



SPORT AND RECREATIONAL EXERCISE AMONG ADULTS (AGED 16+) IN SOUTH DUBLIN, 2007-2009

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SUMMARY

- Between 2007 and 2009, 34% of adults surveyed in South Dublin actively participated in sport or recreational exercise during the previous week, higher than the national rate of 33%
- 56% of adults undertook a recreational walk during the previous week, lower than the national figure of 59%, but 51% walked for transport, higher than the national figure of 46%
- These findings are to be expected given the demographic profile of the area, which has a high proportion of younger adults
- Soccer (8.0%), swimming (5.8%), personal exercise (5.7%) and golf (5.4%) are the most popular activities, with no team sport other than soccer surpassing 1.0%
- Soccer players are almost exclusively male, with 16.1% of all men having played in the previous week
- In addition to swimming and personal exercise, dancing and yoga are popular among women
- Compared to the rest of Ireland, there is surprisingly little decline in active participation with age, such that young adults are less likely to play sport than elsewhere and older adults are more so
- There are strong life-course effects: those who have formed long-term relationships and had children are less likely to play
- Low educational attainment, not owning a car and disability are also linked to lower participation
- Although the sedentarism rate (the proportion completely inactive) matches the national figure of 17%, it has a strong gender bias, with men (21%) much more likely to be sedentary than women (14%)
- The higher rate of male sedentarism is due to a low rate of walking
- Social participation, consisting of volunteering (7%), club membership (32%) and attendance at fixtures (17%), is in line with national figures

Policy Implications

- There is scope to involve more young adults in sport in South Dublin, perhaps by forging better links between schools, colleges and clubs
- Lack of free time may be a particularly important barrier to participation in the area, implying that participation programmes need to focus on convenience for potential participants
- Efforts need to be made to get men walking, perhaps starting by targeting the many non-playing members of soccer clubs

1. INTRODUCTION

A body of international evidence demonstrates that our level of physical activity is linked to our chances of developing chronic life-threatening conditions, including heart disease, various cancers, stroke, diabetes and osteoporosis. Because sport and recreational exercise form a substantial part of overall physical activity, their successful promotion has become a worldwide policy aim. Yet much of the policy initiative must be local.

This report provides evidence relating to the sport and recreational exercise activity of adults (aged 16 and over) in South Dublin.¹ The analysis aims to be of interest and assistance to those involved in the promotion of sport and exercise in the area, from the council and local sports partnership, to individual participants and volunteers.

The results are based on telephone interviews with 1,751 adults conducted over three years (2007-2009), as part of the national *Irish Sports Monitor* (ISM), which is a survey conducted by the ESRI on behalf of the Irish Sports Council. The ISM asks interviewees about sporting activity undertaken in the previous 7 days. Like all social surveys, the ISM has limitations. Some groups are easier to reach on home telephones than others (e.g. non-working individuals compared to employees). Thus, to counteract any potential bias arising, the data are re-weighted to match the population characteristics of South Dublin, as recorded by the Central Statistics Office (CSO).²

The primary justification for public investment in sport is to increase physical activity and hence to improve health. Consistent with this aim (and the *Irish Sports Council Act, 1999*), the report defines “sport” broadly, to include recreational exercise (e.g. swimming, gym, dance classes), as well as field games (e.g. soccer, Gaelic football). The ISM also records recreational walking, walking as a mode of transport and cycling for transport, allowing sport to be set in the context of more general physical activity.

Most charts and tables show percentage participation rates in a given activity by a particular group (e.g. the percentage of women who play team sport). However, reporting simple participation rates like this can be misleading. For example, young adults are more likely to play sport than older ones. This may mean that age reduces the tendency to play. But, on average, younger adults have higher educational attainment – another factor linked to playing. So, is age or education the crucial influence? To answer such questions, we use multivariate statistical techniques that can identify the individual impact of a given characteristic (e.g. gender, age, educational attainment, income, etc.) while simultaneously controlling for other background characteristics that can affect participation in sport. Thus, where displaying simple participation rates might mislead, the output of a multivariate statistical model is also provided.

