



THE IRISH SPORTS MONITOR

THIRD ANNUAL REPORT, 2009

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The Economic and
Social Research Institute (ESRI)

THE
IRISH SPORTS
COUNCIL



AN CHOMHAIRLE SPÓIRT



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Summary of Findings

Activity in 2009

- Levels of physical activity increased in 2009, with more people classified as highly active or fairly active
- The proportion of adults (aged 16 and over) who actively participated in sport rose significantly¹ between 2008 and 2009, from 30.8% to 33.5%
- The proportion who walked regularly also went up, from 57.5% to 60.5%

Trends in Active Participation

- The U-shaped trend for active participation between 2007 and 2009 was driven mainly by a fall and subsequent recovery in the playing of individual sports, with the fall greater among those in the lower half of the income distribution
- The relationship between income and playing sport is stronger in 2009 than it was in 2007 – further confirmation that the recession affected sport
- The participation increase in 2009 was greatest among working people and those with children, suggesting that the increase was partly caused by people having more free time in which to play sport

The Sporting Spectrum

- Swimming remained the most popular activity (7.2% of adults swam in the previous 7 days), ahead of personal exercise (5.8%) and soccer (5.6%)
- Soccer (10.7%) and golf (8.1%) were the most popular activities for men, while swimming (8.5%) and personal exercise (7.1%) were most popular among women

Walking and Cycling for Transport

- Walking and cycling as a mode of transport contribute substantially to physical activity, with 45.7% and 11.2% of adults doing each regularly
- Students, city dwellers, single people and younger people are particularly likely to walk and cycle for transport, with women more inclined to walk than men, and men more likely to cycle than women
- People who play sport or undertake recreational walks are more likely also to walk or cycle for transport

Sedentarism in Ireland

- Sedentarism fell from 18.2% in 2007 to 15.5% in 2009²

1 Throughout this report, when we describe a change as “significant”, it implies that the effect in question is statistically significant. The results presented in this summary are all statistically significant.

2 An individual is defined as sedentary in this report if they do not engage in any sporting activity, nor undertake recreational walks, nor walk or cycle regularly for transport.

- The fall was greater among those with higher incomes – in the lower half of the income distribution more than one-in-five adults is sedentary
- Older women, the middle-aged and those living in rural locations are more likely to be sedentary

Volunteering

- The proportion of adults doing voluntary activity for sport fell from 8.2% in 2007 to 6.8% in 2009, with declines across both individual and team sports
- Rates of volunteering declined most among the middle-aged, working people and those with lower incomes
- Volunteering increased among the unemployed, but solely in relation to team sports

Membership

- Club membership remained unchanged between 2007 and 2009, with 32% of adults holding some type of sports club membership
- Membership decreased among those aged under 25 and increased among older age groups
- Membership among the unemployed doubled between 2007 and 2009, from 14% to 28%, but there is reason to believe this increase is temporary

Attendance

- Attendance at sporting events fell from 17% in 2007 to 15% in 2008 but recovered to 17% in 2009
- The rise was primarily due to more men attending team sports fixtures
- Attendance at events among the unemployed increased sharply to 20% in 2009

The Broader Context for Sport

- Policy to increase active participation following the recession should note that cost and lack of free time are significant barriers to be overcome
- Particular efforts need to be made to keep the young and the unemployed involved in sport, both actively and socially
- Sports organisations can be advocates for other policies to reduce sedentarism, especially making localities better for walkers and cyclists
- Efforts to reduce sedentarism should target older people in low income groups and middle-aged men, where sporting organisations can again play a role

Part One

Introduction

1. The Third Wave of the ISM

Background

The Irish Sports Monitor (ISM) is a telephone survey of participation in sport and physical exercise in Ireland, which began in 2007 and continued throughout 2008 and 2009. Based on regular interviews with adults aged 16 and over, the ISM is primarily designed to track levels of participation in sport and recreational exercise, both for the population as a whole and various subpopulations of interest. To achieve sufficient accuracy, it employs large annual samples: 9,781 in 2009; 6,829 in 2008; 9,767 in 2007.

The survey is conducted against a backdrop of international research that has increasingly revealed the importance of physical activity for health. Successful battles against infectious diseases in developed countries mean that degenerative diseases now constitute the greater risk to human health. Physical activity reduces the risks of suffering from many chronic degenerative conditions and has, therefore, come to greater prominence as a contributor to good health. The relevant scientific evidence has recently been extensively reviewed in the United States by the Physical Activity Guidelines Advisory Committee (2008). It concluded that there was very strong evidence linking physical activity to better health-related fitness, lower risk of developing disabling medical conditions and lower rates of various chronic diseases. Higher levels of activity are associated with reduced risks of coronary heart disease, stroke, diabetes and various cancers, and with improved skeletal health. Increasing physical activity is a medical recommendation and a global public health policy objective (World Health Organization, 2002).

Sport and recreational exercise, broadly defined, constitute a major component of overall physical activity. Throughout this report “sport” is defined in accordance with the broad definition contained in the Irish Sports Council Act of 1999, which covers all kinds of recreational exercise activities, such as swimming, jogging and going to the gym, as well as traditional field games such as soccer and Gaelic football. Recreational walking, walking as a mode of transport and cycling for transport are also measured in the survey. The analysis initially combines the data relating to these activities with that relating to participation in sport, to provide an overall assessment of physical activity levels in Ireland. The report goes on to offer separate analyses of playing sport and of walking and transport related physical activity, but also to examine the overlap between these activities. This analysis forms much of the basis for the policy implications discussed in the final chapter, which invites policymakers to consider the potential importance of such overlaps and the role of sport within the broader context of overall physical activity and policy to increase it.

The present report focuses on the third wave of data collection, undertaken in 2009, but must be understood in the context of the results obtained in 2007 (Lunn, Layte and Watson, 2009) and 2008 (Lunn and Layte, 2009). During the first two years of the ISM’s operation, Ireland went through a period of dramatic economic change as it entered a very deep and prolonged recession. The recession had a measurable impact on participation in sport, resulting in approximately one-in-sixteen players giving up regular sporting activity between 2007 and 2008. The key question for 2009, then, was whether this declining trend would continue.

The findings should also be viewed in the context of what has become a substantial body of quantitative research based on nationally representative surveys of sporting activity. Lunn (2007b) aims to provide an accessible summary of findings. More detailed accounts can be found in a range of publications written by the ESRI in collaboration with the *Irish Sports Council*. Fahey, Layte and Gannon (2004) were the first to analyse active participation using a large-scale national survey. Delaney and Fahey (2005) extended this analysis to cover social participation and to assess the economic benefits of sport. Fahey, Delaney and Gannon (2005) provided extensive findings specific to schoolchildren’s sport. Lunn (2007a) undertook an exploration of the strong relationship between participation in sport and social disadvantage. Lastly, Lunn and Layte (2008) used recall data to reconstruct the recent history of Irish sport and hence to uncover trends in participation over recent generations and across the life-course. Comparisons with each of these previous quantitative analyses are made at various points in this report. A further data-source referred to is the published tables of the *Quarterly National Household Survey* (QNHS) module on sport and physical exercise (Central Statistics Office, 2007), which is the only other survey of sport and exercise in Ireland to have employed a large representative sample.

As mentioned above, the ISM findings have implications for policy, which recognises that sport and recreational exercise makes a contribution not only to health, but also to social capital. The final chapter considers these implications. A more general evaluation of how Ireland's sports policy mechanisms relate to the twin goals of improving health and social capital can be found in Lunn (2008).

Sport in Recession

As reported in the 2008 ISM Annual Report, the recession was the dominant factor in determining changes in participation in sport between 2007 and 2008. The results in the following chapters of the present report reveal that, once again, economic fortunes proved to be a crucial determinant of changing patterns of sporting activity in 2009. This section therefore offers a brief background to the link between the recession and participation in sport and exercise.

Between 2007 and 2008, active participation (defined as undertaking a sporting activity for at least 20 minutes in the previous 7 days) fell from 32.9% to 30.8%, which amounted to a statistically significant drop. However, the fall in participation was not steady over time, but began in the final quarter of 2007 and was at its most severe in the first quarter of 2008. Indeed, there was a suggestion that participation may have begun to rise a little again later in the year.

The 2008 ISM Annual Report found strong evidence that the recession was responsible for this drop in active participation. The link between an individual's income and the likelihood that they play sport had strengthened. Participation rates of different employment status categories had also changed. The 2008 report concluded that changes in active participation during the recession were probably determined by the balance between two competing forces, one downward and the other upward. The downward force was declining household spending (be that due to lower income or increased saving), which reduced people's ability to afford the club membership fees, transport and sporting equipment necessary to play many sports. The upward force was additional free time, available not only to those unemployed, but to others who left the workforce altogether and to many working people who had either gone part-time, had working hours otherwise reduced, or experienced less pressure in the workplace. Previous research shows that lack of time is considered the biggest barrier to greater participation in sport and exercise. The 2008 Annual Report conjectured that the sharp downward shift in consumer spending at the beginning of 2008 caused an equivalent dip in the playing of sport, but that as more free time became available to many, this became the stronger influence and participation began to rise again.

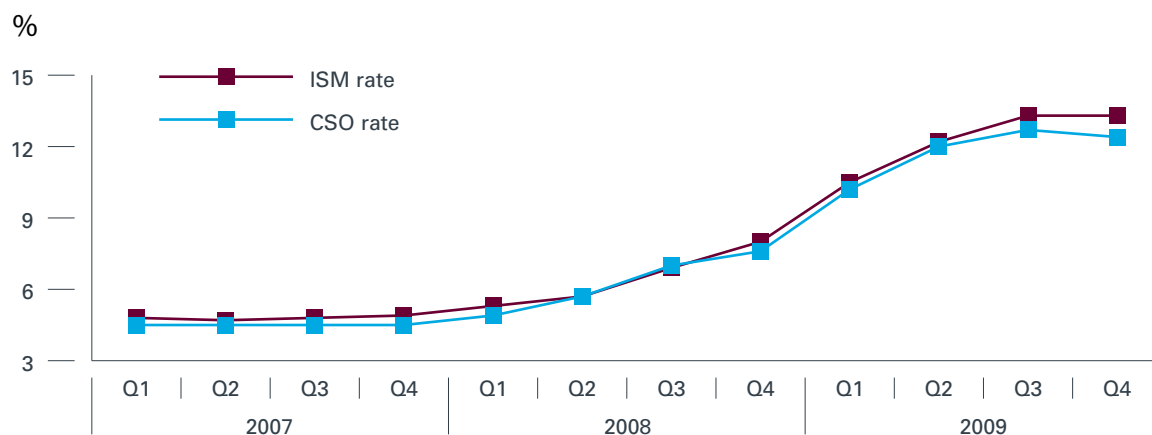
These competing forces left the prospects for active participation in 2009 uncertain. In addition to the continuing effect of lower household spending, a further danger was that the increased participation of those who were out of work would be short-lived. In normal times, unemployment has a negative impact on playing sport. Even after controlling for their lower income and other background characteristics, the unemployed play less sport. So higher unemployment might ultimately reduce participation in sport. On the other hand, greater free time might be available not only to those out of work but also those in work. Thus, the upward force on playing sport might manage to dominate overall levels of participation even if levels of playing among the unemployed fell.

The present report aims to explore these competing influences on overall participation. It then considers whether, in addition to causing fluctuating participation overall, the recession produced any significant change in the make up of the players and the type of activities they undertook. In other words, the analysis considers whether the headline figures mask greater underlying change between different social groups and activities.

In order for the analysis of the ISM to address the impact of the recession adequately, it is clearly important that the extent of economic change has been captured in the sample. One useful way to test this is to compare the unemployment rate as measured by the ISM survey with the official figures recorded by the Central Statistics Office (CSO). The comparison is not precise, as the official figures are based on the International Labour Organisation definition of unemployment, which defines anyone who has done any recent paid work at all to be in employment. The ISM survey asks people for their Principal Economic Status, which represents their own view of their employment status. Generally, the latter figure is known to produce slightly higher estimates.

Figure 1.1 compares the quarterly unemployment rates recorded by the CSO and the ISM. From the perspective of the usefulness of the sample survey, the picture is encouraging. The unemployment rate as measured by the ISM tracks the official figures well, suggesting that it is an appropriate vehicle for analysing the impact of unemployment on sport.

Figure 1.1: The rate of unemployment as measured by the CSO and by the ISM, 2007-2009



A further recession-related factor to consider is migration. In 2007, Ireland experienced net immigration, but by 2009 it was experiencing net emigration. This change has the capacity to influence participation rates for the population, if the people most inclined to emigrate belong to social groups that are more (or less) likely to be involved in sport. In this respect, two aspects of the change are notable. First, the CSO Population and Migration Estimates show that younger adults, especially men, are most likely to emigrate. Partially as a result of this, but also because of the low birth-rate in the 1990s, CSO figures show that between 2007 and 2009 the number of 15-24 year-olds fell from 633,800 to 583,400 – a fall of almost 8%. Given that 16-24 year-olds make up one-third of adult active participants in Ireland, emigration could have had a non-negligible impact on active participation over the period. (Any impact on social participation, which has an older age profile, would have been negligible.) The second notable aspect of emigration, however, is that a majority of those leaving the country during the period were non-Irish nationals. Previous ISM Annual Reports have shown that non-Irish nationals are much less likely to participate in sport. The impact of emigration on participation is therefore likely to be weaker than the analysis by age-group might imply. Without a socio-economic breakdown of emigrants (and immigrants), it is difficult to refine the effect of emigration further. A reasonable assumption is that emigration would be higher among those without third-level qualifications (or who are not working towards one). If so, this would further reduce any impact of emigration on active participation, given the socio-economic profile of participants. Overall, an approximate calculation would suggest that emigration is likely to have reduced the active participation rate between 2007 and 2009, but by less than half a percentage point.

Limitations of the ISM

Like any survey, the ISM has limitations associated with its methodology, some of which are inherent weaknesses with large household surveys and others of which are unique. Some of these limitations are discussed extensively in the 2007 Annual Report (see Lunn et al., 2009, Appendix A), while some complications specific to data collection in 2008 are described in the second annual report (Lunn and Layte, 2009). Hence, only a brief description is given here.

Telephone surveys can always be subject to sample biases caused by over-representation of social groups that are more likely to be available and willing to conduct a telephone interview in their own homes. We attempt to control for this potential bias by using a selection rule that determines which member of a contacted household is interviewed. The data are also reweighted according to six socio-economic and socio-demographic variables, to match the 2009 population profile as supplied by the Central Statistics Office (CSO). The aim is to ensure that the results are genuinely reflective of groups defined by gender, age, region, marital and socio-economic status. However, the degree to which these methods are successful is not known.

There are particular difficulties surrounding non-Irish nationals. In addition to the usual problem of obtaining agreement to participate in the survey, it is clearly not possible to include people with insufficient English to conduct what is a quite detailed telephone survey. There is little question that the proportion of non-Irish nationals in the sample (7%) is lower than it is in the adult population (for which the CSO records a proportion of approximately 12% in both 2007 and 2009). Furthermore, it is hard to control for this sample bias, especially given the difficulty of recording migratory patterns even in official statistics. Other groups that the CSO also finds hard to measure, such as homeless people and members of the Travelling community, are unlikely to feature in the ISM sample. Given that these groups are likely to have somewhat lower levels of participation in sport, the biases introduced probably have the effect of marginally increasing the participation rates reported, but there is no reason to assume that they will affect trends over time.

All household surveys also rely on respondents accurately and truthfully relating their behaviour. We cannot be sure that this is what they do and it is, therefore, helpful to bear in mind that all the results relate to responses given by interviewees, not to measurements of their actual behaviour. Nevertheless, the results produced by the ISM conform accurately to figures produced through other surveys, including those conducted face-to-face (Lunn et al., 2009).

A significant improvement in the survey methodology was adopted in 2009. In the first wave of data collection in 2007, interviews were conducted in at least two out of every three months of each quarter. In 2008, the data collection was more uneven, resulting in an under-representation of interviews conducted during the second and third quarters of that year. In both 2007 and 2008, various data checks and weighting schemes were adopted to ensure that the somewhat uneven sampling did not affect the results described. By contrast in 2009, data were collected evenly across all 12 months. Where we suspect that the evenness of sampling might have had a marginal impact, we refer to this in the text, but such instances are rare.

Note that even with sampling spread evenly throughout the year, it is not yet possible to produce “seasonally adjusted” figures for participation in sport, which would require the usual pattern of activity across seasons to be known from historical data. Three years of data, collected during a period of great change, is not sufficient for a reliable seasonal pattern to be established.

Lastly, previous ISM Annual Reports have included an analysis of participation rates by county. A decision was taken with the present report not to repeat this analysis, for two reasons. First, and most importantly, the dramatic economic changes that have occurred over the past three years are likely to have resulted in considerable changes to the population profiles of individual counties, perhaps especially in respect of the numbers of young men. Until the results of Census 2011 become available, it will be difficult to quantify these changes and there are dangers of failing to account for them in a county comparison, especially where small samples are inevitably involved. Second, the *Irish Sports Council* and the ESRI have embarked upon a series of research reports at the county level that represent a more appropriate vehicle for analysis, and it is hoped that these reports will be of greater assistance to local sports policymakers than a more general and approximate cross county comparison.

Part Two

Physical Participation

2. Activity in 2009

Summary

- Levels of physical activity increased in 2009, with more people classified as highly active or fairly active
- The proportion of adults (aged 16 and over) who actively participated in sport rose significantly³ between 2008 and 2009, from 30.8% to 33.5%
- The proportion who walked regularly also went up, from 57.5% to 60.5%

Introduction

In the 2007 and 2008 annual reports, the activity level of Irish adults was described according to a four-way classification, which combined information on sport and exercise activity with that for walking for recreation, walking as a mode of transport and cycling for transport. The classification is outlined in Table 2.1.

Table 2.1: A hierarchy of physical activity

| Category | Definition |
|---------------|--|
| Highly Active | Participated in 30 minutes moderate physical activity at least five times during the previous 7 days (i.e. met WHO guidelines) |
| Fairly Active | Participated in 30 minutes moderate physical activity at least twice during the previous 7 days |
| Just Active | 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) |
| Sedentary | Did not participate (20 minutes) in recreational activity during the previous 7 days and does not cycle or walk regularly for transport |

A feature of this typology is that those classified as highly active are people who meet the WHO guidelines for physical activity through a combination of recreational walking and playing sport. Highly active people also match the National Guidelines on Physical Activity for Ireland adopted in 2009 (Department of Health and Children, 2009).

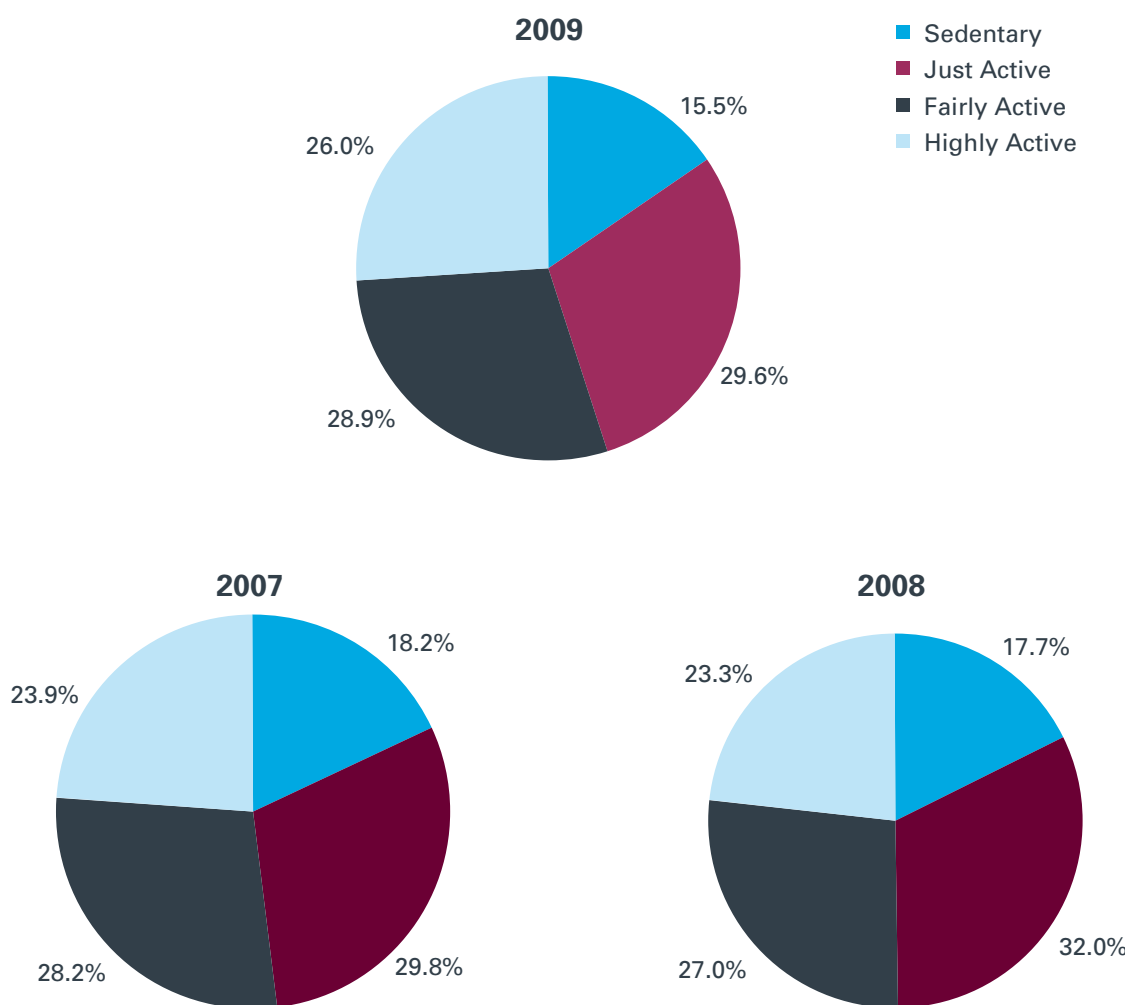
Key Results

Figure 2.1 provides a breakdown of the population aged 16 plus into the four physical activity categories, complete with a comparison with 2007 and 2008. In 2009, the proportions classified as highly active and fairly active both went up, while the proportion of the population classified as sedentary fell. This increase in activity is statistically significant ($p < 0.001$).⁴

³ Throughout this report, when we describe a change as “significant”, it implies that the effect in question is statistically significant.

⁴ The p-value indicates the probability that the observed data could have occurred merely by chance, i.e. in the absence of any real effect. Thus, the probability of observing the pattern in Figure 2.1 if, in fact, there was no real increase in activity, is less than one-in-a-thousand.

