



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

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## SUMMARY

- Between 2007 and 2009, 29% of adults surveyed in Cork actively participated in sport or recreational exercise during the previous week, a somewhat lower proportion than for Ireland as a whole
- 61% of adults undertook a recreational walk during the previous week, a slightly higher proportion than nationwide
- 16% of adults in Cork are effectively sedentary
- Personal exercise (6.5%), swimming (6.2%) and soccer (5.5%) are the most popular activities
- Around two-thirds of all sporting activity (excluding recreational walking) consists of individual sport and exercise activities, as opposed to team games
- Team games appeal little to women and those aged over 30
- Men play more team sport than women but there is no gender gap for individual sport and exercise activities
- People of high socio-economic status are very much more likely to be active participants in sport
- Active participation is significantly and separately related to each of educational attainment, income and occupational status
- The likelihood of active participation falls with age, with the sharpest reductions occurring in young adulthood and old age
- People living in Cork city and in towns are more likely to play sport than those living in more rural locations
- Complete inactivity is most common among older people and middle-aged men

### *Policy Implications*

- People in lower socio-economic groups need to be the primary target for sports promotion in the area
- Promotion of sport needs to extend beyond team games to be more attractive to women and to adults aged over 30
- There is a need to target the promotion of sport and exercise among people in more isolated rural locations, perhaps exploiting pre-existing social networks

# 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 Cork (City and County). The analysis aims to be of interest and help to those involved in the promotion of sport and exercise in the area, from councils and local sports partnerships, to individual participants and volunteers.

The results are based on telephone interviews with 3,259 adults conducted over three years (2007-2009), as part of the national *Irish Sports Monitor* (ISM), which is a survey conducted by the Economic and Social Research Institute (ESRI) on behalf of the Irish Sports Council (ISC). The ISM asks interviewees about sporting activity undertaken in the previous 7 days. Like all social surveys, the ISM has limitations. In particular, 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 Cork, as recorded by the Central Statistics Office (CSO). Further details of the aims and methodology of the ISM can be found in ISM Annual Reports (available at [www.irishsportscouncil.ie](http://www.irishsportscouncil.ie) and [www.esri.ie](http://www.esri.ie)).

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.

In this report, 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 – a factor that is also strongly linked to participation. So, is age or education the crucial influence? To answer such questions, the analysis uses multivariate statistical techniques that can identify the individual impact of a given characteristic (e.g. gender, age, educational attainment, income, residential location, 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.

## 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 Cork, together with the equivalent national figures. The 29% participation rate for playing sport is significantly lower than the national figure of 33%. However, part of this discrepancy is due to demography. Compared the rest of Ireland, Cork has a lower proportion of young adults aged between 20 and 35 – an age-group which has a higher participation rate than older groups. Based on Census 2006, the 29% rate for active participation in sport translates into approximately 111,000 adults playing regular sport in Cork.<sup>1</sup>

Table 1: Summary of physical activity

Activity	%	National %
Played sport in previous 7 days	29	33
Walked for recreation in previous 7 days	61	59
Regularly walks for transport	52	46
Regularly cycles for transport	8	11
Sedentary	16	17

The demographic profile is also reflected in the higher rates of walking (both for recreation and as a mode of transport), which is more common among middle-aged and older people, and the lower rate of cycling, which again is more common among younger adults. Overall, the 16% of the Cork population who are sedentary (i.e. completely inactive) is marginally below the national rate.

### 2.2 MOST POPULAR SPORTING ACTIVITIES

Table 2 lists the most popular sporting activities undertaken in Cork, for all adults and separately by gender. Only activities with a recorded participation rate of at least 1% are listed, i.e. over 1% of adults over 16 had played the sport in the previous week. Given the sample of 3,259, the percentage figures should be regarded as indicative rather than precise – they could vary by 1-1.5 percentage points either way.

Overall, the top four sports are personal exercise<sup>2</sup>, swimming, soccer and golf. These four sports also dominate the national picture, although golf is

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<sup>1</sup> This figure is approximate. Given the impact of the recession, the population may have varied significantly during the 2007-2009 period.

<sup>2</sup> 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.

somewhat less popular in Cork than nationally (4.9%). Generally, the left-hand column is very similar to the national picture, albeit that the participation rate for most sports is marginally lower.