¹ The sample covers people who live in the area, not who play sport in the area. Residents may participate at locations in other local authority areas, and residents of neighbouring authorities not covered by the sample may play sport in South Dublin.

² Further details of the aims and methodology of the ISM can be found in ISM Annual Reports (available at www.irishsportsCouncil.ie and www.esri.ie).

2. RESULTS

2.1 OVERALL PHYSICAL ACTIVITY

In order to place active participation in sport in context, Table 1 provides a summary of overall physical activity in South Dublin, together with the equivalent national figures. Levels of activity are largely consistent with the national picture. The proportion who actively engaged in sport in the previous 7 days is marginally higher than the national figure, although the difference is not statistically significant. Based on Census 2006, the 34% rate for active participation in sport translates into approximately 64,000 adults playing regular sport in South Dublin.³ It is important to note the demographic profile of South Dublin, which has a relatively high proportion of adults aged under 35 and a relatively low proportion aged over 60. Given this profile, one might anticipate a higher rate of participation in sport in the area.

Table 1: Summary of physical activity

Activity	%	National %
Played sport in previous 7 days	34	33
Walked for recreation in previous 7 days	56	59
Regularly walks for transport	51	46
Regularly cycles for transport	11	11
Sedentary	17	17

Compared to the national figures, a lower proportion of the population undertook a recreational walk in the previous 7 days (a difference that is statistically significant), but this is compensated for by a significantly higher rate of walking as a mode of transport. This pattern is also predictable, given the demographic profile, as younger adults are less likely to walk for recreation and more likely to do so for transport. The net effect is that the 17% rate of sedentarism, which is the proportion of adults for whom we record no form physical activity at all, is in line with national figures.

2.2 MOST POPULAR SPORTING ACTIVITIES

Table 2 lists the most popular sporting activities undertaken in South Dublin. Figures are provided for all adults and separately by gender. Only activities with a recorded participation rate of at least 1% are listed. Given the sample of 1,751, these percentages should be regarded as indicative rather than precise – they could vary by 1-2 percentage points either way.

³ This figure is approximate. Given the impact of the recession, the population may have varied significantly during the 2007-2009 period.

Overall, the top four sports are soccer, swimming, personal exercise⁴ and golf. These four sports are also the most popular nationally, but there is nevertheless a clear difference between South Dublin and the rest of the country. Soccer is significantly more popular (the national figure is 5.6%) and is the only team sport with a measured participation rate of above 1.0%, including Gaelic football and hurling/camogie, which both register well above 1.0% nationally. All other sports listed are individual activities.

Breaking the figures down by gender clarifies the situation. Soccer is very popular indeed among men, with more than one in six adult males having played soccer in some form within the past 7 days. When the analysis is limited to males, the participation rates for rugby, Gaelic football and hurling just make it above the 1.0% cut-off point. There are no team sports prominent at all for women. In comparison with the national picture, dancing and yoga are particularly popular among women in South Dublin.

Table 2. Most popular sporting activities⁵

All		Male		Female	
	%		%		%
Soccer	8.0	Soccer	16.1	Swimming	7.9
Swimming	5.9	Golf	9.2	Exercise	6.1
Exercise	5.7	Exercise	5.2	Dancing	3.2
Golf	5.4	Jogging	4.0	Yoga	2.4
Jogging	2.8	Cycling	3.9	Golf	1.8
Cycling	2.4	Swimming	3.7	Jogging	1.7
Dancing	1.6	Rugby	1.1	Tennis	1.6
Yoga	1.3	Gaelic football	1.0		
Tennis	1.1	Hurling	1.0		