Figure 2.1: Population classified by levels of recreational physical activity, 2007 - 2009⁵



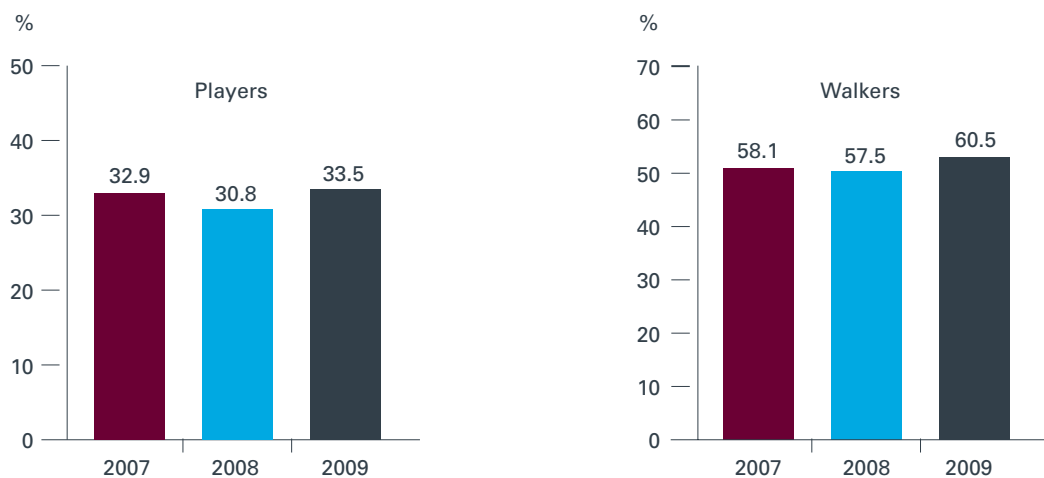
Further analysis indicates that the higher level of overall activity was due to increases in the amount of regular sport and exercise activity, and an increase in the amount of recreational walking undertaken, with less change in the extent of walking and cycling for transport. Further analysis of these broader forms of physical activity is provided in Part Three.

The four-way classification used in Figure 2.1 employs a duration threshold for activity of 30 minutes, i.e. an activity must last 30 minutes or more to be counted. This threshold is chosen for comparison with WHO guidelines. Previous Irish measures of participation, however, have used a threshold of 20 minutes duration. This 20-minute threshold is adopted for the remainder of the present report, partly for reasons of consistency, but also because of analysis conducted for the 2007 Annual Report, which revealed that some activities, including high intensity activities, are undertaken for durations of between 20 and 30 minutes.

Figure 2.2 shows participation rates for playing sport and for walking in each of the three years of the ISM to date. The participation rate for playing is significantly higher in 2009 than 2008 ($p < 0.001$), but not significantly higher than it was in 2007 before the onset of recession ($p = 0.38$). The participation rate for recreational walking is significantly higher than in both 2007 and 2008 ($p < 0.001$).

⁵ Most figures presented in this report are proportions given in percentage form. For adults aged 16 and over, 1% corresponds to approximately 33,000 individuals.

Figure 2.2: Proportion of the adult population (aged 16 and over) who played sport or undertook a recreational walk for at least 20 minutes during the previous seven days, 2007-2009



Discussion

As was the case in 2008, the findings represent a surprising degree of change. Internationally, participation rates in sport and exercise do not generally alter by more than around a single percentage point per year. One possibility that must always be considered is that the figures in some way reflect mere statistical variation, perhaps associated with the sampling or survey design. However, as the 2008 annual report showed, the fall in active participation in sport and exercise after 2007 was linked to changes in income and employment status, implying that the figures were being driven by what is a very large recession by international standards. As we will see in the following chapters, there is also an association in 2009 between the observed changes in participation rates and certain population characteristics, which again suggests a link between the patterns of activity and the economic travails Ireland is presently enduring.

From a policy perspective, the increases in activity are good news. Had the previous fall of 2008 been sustained or repeated, there could have been important consequences for health and wellbeing. As it is, the overall upward shift in the figures is clearly welcome.

3. Trends in Active Participation

Summary

- The U-shaped trend for active participation between 2007 and 2009 was driven mainly by a fall and subsequent recovery in the playing of individual sports, with the fall greater among those in the lower half of the income distribution
- The relationship between income and playing sport is stronger in 2009 than it was in 2007 – further confirmation that the recession affected sport
- The participation increase in 2009 was greatest among working people and those with children, suggesting that the increase was partly caused by people having more free time in which to play sport

Introduction

As outlined in Chapter 1, from the perspective of active participation in sport, the two primary forces of change associated with the recession are lower household spending and alterations in daily routines. While lower spending might reduce the likelihood of playing sport, this could be counterbalanced by the possibility that people have more free time available, due to changes in employment status, changes in the employment status of partners, or reduced working hours. Alternatively, it remains possible that the headline change in participation reflected factors not associated with the large economic changes occurring during the period, although the analysis in the 2008 ISM Annual Report would indicate otherwise.

This chapter sheds more light on the issue by examining the increase in active participation in sport and exercise in more detail, breaking down the change in participation separately for team and individual sports and by type of participant. The findings reported are selected on the basis of a multivariate statistical model of playing sport. The method, which is described more fully in the 2007 ISM Annual Report, essentially allows participation levels to be compared across different social groups while simultaneously controlling for educational attainment, age, gender, income, marital status, employment status, health status, family structure, car ownership, location, nationality and time (Lunn et al., 2009, Appendix C).

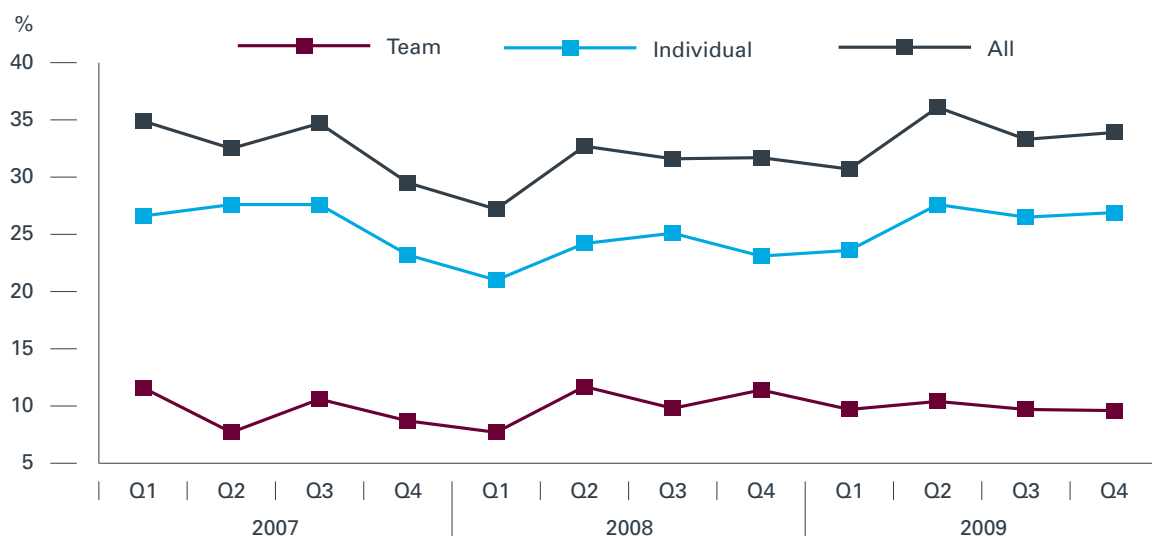
Key Results

Figure 3.1 presents the time-series of participation in sport from 2007-2009 by quarter for all sports and separately for team and individual sports. Care must be taken when interpreting this chart because we do not yet have sufficient data to determine the seasonal pattern of participation, so any changes over time are confounded with seasonal variation. Nevertheless, a number of points can be made.

Firstly, as described in the 2008 ISM Annual Report, the sharp drop in participation occurred at the end of 2007 and the beginning of 2008, coinciding perfectly with a steep decrease in consumer spending throughout the economy – the end of 2007 is when consumer behaviour really began to change. Given this, it seems likely that the participation rate recorded in the fourth quarter of 2007 was already being affected by the recession and, therefore, that the overall figure of 32.9% for 2007 probably underestimated the participation rate at the start of the recession.⁶ A comparison of participation rates for the first three quarters of 2007 and the final three quarters of 2009 suggests that active weekly participation in sport and exercise began the recession at approximately 34% and had approximately returned to this figure by late 2009.

⁶ This possibility was speculated on in the 2007 ISM Annual Report, but at that time it was unclear whether the decline in the final quarter of 2007 was a seasonal effect or a genuine change. The data collected since suggest the latter was the case.

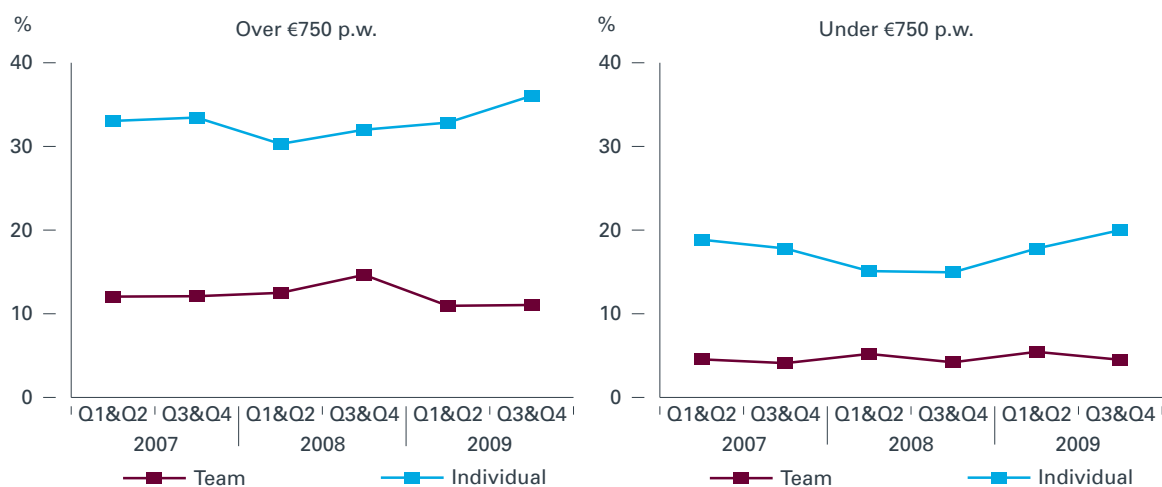
Figure 3.1: Quarterly trends in participation rates for all sports, individual sports and team sports, 2007-2009



Secondly, it is apparent that the impact of the recession on sport was overwhelmingly due to its effect on participation in individual sports. Given the additional expense generally associated with individual sports, plus the fact that they account for a higher proportion of the sporting activity of working-age adults, whose income and economic status would be most affected by the economic situation, this is arguably unsurprising.

This link between expense and type of sport is made more explicit when the sample is split by household income. Figure 3.2 provides the equivalent analysis separately for those earning in excess of €750 per week and those earning less than €750 per week. The quarterly data are aggregated into half-yearly data to preserve sample size. This picture makes it apparent that the impact of the recession on sport primarily consisted of a fall in participation in individual sports near the beginning of 2008. In the upper half of the income distribution, this fall was the equivalent of one-in-eleven people who played an individual sport in 2007 giving it up in 2008, but in the lower half that figure was more than one-in-five. Since then, there has been something of a recovery in participation in individual sports among people in both halves of the income distribution.

Figure 3.2: Half-yearly trends in participation rates for individual and team sports by income

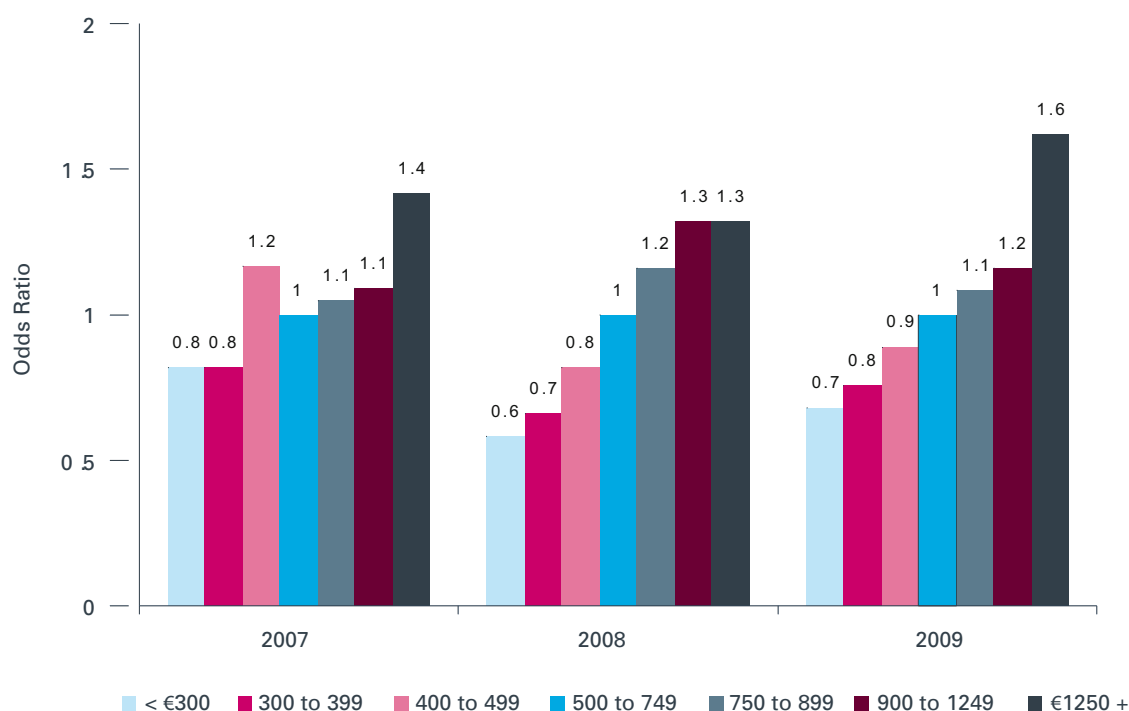


Although one might reasonably characterise developments in 2009 as returning participation rates to pre-recession levels, the people actively participating in 2009 are not the same as those who were doing so in 2007. Focussing again on individual sports in Figure 3.2, a comparison of the first data point (Q1&Q2, 2007) with the last one (Q3&Q4, 2009) reveals that over the period as a whole participation ultimately rose by 3.0 percentage points among the better off and 1.1 percentage point among the worse off – widening the already large gap between these two groups.

To more accurately assess such changes, however, it is important to use a multivariate statistical model, which controls for other relevant background characteristics. That is, the model allows us effectively to compare people with the same educational attainment, age, gender, marital status, employment status, health status, family structure, car ownership, location and nationality, and to look only at the impact of having a low or high income.

Figure 3.3 uses output from the model to show how the relationship between income and active participation evolved over the period, controlling for other characteristics. The data are expressed as “odds ratios” – the relative odds that a person in each category plays sport relative to a reference category. In this case, the reference category is the middle income group, earning €500-€749 per week, which is given the value 1. The chart shows that as the recession bit, the relationship between income and playing sport, which was already strong, became stronger still.

Figure 3.3: Odds ratios for the likelihood of playing sport by income, 2007, 2008 and 2009

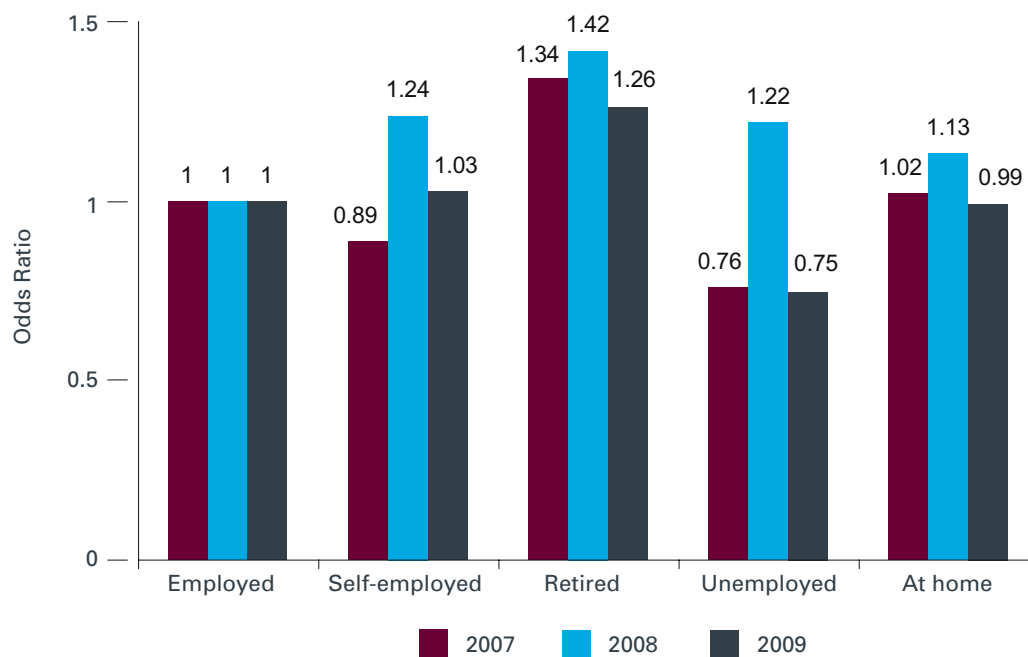


In 2007, there was a fairly flat section across the middle income categories. This implies that, while the poorest were less likely to play sport and the very richest much more likely to play, the odds of playing sport did not differ greatly between individuals in these middle-income categories. But in 2008, the gradient across the categories became steeper and consistent, implying that income had become a constraint on participation and, hence, a stronger determinant of whether an individual played sport. In 2009, that gradient may have become marginally shallower again across the middle income categories, although the very richest have opened up a yet greater gap in the likelihood of participation. Overall, however, the key point is that while participation rates for the population as a whole are now back to pre-recession levels, the relationship between income and playing sport has not returned to its pre-recession state. There is now a stronger relationship between the two, which means that those in a situation of greater socio-economic disadvantage have slipped further behind in terms of active participation in sport and exercise.

Figure 3.4 performs a similar analysis by employment status. Unlike the case of income, employment status categories are not ordered, so the data are presented by category rather than by year. The reference category is individuals in employment, who are given the value 1. The odds ratio for each category therefore represents the relative odds that a person in that category actively participated in sport and exercise compared with a person in employment, while controlling for other characteristics, including income.⁷

⁷ Note that because the model controls for other characteristics, the odds ratios for the “retired” category compare the odds of participation of retired and non-retired people who have the same educational attainment, age, gender, marital status, income, employment status, health status, family structure, car ownership, location and nationality. Similarly, the odds ratios for the “at home” category compare the influence of being in “home duties” across people who otherwise have the same background characteristics. This means that the results cannot be explained by, for example, the age profile of those who retire; or, similarly, the fact that many people at home have young children. These factors are simultaneously controlled for in the model, which is designed to compare like with like.

Figure 3.4: Odds ratios for the likelihood of playing sport by employment status, 2007, 2008 and 2009



Two categories show significant variation. In 2008, both the self-employed and the unemployed increased their likelihood of active participation such that they became more likely to play sport than those in employment. To a large extent, this phenomenon was due to the changing composition of the categories. People who had previously been employed became self-employed or unemployed and took their sporting habits with them. However, the extent of these increases was such as to also suggest that many people who had recently left full-time employment were playing more sport than when they were employed, perhaps because the change in employment status meant they had more free time. Lack of time and competing family commitments are common reasons cited for non-participation (Fahey et al., 2004; Lunn, 2008), so additional free time may have counterbalanced, to some extent, the negatives associated with leaving employment, such as loss of status, social contacts or motivation.

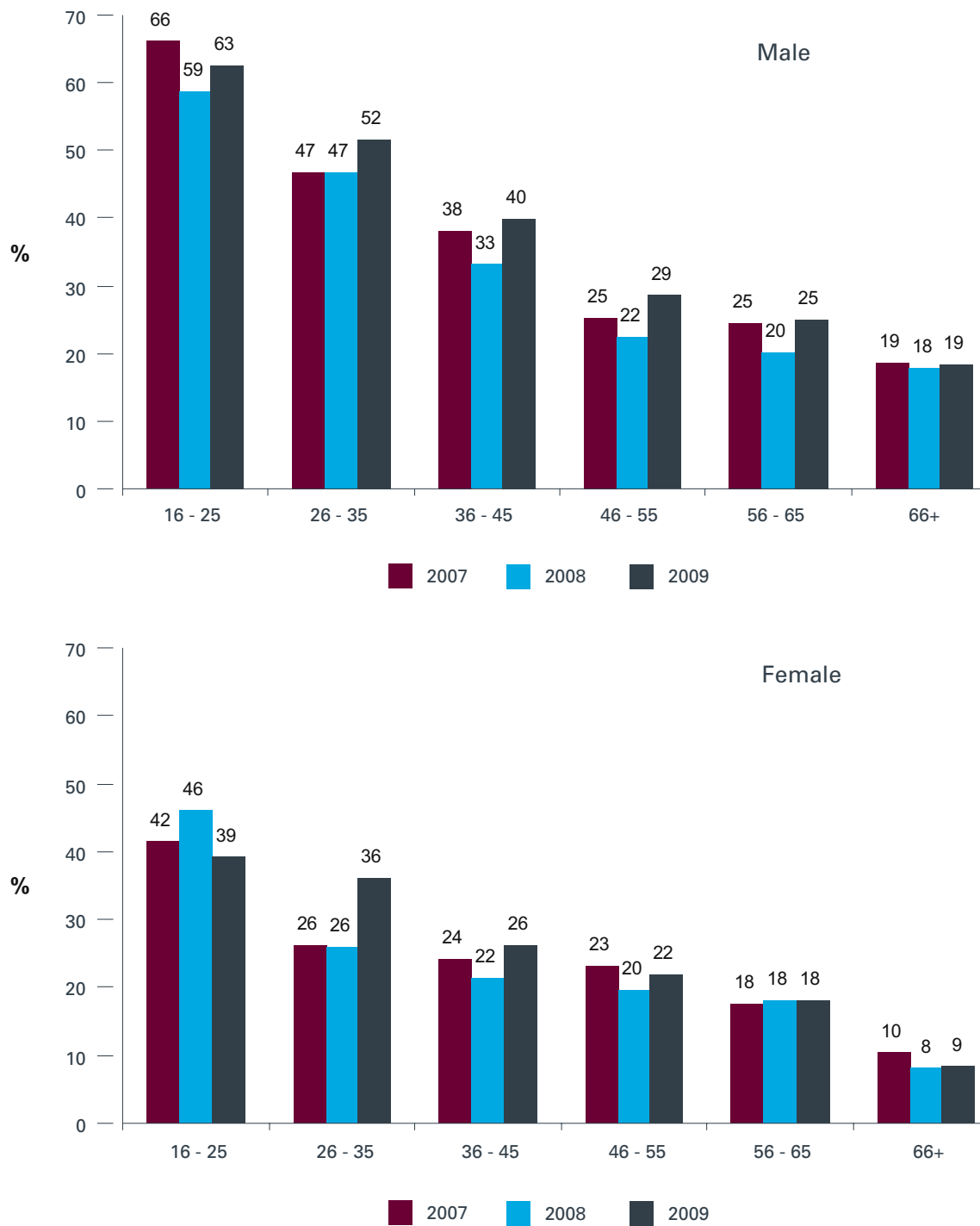
The 2008 ISM Annual Report raised the issue of whether the positive effect of additional leisure time could be expected to last, given that the long-term relationship between unemployment and participation is generally negative. Looking at 2009, this caution was perhaps justified, as the odds ratio for the unemployed has again fallen below that for employed persons. Given that unemployment in 2009 averaged almost 12%, the equivalent of over 250,000 working-age adults, these results again suggest that large numbers of people in less advantaged circumstances have suffered a sporting penalty as well as a socio-economic one.

