely to do so at least once over a longer period.
Part Four:

Conclusions
12. Contribution of the 2007 ISM

With its combination of large sample-size and sole focus on sporting activity, the Irish Sports Monitor is designed to provide the most accurate account of adult grassroots Irish sport available to date. The results contained in the previous chapters therefore offer improved benchmarks for future comparison. The more detailed findings reinforce some of the main messages of previous research, but also add some new insights. Thus, Irish sports policy now has available to it a substantial body of evidence.

Benchmarks

The classification of the population into four categories of physical activity, in Chapter 2, combines individual data on walking and on playing sport. Separate headline figures for participation in each of these components are given in the same chapter. These figures provide benchmarks against which developments in levels of physical activity and in walking and playing sport may be judged.

In addition to these headline numbers, the 2007 ISM provides baseline data for the frequency, duration, intensity and context of sporting activity (Chapter 3), levels of participation by different social groups (Chapter 4) and by area (Chapter 5), detailed levels of walking activity (Chapter 7), headline participation rates for volunteering (Chapter 9), club membership (Chapter 10) and attendance at sporting events (Chapter 11). These findings permit the evolution of Irish sport to be accurately monitored in coming years.

Reinforcement of previous findings

There is now considerable consistency in the available data relating to grassroots Irish sport, which allows solid conclusions to be formed.

Looking across the 2003 SSPE, the 2006 QNHS and the 2007 ISM, a clear picture emerges of the amount and type of sporting activity in Ireland. Most people walk regularly: 58% for at least twenty minutes a week. A substantial minority of the adult population actively participates in regular sport and exercise: 33% according to the criteria and definition of participation used here. These numbers are in line with previous findings.

Compared to non-participants, active participants are, on average, better educated, more likely to be male, younger and richer. Combining the effects of educational attainment, income and social class, there is a very strong socio-economic bias in sporting activity.

There is also a consistent picture regarding the popularity of sporting activities. Personal exercise activity (going to the gym, using exercise machines, taking fitness/aerobics classes) is the most popular form of sport and exercise in Ireland. Swimming, soccer and golf are the only other sports in which more than one in twenty adults participate regularly.

Walking is an extremely important form of adult exercise, since it accounts for a very large amount of physical activity and is the only type of regular physical activity for many people.

In addition to active participation, i.e. playing sport, there are a substantial number of people who engage with sport as social participants; as volunteers for sport-related activity, spectators at sporting fixtures and members of sports clubs.
New findings

The more accurate 7 day reference period used by the ISM, with year-round collection, plus a more detailed set of questions regarding the precise nature of people’s involvement compared to previous questionnaires, has produced some new findings.

The rise of personal exercise activities is not confined to active participation, but extends to club membership as well. Gym and fitness/health club membership is now the most frequent form of sports club membership, overtaking membership of GAA clubs.

There was substantial seasonal variation in activity. Active participation dropped during the latter part of the year. Summarising the seasonal effects across all forms of participation, including the social forms, the third quarter of the year sees substantial pick-up in sporting activity. This is very likely to be linked to the beginning of seasons and the start of the academic year. Later years will be able to confirm whether this seasonal pattern is regular.

The majority of active participation in sport takes place in a non-organised context, with over one-quarter being undertaken by people on their own. The most common context (35%) for playing sport is with friends and family.

Previous research has shown the strong associations between playing sport, educational attainment and income. The present survey suggests that the impact of income may be even greater than previously reported. Furthermore, even controlling for educational attainment and income, those of lower social class (as determined by occupation) are less likely to play sport.

There is a link between nationality and playing sport: nationals from non-English-speaking countries and non-EU countries are less likely to play sport.

The sample-size of the ISM allowed investigation of participation rates by county (or council in greater Dublin). There are considerable differences in participation rates in different areas, with some counties outperforming others by statistically significant amounts, even after controlling for demographic factors.

International comparison would suggest that Ireland’s performance in terms of grassroots participation in sport is middling. We lag behind the Scandinavian nations and English-speaking Commonwealth nations, but are ahead of the worst performers, which tend to be the Southern European nations.

Based on the 7 day reference period used here, the ratio of players to volunteers in sport is perhaps not as great as was previously thought – some 8% had volunteered in the previous 7 days, meaning that sport has one weekly volunteer for every four weekly participants. Nevertheless, looking at the range of activities they perform and the hours they devote, volunteers are an essential component of Irish sport.
The ISM and sports policy architecture

Five previous ESRI reports have detailed more than forty specific policy implications relating to quantitative research since 2004, including more than thirty that relate to adult sport. This first ISM Annual Report for 2007 reinforces the empirical basis from which those implications were derived. Although there are some minor differences in findings and emphasis, the picture is overwhelmingly one of consistency between different surveys and studies.