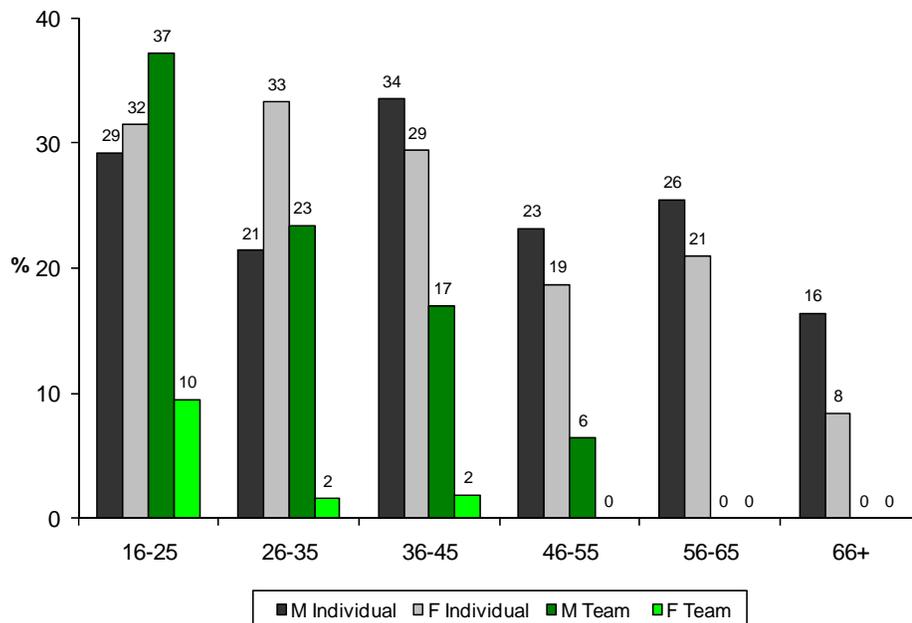
These differences produce overall participation rates for men and women of 40% and 28% respectively. Greater insight into the gender differences in activity can be had from Figure 1, which shows participation in individual and team sports by gender and age. Individual sporting activities account for more than two-thirds of total activity, with an overall participation rate of 26%, versus 10% for team sports. The primary reason for this is that only younger adults tend not to play team sports, while participation in individual activities is more likely to be sustained as people age. This is also the nationwide situation, but in South Dublin the pattern by gender and age is nevertheless somewhat different. Because team sport in the area consists overwhelmingly of soccer, which of the mainstream team sports is the one that people

⁴ This category includes various forms of personal exercise, including going to the gym, “working out”, doing exercise routines at home, as well as attending exercise, aerobics or keep-fit classes.

⁵ From this point onwards, all results presented are for South Dublin only. Readers interested in comparative national figures should consult the ISM Annual Reports, available at www.irishsportsCouncil.ie and www.esri.ie.

continue to play for longest, a significant proportion of men aged over 35 in South Dublin still play team sport.

Figure 1: Active participation in individual and team sports by gender and age



Two other points are worth noting with respect to Figure 1. First, there is no overall gender gap for individual activities, with participation rates of 26% for men and women, although young women tend to play more individual sport than young men, and older men tend to play more than older women. Second, the participation rates in all four categories among 16-25 year-olds are lower than the equivalent national figures. Hence, young adults in the area play less sport than in the rest of the country. Given the good overall participation rate, this obviously implies that older adults play more.

2.3 DEMOGRAPHY AND ACTIVE PARTICIPATION

The unusual pattern of active participation with age, relative to the rest of the country, bears further analysis. Figure 1 above is not straightforward to interpret, because characteristics of older and younger adults other than age affect whether someone plays sport. For example, younger adults have, on average, higher levels of educational attainment and are more likely to be current students, both of which are known to increase the likelihood of active participation. Older adults also tend to have lower income, which is known to reduce the chances that they play sport. It is therefore difficult to say whether the lower participation rate of older adults is due to a declining propensity to be an active participant with age, or whether other factors are responsible. Given all of these various interlinked factors, a multivariate statistical model is

necessary to isolate and assess the relative influence of the different factors associated with active participation.

Using a multivariate statistical model to identify the individual impact of various characteristics on a person's likelihood of playing sport, six factors emerge as having a statistically significant association with active participation in sport in South Dublin. These are educational attainment, gender, health, car ownership, relationship status and whether the individual has children. We examine each of these factors below. But of particular note is that age has only a relatively weak influence, once an individual's other background characteristics are controlled for.

Figure 2 shows the results when the multivariate model is used to isolate the impact of age. For illustrative purposes, we use the model to estimate predicted participation rates for two "typical" adults in South Dublin, one male and one female, whose characteristics are selected to get them as close as possible to a median individual for the area. Our hypothetical individuals have leaving certificate, are married with children, healthy and own a car. The model compares the likelihood of participation across people who are identical according to these significant background characteristics and differ only in terms of gender and age.