The result requires careful interpretation, however, because the comparison is *relative*, i.e. the effect may be due to unemployed people becoming less likely to participate, or to employed people becoming more likely to participate. If employed people became more likely to participate, then we would expect to see the odds ratios for all other categories fall. In fact, this is what we do observe in Figure 3.4, where the odds ratios for all categories other than those in employment are lower in 2009 than in 2008. Yet the odds ratio for the unemployed displayed a greater reduction than the other non-employed categories. Thus, the effect is likely to be a combination of the two influences: relative to the other categories, employed people increased their likelihood of active participation, while unemployed people simultaneously decreased their likelihood of participation.

The implication of Figure 3.4, therefore, is that the headline increase in the active participation rate recorded for 2009 occurred primarily among employed people. Figure 3.5, which offers a breakdown of active participation rates by age and gender, also supports this interpretation. Note that these are raw participation rates, i.e. this chart does not control for other background characteristics. For both genders, the increase in participation was concentrated among the age groups with the highest labour force participation (26-45 year-old women, 26-55 year-old men). This pattern across age groups is statistically significant, while the largest increase, that for 26-35 year-old women, is significant in its own right.

Placing these results in the context of previous research, specifically the finding that non-participants say that lack of available time due to work and family commitments prevents them from playing sport, a clear hypothesis emerges in relation to the increased active participation recorded for 2009. The rise may, at least partly, have been due to working people having more free time. The most obvious mechanism for this effect would be people simply spending less time at work, either due to an official reduction in working hours, or an unofficial reduction caused by a reduced workload. But a further possibility is that people may have benefited from more free time because of a change in the working arrangements of their partners, which allowed for a shift in the allocation of household tasks.

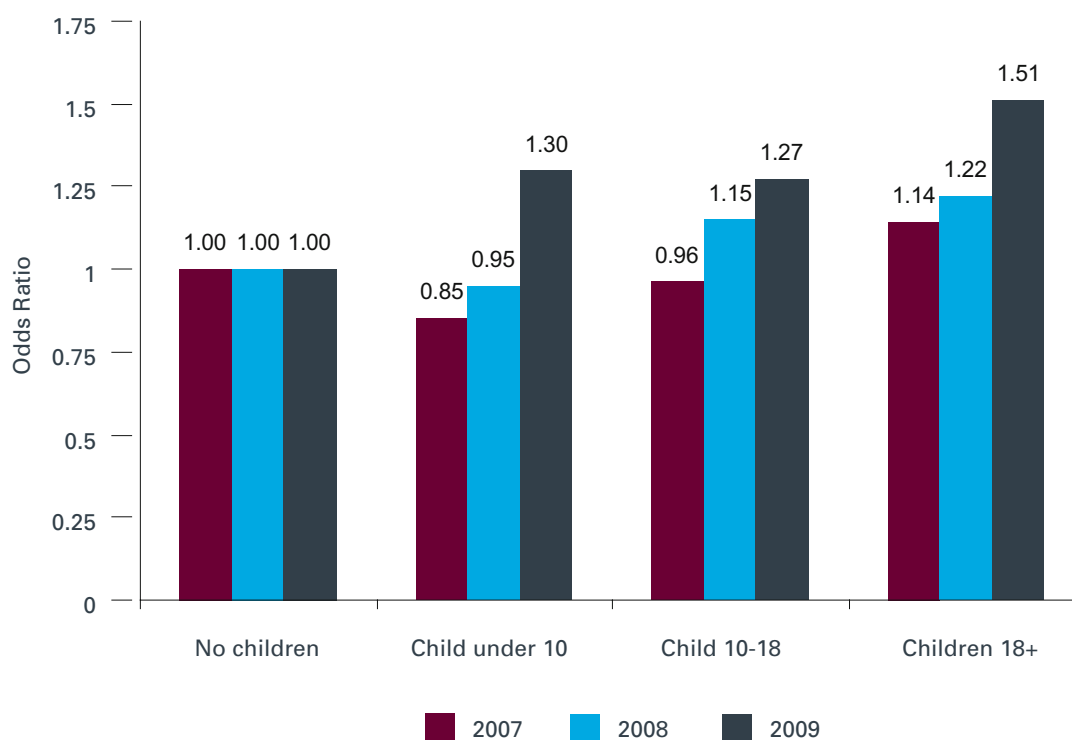
Figure 3.5: Playing sport by age and gender, 2007, 2008 and 2009



Unfortunately, the ISM does not record whether an individual works part-time or the working status of partners, so it is not possible to test these hypotheses directly. However, another way to test this time-based hypothesis is to consider families with children, who might reasonably be expected to experience the greatest difficulty with finding the time to commit to sport and exercise. Assuming that people with children, perhaps especially young children, are likely to be the most constrained by lack of time, they would be the group whose behaviour would have been most affected by any increase in available free time. In other words, if additional free time explains the rise in active participation among employed people in 2009, then we would expect the rise to have been greatest among people with children.

Figure 3.6 provides odds ratios for four categories of family defined by the age of the youngest child in the household, based on the multivariate statistical model for active participation. People with no children are the reference category. Recall that the model controls for other background characteristics, including age and income. The chart reveals a marked and significant change. For all categories of parents, the likelihood of active participation began to increase relative to non-parents in 2008 and the increase continued in 2009.⁸ These changes are statistically significant.

Figure 3.6: Odds ratios for playing sport by age of youngest child in the household, 2007, 2008 and 2009

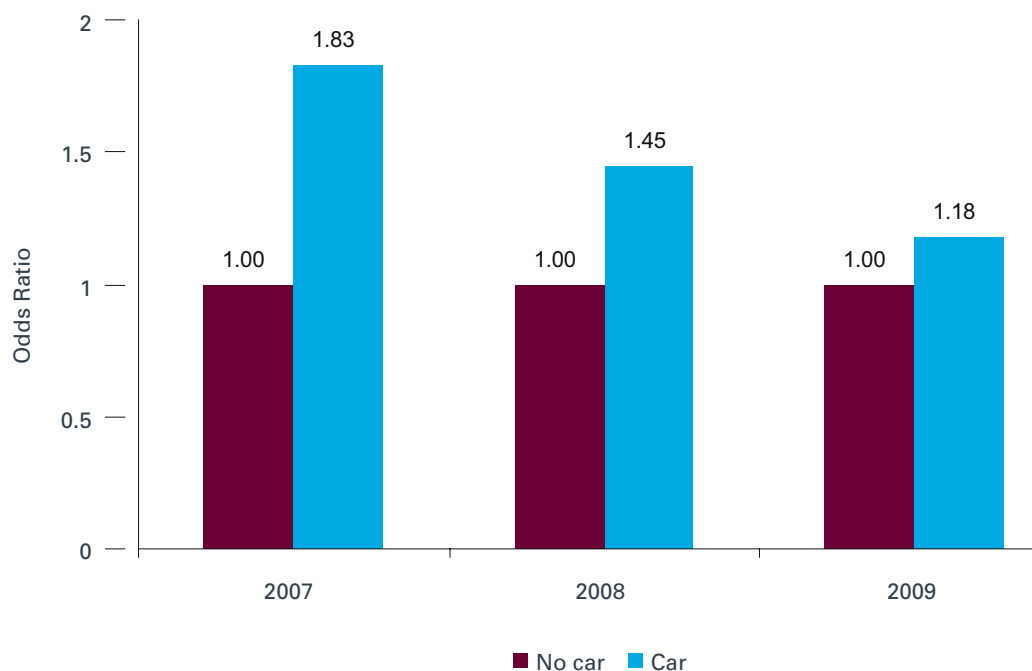


Note that there are many reasons (in addition to the availability of free time) why one might expect parents to be either less likely or more likely to participate in regular sport than non-parents – playing sport with the children, the cost of having children, the likelihood of making contacts within the residential locality, the likelihood of having a garden, restrictions on social life, etc. Previous work, based on more than one data source, has tended to show that there is very little difference in active participation between parents and non-parents (as suggested by the 2007 results above and also in Lunn (2007a)), suggesting either that these many potential influences are not strong, or that they tend to cancel each other out overall. What Figure 3.6 implies, however, is that over the course of 2008 and 2009, the balance of all these potential factors tipped somewhat in favour of parents. It is important to understand that the hypothesised reason for this is not that parents somehow found *more* time than non-parents – parents doubtless remain more time-constrained than non-parents. Rather, the hypothesis being tested is that available free time was initially a greater constraint for parents than non-parents, such that when economic changes provided some additional leisure time, it had the greatest impact upon the behaviour of this group, assuming that the other factors associated with parenthood remained as before.

⁸ Separate tests (not shown) indicate that the increase in odds ratios occurred for both couples and single parents. Again, this might be expected if the constraints of available time are what changed.

The multivariate model reveals an additional factor that also changed its relationship with active participation between 2007 and 2009. In both previous ISM Annual Reports and in other research (Lunn, 2007a), a strong and significant negative relationship has been reported between active participation and car ownership: those without access to a car were less likely to play sport, after controlling for other background characteristics. The 2009 data reveal this relationship to have moderated. Figure 3.7 provides odds ratios for the likelihood of participation, controlling for other available background characteristics, for those with a car compared to those without, who take the value 1. The data display a clear and significant reduction in the impact of car ownership.

Figure 3.7: Odds ratio for playing sport by car ownership, 2007, 2008 and 2009



Although there may be other potential explanations, it is worth pointing out that this trend is again consistent with the hypotheses that pressures of time have become less of a constraining factor for active participation in sport and exercise. The logic is similar to that for parents versus non-parents. In general, lack of access to a car is likely to increase the time required to actively participate in sport and exercise, meaning that the participation of those without a car (controlling for potentially associated factors such as income, marital status, employment status, etc.) would be more constrained by lack of time. Thus, if pressures of time became less of a factor in people's lives, then we would expect the behaviour of people without access to a car to display greater change, which is what Figure 3.7 implies.

Discussion

From a policy perspective, the analysis presented in this chapter contains both good news and bad. On the upside, active participation has increased again, particularly among working adults and those with families, who express difficulty in fitting sport and exercise activity into their busy lives. It hence seems likely that additional free time for playing sport represents something of a silver lining to Ireland's severe recession. Policymakers might note that this differential impact across individuals supports the view that time constraints are an important influence on sport and exercise activity. Thus, the staging and marketing of sporting opportunities such that they are specifically designed to suit the lives of busy people may increase the chances of success in raising active participation levels.

Turning to the downside, it is well-known in economics that recessions discriminate; the negative economic impact is not evenly spread, but rather falls on the minority who have the misfortune to lose their jobs. The same general rule appears also to apply to sport in a recession. People with low incomes and the unemployed become less likely to participate. From a policy perspective, this strengthens what is already an important socio-economic divide in sport (Lunn, 2007a). When the impact of low income, low educational attainment and unemployment are considered together, people who are socially disadvantaged are many times less likely to participate in sport and, consequently, substantially less likely to obtain the health benefits of physical activity. Given that the primary aim of sports policy is to improve health and wellbeing, the results further emphasise the need to design policies most likely to increase participation in sport and exercise among the more socially disadvantaged.

Lunn (2007a) outlines a broad range of findings relating to social disadvantage and sport and discusses possible policy responses, some of which are also considered in the 2008 Annual Report. It is worth noting that, although it is not a focus of the present analysis, the 2009 data reinforce the point that the impact of social disadvantage is not confined to certain types of sports, but instead applies broadly. Compare again the two panels of Figure 3.2. While those in the lower half of the income distribution are less likely than those in the upper half to play individual sports, prominent among which are activities such as swimming, going to the gym and golf, which might be thought to be more middle-class pursuits, they are similarly less likely to play team sports, such as soccer and Gaelic games.

4. The Sporting Spectrum

Summary

- Swimming remained the most popular activity (7.2% of adults swam in the previous 7 days), ahead of personal exercise (5.8%) and soccer (5.6%)
- Soccer (10.7%) and golf (8.1%) were the most popular activities for men, while swimming (8.5%) and personal exercise (7.1%) were most popular among women

Introduction

The 2008 ISM Annual Report documented substantial changes in the specific sports undertaken by adults in Ireland. Most notably, the recession had an impact on individual sporting activities, especially personal exercise activities such as going to the gym and exercise classes. This chapter explores whether the recovery in activity in 2009 led to a stabilisation or recovery in the pattern of activities, or whether the spectrum of sporting activity continued to change.

Key Results

Active participation rates for the most popular ten sports are given in Figure 4.1 for the years 2007, 2008 and 2009. The most striking aspect of the results is their consistency. In 2008, all individual sport and exercise activities recorded a drop in active participation, which in all but one case (personal exercise) was not statistically significant, but which was statistically significant overall. This falling trend for individual sports did not continue in 2009. Rather, the relative participation rates stabilised and, overall, apart from the impact on personal exercise, the degree of change since 2007 remains modest.

Indeed, taken across the three years, the only activity for which there has been a clear, statistically significant change in overall participation is personal exercise, which was the most popular activity in 2007, declined in 2008 and remained at a lower level in 2009. Analysis of falling levels of gym and health membership in the 2008 ISM Annual Report suggested that this fall in participation was due to the recession and was probably linked to the expense associated with undertaking many personal exercise activities. This explanation is in keeping with the figures for membership in Chapter 8, which show no significant recovery in membership of gyms and health and fitness clubs.

Figure 4.1: Playing by specific sporting activity, 2007, 2008 and 2009

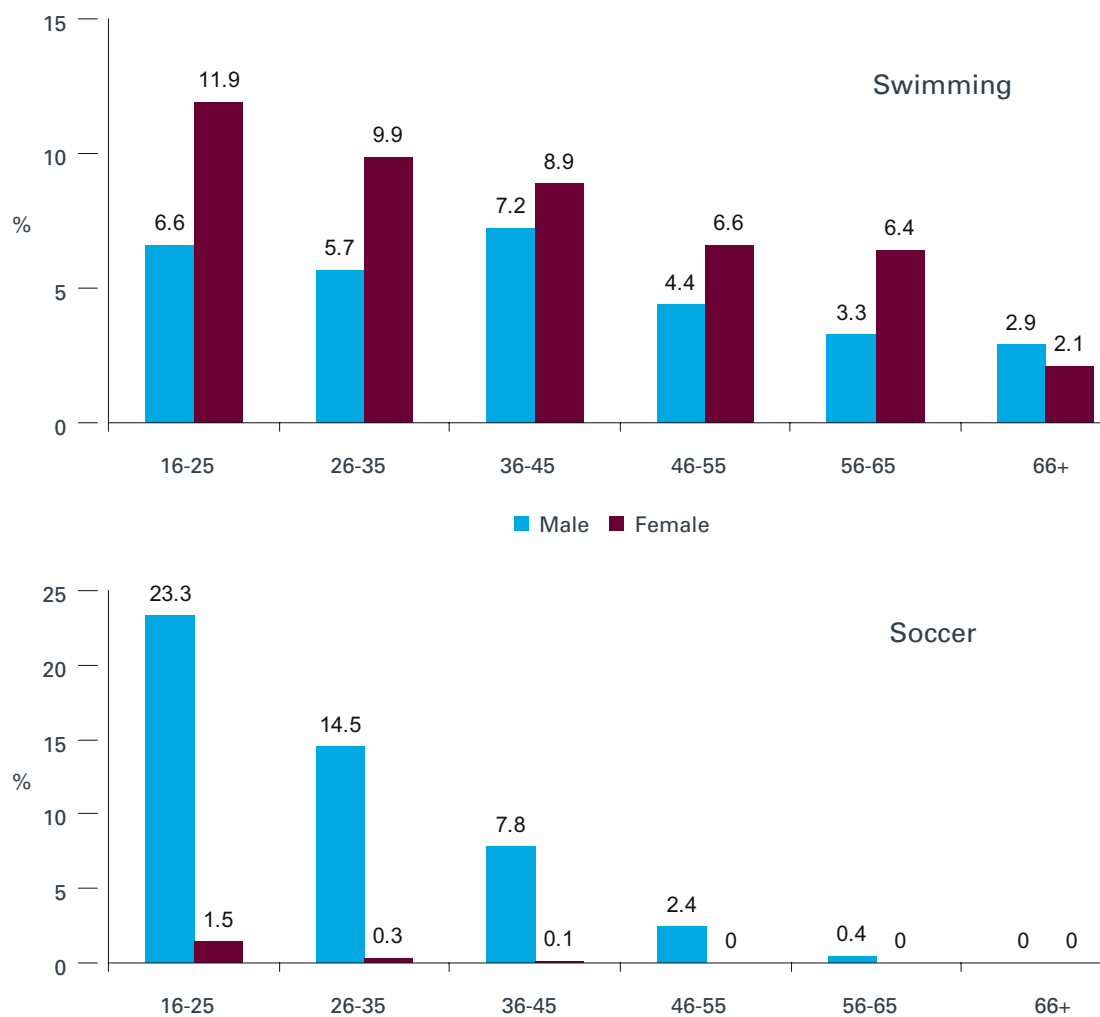


Swimming is still the most popular sport and exercise activity for adults in Ireland having been overtaken by personal exercise for only a brief period at the height of the economic boom (Fahey et al., 2004; Central Statistics Office, 2007; ISM Annual Report 2007). Based on the experience of the authors, the fact that swimming is the most popular sport for active participation in Ireland comes as a surprise to many.⁹ For this reason, in Figure 4.2 we present a further comparison between swimming and the sport that people are more likely to presume to be the most popular, namely soccer.

Figure 4.2 pools the data for all three years (2007-2009) and breaks down participation in swimming and soccer by age and gender. Swimming (top chart) is more popular among women, but a substantial number of men also swim. Most importantly, although the participation rate declines for the older age categories, the key to understanding the popularity of swimming is to note its broad appeal across all gender and age categories. Compare this demographic profile to that for soccer (bottom chart). Although very popular among young men, soccer has little appeal outside of this demographic group. Given that more than half the adult population is over the age of 40 and one quarter is over 55, it is easy to see why the overall participation rate for soccer is below that for swimming, despite its great prominence among young men.

⁹ The authors have presented this finding relating to the popularity of swimming, which is consistent across a number of separate surveys, to many audiences. Policymakers, researchers, representatives of sports bodies and others involved in the area of sport and physical activity have all expressed surprise at the finding. The most common preconception appears to be that soccer is the most popular activity.

Figure 4.2: Participation in swimming and soccer by age and gender, 2007-2009

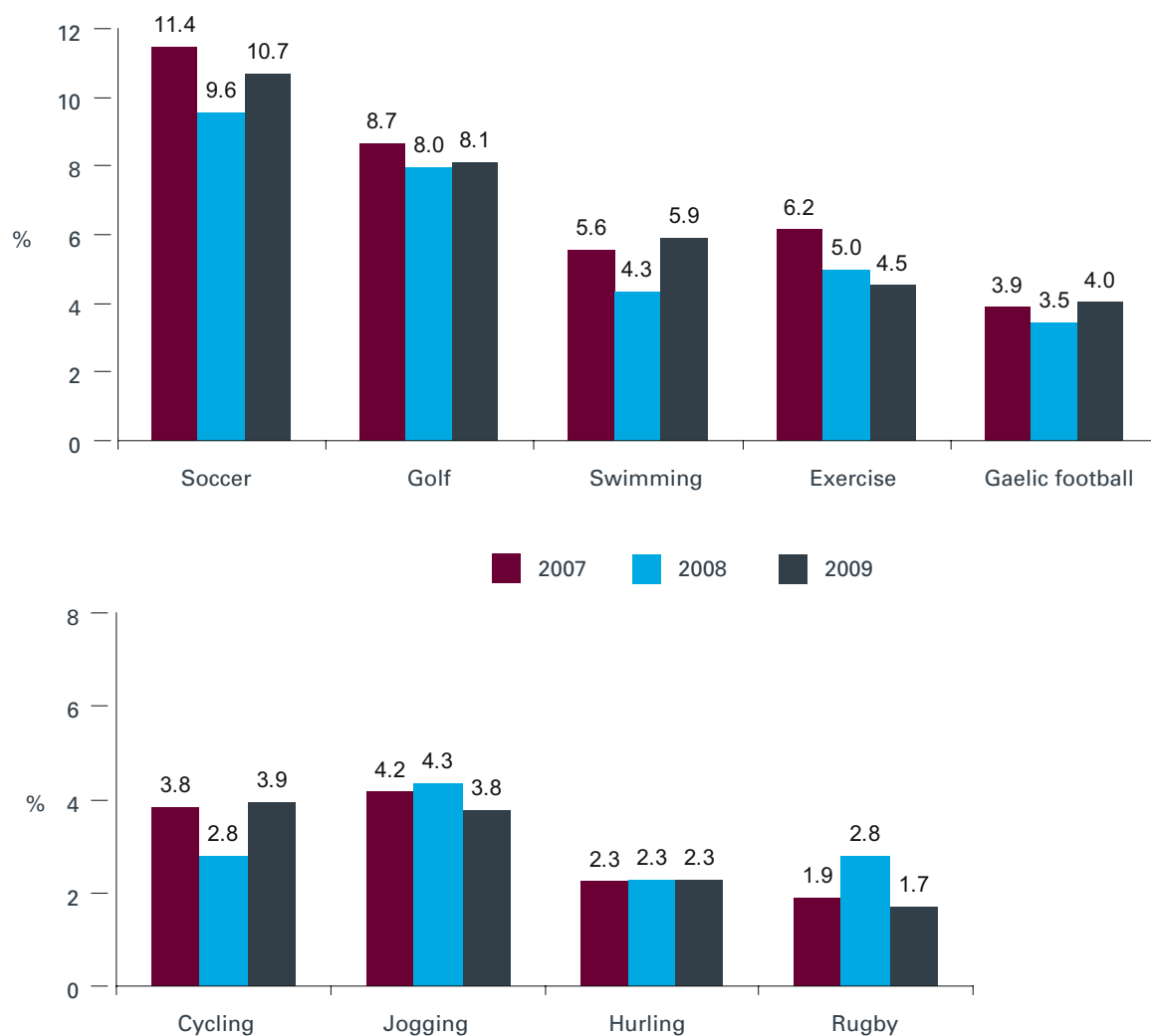


To some extent, the comparison of swimming and soccer depicted in Figure 4.2 is typical of the general pattern associated with individual sports and team sports, with the latter being largely confined to younger males and thus being less popular across the population as a whole. Team sports are more physically demanding and more likely to be played in a competitive environment, both of which may reduce their appeal differentially for different socio-demographic groups. Soccer also displays a particularly strong gender difference.