This is pleasing from the point of view of the reliability and quality of the evidence base. We know where we stand.

The ongoing role of the ISM is now to monitor levels of participation into the future; to see whether the combination of social forces, individual decisions and policy efforts that drive people to get actively involved in sport will deliver higher levels of participation, in line with the aims of policy. Yet, at the same time, the findings have the capacity to contribute to our understanding of those same forces, decisions and policies, such that we can better understand why people participate and can better design policies to encourage and assist them to do so.

In this sense, the ISM, as described in the introduction, can become part of the policy architecture. Whether it does so will depend on the quality of the evidence it produces and the inclination and ability of policy makers to employ that evidence to good effect.
References


Appendices
Appendix A - ISM Technical Report

Sampling

The 2007 Irish Sports Monitor was conducted by telephone with over 10,000 adults (age 16 and over) in 2007. Interviewing took place in 440 randomly selected sampling points throughout the country between February and December 2007.

The ISM employs a three-stage clustered sampling design. The first stage is the selection of the Primary Sampling Unit from the GeoDirectory – a listing of all addresses in Ireland. The sampling points are based on aggregates of town lands. The second stage is the selection of the household within each of the 440 sampling units selected at the first stage. For each cluster, one or more sets of 100 telephone numbers are randomly generated. Not all of the numbers generated are actually live numbers to private households. Some will not be valid numbers; some will be to businesses; some will be valid numbers to households which have no persons whose principal status is “at work” and so on. This means that there is quite a degree of ‘wastage’ in the telephone numbers generated in each Primary Sampling Unit. This ‘wastage’ does not adversely impact on the statistical nature of the resultant sample.

The third stage is the selection of the actual individual within the household who will fill out the questionnaire. We impose a post-stratification selection rule in the selection of the individual within the household chosen for interview. This is based on gender, economic status (at work or not at work) and broad age group (under 45 and age 45 or over). This is done to ensure a representative mix of males and females and different age groups. If this post-stratification selection criterion were not imposed, females over 45 years of age would be over-represented in the final sample for analysis, since willingness to participate in surveys is highest among this group in almost all surveys undertaken.

Sample size and response rates

The survey is conducted by ESRI interviewers, on a telephone basis, with the respondent in his/her home. Interviewers are instructed to attempt each number four times before recording a ‘non contact’, ensuring that at least two of the calls are on different weekday evenings and at least one was at the weekend.

Table A1 outlines the response rates to the survey in 2007. A total of 61,394 numbers were called, resulting in a total of 9,767 fully completed and usable questionnaires; a further 250 partially completed forms which were not used in the analysis; a total of 9,137 households where the household refused to participate in the survey. There were 1,652 households where potential respondents were excluded because of the post-stratification controls (see above), 16,129 where there was consistently no reply, 5,857 were business numbers and 18,602 numbers were not in service. Excluding the ineligible households we made contact with a total of 19,154 valid households. Fully completed and usable questionnaires were completed with 9,767 of these households. This gave an effective response rate of 51 per cent of the valid sample, or 35 per cent if we assume that 42 per cent of the non-contacts are eligible (derived from the fact that 42 per cent of the calls where eligibility is known were to eligible households).

Table A1: Survey Response Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Number of Cases</th>
<th>Per cent of valid numbers</th>
<th>Per cent including non-contacts with adjustment for percentage eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed</td>
<td>9,767</td>
<td>51%</td>
<td>35%</td>
</tr>
<tr>
<td>Partially completed</td>
<td>250</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Refused</td>
<td>9,137</td>
<td>48%</td>
<td>33%</td>
</tr>
<tr>
<td>Total Valid Calls</td>
<td>19,154</td>
<td>100%</td>
<td>(27,631)</td>
</tr>
<tr>
<td>Out of quota</td>
<td>1,652</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Consistent no reply</td>
<td>16,129</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Business Number</td>
<td>5,857</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Non-existent</td>
<td>18,602</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>61,394</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Questionnaire

During the interview, the ISM questionnaire (supplied in Appendix B) begins after a series of questions about the state of the economy, which are used to compile a consumer sentiment index. This feature is part of the initial design of the ISM. It has the advantage that the interview is not solely directed at sport and is not initially described to an individual who receives a call as being a survey about sport. This effectively removes the possibility that those not interested in sport might simply refuse to take part, thereby biasing the sample. Once respondents have agreed to do a survey, it is very rare that they pull out part way through.