Figure 2: Predicted participation rates by age and gender for individuals with typical background characteristics in South Dublin

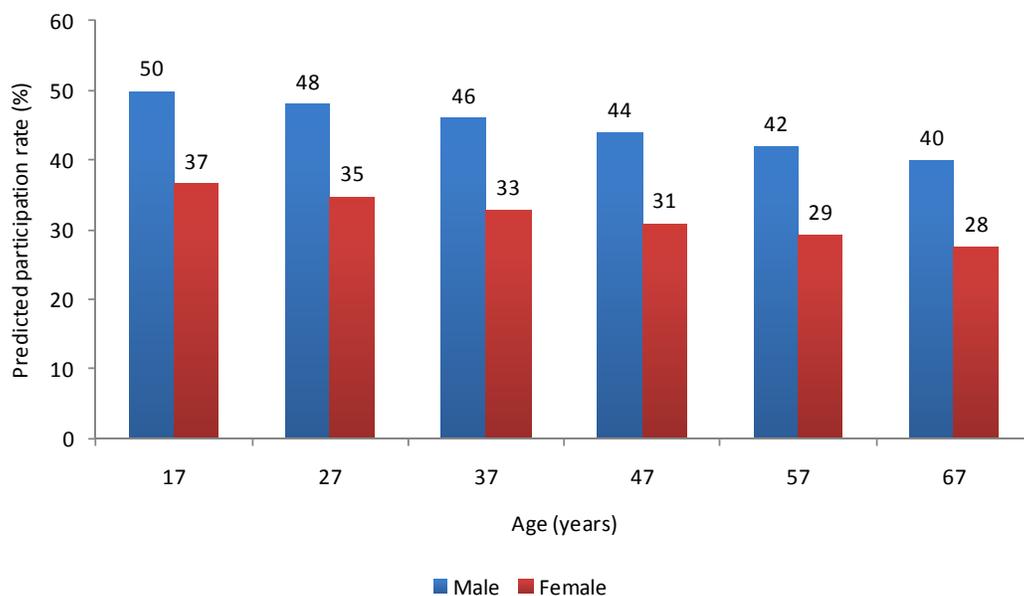
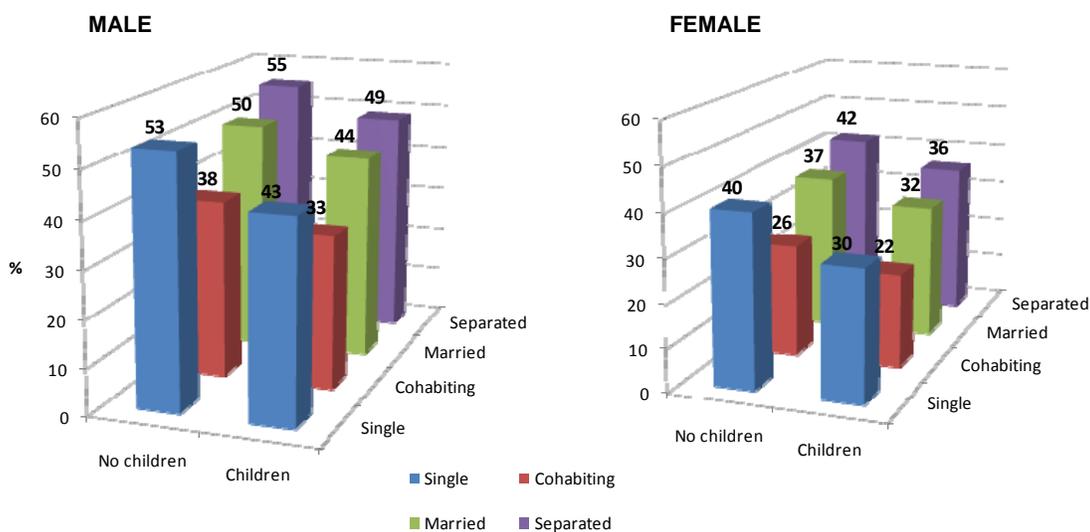


Figure 2 reveals that once other characteristics are controlled for, there is a relatively modest decline in the likelihood of participation with age – so

modest in fact that it is statistically insignificant.⁶ The difference between this pattern and that typically found in the rest of the country confirms that while older people are more likely to play sport in South Dublin than elsewhere in Ireland, younger people are less so. The gender gap is statistically significant, but is also smaller than is typically the case for the rest of Ireland.