Given the size of the gender differences in the popularity of sporting activities, it is helpful to split the sporting spectrum by gender. Figures 4.3 and 4.4 provide participation rates in 2007, 2008 and 2009 for the top nine sports, separately for men and women respectively.¹⁰

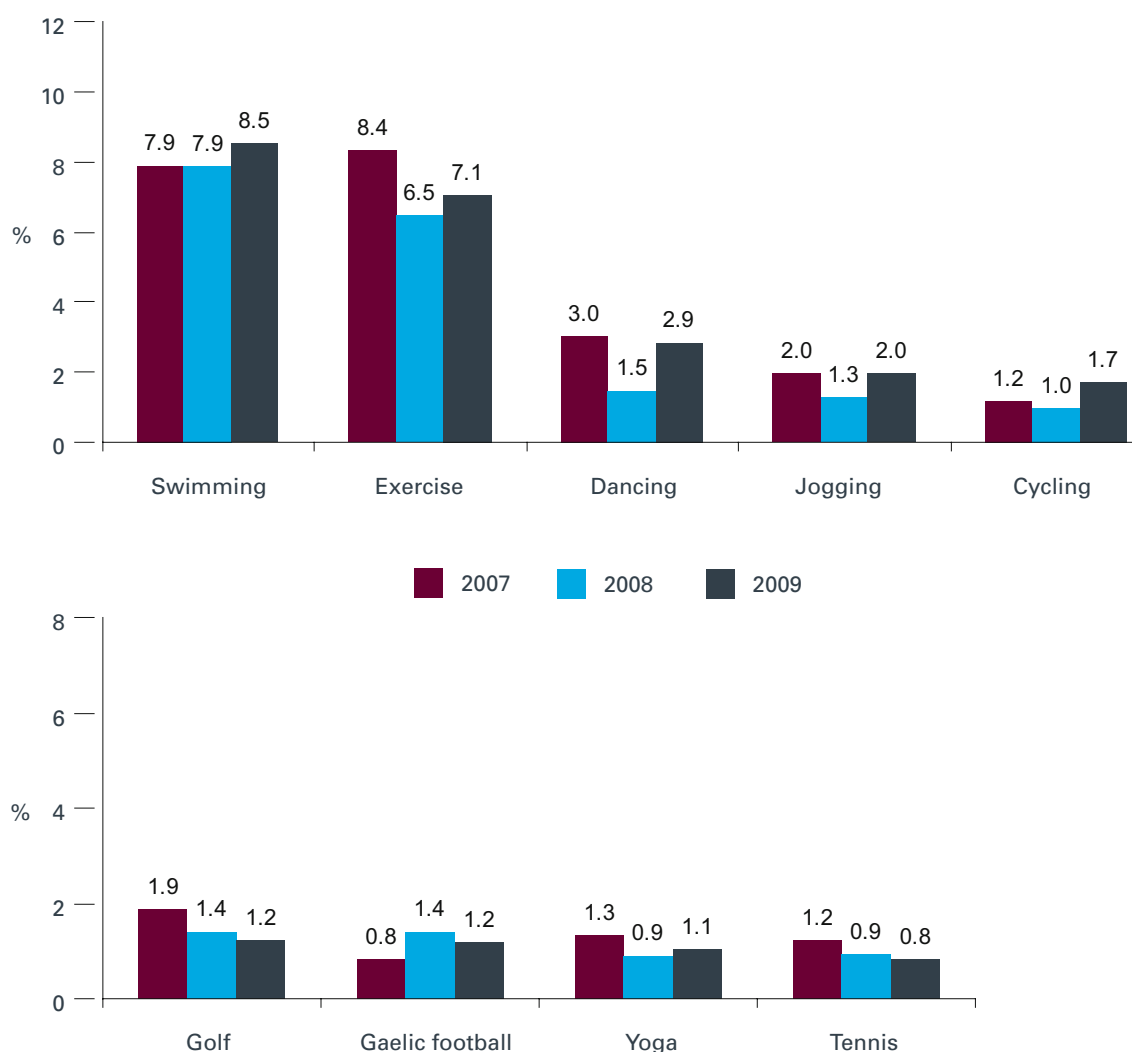
¹⁰ Nine sports are given because the participation rate for less popular sports becomes too low for the figures for separate years to be reliable.

Figure 4.3: Playing by specific sporting activity, 2007, 2008 and 2009 (males)



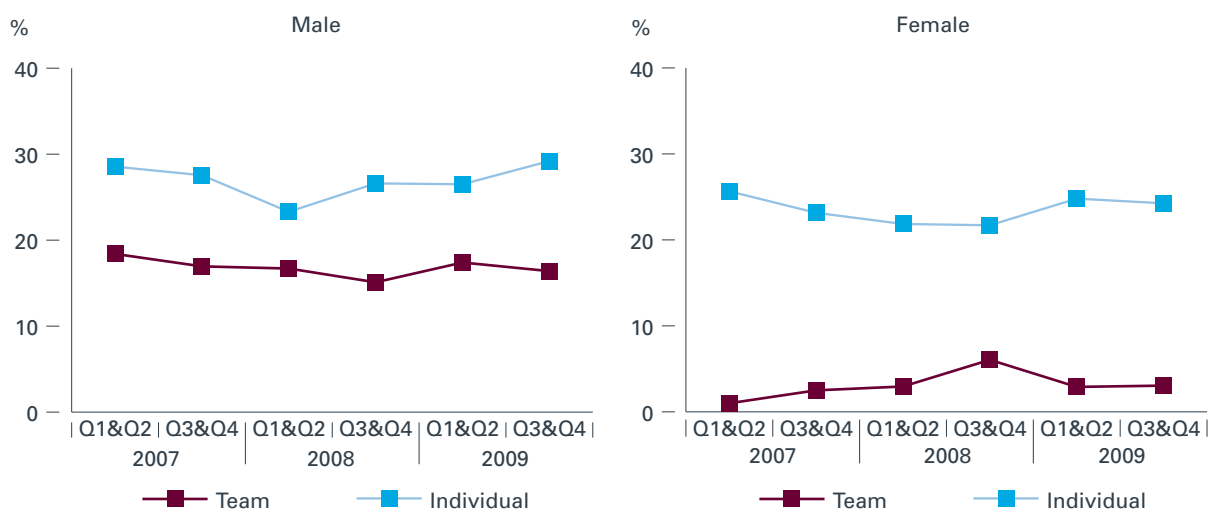
Again, possibly the most striking aspect of this data is the consistency of the findings, in spite of the considerable change in overall participation that has occurred over the three years of the ISM to date. While men's sporting activities consist of a mixture of team and individual activities, women's participation is dominated by personal exercise and swimming, with team sports accounting for only a small proportion of activity.

Figure 4.4: Playing by specific sporting activity, 2007, 2008 and 2009 (females)



The 2008 ISM Annual Report noted however, that the decline in individual activities in that year had been somewhat compensated for among women by an increase in team activities. Figure 4.5 looks at whether this trend continued by providing the participation trends for individual and team sports by gender. A fall and subsequent rise in the curve for individual sports is discernable for both men and women, but what is striking about the chart for women (right) is how the curves for individual and team sports appear to mirror each other – something not seen in the chart for men. The suggestion here (and it is only a suggestion, since we cannot determine it for sure from the data) is that at least some women may have actively substituted between team and individual activities during 2008.

Figure 4.5: Participation trends for individual and team sports by gender, 2007-2009



Discussion

The changes to participation rates in specific sporting activities that occurred between 2007 and 2008 do not appear to have represented the start of long- or medium-term trends. The pattern has, instead, stabilised in 2009. Personal exercise activities have not been subject to any further decline, but have settled at around the level established in 2008.

Previous research has documented large changes in the spectrum of sporting activities in Ireland over the most recent two to four decades (Lunn and Layte, 2008), most notably the increase in individual sports, especially personal exercise activities, in comparison with traditional team games. Over the three years of the ISM, it has not yet been possible to identify any similar ongoing trends. In part, this may reflect the nature of the years concerned, during which changes associated with the very severe recession may have masked slower-paced changes. Nevertheless, it is clear that individual sports were most affected by the onset of recession and have also been the activities to have recorded something of a recovery since 2008. The implication is that individual sports are most sensitive to economic circumstances and, therefore, may also be the most likely beneficiaries of any economic recovery. For now, however, this hypothesis must be regarded as speculative.

Part Three

Broader Physical Activity

5. Walking and Cycling for Transport

Summary

- Walking and cycling as a mode of transport contribute substantially to physical activity, with 45.7% and 11.2% of adults doing each regularly
- Students, city dwellers, single people and younger people are particularly likely to walk and cycle more for transport, with women more inclined to walk than men, and men more likely to cycle than women
- People who play sport or undertake recreational walks are more likely also to walk or cycle for transport

Introduction

Participation in sport is an important contributor to overall physical activity. Placed in this broader context, it is interesting to ask how participation relates to other forms of physical activity and, in particular, how large the overlaps are between different forms of activity. The ISM records information on recreational walking, walking as a mode of transport and cycling for transport. This chapter examines the latter two forms of activity, using all the ISM data from 2007-2009. The 2007 ISM Annual Report conducted a separate analysis of recreational walking, the results of which apply for all three years. The following chapter combines the measures of all these forms of physical activity to look specifically at those people who engage in none of them, i.e. people who appear to be effectively sedentary. This present chapter is hence a useful prelude to the analysis of sedentarism.

Key Results

The ISM survey asks respondents whether they walk regularly as a mode of transport and also whether they cycle regularly for transport, where “regularly” is defined as at least once per week. The findings presented are based on multivariate statistical models, which allow us to select the relationships that are most statistically significant, as previously for active participation in sport.

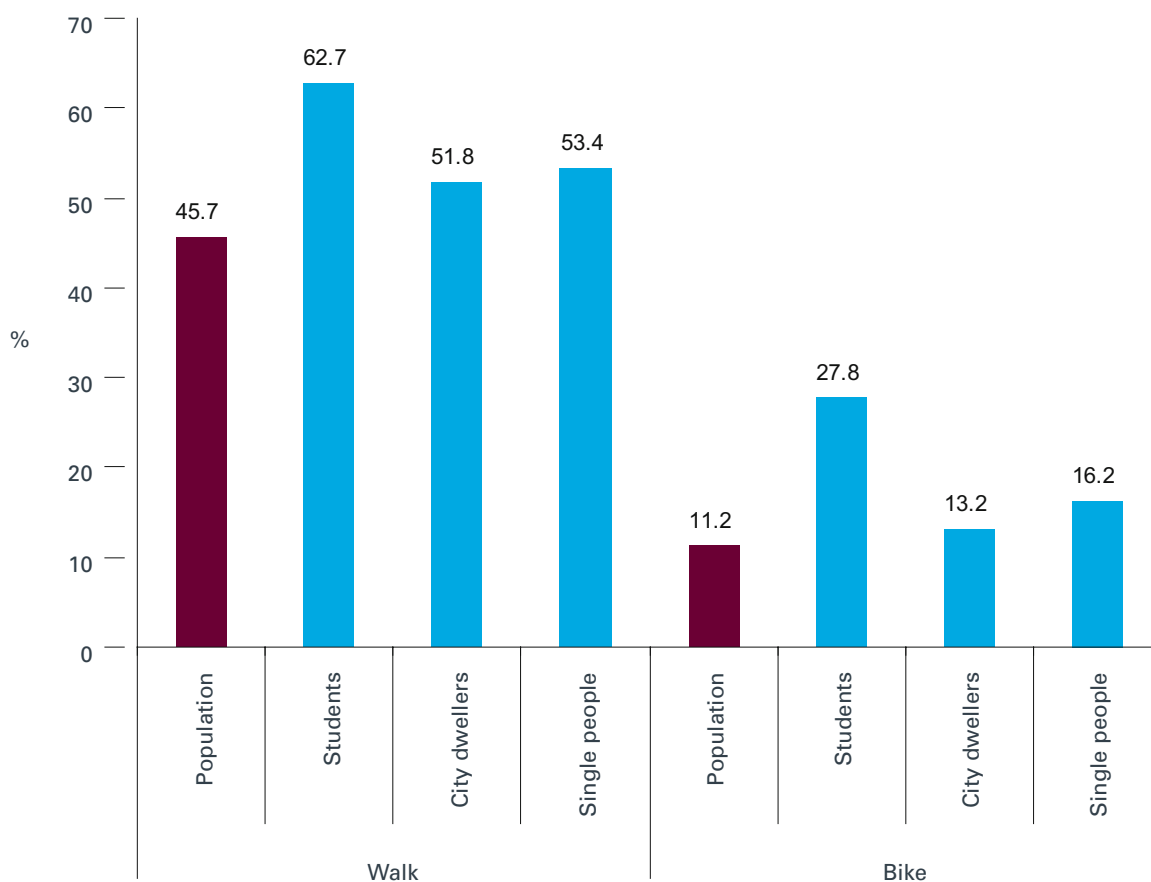
Based on the combination of the figures for the three years of the ISM, 45.7% of the population walks regularly for transport, while 11.2% cycles regularly. In comparison with the proportions of the population who play sport and undertake recreational walks, these are not small proportions and, therefore, they indicate that walking and cycling for transport make substantial contributions to physical activity.

There is some evidence that the proportion of people walking for transport increased across the three years, but not that there has been an increase in cycling for transport over the period.¹¹ There is also a strong overlap between the two activities: of those who cycle regularly for transport, 72.2% also walk regularly for transport, a very much higher proportion than for non-cyclists. Thus, the proportion of individuals who either walk or cycle regularly for transport (48.8%) is not much higher than the proportion who only walk for transport.

The multivariate statistical model reveals that there are certain social groups that are both significantly more likely to walk for transport and more likely to cycle for transport. Figure 5.1 provides the relevant proportions for students, city dwellers and single people. In each case, there is a greater likelihood of walking and cycling for transport, which remains after controlling for educational attainment, gender, age, income, employment status, occupation, number of children, access to a car, health status and nationality.

¹¹ We are being cautious in the interpretation of any trends in these two data series. To a greater extent than is the case for playing sport or recreational walking, the two indicators appear to be affected by strong seasonal factors, which could relate to things such as weather, educational terms, holidays etc. Because the ISM data were not collected evenly across the months of 2007 and 2008, it is difficult to control for this variation when comparing across years, so we do not present separate proportions by year and we limit ourselves to the conclusions in this paragraph.

Figure 5.1: Social groups with high rates of walking and cycling for transport, 2007-2009

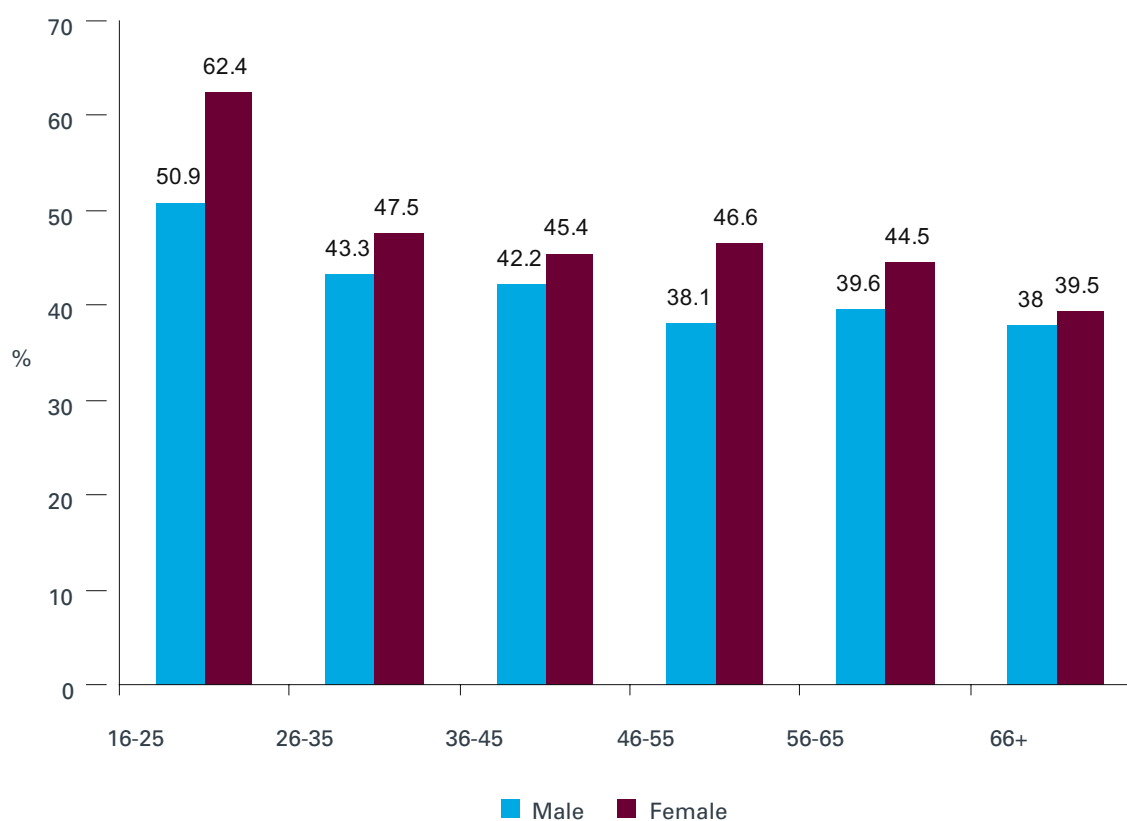


These findings are open to multiple interpretations – there are many possible reasons why members of the three categories might be more inclined to walk or cycle. Students may have occasional access to family cars, but be forced to use other means of transport much of the time. City dwellers often have shorter distances to travel to reach basic amenities. They may also be more likely to combine walking or cycling with public transport, which is less available in many smaller locations. City dwellers may also face parking restrictions, which are less common in less densely populated regions.

Arguably, the finding for single people is more surprising. Car ownership is controlled for in the statistical model, but one possibility is that single people are more likely to live near urban centres where car dependency is less than it is in the suburbs. We have no way to test these hypotheses with the limited information regarding the built environment contained in the survey.

The multivariate statistical models also show that both walking and cycling for transport are significantly associated with age and gender – more so than with socio-economic characteristics. Figure 5.2 breaks down the proportions walking for transport by these variables. There is a steady decline in the proportion with age, which is not entirely eliminated by controlling for all the available background variables, notably car ownership.

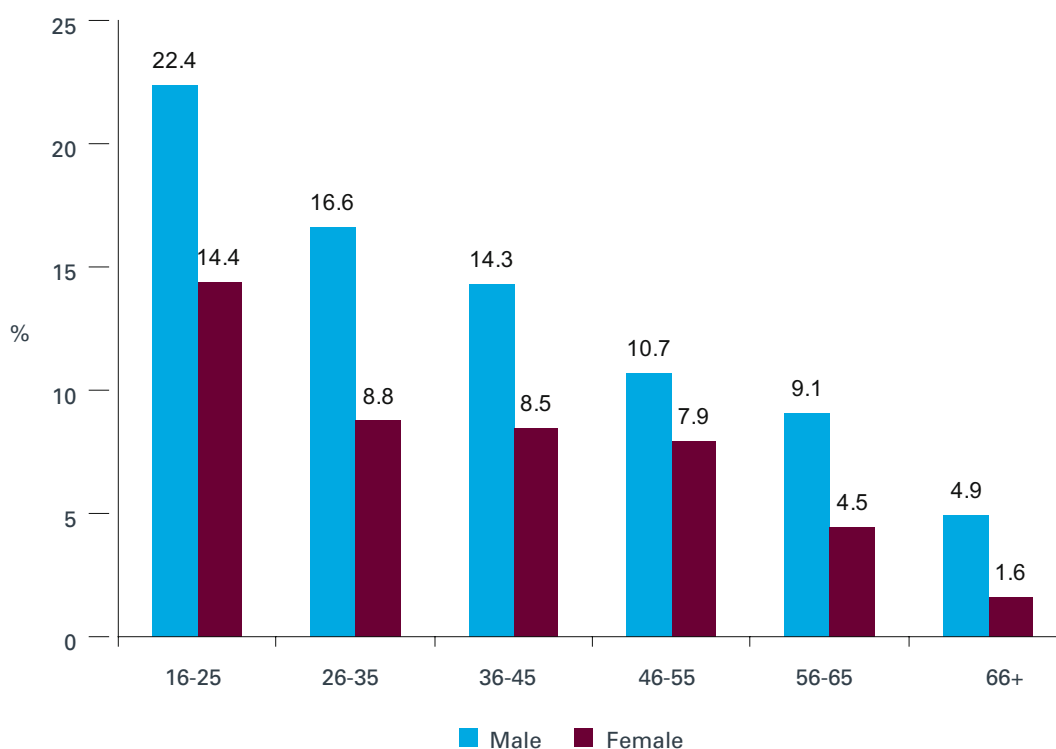
Figure 5.2: Walking for transport by age and gender, 2007-2009



Walking for transport is more common among women in every age category, an effect that is not diminished by controlling for other characteristics. Young women are especially likely to walk for transport. Although the gender gap is widest in the youngest age category (16-25), it does not simply narrow with age, but widens again in middle-age. These findings are not easily explainable unless one concludes that men are more likely to be the family members who employ other modes of transport, especially family cars. It is possible that this reflects the higher proportion of men who work and hence tend to travel greater distances regularly, but again we cannot test this hypothesis.

Figure 5.3 performs the same analysis for cycling for transport. The relationship with age is stronger than for walking – older people are much less likely to cycle for transport. It is important to note that an analysis such as this, which is based purely on cross-sectional data, cannot distinguish between an age effect and a cohort effect. That is, we cannot determine whether people's propensity to cycle declines as they get older, or whether people born later are more likely to cycle and may therefore remain so as they get older. Using recall data, Lunn and Layte (2008) found that the proportion of individuals playing regular sport had increased in recent cohorts, suggesting that the pattern of lower participation by age (e.g. see Figure 3.5 in Chapter 3) was in part due to people born in later generations playing more sport, rather than those in the older generations have given sport up. Looking at Figure 5.3, the same may be true for cycling. The higher rates of cycling in younger age categories may translate into higher rates for middle-aged people in future, or the present cohort of young adults may also acquire cars and develop less physically active transport patterns, thereby aping the preceding generation.