The questionnaire is organised into 3 main sections. Section A records details on the respondent’s participation in sport, either as a player, volunteer, club member or spectator. Section B is designed as a flexible module of questions. It is intended that this module will be changed at least once during the year’s data collection, allowing ongoing opportunities to address new research questions with large-sample data. Analyses of Section B questions are not included in the present report. Section C records some additional background information on the respondent not already recorded during the economic questions that preceded the sport questions.

Reweighting the data

The purpose of sample weighting is to compensate for any biases in the distribution of characteristics in the completed survey sample compared to the population of interest, whether such biases are due to sampling error, to the nature of the sampling frame used, or to differential response rates. Whatever the source of the discrepancy between the sample and population distributions, we would like to adjust the distributional characteristics of the sample in terms of factors such as age, sex, economic status and so on to match that of the population. As with most surveys, the completed sample for the ISM under-represented ‘hard to reach’ groups such as young adults, males and those at work, and sample weights are needed to ensure that point estimates from the data represent the population as a whole.

In the current survey this was implemented using a standard statistical technique known as calibration which involves comparing sample distributions to external population figures, in this case derived from the Quarterly National Household Survey (QNHS). The QNHS is based on interviews conducted in over 33,000 households each quarter. The data used came from the first to fourth quarters 2007. The figures from the QNHS followed revisions arising from Census 2006.

The variables used in the weighting scheme were:

- Age cohort (9 categories) by gender
- Level of educational attainment (4 categories) by gender
- Principal economic status (6 categories) by gender.
- Marital status (4 categories) by gender by age group (2 age groups for single adults, 3 age groups for married adults).
- Region (3 categories)
- Number of persons age 16 and over in the household (special figures provided by the CSO, 5 categories)

The weighting procedure involved constructing weights so that the distribution of each of the characteristics for the responding individuals was equal to the distribution of these characteristics for the population of persons age 16 and over. Weighting was accomplished by using a minimum distance algorithm, which adjusts the marginal distributions for a number of variables simultaneously using an iterative procedure.

As the completed sample size differed appreciably by quarter, the weights were separately constructed within each quarter, and an annual weight was constructed by taking the average across quarters. Using the annual weight, the weighted sample is representative of the population age 16 and over living in private households in 2007. The quarter-specific weights are needed to produce figures for each quarter. The weights were constructed so as to gross the results to the population size.
Appendix B Questionnaire

Now I would like to ask you a few questions on recreation, exercise and sport. These questions are being asked on behalf of the Irish Sports Council, but they relate to a broad range of physical activities as well as traditional sports, including walking, cycling, other outdoor pursuits, water sports, and non-competitive or recreational exercise.

A1. First, I would like to ask you about any recreational walking you did in the last 7 days.

DO NOT include walks for transport, such as walking to work or to the shops, but DO include walks undertaken for exercise, recreation or leisure.

In the last 7 days, did you take such a walk?

Yes ☐ 1  No ☐ 2 go to A6

A2. How many walks for exercise, recreation or leisure did you take? ________

A3. Approximately how many minutes did each walk last?

a. ____  b. ____  c. ____  d. ____  e. ____  f. ____  g. ____

(INT: If interviewee took more than 7 walks, please record the 7 longest)

A4. How would you describe your usual walking pace during this(these) walk(s)? [Tick ONE only]

Slow ☐ 1  Steady, average ☐ 2  Fairly Brisk ☐ 3  Fast ☐ 4  Don’t know ☐ 5

A5. I would now like to ask you about any OTHER physical activities you undertook in the past 7 days for exercise, recreation or sport.

Please DO NOT include physical activity for work, transport, or domestic work like gardening or DIY. Please DO include personal exercise, such as swimming, dancing or jogging, as well as all forms of sporting activity, indoor or outdoor, whether undertaken in an organised setting or casually with family or friends.

So, in the past 7 days, did you participate in any such activities?

Yes ☐ 1  No ☐ 2 go to A22

A6. Please list up to 3 sports or activities, in the order in which you participated the most:

(INT: If answer includes any of the 6 sports in the table, it is ESSENTIAL to ask the relevant follow-up question and record exactly which type of sport, as shown. Treat each of these as a separate activity.)