Interestingly, the statistical model suggests that it is not age *per se* that changes the likelihood of participation, but events or changes that might occur in the typical life course. Figure 3 shows the equivalent analysis to that above, but this time gender and age are held constant and only marital status and the presence of children vary. Thus, the numbers show the predicted participation rate for a male and female of average age, 37, who is healthy and owns car, differing only in terms of whether they have children and their relationship status.⁷

Figure 3: Predicted participation rates for typical 37 year-old male and female, but marital status and presence of children



The extent of variation in these charts suggests that family structure and relationships are a greater influence on the likelihood of participation than age, and as significant as gender. It is unlikely that the particularly low participation associated with cohabitation reflects the fact of being unmarried. Rather, cohabitating relationships tend to be more recently formed and it may be this that underlies the effect. The implication is that the process of family formation and having children has a negative effect on the likelihood of

⁶ It would be a mistake to read too much into this, as the statistical model still predicts a decline in the likelihood of participation with age. Given a larger sample, it is quite likely that a statistically significant relationship would emerge. Nevertheless, the lack of such an association in a sample of over 1,750 suggests a relatively weak relationship.

⁷ The category 'Separated in Figure 3 includes people who are separated and people who are divorced.

playing sport, resulting in the U-shape across the four relationship stages and lower participation generally among those with children.

The pattern of Figure 3 is not typical of the rest of the country and hence suggests that the process of family formation and having children in South Dublin has a greater impact on the likelihood of playing sport than is the case elsewhere. This finding is not straightforward to explain. One possible explanation is that lack of free time has a greater impact on active participation in the South Dublin area than it does elsewhere. This explanation is consistent with the observed pattern of Figure 3, given the reasonable assumption that having a family curtails free time. South Dublin has a relatively large proportion of young working people, many of whom may undertake significant commutes, and who may find it more difficult than people elsewhere to fit sporting activity around busy lives. However, we have no way to test this hypothesis directly with the available data.

2.4 SOCIO-ECONOMIC STATUS AND ACTIVE PARTICIPATION

This section concentrates on the impact of socio-economic status, as measured primarily by an individual's educational attainment, income or occupation. Figure 4 provides active participation rates broken down by these three indicators and shows that there is a strong relationship with the likelihood of playing sport in each case. Individuals with higher educational attainment, higher income,⁸ or who work in higher skilled occupations, are much more likely to play sport.

These results are not easy to interpret, however, because educational attainment, income and occupation are all themselves related, i.e. more educated people tend also to have higher earnings and to work in more skilled occupations. Consequently, it is unclear what is really driving the relationship between active participation and socio-economic status. Using a multivariate statistical model makes it possible to disentangle the effects, allowing us to compare the likelihood of participation across people with the *same* income and occupation (and other background characteristics), but *different* educational attainment.

Figure 5 shows the outcome. Each chart gives predicted probabilities for a typical male and female (37 years old, married with children, healthy, car owner). The top left chart shows the impact of varying educational attainment while holding income and occupation constant (median income and skilled manual occupation). The top right chart shows the impact of income with educational attainment and occupation constant (leaving certificate and skilled manual occupation). The bottom chart shows the effect of occupation when educational attainment and income are held constant (leaving certificate and median income).

⁸ Measured as weekly household income after tax.