**Table 2. Most popular sporting activities<sup>3</sup>**

All		Male		Female	
	%		%		%
Exercise	6.5	Soccer	10.1	Exercise	8.6
Swimming	6.2	Swimming	5.1	Swimming	7.3
Soccer	5.5	Golf	4.9	Dancing	1.7
Golf	3.0	Exercise	4.4	Jogging	1.3
Jogging	2.5	Jogging	3.6	Golf	1.2
Gaelic Football	1.9	Gaelic Football	3.5		
Hurling	1.5	Hurling	2.7		
Cycling	1.4	Cycling	2.3		
Dancing	1.2	Rugby	1.1		

There are large gender differences. The strong preference for soccer is an almost exclusively male phenomenon. Golf too is a primarily male sport, although the figure of 4.9% is well below its national equivalent of 8.3%. Men participate in a mixture of team and individual activities, while female activity is dominated by individual activities, the majority of which are non-competitive. Swimming and exercise account for more than half of all female activity.

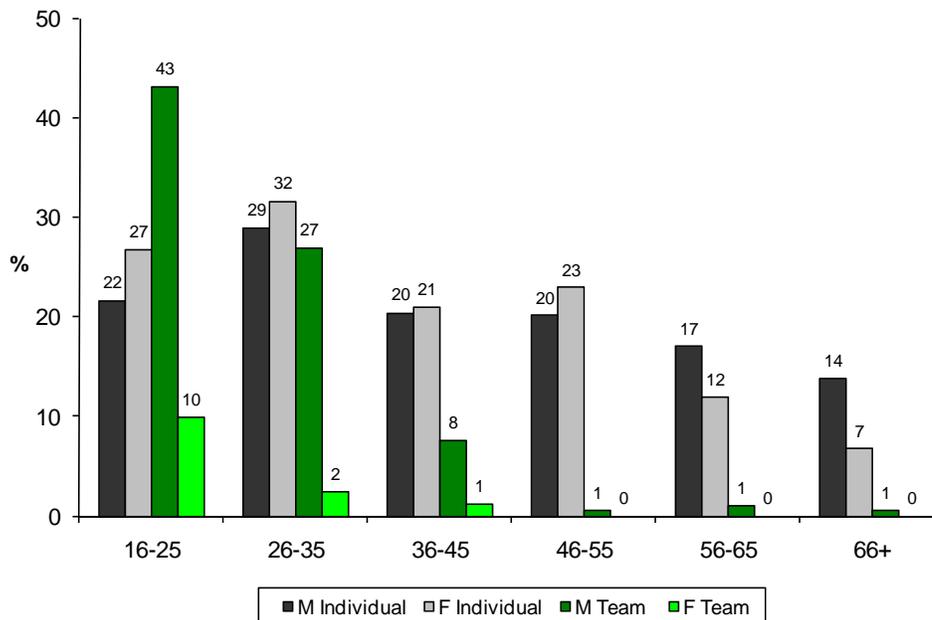
Greater insight into this pattern can be had from Figure 1, which shows participation in individual and team sports by gender and age, and has several striking features. First, although some of the most popular sports are team sports, individual sporting activities account for more than two-thirds of total activity, with an overall participation rate of 21%, versus 10% for team sports. Second, the gender gap in sport in Cork is entirely based around team sports: there is no overall gender gap for individual sporting activities. Third, many young adults, especially women, appear to drop out of team sport fairly rapidly with age.

The breakdown by gender, age and type of sport also helps to explain why overall active participation in Cork lies below the national participation rate. While, as previously mentioned, demography plays a role, there are also certain groups and activities for which participation lags behind the national figures. The gap is mainly due to lower participation among men (35% versus 40% nationally, compared to 24% versus 26% for women) and entirely down to lower participation in individual sports, most notably golf, but with lower participation in other individual activities also. Furthermore, this lower rate of participation in individual sports occurs among the 16-25 age-group and those

<sup>3</sup> From this point onwards, all results presented are for Cork only, with national figures referred to only in the text where relevant. Readers interested in comparative national figures should consult the ISM Annual Reports, available at [www.irishsportsCouncil.ie](http://www.irishsportsCouncil.ie) and [www.esri.ie](http://www.esri.ie).

over 55 (i.e. the grey bars in Figure 1 are lower for these groups than they would be for Ireland as a whole).