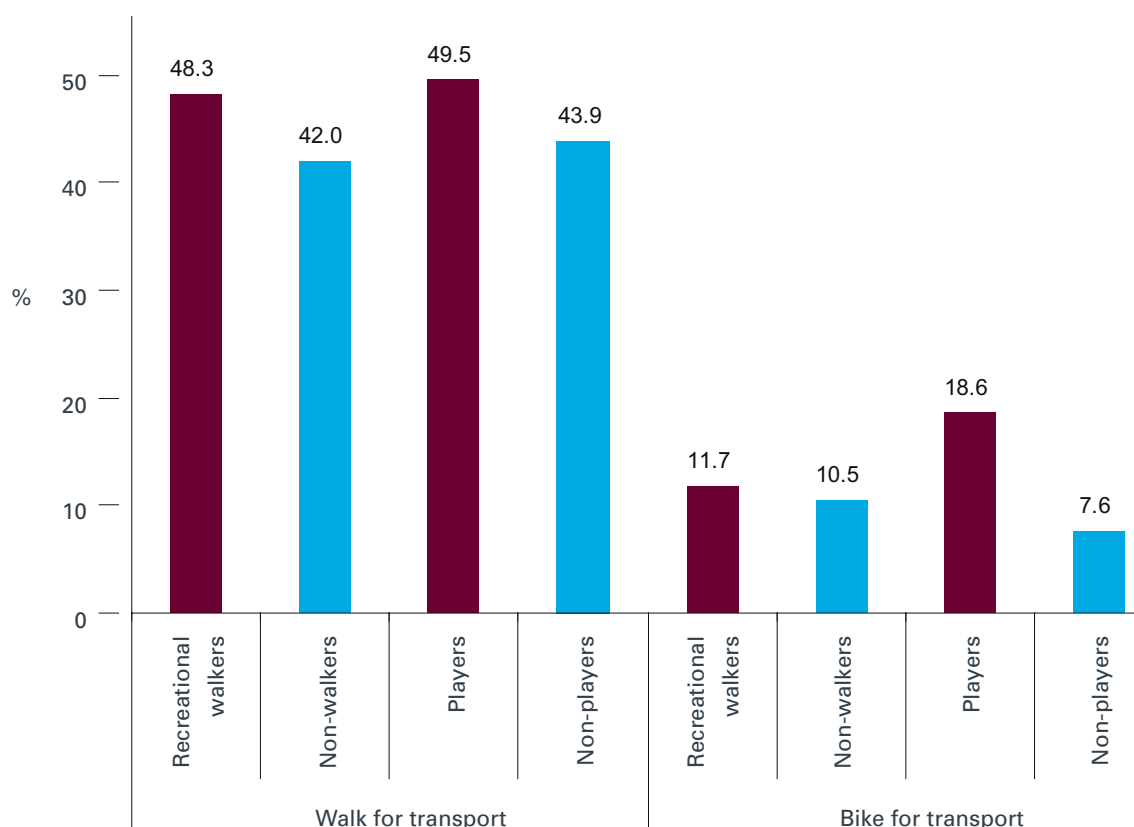
Figure 5.3: Cycling for transport by age and gender, 2007-2009



The gender pattern is the opposite of that for walking, with men being much more likely to cycle. Lunn and Layte (2008) found that among men there has been a considerable increase in cycling for sport or leisure over recent decades, in line with increases in many other individual sporting activities, but that there was a decrease among women. It is possible that women may be more affected by safety concerns. Similarly the gender gap narrows in middle-age then widens again.

Given the contribution walking and cycling for transport make to overall physical activity, a question of clear importance is the relationship between these activities and playing sport and recreational walking. One might hypothesise a negative or positive relationship. On the one hand, people who want to get a certain level of exercise may treat these different activities as substitutes. For example, those who do not participate in regular sport or exercise may feel that it is more important to get exercise via transport, resulting in a negative correlation. On the other hand, the motivation and physical fitness required to undertake each form of physical activity might mean that people who engage in one type of activity are more likely to undertake another, meaning that different activities would be complementary and the resulting correlation positive. Figure 5.4 provides the answer: the relationship is positive and statistically significant.

Figure 5.4: Proportions who walk and cycle for transport, by recreational walking and participation in sport, 2007-2009



People who regularly play sport or undertake recreational walks are more likely to both walk and cycle for transport. The multivariate statistical analysis confirms that this remains the case even after all the available background characteristics, including age and chronic health problems, are controlled for. The strongest of these positive associations is that between playing sport and cycling for transport. This probably suggests that physical fitness is an important common requirement for both activities.

Discussion

Walking and cycling for transport make substantial contributions to overall physical activity. However, there appears to be a mutually supportive positive relationship between these transport choices and active participation in sport and exercise, which may be related to motivation and the requirement for physical fitness associated with each activity. Consequently, the disparity in levels of physical activity apparent in participation in sport and exercise, particularly between younger and older adults, is exacerbated further by patterns of walking and cycling for transport.

This finding in relation to age is important, because it leads to the conclusion that middle-aged and older people, in particular, are strongly reliant on recreational walking for maintaining physical activity. It is also consistent with the analysis of Lunn and Layte (2008) in relation to fitness across the life-course. If the positive associations between different forms of physical activity result from people with greater physical fitness being more inclined to engage in each kind of physical activity, then the importance of maintaining at least some level of activity throughout the life-course needs to be emphasised. Once an individual's physical activity declines and fitness is lost, it may become increasingly difficult to recover to a more desirable level.

On the positive side, the results presented in this chapter were selected on the grounds that they reflected the most statistically significant relationships. Consequently, it is worth stressing that socio-economic status has a much weaker association with walking and cycling for transport than with playing sport. From a policy perspective, this is an interesting finding, because it suggests that even without specifically targeting interventions at the less well-off, policies to improve the environment for walkers and cyclists would be inclined to raise levels of physical activity among all socio-economic groups.

6. Sedentarism in Ireland

Summary

- Sedentarism fell from 18.2% in 2007 to 15.5% in 2009
- The fall was greater among those with higher incomes – in the lower half of the income distribution more than one-in-five adults is sedentary
- Older women, the middle-aged and those living in rural locations are more likely to be sedentary

Introduction

Given the strong links between physical activity and health, sedentarism is likely to have serious public health consequences. Here, we define someone as sedentary who does not actively participate in any recreational sport or exercise, does not undertake recreational walks, and does not walk or cycle regularly as a mode of transport. This is an imperfect definition, since individuals may find other ways to get physical activity, perhaps most notably in the workplace, where manual jobs constitute a declining but still significant part of the labour market. In principle, household chores and gardening may also contribute to levels of physical activity and are not measured in the survey. Nevertheless, the patterns of sedentarism reported in this chapter are very strong and it is therefore unlikely that a more comprehensive definition would alter the findings appreciably.

Key Results

As pointed out in Chapter 2, the proportion of the population that is effectively sedentary fell significantly from 18.2% in 2007 to 15.5% in 2009. From a policy perspective, this is a welcome development, driven by a combination of increases in participation in sport, recreational walking and walking for transport. However, the reduction in the level of sedentarism was not uniform across the population. In particular, as Figure 6.1 shows, the reduction was considerably greater for those on higher incomes, who were already very much less likely to be sedentary. In 2009, the proportion of people who were sedentary was more than twice as high in the bottom half of the income distribution as it was in the top half.

Nevertheless, sedentarism fell across the population generally and the fall was relatively even across other background characteristics. For the remainder of this chapter, the data from 2007-2009 are therefore pooled, to examine other relationships of interest.

Figure 6.1: Sedentarism by income, 2007, 2008 and 2009

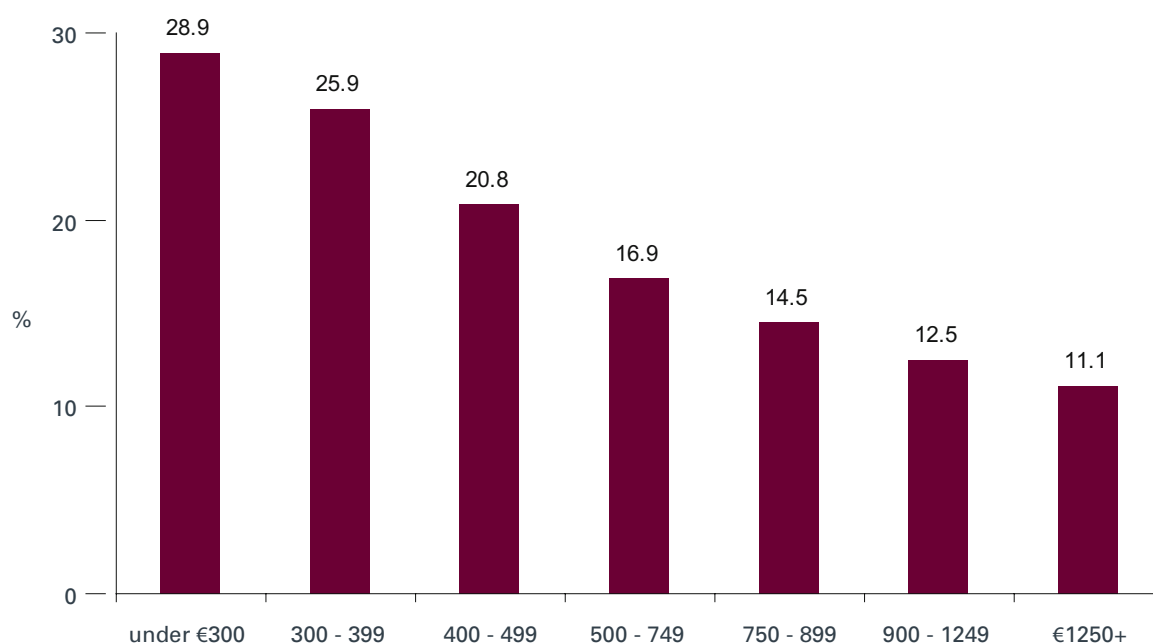


Figure 6.2 presents the proportion of individuals who are sedentary by seven income categories and hence reveals the full extent of the relationship. In the bottom two income categories, people earning less than €400 per week, over one quarter of the adult population is sedentary. This compares with one-in-nine in the top income category. Given the known relationships between physical activity and health described in Chapter 1, this very strong socio-economic gradient makes it highly likely that those at the lower end of the income distribution will suffer increased levels of degenerative disease as a result of physical inactivity.

Multivariate analysis reveals that the pattern of Figure 6.2 is produced not only by the impact of income, but also that of educational attainment. Those in lower income categories are also likely to have lower educational attainment and both variables are highly significant in the analysis, controlling for all other available background characteristics.

It is also worth noting the additional influence of health status. Not unsurprisingly, people who report a chronic health condition are more likely to be sedentary. Among those who state that their condition does not prevent them from taking part in sport and exercise, the rate of sedentarism is 24%. Among those who report that the condition does prevent them undertaking sport and exercise, the figure rises to 35%.

Figure 6.2: Sedentarism by income, 2007-2009

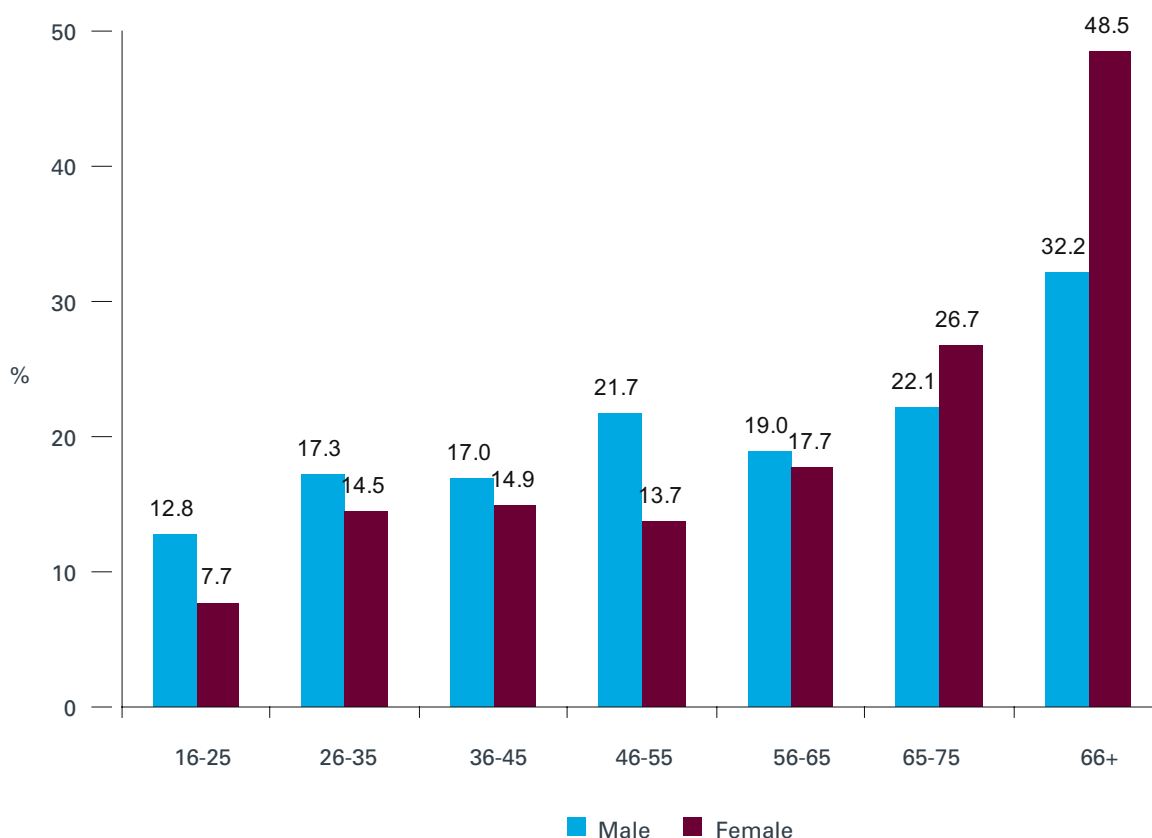


Gender and age are also significantly related to the likelihood of being sedentary. Figure 6.3 shows the strikingly different patterns of sedentarism across age categories of men and women. Generally speaking, women are significantly less likely to be sedentary than men, especially in the 46-55 age category. Indeed, middle-aged men appear to have a particularly high rate of sedentarism. The situation changes however among people aged over 65 and especially among those over 75. This gender gap among older people is greater than can be accounted for by the increased longevity of women alone and remains even after socio-economic and other characteristics are controlled for. Older women therefore appear to be less active than their male counterparts.

Figure 6.3 represents an important finding, because it places the relative participation in sport and exercise of men and women in a broader context. While men are considerably more likely to play sport than women, they are not generally less likely to be physically inactive. With respect to avoiding complete inactivity, women more than make up for their lower level of active participation in sport by being more likely to walk regularly. Of course, it must be borne in mind that much participation in sport and recreational exercise is likely to be more physically intensive than walking. Thus, there is likely to be a greater physical activity gap between active and inactive males than between active and inactive females.

One final point to note is the very low level of sedentarism among young women. Although concern has been expressed at the rate of drop-out from sport and recreational exercise by adolescent and young women, they are nevertheless the demographic group with the lowest level of sedentarism. This is due to the combination of high participation in sport and exercise (relative to older categories, but not relative to young men) and a relatively high degree of walking, especially for transport.

Figure 6.3: Sedentarism by age and gender, 2007-2009



As the previous analysis shows, socio-economic status, gender and age are strongly associated with sedentarism. However, it is also the case that there is an interaction between these variables. Figure 6.4 provides insight into this interaction by presenting the profiles of sedentarism by age and gender separately for those on lower incomes and higher incomes.¹² The patterns are broadly similar during young adulthood, albeit that sedentarism is significantly less common in the higher income group. But at older ages, the patterns diverge. Sedentarism is particularly high among low income over 65s, especially women, where the figure reaches more than one-in-three. Furthermore, in the higher income category, retirement appears to reduce the level of sedentarism among men, while in the lower income category it again increases.

The extent to which middle-aged men stick out in this analysis deserves particular attention. More than one-in-five men aged 46-55 is sedentary, even among the higher income group. The data show that men in this category are likely to have dropped out from sport they used to play, have a high rate of car ownership (and probably car use, although the ISM does not record this), are unlikely to walk or cycle regularly for transport. The result is that they are very much more likely to be sedentary and that their physical activity is heavily reliant on recreational walking, which does not tend to pick up until closer to retirement. Given the health risks associated with physically inactivity, especially circulatory diseases, the level of sedentarism among this group is a matter of concern.

¹² The number of over-75s with high income in the sample is too low for this analysis to be valid for that group, so the age category 66+ is employed.

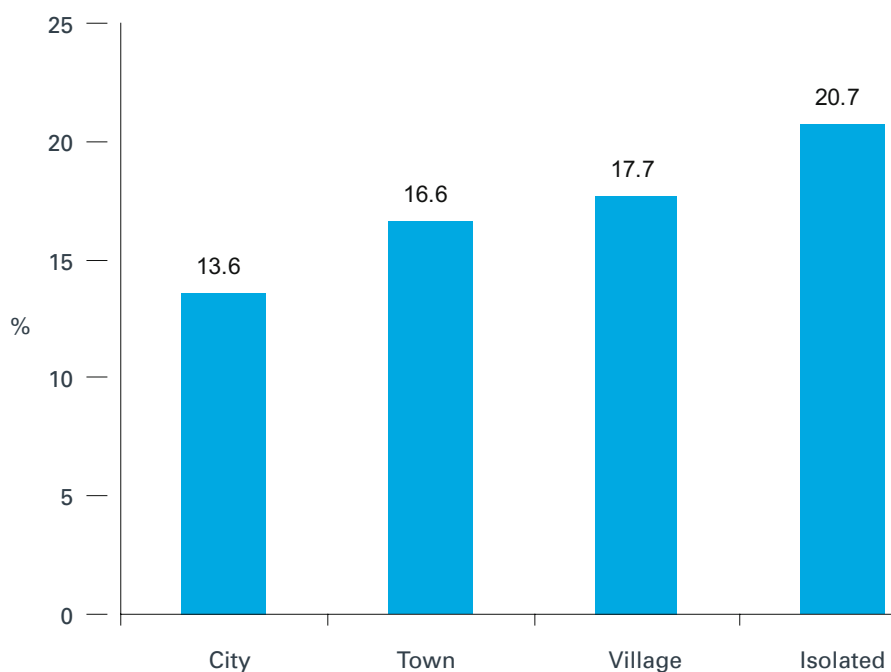
Figure 6.4: Sedentarism by age and gender, for those on lower incomes and higher incomes, 2007-2009



The multivariate statistical model identifies one further relationship of note. Figure 6.5 shows that the level of sedentarism is strongly influenced by residential location. There is a clear gradient, with inactivity being much more likely in non-urban areas, especially isolated rural locations. This pattern is, if anything, strengthened by controlling for other background characteristics.

The pattern of sedentarism by residential location is partly due to lower levels of participation in sport and exercise in rural areas, but is mostly down to people in such areas being less likely to walk, for recreation or transport. Further analysis also shows that the pattern is not caused by regional differences in activity, but is instead a function of the type of residential area people occupy. Thus, it suggests that the built environment (i.e. lack of street lighting, footpaths, etc.) in low density residential areas is less likely to be conducive to walking and, consequently, reduces the physical activity of the inhabitants.

Figure 6.5: Sedentarism by residential location, 2007-2009



Discussion

Previous research on sport and recreational exercise has shown that the greatest difference in health status arises between those who do at least some activity and those who do none (Lunn and Layte, 2008). Thus, sedentarism may be a particular cause for concern from a public health perspective.

While the fall in sedentarism between 2007 and 2009 is clearly welcome, there remain patterns of physical inactivity across the population that are likely to substantially raise the risk of poor health and chronic disease among some identifiable groups. The proportion of people who appear to do little or no regular physical activity is particularly high among those at the lower end of the socio-economic spectrum, especially among older people, where it is very high indeed, reaching one-in-three women and one-in-four men. A further group that appears prone to sedentarism is middle-aged men, especially those aged around 50 – an effect also apparent among men with high income. Lastly, there is a strong urban-rural divide in sedentarism, with more than one-in-five adults living in isolated residential locations being sedentary. Policies to tackle sedentarism therefore need to recognise these distinct patterns. We return to this issue in the final chapter.

Part Four

Social Participation

7. Volunteering

Summary

- The proportion of adults doing voluntary activity for sport fell from 8.2% in 2007 to 6.8% in 2009, with declines across both individual and team sports
- Rates of volunteering declined most among the middle-aged, working people and those with lower incomes
- Volunteering increased among the unemployed, but solely in relation to team sports

Introduction

Raising levels of active participation in sport, widely defined, is the primary aim of the Irish Sports Council, but social participation in sport, as opposed to active participation, is also an important contributor to wellbeing and to the enjoyment of sport for all involved. The ISM asks about a number of different dimensions of social participation. In this chapter we examine the patterns of voluntary activity in the ISM survey. Sport in Ireland is supported by vast amounts of unsung and largely unrecognised voluntary activity. Without this voluntary activity, less sport would be played and the sport that is played would be much diminished.

Key Results

The data reveal a fall in levels of voluntary activity for sport between 2007 and 2009. Voluntary activity in sport fell from 8.2% in 2007 to 7.8% in 2008 and 6.8% in 2009 (a statistically significant decrease, $p < 0.05$). Figure 7.1 shows that, over the period as a whole, levels of voluntary activity fell among both men and women. Controlling for all other available background characteristics, the multivariate analysis confirms the overall downward trend.