Figure 4: Participation in sport by educational attainment (top left), weekly household income (top right) and occupation (bottom)

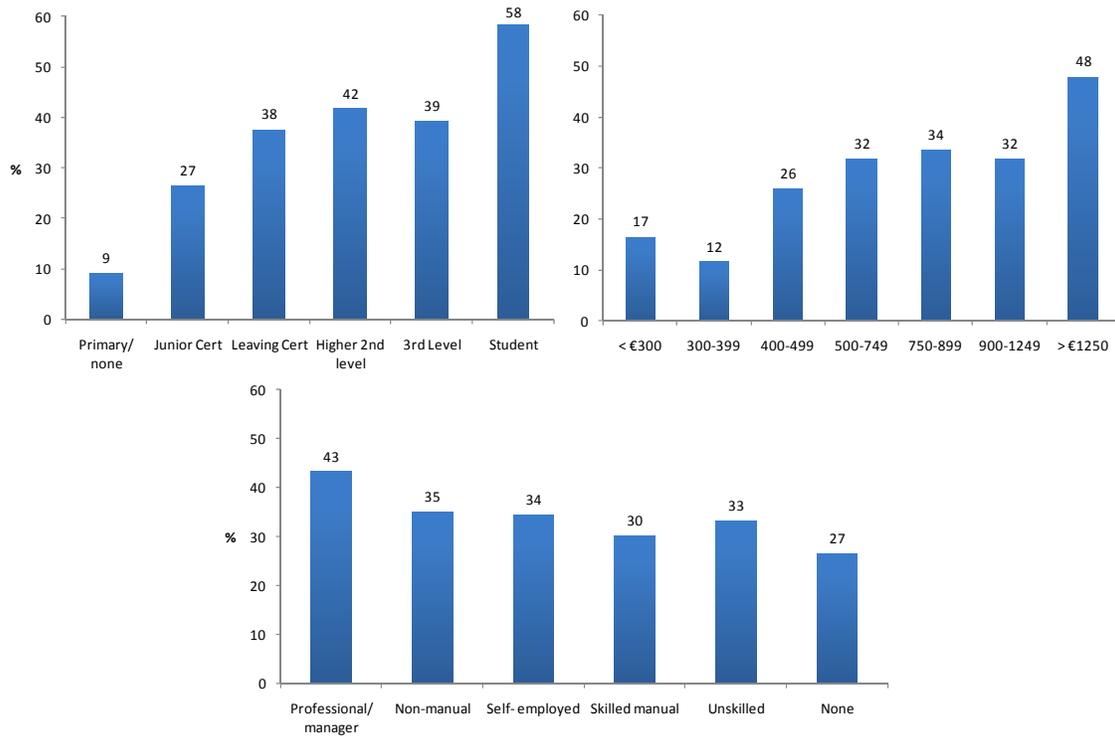


Figure 5: Predicted participation rates for typical male and female differing only by educational attainment (top left), income (top right) and occupation (bottom)