<table>
<thead>
<tr>
<th>A6a.</th>
<th>FOOTBALL</th>
<th>Is that: GAA OR Soccer OR Five-a-side?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A6b.</td>
<td>GOLF</td>
<td>Is that: 18-hole OR Pitch &amp; putt?</td>
</tr>
<tr>
<td>A6c.</td>
<td>RUNNING</td>
<td>Is that: Athletics OR Cross-country OR Jogging?</td>
</tr>
<tr>
<td></td>
<td>CYCLING</td>
<td>Is that: Leisure OR Sport (Road, Mountain etc.)?</td>
</tr>
<tr>
<td></td>
<td>BOWLING</td>
<td>Is that: Ten-pin OR Lawn OR Road?</td>
</tr>
<tr>
<td></td>
<td>HORSE-RIDING</td>
<td>Is that: Leisure OR Sport (Show-jump, Racing etc.)?</td>
</tr>
</tbody>
</table>
I'd like to ask you a short series of questions about each activity, starting with the first

[INT: prompt activity A6a]

A7. On how many of the last 7 days did you take part? _________

A8. For how long did you take part? Consider a usual session if you took part more than once. _______ minutes

A9. Was the effort enough to raise your breathing rate? Yes □ 1 No □ 2

A10. Was the effort enough for you to be out of breath or sweat? Yes □ 1 No □ 2

A11. In what context did the activity take place? [Tick all that apply]

Organised training/coaching/lesson □ 1
Organised competition □ 2
Casually with family or friends □ 3
On own □ 4
Other □ 5

[INT: If no second activity (A6b) go to A22, else go to A12]

I'd like to ask you the same series of questions about the second activity... [INT: prompt activity A6b]

A12. On how many of the last 7 days did you take part? _________

A13. For how long did you take part? Consider a usual session if you took part more than once. _______ minutes

A14. Was the effort enough to raise your breathing rate? Yes...... 1 No........ 2

A15. Was the effort enough for you to be out of breath or sweat? Yes...... 1 No........ 2

A16. In what context did the activity take place? [Tick all that apply]

Organised training/coaching/lesson □ 1
Organised competition □ 2
Casually with family or friends □ 3
On own □ 4
Other □ 5

[INT: If no third activity (A6c) go to A22, else go to A17]

I'd like to ask you the same series of questions about the third activity

[INT: prompt activity A6c]

A17. On how many of the last 7 days did you take part? _________

A18. For how long did you take part? Consider a usual session if you took part more than once. _______ minutes

A19. Was the effort enough to raise your breathing rate? Yes...... 1 No........ 2

A20. Was the effort enough for you to be out of breath or sweat? Yes...... 1 No........ 2
A21. In what context did the activity take place? [Tick all that apply]

<table>
<thead>
<tr>
<th>Organised training/coaching/lesson</th>
<th>Organised competition</th>
<th>Casually with family or friends</th>
<th>On own</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
</tbody>
</table>

A22. I would now like to ask you about any voluntary activity associated with sport and exercise activities that you undertook in the past 7 days. Voluntary activity means any role you may have fulfilled in support of sport or recreational physical activity, for adults or children. It includes helping to run events, providing or maintaining transport, food, equipment or kit, or acting in any kind of official capacity in relation to an event, team or organisation that provides opportunities to engage in physical activities for recreation, exercise or sport.

So, in the past 7 days, were you involved in any volunteering of this type?

Yes ☐ 1 No ☐ 2 go to A28

A23. What were the sports or physical activities concerned (up to a maximum of 2 you were most involved in)?

[INT: If answer includes any of the 6 sports in the table, it is ESSENTIAL to ask the relevant follow-up question]

| A23a. ___________________________ | FOOTBALL | Is that: GAA OR Soccer OR Five-a-side? |
| A23b. ___________________________ | GOLF     | Is that: 18-hole OR Pitch & putt?     |
|                                  | RUNNING  | Is that: Athletics OR Cross-country OR Jogging? |
|                                  | CYCLING  | Is that: Leisure OR Sport (Road, Mountain etc.)? |
|                                  | BOWLING  | Is that: Ten-pin OR Lawn OR Road?     |
|                                  | HORSE-RIDING | Is that: Leisure OR Sport (Show-jump, Racing etc.)? |

A24. For sport … [INT: prompt activity A23a], what voluntary involvement did you have? [Tick all that apply]