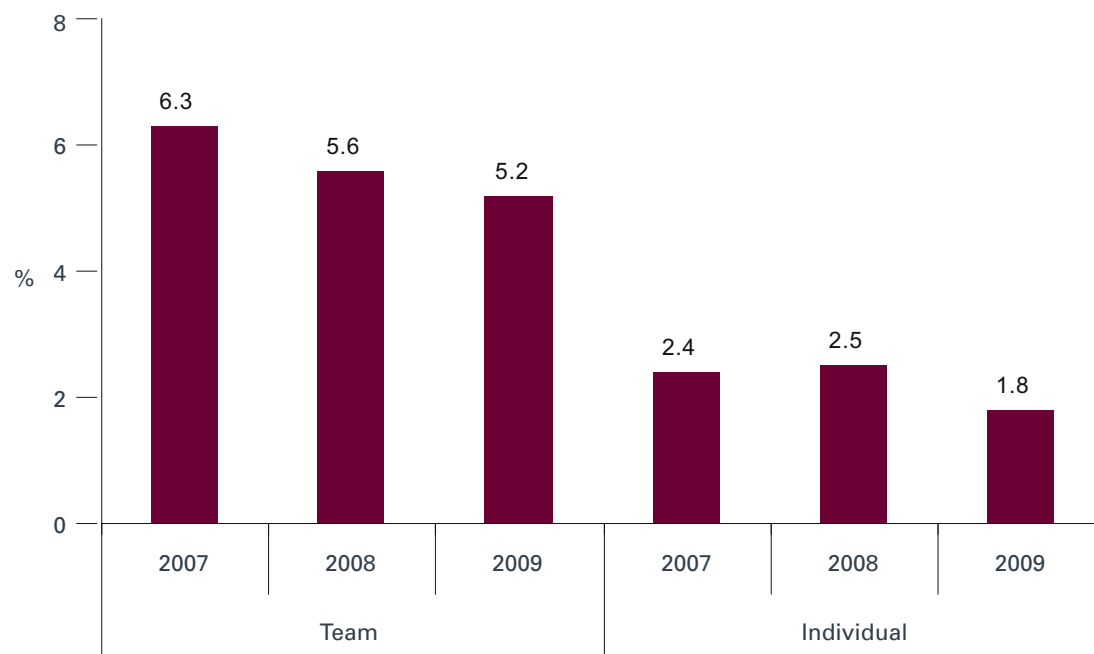
As the previous chapters make clear, the last three years have witnessed dramatic changes in the Irish economy, which have had an impact on active participation. It is therefore not entirely surprising to see significant change in the level of social participation as well. However, it is arguably more surprising that volunteering has continued a downward trend and not enjoyed the recovery recorded for active participation. This is particularly the case given the evidence for a connection between increased active participation and additional free time, as outlined in Chapter 3.

Figure 7.1: Volunteering by gender, 2007, 2008 and 2009



One obvious way to shed more light on the issue is to examine the specific activities involved, to see which have been most affected. However, this turns out to be fairly uninformative, since the downward trend is fairly uniform. Figure 7.2 shows the patterns of volunteering for team and individual sports separately.

Figure 7.2: Volunteering by type of sport, 2007, 2008 and 2009

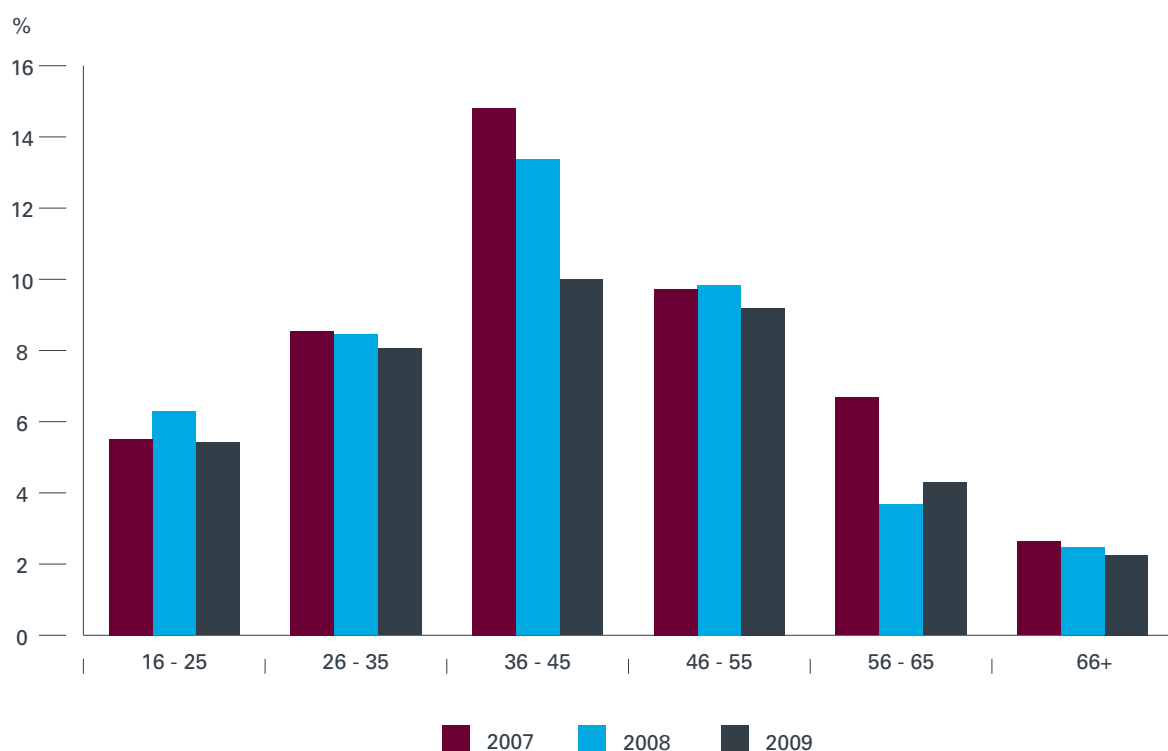


Both team sports and individual sports have been affected by the downward trend. Further analysis reveals that the survey recorded falls in volunteering for all the main team sports. However, in each case the declines fall short of statistical significance, which can only be established once the sports are grouped together. This pattern seems to indicate that the downward trend in volunteering is uniform across sporting activities, rather than being confined to any one type of activity.

Having looked for patterns by activity, the next step to take is to analyse patterns by type of volunteer. The pattern of volunteering across the population reported in previous ISM surveys still holds, in that middle-aged, higher income, employed individuals with older children are most likely to volunteer, but there have been some important developments over the 2007-2009 period.

There is a very pronounced relationship between an individual's age and the likelihood that they will do voluntary activity around sport, which rises with age until age 45 or so, before falling to its lowest point after age 65. The pattern for women is identical to that for men except that levels of volunteering are lower. Figure 7.3 shows how this pattern has evolved between 2007 and 2009. Falls occurred across all age groups over the period, but the drop was pronounced for those aged 36-45, who are also the group with the highest level of volunteering.

Figure 7.3: Proportion volunteering by age, 2007, 2008 and 2009



Given that levels of active participation in sport among the 36-45 age group have increased over the period and there is good reason to believe that the rise in activity is related to greater available free time, the pattern of Figure 7.3 is not easily explained and represents something of a puzzle. One might argue that these groups have refocused their activity on playing rather than volunteering over the last two years, but this argument is unconvincing given the fall and recovery in active participation, as opposed to the more consistent decline in volunteering.

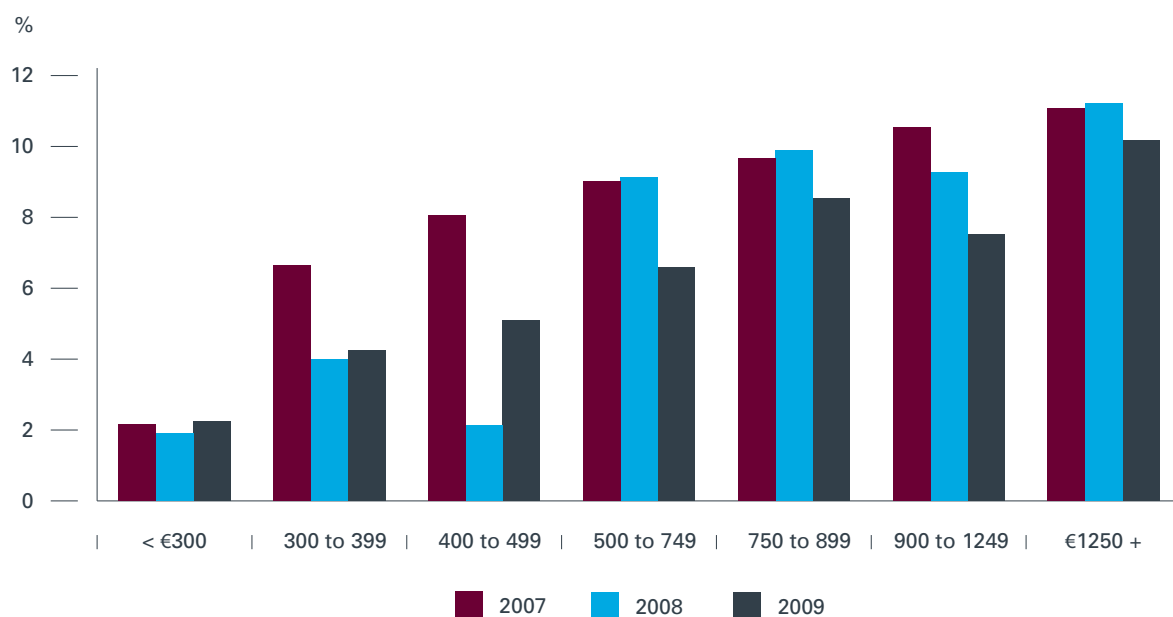
Two alternative possibilities may be worth considering. First, people's willingness to volunteer may be rather straightforwardly associated with economic wellbeing. In all likelihood, most volunteering probably comes at some material cost to the volunteer, not only in terms of the time they commit, but also the cost of transport and perhaps equipment and clothing. People may have become less willing to bear such costs in more difficult economic times. When people are under greater financial pressure, they may simply become less generous with their time and money. In difficult times, there may be a lower supply of willing volunteers.

The second hypothesis focuses, not on the supply of volunteers, but the demand for them. The ISM measures active participation in adult sport, but much volunteering surrounds children's sport, for which we do not have the equivalent data. It is possible that the recession has had an impact on the prevalence of children's sport between 2007 and 2009 and that the decline in volunteering reflects this. There are good reasons to believe that children's sport may have been affected. In terms of provision, it seems unlikely that cuts to various relevant budgets and a recruitment freeze in the teaching profession will have left children's sport untouched. Meanwhile, parents' willingness to spend money on their children's activities may have declined, as we know has been the case for adult sporting activity. Even if overall participation among children hasn't fallen, a reduction in the variety of available activities might also have had an impact on the demand for volunteers. Hence, although we have no direct way to test this conjecture, its plausibility means that it merits consideration.

These two alternative hypotheses therefore suggest very different potential root causes. In one case, the fall is conjectured to be due to people changing their level of generosity in the face of adversity, in the other, people's behaviour is assumed to have remain unchanged while opportunities for them to volunteer have diminished. More simply, one hypothesis concerns the supply of willing volunteers, the other the demand for them. Both must be regarded as speculative but, at first sight, the second hypothesis is more in keeping with Figure 7.3, because the age profile of volunteers is largely driven by the age at which adults are most likely to have children or to get involved with schools or children's clubs. If a more general decline associated with reduced spending were to blame, one might expect the pattern to be more consistent across age groups.

Figure 7.4, however, makes it clear that income is also a factor. While voluntary activity remained strongly patterned by income, with better-off individuals more likely to volunteer, from 2007 to 2009 the differences between income groups were exacerbated by larger falls at the lower end of the income distribution, especially in 2008. The pattern is not uniform and does not extend to the lowest income group, where volunteering has remained stable, but overall the gradient across income groups steepened.

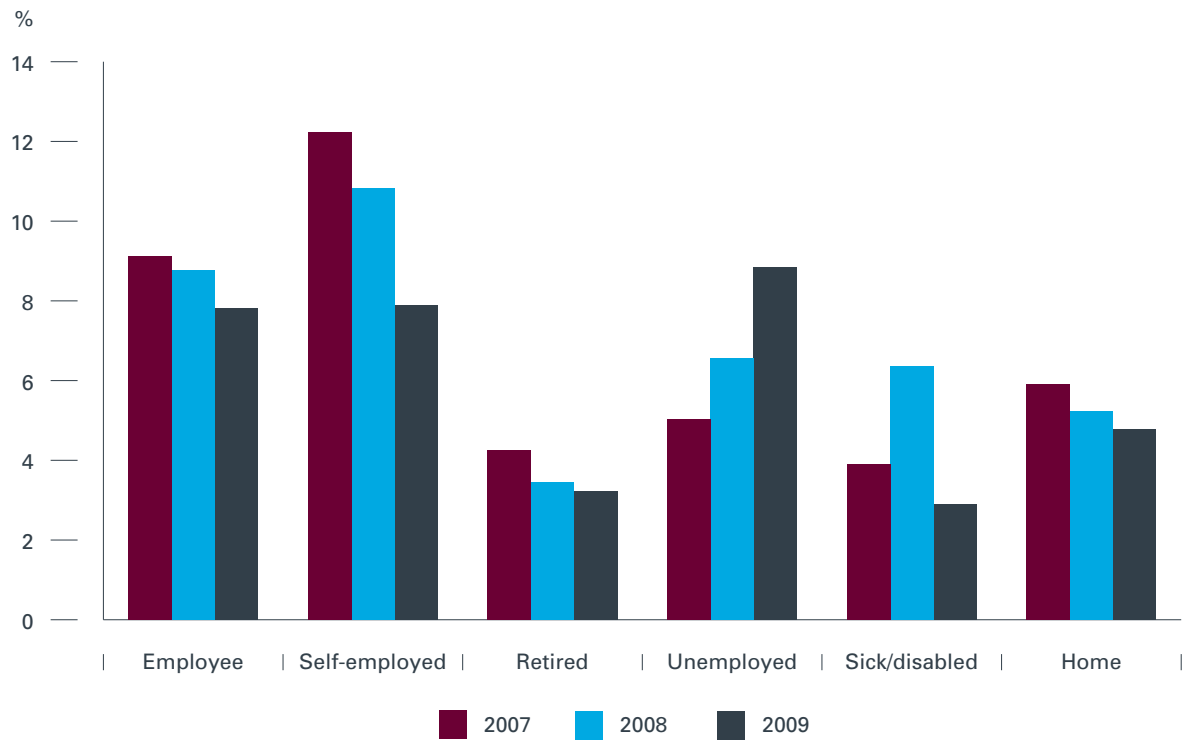
Figure 7.4: Proportion volunteering by income, 2007, 2008 and 2009



The findings are not straightforward to interpret and are insufficiently clear to confidently reject or accept either hypothesis for the decline in volunteering. Arguably, they are consistent with a view that the prevalence of children's sport declined between 2007 and 2009, reducing the demand for volunteers, and that it did so more among lower socio-economic groups. There is a logic to this account, but we do not have direct evidence that children's sport has, in fact, been adversely affected by the recession.

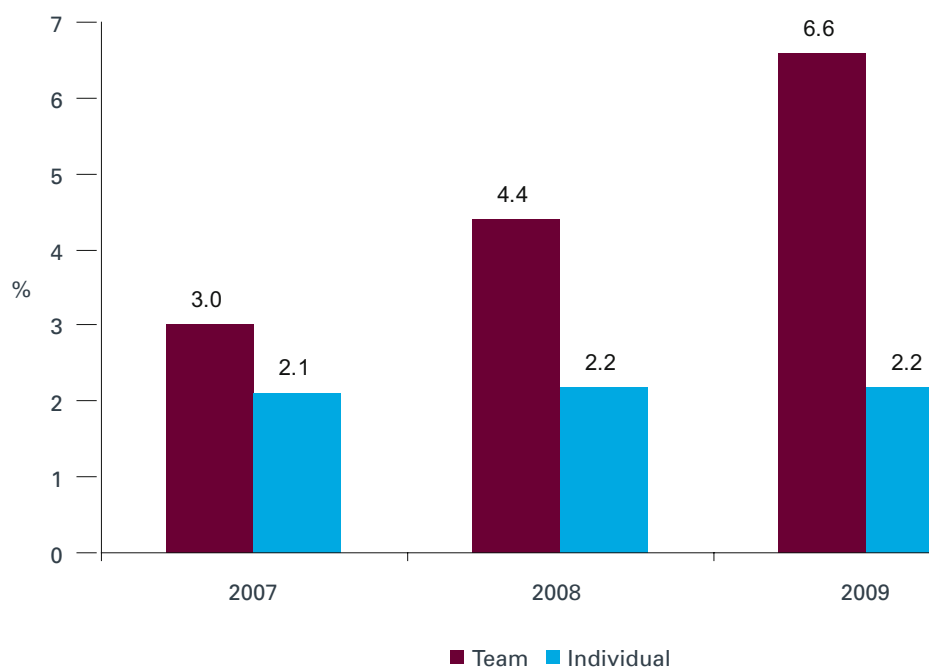
Figure 7.5 displays rates of volunteering by employment status. This further complicates the picture. The fall in voluntary activity occurred across almost all employment status groups except for the unemployed, where there was a statistically significant rise over both years. It is difficult to put a definite interpretation on this increase among the unemployed. Active participation among the unemployed increased in 2008 but then fell back again in 2009. The initial rise was probably due to the influx of recently employed people into the ranks of the unemployed in 2008, bringing with them their sporting habits. A similar effect may also have occurred for volunteers, but appears to have sustained itself.

Figure 7.5: Proportion volunteering by employment status, 2007, 2008 and 2009



One possible explanation hinges on the fact that volunteering occurs predominantly for team sports. This may mean that the social contact it generates is especially beneficial to those who find themselves out of a job. One way to test this hypothesis is to compare rates of volunteering by the unemployed separately for individual and team sports, which is done in Figure 7.6. Although the proportions are based on small sample sizes, the effect is so evident that the hypothesis is plainly supported.

Figure 7.6: Volunteering rate among the unemployed by types of sport, 2007, 2008 and 2009



While falls in the proportion of the population volunteering are important, from the perspective of the sports involved, time spent volunteering matters also. In this respect, the data reveal that in addition to the significant decline in the proportion of people who volunteer, the average time that volunteers spent working for the sport also fell. This was especially true among those devoting more than four or five hours a week to their chosen sport. The fact that the activity of the most committed volunteers reduced between 2007 and 2009 might be interpreted as evidence that the demand for volunteering did indeed fall, especially since many of these most active volunteers are retired and thus less likely to have been affected in terms of income and employment status.

Discussion

The decline in volunteering for sport remains a puzzle. Looking across Figures 7.2–7.5, it is difficult to produce a consistent account of the data. The fall in volunteering is uniform for men and women, but especially strong among the 36–45 age group. Meanwhile, the greater decline among lower income people is somewhat counterbalanced by an increase among the unemployed. This complex pattern is not easily explained by either of two hypotheses advanced: that people have become less generous with their time and money during the recession, or that a decline in the amount of children’s sport during the recession (for which we lack direct evidence) reduced the demand for volunteers. On balance, the latter hypothesis may have more to it.

Regardless of its cause, the decline in volunteering is likely to have an impact. It represents a straightforward reduction in social capital. Even if it turned out not to be the result of a reduction in the amount of children’s sport, it would be likely to have an impact in the other direction, i.e. to make such a reduction more likely. As Delaney and Fahey (2005) observed, volunteering for sport is the most common form of volunteering in Ireland. Sport needs its volunteers.

Voluntary activity among the unemployed has risen in each wave of the ISM, even though active participation among this group fell between 2008 and 2009. The analysis shows this effect was confined to team sports. Thus, the different trends for active participation and voluntary activity among the unemployed probably reflects the different social experiences associated with the team sports for which people typically volunteer and the individual sports that adults are more inclined to play. Policymakers might consider ways that unemployed volunteers could be supported, as the increased social capital generated is likely to benefit both sport and the unemployed people involved.

8. Membership

Summary

- Club membership remained unchanged between 2007 and 2009, with 32% of adults holding some type of sports club membership
- Membership decreased among those aged under 25 and increased among older age groups
- Membership among the unemployed doubled between 2007 and 2009, from 14% to 28%, but there is reason to believe that this increase is temporary

Introduction

Sports club membership provides the structure within which much active and social participation in sport takes place. The role of Gaelic games and the popularity of other club based sports such as golf, soccer and swimming has meant that the sports club has remained an important source of participation in sport and social cohesion within communities (Fahey and Delany, 2005). The growth of individual sports and personal exercise activity over the last two decades (Lunn and Layte, 2008) has resulted in large increases in new forms of club membership – gym and health club membership, which often allow access to a range of activities, including exercise machines, swimming and fitness classes of different sorts. This chapter attempts to understand developments in club membership in Ireland over the last three years.

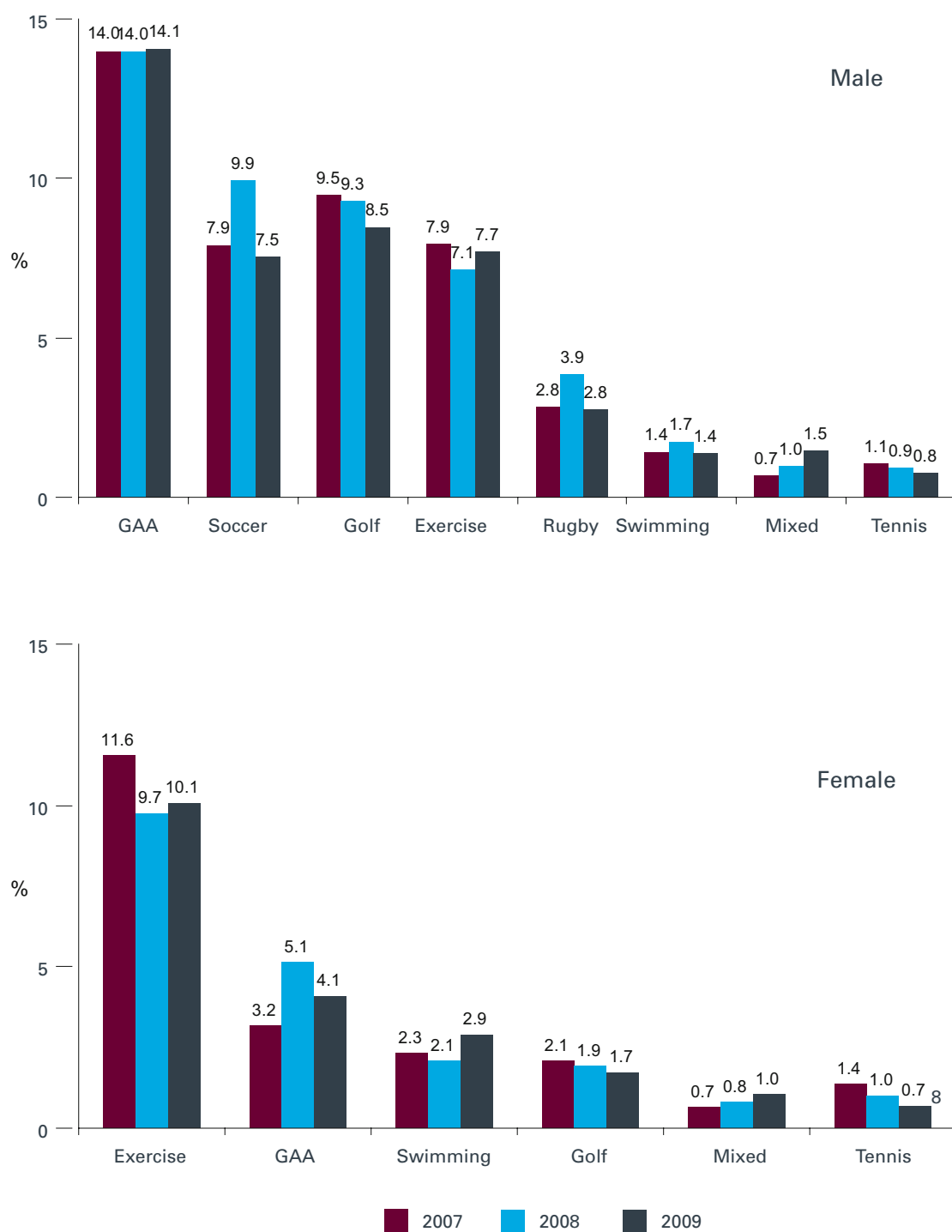
Key Results

Sports club membership remained relatively stable at around 32% throughout the period 2007-2009. The precise recorded figures are 31.5% for 2007, 32.4% for 2008 and 32.1% for 2009, with none of these differences being statistically significant. Men are considerably more likely to be club members, with a rate of 41%, as against 23% for women. Again, there were no significant changes to these figures between 2007 and 2009. However, despite this apparent picture of stability, further analysis of the data by individual sporting activity, by age and by employment status, reveals some changes.