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



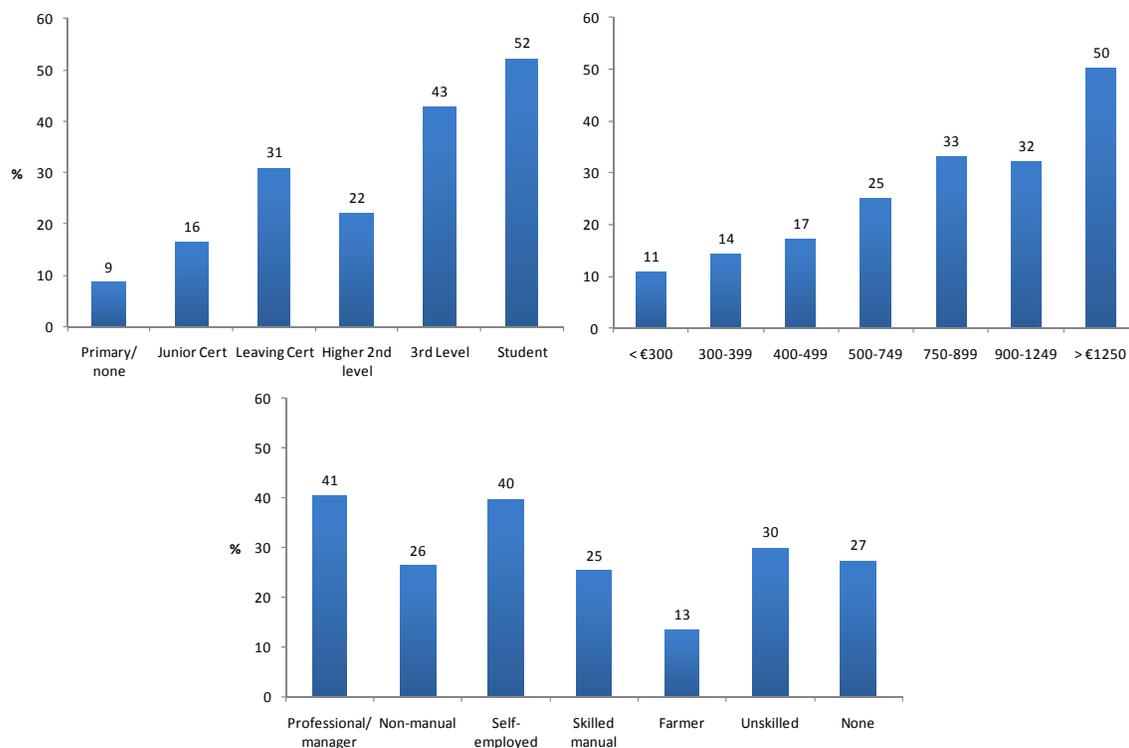
### 2.3 SOCIO-ECONOMIC STATUS AND ACTIVE PARTICIPATION

Using a multivariate statistical model to identify the individual impact of various characteristics on a person’s likelihood of playing sport, ten factors emerge as having a strong association with active participation in sport in Cork. These are educational attainment, gender, age, income, occupation, health, marital status, residential location, retirement and car ownership. The first four factors are also the most significant factors countrywide.

This section concentrates on the impact of socio-economic status, as measured by an individual’s educational attainment, income and occupation. Figure 2 shows that there is a very strong relationship between the likelihood of playing sport and each of these socio-economic indicators. Individuals with higher educational attainment and higher income<sup>4</sup> are very much more likely to play sport. Professionals and the self-employed also have high participation rates, while farmers are much less likely to play sport. The implication is that socio-economic status has a very strong impact on the likelihood of playing sport in Cork. The extreme cases are worth noting: students and those with the very highest incomes are particularly likely to play, while those with the lowest educational attainment are particularly unlikely to do so.

<sup>4</sup> Measured as weekly household income after tax.