<table>
<thead>
<tr>
<th>Providing Transport</th>
<th>Coach</th>
<th>Club official</th>
<th>Activity Organiser</th>
<th>Kit Maintenance</th>
<th>Selector</th>
<th>Mentor</th>
<th>Referee</th>
<th>Other (please specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
<td>☐ 6</td>
<td>☐ 7</td>
<td>☐ 8</td>
<td>☐ 9</td>
</tr>
</tbody>
</table>

A25. How much time during the past 7 days did you devote to volunteering for this activity? ____________ hours

[INT: If no second activity (A23b) go to A28, else go to A26]

A26. For sport … [INT: prompt activity A23b], what voluntary involvement did you have? [Tick all that apply]

<table>
<thead>
<tr>
<th>Providing Transport</th>
<th>Coach</th>
<th>Club official</th>
<th>Activity Organiser</th>
<th>Kit Maintenance</th>
<th>Selector</th>
<th>Mentor</th>
<th>Referee</th>
<th>Other (please specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
<td>☐ 6</td>
<td>☐ 7</td>
<td>☐ 8</td>
<td>☐ 9</td>
</tr>
</tbody>
</table>

A27. How much time during the past 7 days did you devote to volunteering for this activity? ____________ hours
A28. Are you a member of any kind of sports club? Include clubs for traditional sports, but also walking, cycling or swimming clubs, fitness centres, gyms or other organisations that provide opportunities to engage in physical activity for recreation, exercise or sport?

Yes ☐ 1  No ☐ 2 go to A31

A29. How many are you a member of? _________

A30. What are the sports or physical activities concerned (up to a maximum of 3 you are most involved in)?

[INT: If answer includes any of the 6 sports in the table, it is ESSENTIAL to ask the relevant follow-up question]

| A30a. ______________________ | FOOTBALL | Is that: GAA OR Soccer OR Five-a-side? |
| A30b. ______________________ | GOLF | Is that: 18-hole OR Pitch & putt? |
| A30c. ______________________ | RUNNING | Is that: Athletics OR Cross-country OR Jogging? |
| A30d. ______________________ | CYCLING | Is that: Leisure OR Sport (Road, Mountain etc.)? |
| A30e. ______________________ | BOWLING | Is that: Ten-pin OR Lawn OR Road? |
| A30f. ______________________ | HORSE-RIDING | Is that: Leisure OR Sport (Show-jump, Racing etc.)? |

A31. Given the broad definition of sporting activities we have been using, have you attended any fixtures or events in the past 7 days, either children’s or adult events, as a spectator or supporter, rather than as an active participant?

Yes ☐ 1  No ☐ 2 go to A34

A32. How many events did you attend? _________

A33. What were the sports or physical activities concerned (up to a maximum of 3 most recent events)?

[INT: If answer includes any of the 6 sports in the table, it is ESSENTIAL to ask the relevant follow-up question]

| A33a. ______________________ | FOOTBALL | Is that: GAA OR Soccer OR Five-a-side? |
| A33b. ______________________ | GOLF | Is that: 18-hole OR Pitch & putt? |
| A33c. ______________________ | RUNNING | Is that: Athletics OR Cross-country OR Jogging? |
| A33d. ______________________ | CYCLING | Is that: Leisure OR Sport (Road, Mountain etc.)? |
| A33e. ______________________ | BOWLING | Is that: Ten-pin OR Lawn OR Road? |
| A33f. ______________________ | HORSE-RIDING | Is that: Leisure OR Sport (Show-jump, Racing etc.)? |

A34. Apart from during PE lessons, did you play regular sport at school?  Yes ☐ 1  No ☐ 2

A35. When you were at school, did your parents play any kind of sport regularly? [Tick ONE only]

Yes, both ☐ 1  Yes, father only ☐ 2  Yes, mother only ☐ 3  No ☐ 4  Don’t Know ☐ 5

A36. Do you undertake any regular walks of over 15 minutes for transport, such as walking to work, walking children to school etc.? By regular I mean at least once-a-week.  Yes ☐ 1  No ☐ 2

A37. Do you cycle regularly as a form of transport? By regular I again mean once-a-week.  Yes ☐ 1  No ☐ 2

***** Section B (Flexible Module) Inserted Here *****
Finally, I would like to ask you a few more background questions.

C1. Do you have any long-term illness, health problem or disability that limits your daily activities or work?  
   Yes ☐ 1  No ☐ 2

C2. Does this prevent you from taking part in sport and exercise?  Yes ☐ 1  No ☐ 2

C3. Do you have any children?  Yes ☐ 1  No ☐ 2 go to C6

C4. How many children do you have?  