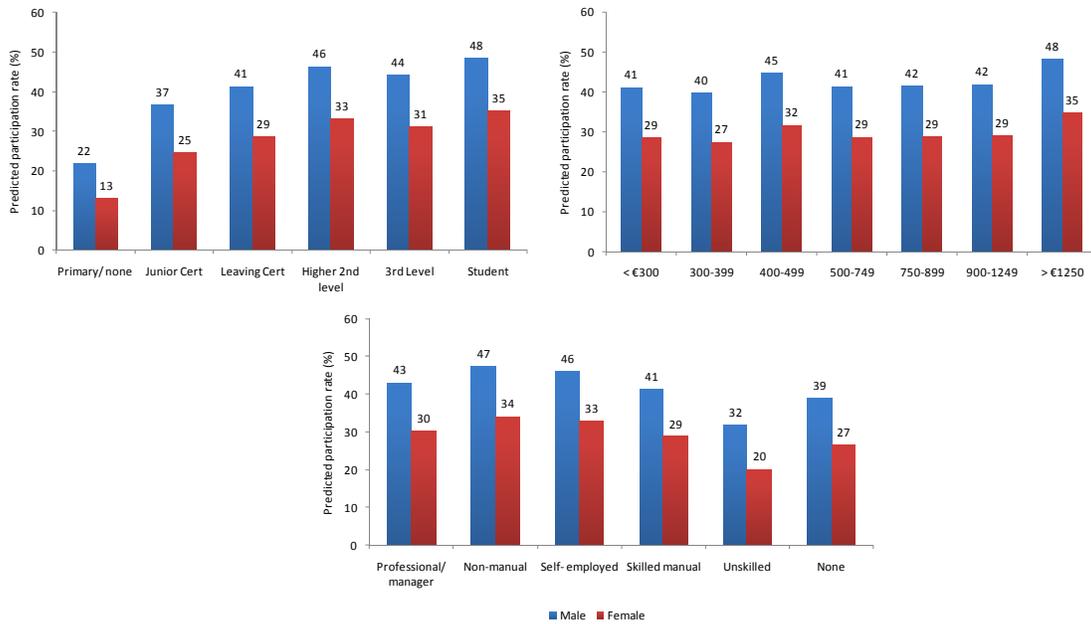


Figure 5 provides a clear message. The relationship between socio-economic status and playing sport is mainly driven by educational attainment, rather than income or occupation, which have a much reduced impact once the other factors are controlled for. In particular, low educational attainment (below leaving certificate and, especially, those with no qualifications) is associated with much lower participation rates.

At one level, this result is surprising. The measures of income and occupation are related to an individual's current status, i.e. what they can afford now and where they presently work, which ought arguably to be related to present opportunities more strongly than educational attainment, which in most cases is an indication of past opportunities. The finding emphasises the importance of experiences as a young adult in the likelihood of continuing to be active later in life.

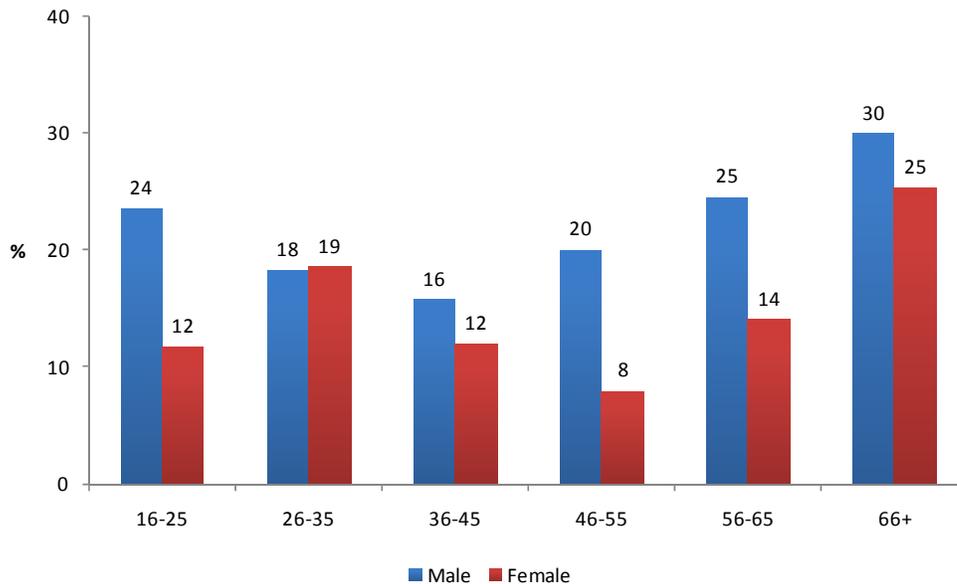
Three other factors are significantly related to the likelihood that individuals play sport. First, the multivariate model estimates that for people who do not own a car the likelihood of active participation decreases by approximately 12%. Second, the equivalent reduction for people with a disability that limits their possibilities for participation is 17%. Lastly, those people who had sporty parents are more likely themselves to be participants.

2.5 SEDENTARISM

Complete physical inactivity carries particular risks to health. An analysis of which social groups are most likely to be sedentary in South Dublin is consequently of interest from a policy perspective. Here, someone is defined as sedentary if they meet four criteria: (1) did not play sport in the previous 7 days, (2) did not take a recreational walk in the previous 7 days, (3) does not walk regularly for transport, and (4) does not cycle regularly for transport. This definition is imperfect, because it is limited to recreation and transport activity. Most notably, some individuals undertake significant physical activity associated with work, either through a manual occupation or via domestic duties, which is not recorded by the ISM. Nevertheless, the results offer a reasonable guide to inactivity, especially as it can be affected by policy relating to sport and physical activity.