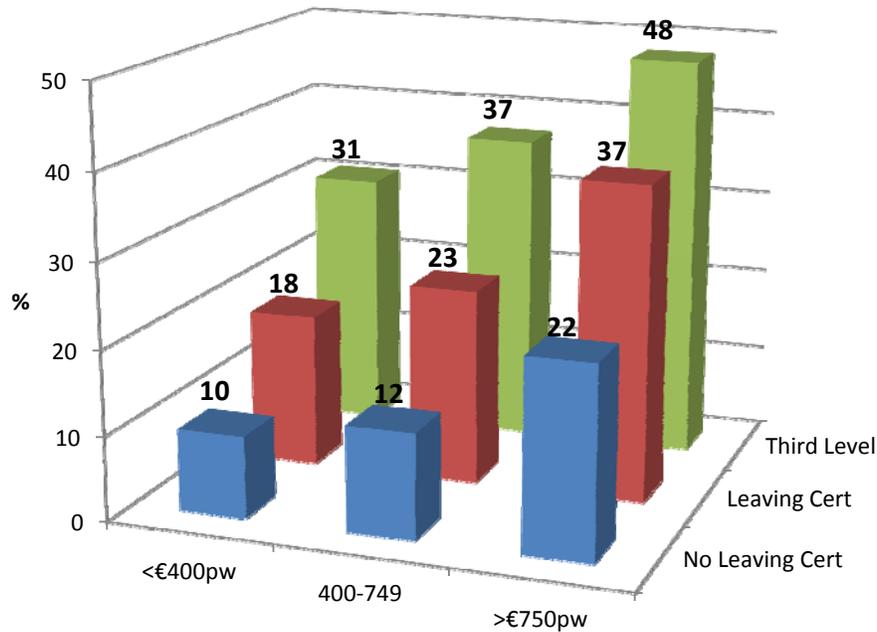
**Figure 2: Participation in sport by educational attainment (top left), weekly household income (top right) and occupation (bottom)**



These results are not straightforward 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. Nevertheless, the multivariate statistical model, which simultaneously controls for these effects, reveals that all three are statistically significant. That is, there is an impact of income and occupational status on playing sport even when comparing two individuals with the same level of education, and so on.

The fact that these effects are strong and substantially separate is more easily understood from Figure 3, which simultaneously breaks down participation by educational attainment and income. To preserve sample size, each is given in just three categories, with males and females combined. The pattern is very clear. For each level of educational attainment, additional income significantly increases the likelihood of playing sport, while for each level of income, higher educational attainment increases the likelihood. These differences in participation rates are very large. Furthermore, because those with higher educational attainment tend also to have higher incomes, it is worth noting that the population is mostly concentrated in either the far right or the near left corner of this chart.

**Figure 3: Participation rates by educational attainment and income**



The link between income and playing sport may be partly due to the simple fact that playing sport costs money, including costs associated with equipment, clothing and transport, as well as direct costs such as club membership fees or other ways to access facilities. The impact of educational attainment is probably more subtle. It may partly reflect the sporting opportunities associated with staying on in full-time education for longer, thereby continuing to have access to a broad range of activities during young adulthood – a period when people often switch from a team to an individual sport, while many others drop out from sport altogether. But it is also likely that the social networks formed during this period are beneficial from a sporting perspective, again offering greater opportunities to try new activities.

Despite the dramatic scale of these income and education effects, they still do not capture the full extent of the influence of socio-economic status on the likelihood of playing sport, because an individual's occupation is also important, even after educational attainment and income are controlled for. This also suggests the possibility that the social networks and norms that surround different workplaces may contribute to involvement in sport.

In summary, there is a very strong socio-economic divide with respect to participation in sport in Cork, which represents an important challenge for policymakers.

## 2.4 DEMOGRAPHY AND ACTIVE PARTICIPATION

Figure 1 (above) gave an indication of the way active participation rates fall with age. The pattern is not straightforward to interpret, however, because characteristics of older and younger adults other than age affect whether someone plays sport. For example, younger adults are, on average, better educated, which we have already seen is positively associated with participation. Furthermore, women (especially younger women) have higher average educational attainment than men. Consequently, it is unclear what is really driving the relationship between active participation, gender and age. Using a multivariate statistical model makes it possible to disentangle the effects. For instance, the model can compare the likelihood of participation across men and women of *different* ages, but the *same* educational attainment, income and occupation (and other background characteristics). In other words, it makes it possible to compare like-with-like, to isolate the impact of gender and age independently of these other factors.