Figure 8.1 displays rates of club membership for men and women for different types of club, ranked by popularity. Exercise (gyms, health and fitness clubs, etc.) and golf clubs have experienced overall declines in membership among both men and women, with the overall effects being significant in each case. It is hard to avoid the conclusion that this pattern is due to these sports having higher membership fees at a time when households are reducing spending. Otherwise, the pattern is primarily one of relative stability.¹³

13 The apparent rise in soccer and rugby club membership in 2008 among men is not emphasised here because it is likely to represent primarily statistical variation, and does not appear to reflect an ongoing change. The survey sample in 2008 was collected disproportionately during the winter, which may have contributed to this effect, despite attempts to control for the potential bias induced. For further discussion of this issue, see the ISM Annual Report of 2008.

Figure 8.1: Club membership by gender in 2007, 2008 and 2009



Club membership has a pronounced patterning by age group, which is shown in Figure 8.2. The youngest age group have the highest rate of membership, at 44% in 2009, falling to 17% for those aged over 65. This pattern is partly a consequence of the equivalent pattern for active participation, which also falls steadily as age increases. In addition, Figure 8.2 shows that the level of membership among the youngest age group fell in 2009, following an increase in 2008, whereas membership levels among older age groups actually increased. A multivariate statistical model confirms this pattern, with membership falling significantly between 2007 and 2009 among the youngest age group, while increasing for those aged between 26 and 65.

Figure 8.2: Club membership by age, 2007, 2008 and 2009

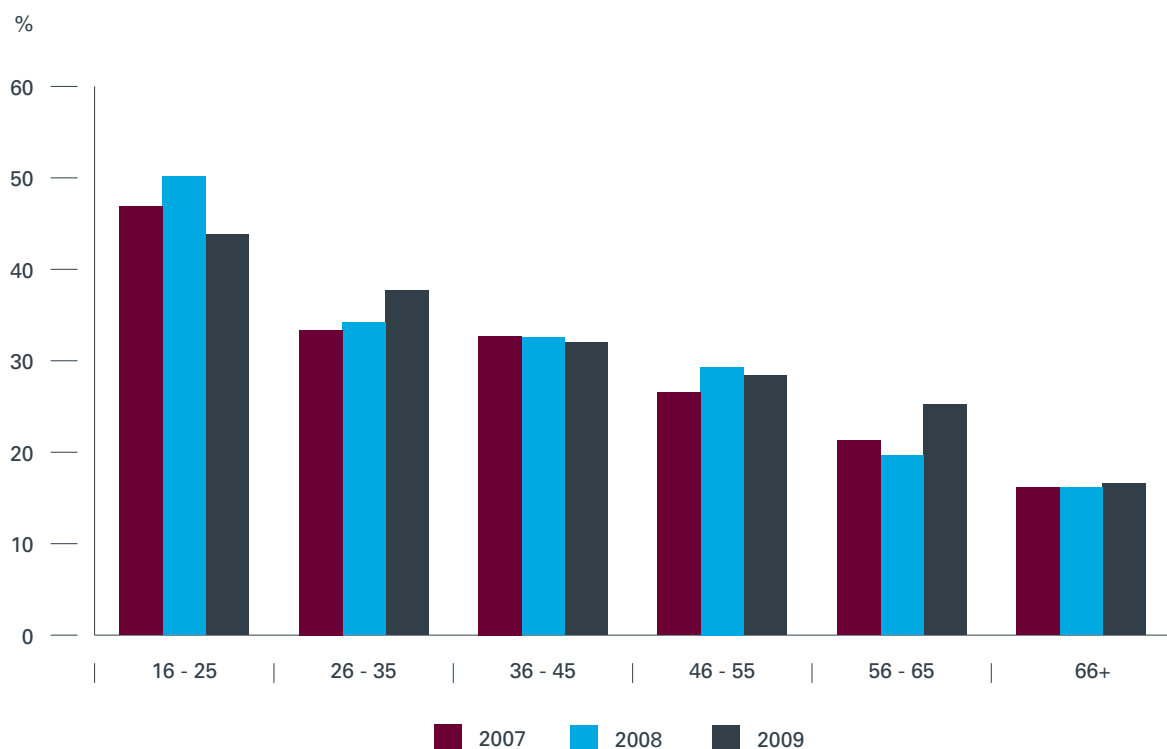
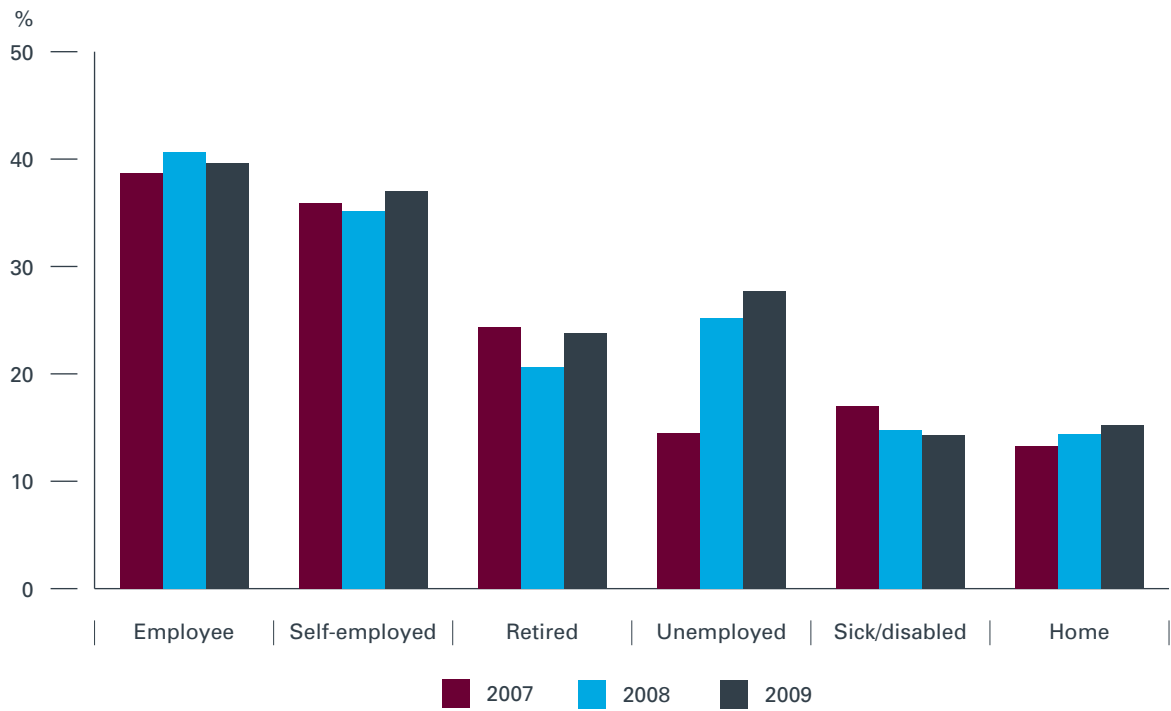


Figure 8.3 provides similar analysis by employment status. The last three years have witnessed substantial change in the patterns of membership among the unemployed. In 2008, club membership among the unemployed increased, primarily because individuals moving into unemployment carried their memberships with them. Our assumption in the 2008 ISM Annual Report was that with time and lower incomes, the rate of membership among the unemployed might drop. In fact, as shown by Figure 8.5, membership among the unemployed has continued to rise and indeed doubled between 2007 and 2009, from 14% to 28%.

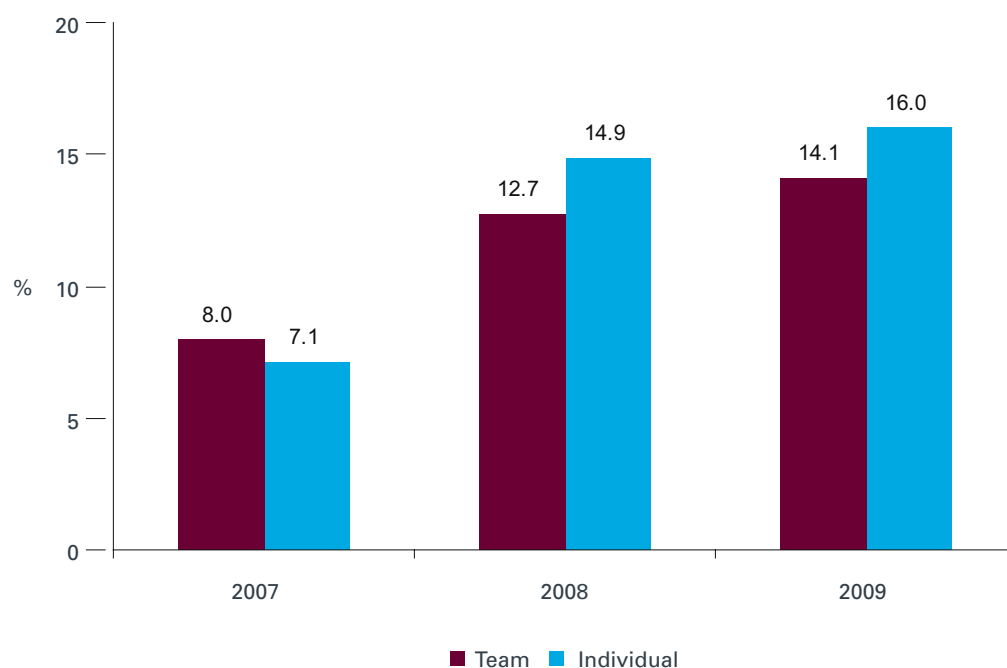
It is not straightforward to reconcile this increase in membership among the unemployed with the fall in active participation among the unemployed between 2008 and 2009, although it is in keeping with the consistent increase in volunteering among the unemployed (see Figure 7.5 above). As suggested in that case, one possibility is that the greater emphasis on club membership associated with team sports, and the GAA in particular, means that social participation is greatly valued by those who are out of work. Moreover, membership fees associated with team sports are likely to be considerably less expensive than the outlay required for active participation in many of the individual sports that adults are more likely to play.

Figure 8.3: Club membership by employment status, 2007, 2008 and 2009



Similarly to volunteering, we test this hypothesis by separating membership among the unemployed by type of sport. This time, however, the hypothesis is not supported. Membership of clubs associated with individual activities has in fact risen by more than membership of clubs for team sports.

Figure 8.4: Club membership among the unemployed by type of sport, 2007, 2008 and 2009



Perhaps the most plausible explanation for the difference between volunteering and membership is that many of the unemployed have recently been employed and many memberships last for a year. Thus, it may simply be that the unemployed have carried memberships with them and that Figures 8.3 and 8.4 represent a transitory phase. Note that even following the increase, membership among the unemployed lies well below that among the employed. For volunteering, on the other hand, the unemployed in 2009 had greater involvement than the employed, and so the increase may reflect genuine behaviour change accompanying job loss.

Discussion

There have been some developments in sports club membership over the period from 2007 to 2009. Although the overall trend looks to be neutral, this masks a number of significant changes. Memberships of gyms, health and fitness clubs (or similar) and golf clubs have fallen, probably reflecting their cost.

The fall in membership among younger adults (aged 16-25) warrants closer attention. Many of this age group, especially males, are unemployed. A supplementary budget in 2009 considerably reduced the Jobseekers Allowance for those under 20 years of age and Budget 2010 has also reduced it for those aged under 25. Given the strong relationship between income and membership reported in previous ISM Annual Reports (an analysis not repeated in this chapter, as the effect has changed little over the three years), it seems very likely that these changes to the welfare system will further reduce sports club membership among this group and may already have done so for those under 20. Young adulthood is a crucial time in the life-course of physical activity (Lunn and Layte, 2008) and policymakers may be able to do something to reduce the likelihood of young people becoming disconnected from sporting activity.

Given the uniformity across the type of sports involved, the increased levels of membership among the unemployed probably reflect the carryover of membership from when individuals were employed. This stands in contrast to the case of volunteering where there the evidence is more in keeping with the idea that the unemployed may be specifically getting involved in team sports as a way of maintaining social contact. Consistent with this, comparing Figure 8.3 with its equivalent in the previous chapter (Figure 7.5), it is notable that the level of volunteering is higher among the unemployed than the employed whereas, despite the recent increase, club membership among the unemployed remains well below that among the employed. The implication is that the increased levels of club membership among the unemployed may not last.

9. Attendance

Summary

- Attendance at sporting events fell from 17% in 2007 to 15% in 2008 but recovered to 17% in 2009
- The rise was primarily due to more men attending team sports fixtures
- Attendance at events among the unemployed increased sharply to 20% in 2009

Introduction

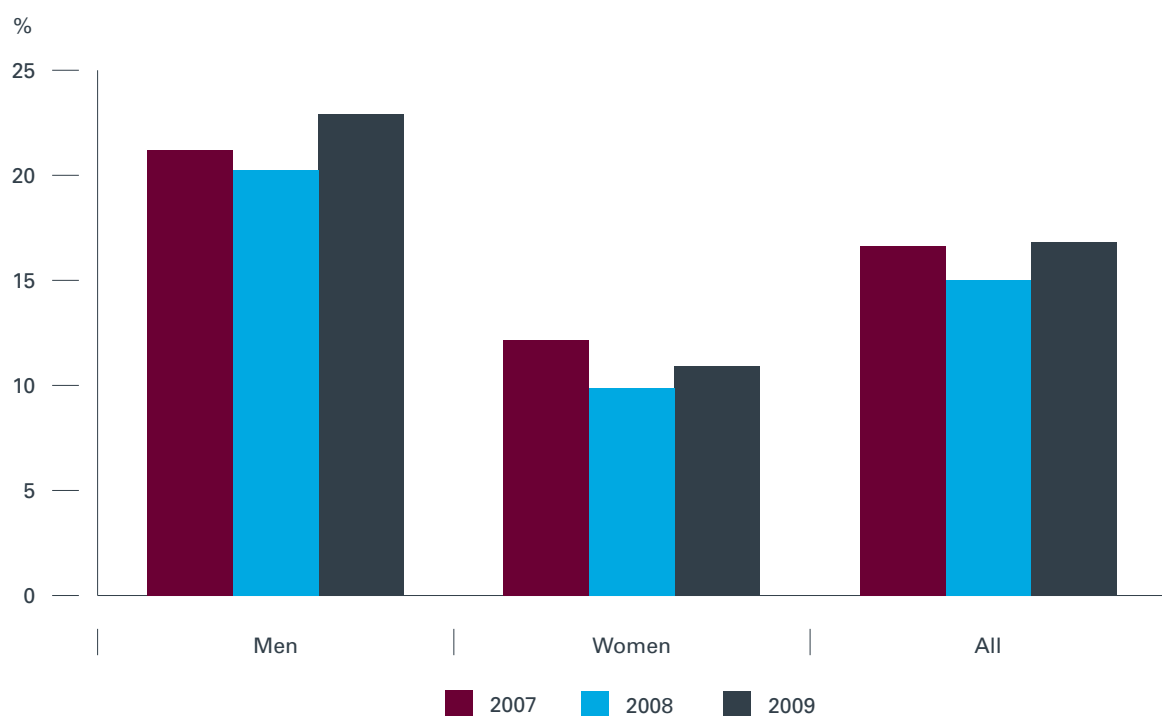
The ISM asks respondents whether they have attended a sporting event in the previous 7 days and, if so, how many events they attended. The question specifically states that these events can be adult or children's fixtures. The distinction is important, as previous research on sport has shown that parents attending the sporting events of their children account for a substantial proportion of overall attendance at sporting events (Delaney and Fahey, 2005; Lunn, Layte and Watson, 2009). In this chapter, we examine the patterns and trends in attendance at sporting events between 2007 and 2009.

Key Results

The headline figures for attendance at fixtures are presented in Figure 9.1, for all adults and separately by gender. Attendance fell from 17% in 2007 to 15% in 2008, before rising to 17% once again in 2009. This pattern is confirmed by multivariate statistical models that show a fall between 2007 and 2008, followed by a rise in 2009.

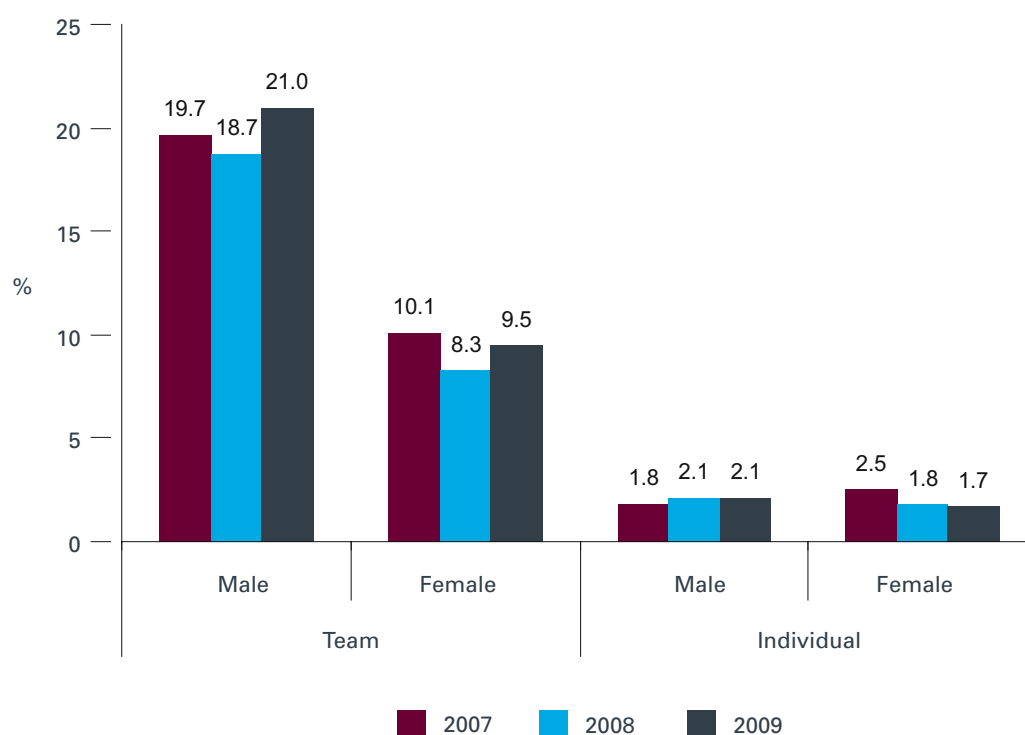
One possible explanation for this U-shaped time-course is similar to that proposed for the decrease and subsequent recovery in active participation. The level of attendance could reflect a trade-off between declining spending, which might push down attendance levels, and extra free time, which might push them up. For attendance the picture is complicated by the fact that some events attended require spectators to buy tickets, while others involving local and school teams require no more than making the effort to get to the touch line.

Figure 9.1: Attendance at sporting events by gender, 2007, 2008 and 2009



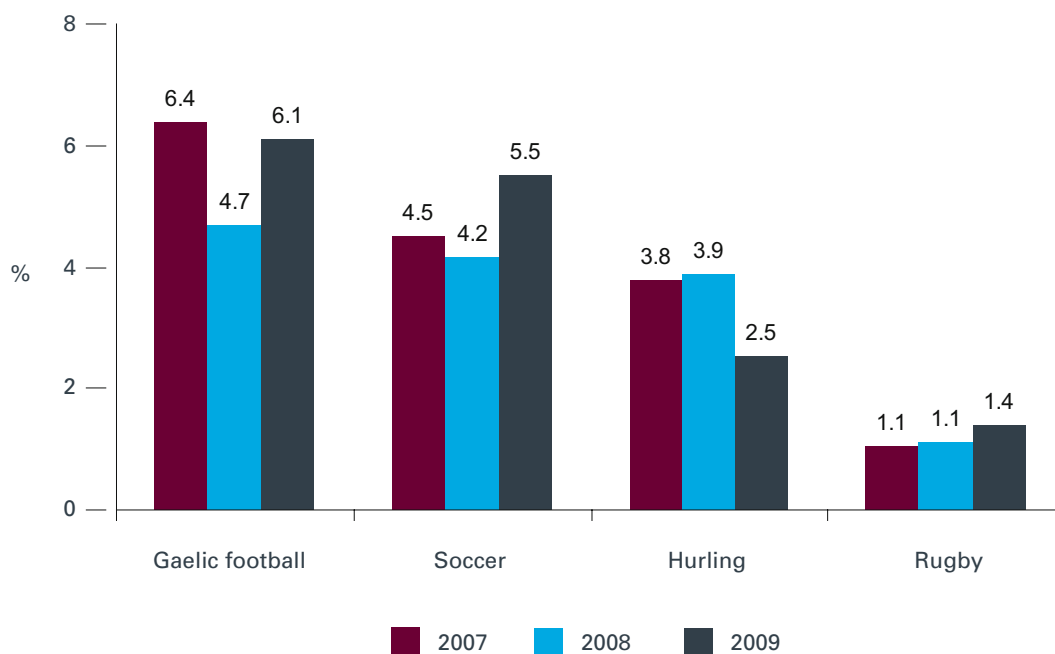
The overall trend masks differences by gender and by type of sport. The proportion of men attending sporting events is generally almost twice as high as that for women, but it displayed less of a drop in 2008 and then a more pronounced recovery in 2009. Figure 9.2, which further breaks down the data by type of sport, makes it clear that the recovery in attendance levels in 2009 was largely driven by men attending team sports fixtures.