C5. What age is your youngest child?  

C6. Does your household have a car?  Yes ☐ 1  No ☐ 2

C7. Which of the following best describes where you live? [Tick ONE only]
   In a city ☐ 1  In a town ☐ 2  In a village ☐ 3  Isolated location ☐ 4  Don’t Know ☐ 5

C8. Which county do you live in?  
   [INT: If TIPPERARY, specify North or South]
   [INT: If DUBLIN go to C9, else go to C10]

C9. Which of the following is your local authority?
   Dublin City ☐ 1  Dun Laoghaire-Rathdown ☐ 2  Fingal ☐ 3  South Dublin ☐ 4

C10. What nationality are you? If joint nationality, please state both nationalities  

C11. Do you supervise or manage anyone in your job?  
   Yes ☐ 1 go to C12  No ☐ 1 go to END

C12. Do you supervise or manage… Less than 25 people ☐ 1  25 or more people ☐ 2

   These last two questions refer to the main earner in your household.

C13. Does he/she supervise or manage anyone in their job?  Yes ☐ 1 go to C14  No ☐ 1 go to END

C14. Do he/she supervise or manage? Less than 25 people ☐ 1  25 or more people ☐ 2

THANK YOU VERY MUCH FOR TAKING THE TIME TO TAKE PART IN THIS SURVEY

INT: Gender of respondent:  Time interview ended ___ : ___ (24-hour clock)
Appendix C - Multivariate Model of Playing Sport

Logistic regression for determinants of being a “player”, as defined in Chapter 2.

<table>
<thead>
<tr>
<th>Explanatory Variable</th>
<th>β</th>
<th>s.e.</th>
<th>p-value (Wald)</th>
<th>Odds ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-.802</td>
<td>.195</td>
<td>.000</td>
<td>.448</td>
</tr>
<tr>
<td>Educational attainment (Lower second level)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>-.169</td>
<td>.114</td>
<td>.138</td>
<td>.845</td>
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<tr>
<td>Higher second level</td>
<td>.299</td>
<td>.089</td>
<td>.001</td>
<td>1.349</td>
</tr>
<tr>
<td>Other second level</td>
<td>.249</td>
<td>.131</td>
<td>.057</td>
<td>1.283</td>
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<td>Third level</td>
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<td>.093</td>
<td>.000</td>
<td>1.709</td>
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<td>Current student</td>
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<td>.000</td>
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<td>Weekly income (£500 – 749))</td>
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<td>Under £300</td>
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<td>.838</td>
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<td>£300 - 399</td>
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<td>.132</td>
<td>.167</td>
<td>.833</td>
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<td>£400 - 499</td>
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<td>.107</td>
<td>.034</td>
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<td>£750 - 899</td>
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<td>.086</td>
<td>.700</td>
<td>1.034</td>
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<tr>
<td>£900 - 1249</td>
<td>.238</td>
<td>.087</td>
<td>.006</td>
<td>1.269</td>
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<tr>
<td>Above £1250</td>
<td>.575</td>
<td>.085</td>
<td>.000</td>
<td>1.778</td>
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<tr>
<td>Male</td>
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<td>.059</td>
<td>.000</td>
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<tr>
<td>Age/10</td>
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<td>.033</td>
<td>.000</td>
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<tr>
<td>Employment status (Employee)</td>
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<td>Retired</td>
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<td>Not working</td>
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<td>Home duties</td>
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<tr>
<td>Occupational class (Skilled manual)</td>
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<td>Professional/Manager</td>
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<td>.086</td>
<td>.592</td>
<td>1.047</td>
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<td>Non-manual</td>
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<td>.088</td>
<td>.089</td>
<td>1.162</td>
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<td>.681</td>
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<td>.137</td>
<td>.795</td>
<td>.965</td>
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<td>Disabled</td>
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<td>.000</td>
<td>.577</td>
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<td>Children (No children)</td>
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<td>Over 18</td>
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<td>Youngest aged 10 to 18</td>
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<td>.100</td>
<td>.639</td>
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<td>Youngest under 10</td>
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<td>Access to car</td>
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<td>Location</td>
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<td>Town</td>
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<td>Other EU</td>
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<td>.379</td>
<td>.846</td>
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<td>Other English-speaking</td>
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<td>.296</td>
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<td>Rest of World</td>
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N: 8,389  
Nagelkerke R-Squared: 0.221