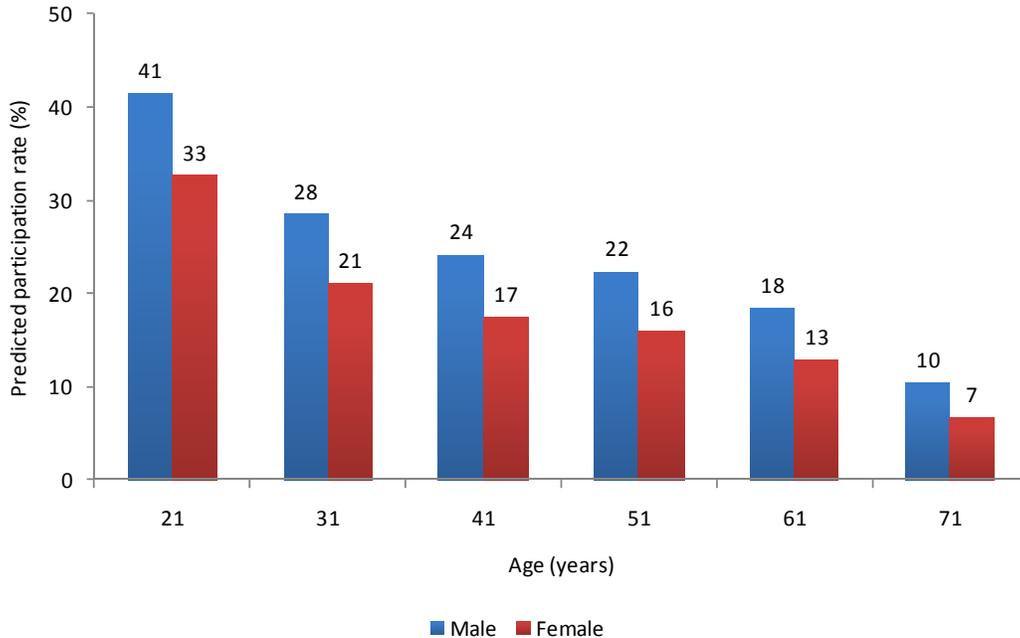
For illustrative purposes, we use the model to estimate predicted participation rates for “typical” adults in Cork, whose characteristics are selected to get them as close as possible to a median individual for the area. The hypothetical individuals all have a Leaving Certificate, average income of €500-749 per week, work in a skilled manual occupation, live in a town, do not suffer from ill-health, are married and own a car – they differ only in age and gender.<sup>5</sup> Figure 4 then provides predicted participation rates separately for such individuals who differ in only gender by age (in steps of ten years from the median age of 41), but are the same with respect to all other significant background characteristics.

Once the impacts of age and gender on playing sport are statistically isolated like this, it is clear that the drop out from sport with age among both genders mainly occurs in early adulthood and old age, with participation holding up fairly well across middle age. The first of these effects is largely driven by people giving up team sports in early adulthood, with a proportion of those who drop out not taking up any other activity. The cause of the second effect is less clear, but is consistent with the fact that older people in Cork have particularly low active participation in comparison with older people in the rest of the country.

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<sup>5</sup> These characteristics associated with a “typical” Cork person are derived from Census 2006.

**Figure 4: Predicted participation rates by age and gender for individuals with typical socio-economic characteristics**



## 2.4 ACTIVE PARTICIPATION IN CORK CITY AND CORK COUNTY

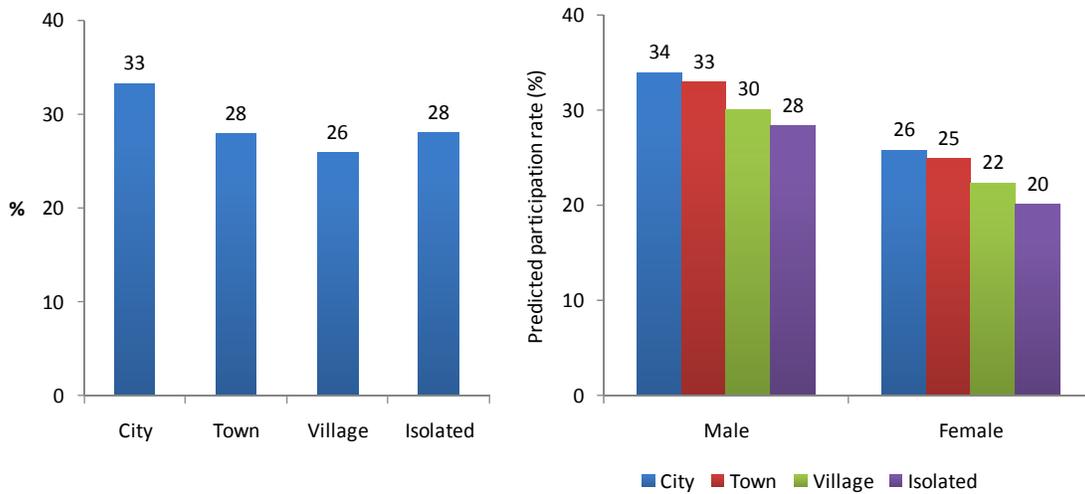
It is not possible from the ISM survey to identify accurately whether an individual lives in Cork City or Cork County. However, it can be done approximately. The survey contains a question about residential location, which asks respondents whether they live in a city, town, village or isolated location. The responses to this question reveal that 34% consider that they live in the city. This is a somewhat larger proportion of the county than actually live within the Cork City local authority boundary, as determined by Census 2006, so it is likely that some individuals who live outside the boundary nevertheless regard themselves as living in the city.