In the South Dublin area, the analysis reveals that men are much more likely to be completely inactive than women. The overall difference in rates of sedentarism is 21% versus 14%, but as Figure 6 makes clear, the gender gap is age specific. Young men and middle-aged men are very much more likely to be sedentary than women of the equivalent age. Closer inspection of the data reveals that this effect is entirely due to walking behaviour. Women are much more inclined to walk for recreation (66% versus 47%) and also more likely to walk for transport (58% versus 43%). This more than makes up for the opposite gender gap for playing sport and the fact that men are somewhat more likely to cycle for transport (13% versus 9%).

Figure 6: Sedentarism by age and gender



Socio-economic status is also linked to sedentarism. Those with low educational attainment and those in the bottom income category are significantly more likely to be completely inactive. Lastly, those who describe themselves as living in the city are less likely to be sedentary.⁹

2.6 SOCIAL PARTICIPATION

The ISM also records social participation in sport. The survey asks whether individuals undertook volunteering associated with sport (e.g. officiated, organised, provided transport), whether they are a member of any sports club and whether they attended any sporting events. The results reveal that 7% of adults in South Dublin volunteered for sport during the previous week, 32% are members of some type of sports club and 17% had attended a sporting fixture. These proportions do not differ significantly from the equivalent national figures, but it is worth noting that membership of soccer clubs is very high in the area, at 10% of all males.

⁹ The ISM collects only self-report data on residential location. Survey respondents are asked whether they live in a city, town, village or isolated location. Given the nature of the South Dublin area, which contains a number of urban and suburban centres within the urban conurbation of Dublin, the responses are not straightforward to interpret. For instance, would a resident of Tallaght say they live in a city? Nevertheless, the rate of sedentarism was higher among the 24% who described themselves as living in a town, village or isolated location.

3. POLICY IMPLICATIONS

With respect to participation in sport, South Dublin has many things in common with the rest of the country, in terms of who plays sport and who does not, e.g. playing is related to gender and socio-economic status. There are many potential policy responses to the findings – too many to summarise here. Policymakers and others are encouraged to consult recent publications that have dealt specifically with these influences on active participation (*Fair Play? Sport and Social Disadvantage in Ireland; Sporting Lives; ISM Annual Reports*; all available at www.irishsportsCouncil.ie and www.esri.ie). This final section, therefore, offers an indicative rather than exhaustive examination of policy implications. We focus on three findings that may be of relevance in South Dublin: young people, time and sedentarism, especially among males.

One striking finding of this report is that, although active participation in South Dublin is relatively high, young adults in the area, male and female, are less likely to play both individual and team sports than their equivalents elsewhere in Ireland, while contrastingly older adults are more likely to be active participants. It is possible that sport is partly crowded out by the range of alternative activities and priorities for young people in the area, but we have no way to test this. One clear implication, however, is that there is potential to increase participation among young adults. Previous research has shown that the time when young adults leave full-time education is formative. Thus, one option is for policymakers to aim to improve links between school (and college) sport and independent sports clubs. Given the already dominant position of soccer, growth is probably most likely among alternative sports.

Active participation is also lower among those who have formed relationships or had children. The most obvious candidate explanation for these findings is lack of free time. This also suggests pent up demand for sporting opportunities, which that might be met if opportunities for participation are made easier to fit around busy lives. The implication is that higher participation will come, not through making available more sporting facilities, but via better organisation and marketing of sporting opportunities that use existing facilities. The most successful programmes are likely be those that offer opportunities that are easy and convenient to take up, at times and for durations that suit busy people.

Although the rate of sedentarism in South Dublin matches the national rate, the area is unusual in having a large gender gap. Young and middle-aged men are much more likely to be completely inactive than women of the same age, with potentially serious health consequences. The primary reason for this is deceptively simple: men in South Dublin do not walk. Given that women do walk, it appears that neither lack of opportunity nor the built environment can be to blame. Consequently, there ought to be scope for promoting greater walking among men. Given the high membership rates of soccer clubs, non-playing members offer a potential target for such campaigns.