Figure 9.2: Attendance at sporting events by type of sport, 2007, 2008 and 2009



The decline and subsequent increase in attendance has not been uniform across specific team games, however. Figure 9.3 shows that Gaelic football recovered lost ground from 2008, that soccer has in fact increased its popularity as a spectator sport during the period, and that hurling experienced a decline in attendance in 2009. Caution must be used when interpreting these figures, as they are based on relatively small samples of attendees, so the precise figures will be subject to some error. Nevertheless, each the three overall patterns just described for the three most popular spectator sports are statistically significant.

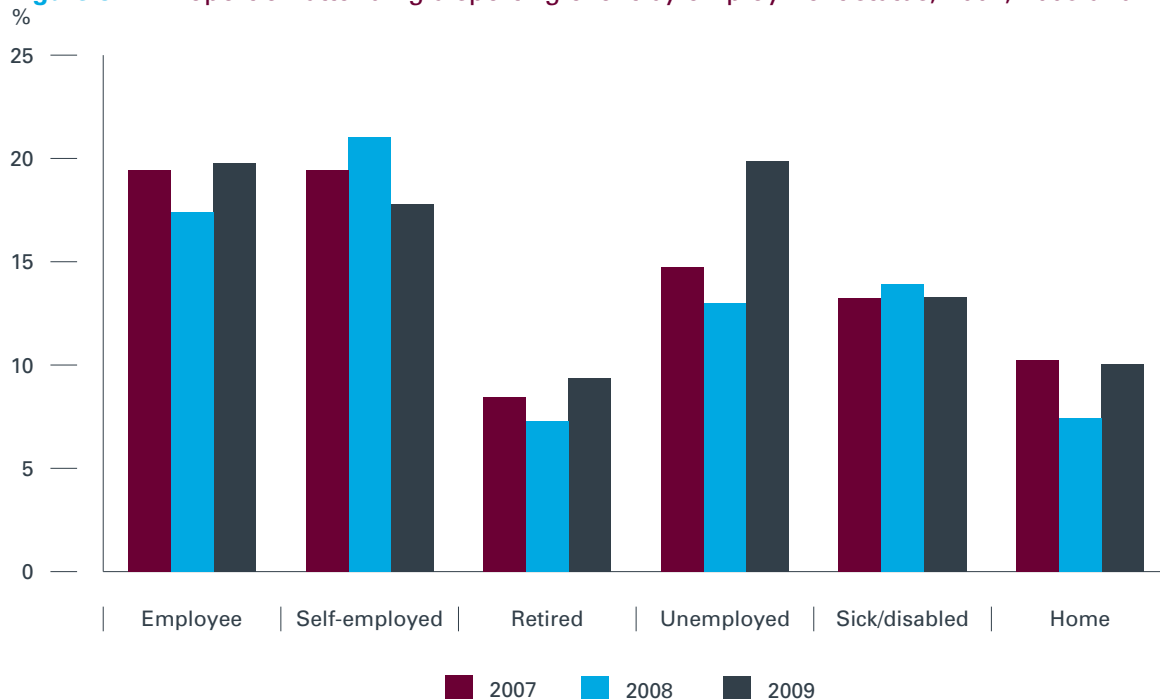
Figure 9.3: Attendance by specific sport, 2007, 2008 and 2009



It is not straightforward to explain these findings, but such volatility is perhaps inevitable, for the following reason. The recession has had a disproportionate impact on the economic wellbeing of younger adults and has also had a somewhat larger effect on the employment status (and therefore incomes) of men. Attendance is high among young men, especially with respect to these four most popular team games, which offer opportunities to spectate that both require the purchase of tickets and that can be seen for free. A further complicating factor is that the impact of the recession has not been uniform across Ireland, with some regions suffering more than others. The 2008 ISM Annual Report documented considerable variation in the popularity of these different team games by region. With all these factors in the mix, volatility is perhaps inevitable.

Further insights into the overall trend can nevertheless be had by looking at the pattern of attendance by employment status. Among the employed, the fall and rise matches that for active participation and may similarly reflect a trade-off between reduced household spending and additional free time. But the pattern among the unemployed is unique to attendance. The analyses of volunteering and membership of sports clubs in the previous two chapters show consistent increases in participation among the unemployed over the last three years, while that for active participation involves a rise in 2008 followed by decline in 2009 – the opposite of that for attendance in Figure 9.4

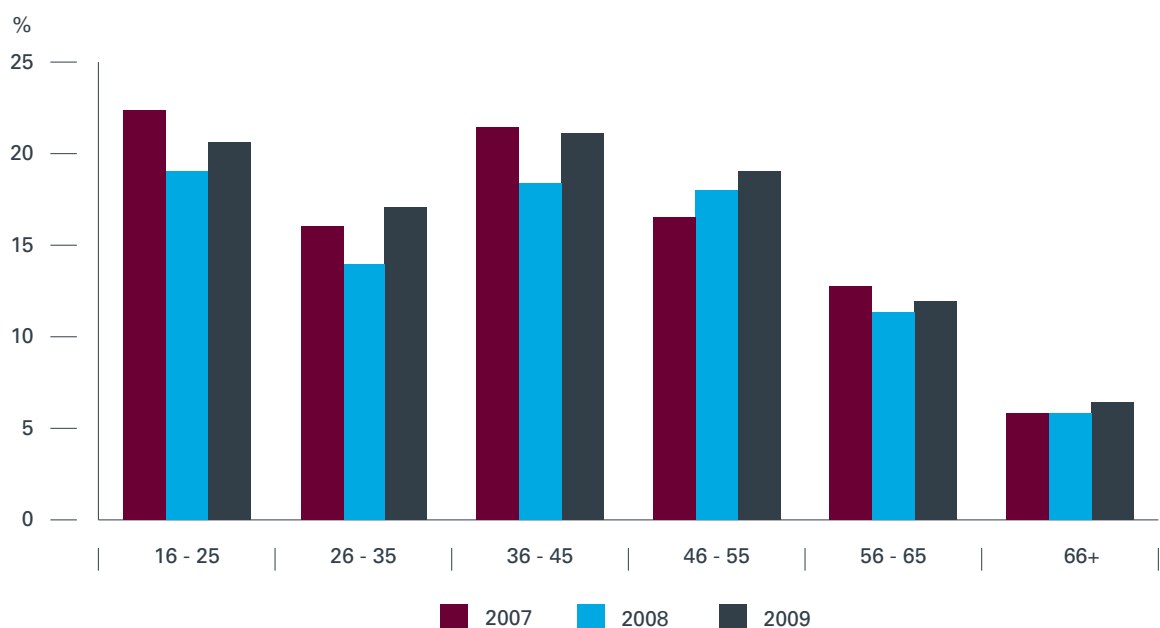
Figure 9.4: Proportion attending a sporting event by employment status, 2007, 2008 and 2009



Again, this pattern may defy simple explanation. One possibility is that attendance at sporting events is a less habitual behaviour than playing sport or volunteering, such that people who lose their jobs are less likely to carry over their attendance patterns into unemployment. Attendance at fixtures that require payment for tickets may be a particularly discretionary kind of spending that is easily reined in by a household that has had a recent income drop. Over the longer term, however, the greater influence may be additional free time and the desire for social contact, both of which make people more inclined to turn up to watch their children or the local team, in most cases for free.

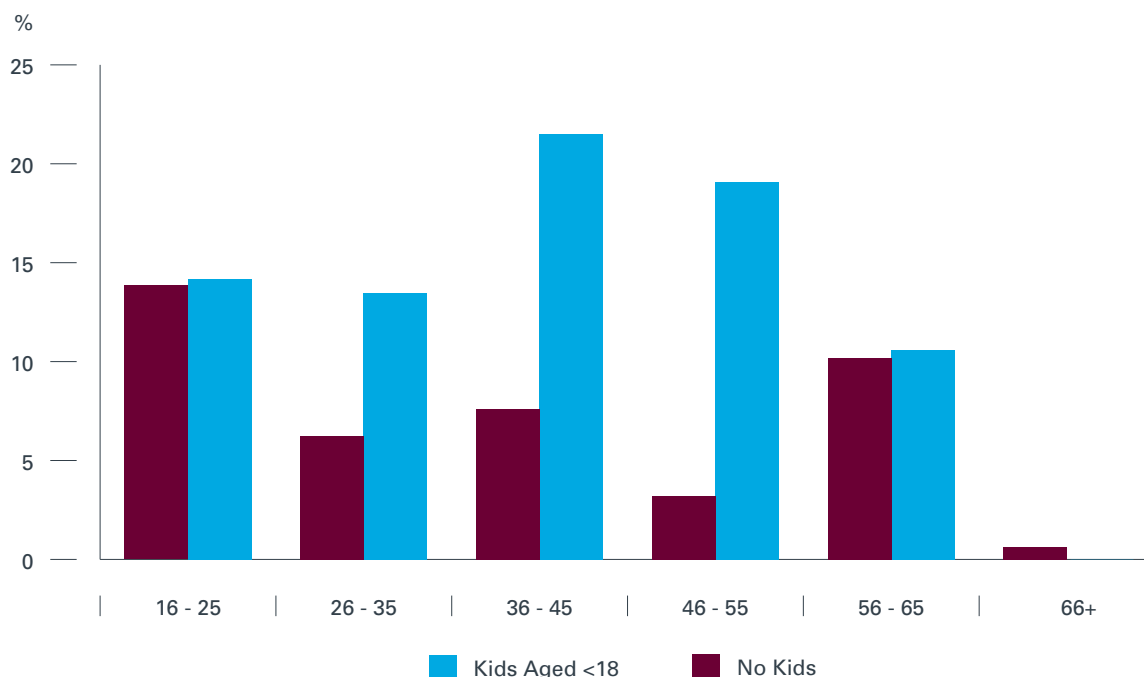
Attendance is influenced by age, but the pattern is distinct from other areas of sporting activity. The probability of attendance falls initially after age 25, then rises again to a peak between ages 36 and 55, before falling once more (Figure 9.5). The fall and subsequent rise in attendance levels between 2007 and 2009 was relatively uniform across age groups, as Figure 9.5 shows.

Figure 9.5: Attendance at sporting events by age, 2007, 2008 and 2009



This general pattern by age is common to both men and women, although the peak for women occurs earlier than for men. Further insight into the female profile can be had from Figure 9.6, which combines the data across years to give the proportion of women reporting that they attended a sporting event in the last week by the presence of children under the age of 18. There is a very striking difference in the profiles of women with and without children, with those women with children aged under 18 being twice as likely or more to attend events.

Figure 9.6: Women’s attendance at sporting events by age and presence of children under 18, 2007-2009



The majority of modern children play some form of sport, with active participation peaking at around age 15 (Lunn and Layte 2008). This clearly has a substantial knock-on effect on the attendance of adults at sporting events.

Discussion

It is clear that attendance at sporting events has been affected by the changing economic climate over the last three years in a similar manner to the other forms of participation analysed in previous chapters. The proportion of individuals attending fell in 2008, but 2009 seems to have witnessed a recovery, among men at least. The recovery was mostly driven by an increase in men going to watch team sports, although there was much volatility in attendance for particular sports, with soccer being the sport to witness an unambiguous increase.

In common with volunteering and club membership, there has been a sizeable increase in attendance among the unemployed since 2007, albeit that the increase occurred later than the equivalent increases in volunteering and membership. The precise reasons for these differences across types of social participation in sport are not clear, but there is little doubt that by 2009 the level of social participation among unemployed people was higher for all three forms of participation, albeit for different reasons. Given that Ireland is likely to continue to experience high levels of unemployment for some time to come, the social capital generated by sport is now of increased importance, relative to pre-recessionary times.

Part Five

Implications of the 2009 ISM

10. The Broader Context for Sport

Summary

- Policy to increase active participation following the recession should note that cost and lack of free time are significant barriers to be overcome
- Particular efforts need to be made to keep the young and the unemployed involved in sport, both actively and socially
- Sports organisations can be advocates for other policies to reduce sedentarism, especially making localities better for walkers and cyclists
- Efforts to reduce sedentarism should target older people in low income groups and middle-aged men, where sporting organisations can again play a role

Introduction

The recession has had and continues to have a surprisingly strong impact on participation in sport. Given the nature of the forces in operation, which derive from changing incomes and lifestyles associated with rapid changes in the labour market, sports policy itself is limited in what it can achieve and finds itself primarily and unavoidably in a position of being reactive to events. Furthermore, the pattern of sporting activity is changing relatively rapidly and it is therefore difficult to foresee with any degree of confidence how it will develop in the coming years. However, that the balance of the forces at work has led to something of a recovery in participation is clearly welcome from a public health and social capital perspective. Furthermore, the data suggest that there may be more that policy can do.

The analysis of sedentarism provides new findings that may be informative as well. Sport exists in a broader policy context of efforts to increase physical activity as a whole and, hence, to improve health. Moreover, the present results show that people who are active participants in sport are also more likely to walk and cycle for transport. There are opportunities here for sporting organisations to advocate other policies to promote physical activity, which are complementary to their own aims.

The Importance of Money and Free Time

At first sight, the changing relationships between active participation and income, employment status, car ownership and whether people have children, can appear very complex. However, a more simple way to understand what has changed over the 2007-2009 is to focus on two key relationships suggested by the data.

First, participation in sport and exercise costs money. The largest drops in active participation occurred at the beginning of 2008, coincident with the sharp drop in consumer spending across the economy. At that time, the relationship between income and the likelihood of playing sport strengthened, and the 2009 data reveal that the relationship has remained strong since. Thus, any policy measures that reduce the cost of playing sport are likely to be effective. The 2008 ISM Annual Report discussed a role for trying to reduce membership fees for people in difficult economic circumstances and a leadership role for policymakers in making sports organisations aware of the problem (Lunn and Layte, 2009). The 2009 findings add a further concern. Club membership among the under 25s has fallen and many of this age group are not in employment. Reductions in welfare benefits for the under-25s in the 2009 and 2010 budgets make it more likely still that young adults will drop out from sport, especially those in lower socio-economic groups. Efforts to reduce membership fees for those under 25 would also assist people to stay connected with sport at a stage in the life-cycle that is crucial for continuing physical activity.

Second, there is a consistent theme that emerges from the pattern of changes in active participation across social groups that probably contains within it a policy lesson. It appears that a significant barrier to participation is lack of free time for playing sport, especially among working people. The increase in available time that the recession has brought with it seems to have had a beneficial effect on participation. Given this, it is clearly the case that policies that are aimed at raising participation levels need to take account of this barrier. It suggests a degree of pent up demand for sport that can be met if opportunities for participation are made easier to fit around busy lives. This implication of the findings is consistent with previous research suggesting that the greatest likelihood of raising participation will come, not from providing more sporting facilities, but from organising and marketing sporting opportunities that use existing facilities and are easy and convenient to take up (Lunn, 2008). This requires better organisation of sporting opportunities, at times and for durations that suit busy people. In other words, public investment may get a better return from funding the human and social capital associated with sport, rather than the physical capital.

Reduced household spending and more free time are also likely candidates for explaining the pattern of active participation of the unemployed. To these influences we might add the desire for social contact, which may help to account for the increased social participation of the unemployed, across all three forms of social participation. Social involvement in sports may be very beneficial for unemployed people, who are denied one obvious source of social contact and are at risk of isolation. This provides a further reason for sports clubs to offer reduced fees or other benefits to those who are unemployed, as suggested in the 2008 ISM Annual Report.

Tackling Sedentarism

The analysis shows that people who play sport are also more likely to walk or cycle for transport. Causality could run in either direction: playing sport might increase the likelihood of undertaking other forms of physical activity or vice-versa. It is quite likely that the relationship may be mediated by physical fitness, which makes involvement in any of these physical activities more likely. If so, the finding suggests that the health benefits of playing sport may in fact be greater than previously understood, since playing sport probably increases the likelihood of gaining benefit from other forms of physical activity as well.

This report presents a fairly detailed analysis of sedentarism in Ireland, which contains a number of findings of relevance for policy designed to tackle it. The proportion of the population that is sedentary has fallen over the three years under study here, but it remains very much higher among those in lower socio-economic groups, middle-aged men and those who live in isolated locations.

This latter finding may contain a clue to some of the causes. International research is increasingly concluding that sedentarism is strongly linked to aspects of the built environment. The present analysis is consistent with that view. Comparing individuals with the same background characteristics, an individual living in an isolated location is very much more likely to be sedentary. Although people in rural locations are somewhat less likely to play sport, the greater factor is likely to be that the environment they inhabit is not conducive to walking and cycling, and is more car dependent.

Making the built environment better for walking is mostly beyond the scope of sports policy. It is primarily an issue for planners. However, sports policymakers might like to consider the degree to which sporting organisations themselves can contribute to making communities more walkable. The primary justification for spending public money on sport is to raise levels of physical activity and improve health, while the present data show that active participants are also more inclined to be active in their transport choices. Given these facts, sports organisations should arguably be local advocates for efforts to increase physical activity and to improve health more broadly than through their own specific sport. Clubs themselves can help to ensure that they are accessible on foot and that they provide space for bicycles. They can also campaign locally to ensure that their own communities do what they can to make amenities walkable and to promote local walking and cycling. The suggestion of the present data is that their members in particular would benefit, as well as their communities. The social capital that surrounds team sports also provides a potential network for the promotion of other forms of physical activity. For instance, soccer or GAA clubs might also host alternative sport and exercise activities for older members (e.g. walking clubs, golf societies, fitness classes) that could both increase physical activity and potentially strengthen the club. This might be a particularly beneficial route for encouraging activity among middle-aged men. Anecdotal evidence suggests that some clubs have already developed efforts to increase physical activity among older non-playing members. Policy can encourage and support the spread of such schemes.

Targeting Policies at Social Groups

The analysis of sedentarism also offers insights into the way levels of overall physical activity vary by social group. Sports policy has taken on board previous research showing that women and older people have lower participation rates, responding with participation schemes targeted at these groups. Employing the same logic, it is interesting to note the groups that are most likely to engage in no physical activity.

Members of lower socio-economic groups are much more likely to be sedentary, especially the over 65s, among whom one-in-three women and one-in-four men are sedentary. This is therefore a clear priority group for any active retirement and active aging initiatives.

But levels of sedentarism are also very high among middle-aged men, especially those around the age of 50, right across the socio-economic spectrum. This group is rarely the target of policy initiatives, although it is sometimes targeted by specific public health campaigns, such as those surrounding heart disease and prostate cancer, some of which use sport as a vehicle to address their target audience. Sports policymakers might like to think creatively about how they could help to get more middle-aged men active. Many are keen spectators of sport and may be responsive to initiatives that are linked with sports clubs and sporting activity. Thus, clubs provide a potential vehicle for schemes to get middle-aged men more active – an opportunity for a joined-up policy that explicitly links sport, physical activity and public health.

References

- CENTRAL STATISTICS OFFICE, 2007. *Quarterly National Household Survey, Sport and Physical Exercise*, Quarter 3 2006. Statistical Release, 14 December 2007.
- DELANEY, L. and T. FAHEY, 2005. *Social and Economic Value of Sport in Ireland*, Books and Monographs, No. 180, Dublin: The Economic and Social Research Institute.
- DEPARTMENT OF HEALTH AND CHILDREN, 2009. *The National Guidelines on Physical Activity for Ireland*. Dublin: Department of Health and Children.
- FAHEY T., L. DELANEY and B. GANNON, 2005. *School Children and Sport in Ireland*. Books and Monographs, No. 182, Dublin: The Economic and Social Research Institute.
- FAHEY T., R. LAYTE and B. GANNON, 2004. *Sports Participation and Health Among Adults in Ireland*, Books and Monographs, No. 178. Dublin: The Economic and Social Research Institute.
- LUNN, P., 2007a. *Fair Play? Sport and Social Disadvantage in Ireland*, Dublin: The Economic and Social Research Institute.
- LUNN, P., 2007b. *Ballpark Figures: Key Research for Irish Sports Policy*. Dublin: The Irish Sports Council.
- LUNN, P. and R. LAYTE, 2008. *Sporting Lives: An analysis of a lifetime of Irish sport*. ESRI Research Series No. 2, Dublin: The Economic and Social Research Institute.
- LUNN, P. and R. LAYTE, 2009. *The Irish Sports Monitor, Second Annual Report, 2008*. Dublin: The Irish Sports Council.
- LUNN, P., R. LAYTE and D. WATSON, 2009. *The Irish Sports Monitor, First Annual Report, 2007*. Dublin: The Irish Sports Council.
- LUNN, P., 2008. "Getting Out What You Put In? An Evaluation of Public Investment in Irish Sport". In *Budget Perspectives 2009* (T. Callan, ed.), Dublin: The Economic and Social Research Institute
- PHYSICAL ACTIVITY GUIDELINES ADVISORY COMMITTEE, (2008). *Physical Activity Guidelines Advisory Committee Report, 2008*. Washington, DC: U.S. Department of Health and Human Services.
- WORLD HEALTH ORGANISATION, 2002. *The World Health Report 2002: Reducing Risks, Promoting Healthy Life*. Geneva: World Health Organization.

Appendix – The ISM 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 A5

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.]

| | | |
|------------|--------------|---|
| A6a. _____ | FOOTBALL | Is that: GAA OR Soccer OR Five-a-side? |
| A6b. _____ | GOLF | Is that: 18-hole OR Pitch & putt? |
| A6c. _____ | 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.)? |

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) → A22, else → 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) → A22, else → 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]

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

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? |
| | GOLF | Is that: 18-hole OR Pitch & putt? |
| A23b. _____ | 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]

| | | | | | | | | | |
|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------|
| Providing | Club | Activity | Kit | | | | | | Other (please |
| Transport | Coach | Official | Organiser | Maintenance | Selector | Mentor | Referee | specify) | |
| <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ | <input type="checkbox"/> ₈ | <input type="checkbox"/> ₉ | _____ |

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]

| | | | | | | | | | |
|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------|
| Providing | Club | Activity | Kit | | | | | | Other (please |
| Transport | Coach | Official | Organiser | Maintenance | Selector | Mentor | Referee | specify) | |
| <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ | <input type="checkbox"/> ₈ | <input type="checkbox"/> ₉ | _____ |

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? |
| | _____ 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.)? |

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? |
| | _____ 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.)? |

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

Yes, both... ₁ Yes, father only... ₁ Yes, mother only... ₁ No... ₁ Don't Know... ₁

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 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 → go to C3

C2. Does this prevent you from taking part in sport or 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 | In a town | In a village | Isolated location | Don't Know |
| <input type="checkbox"/> ₁ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₁ |

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... ₁
Fingal ... ₁ South Dublin ... ₁

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

[INT: Check Q22 in Consumer Survey – Is respondent the main earner in the household?]

Yes..... ₁ No..... ₂ → go to C13

C11. Do you supervise or manage anyone in your job? Yes ... → go to C12 No ... → 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 ... → go to C14 No ... → 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)