Despite this blurring of the city-county boundary, the breakdown of active participation by residential location gives an indication of the difference between Cork city and the rest of the county. The left panel of Figure 5 shows active participation rates by residential location. Those living in the city have a significantly higher participation rate, with the lowest rate among those living in villages. However, it should be noted that the demographics of Cork City are very different from the rest of the county. It has a much higher proportion of people under 30 and so ought to have higher active participation.

The multivariate model allows us to control for all available socio-economic and socio-demographic background characteristics, in order to isolate the effect of residential location from other associated characteristics. Thus, the right-hand panel of Figure 5 shows predicted participation rates for a typical male and female of average age, matched as above by income, occupation and other characteristics. Once we have controlled for background

characteristics, it is apparent that there is a steady decrease in the likelihood of playing sport as residential location becomes less urban and more rural. In other words, the difference we have observed is not caused by living inside or outside Cork city, but is a more general effect, whereby those in more densely populated areas are more likely to play sport, all else equal.

**Figure 5: Active participation by residential location (left) and predicted participation rates by residential location for “typical” male and female after controlling for socio-economic characteristics**



## 2.5 OTHER INFLUENCES ON ACTIVE PARTICIPATION

In addition to those already outlined, five other factors have a statistically significant association in Cork with the likelihood of playing sport, once all other available background characteristics have been controlled for. First, people with a disability that limits the possibility of participation are considerably less likely to play any kind of sport. Second, partnership seems to have a negative influence, because people who are cohabiting or married are less likely to play than single people. Third, car owners are more likely to play sport. Fourth, those who have retired have a significantly higher chance of being active participants, indicating that additional free time makes it easier to be active. Lastly, people whose parents were actively involved in sport are more likely themselves to play. This is one reason, among others, for the strong link between playing and socio-economic status, since those from higher socio-economic groups are more likely to have had parents who played sport.

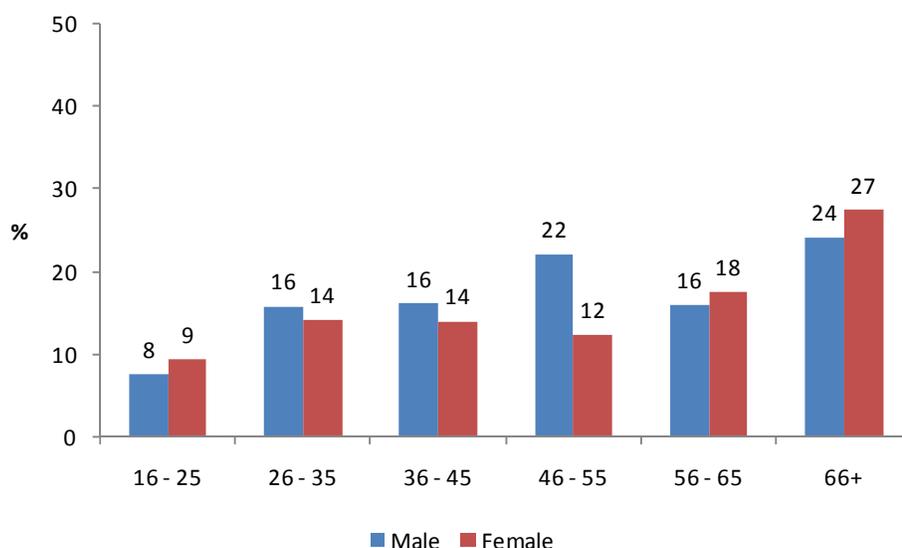
## 2.5 SEDENTARISM

Complete physical inactivity carries particular risks to health. An analysis of which social groups are most likely to be sedentary in Cork 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.

Figure 6 presents the pattern of complete inactivity by age and gender. It reveals that the likelihood of being sedentary generally increases with age, although it does not do so smoothly. Rather, there are sharp increases in early adulthood, when a proportion of people drop out from sport and may not engage in other physical activity, and among older people.

**Figure 6: Sedentarism by age and gender**

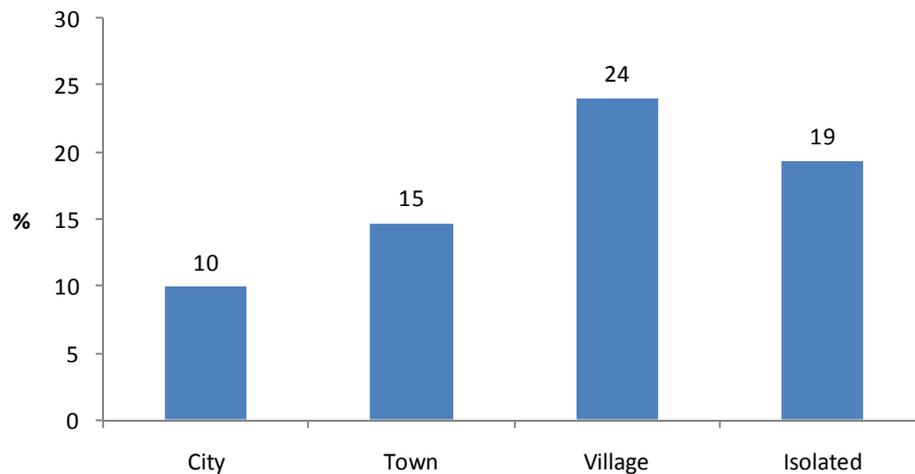


There is no overall gender difference in the likelihood of being sedentary, because while men play more sport, women tend to be considerably more likely to walk, both for recreation and transport. There is nevertheless a difference in the age-profile of sedentarism by gender. Figure 6 shows that men are considerably more likely to be completely inactive than women in middle age. This pattern of inactivity, which has potentially serious health consequences,

is caused by the fact that middle-aged men do less recreational walking than middle-aged women.

There is also a strong relationship between sedentarism and residential location, as shown by Figure 7. People living in Cork city are much less likely to be sedentary, especially in comparison to those in villages or isolated locations. As well as being more likely to play sport, as shown above, residents in the city (and to a lesser extent towns) are more likely to walk regularly, both for recreation and transport.

**Figure 7: Sedentarism by residential location**



A multivariate statistical model reveals two other factors that are significantly related to an increased likelihood of being sedentary: low socio-economic status, especially low educational attainment, and disability.

## **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 8% of adults in Cork volunteered for sport during the previous week, 31% are members of some type of sports club, and 13% had attended a sporting fixture. These proportions of volunteers and club members are in line with national figures, but the proportion of the population who had watched a sporting event during the previous seven days in Cork is significantly lower.

### 3. POLICY IMPLICATIONS

With respect to participation in sport, Cork has many things in common with the rest of the country, in terms of who plays sport and who does not. 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](http://www.irishsportsCouncil.ie) and [www.esri.ie](http://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 Cork: the strength of socio-economic factors, the balance between team and individual sports, , and the urban-rural gap in physical activity .

The relationship between socio-economic status and playing sport in Cork is very strong. It is worth emphasising, therefore, that the results imply both a greater need and a greater potential for increasing participation among lower socio-economic groups. There is a good case for ensuring that members of these groups are the primary target for sports policy in the area, and that the design and marketing of participation programmes reflects this.

The majority of sport played by adults in Cork consists of individual rather than team activities, with the latter very highly concentrated among young males. Few women play team sports beyond 25 years of age. This age and gender pattern has implications for the effectiveness of policies primarily based on promoting team games to young people. The impact of such policies on active participation in sport across all adults is likely to be limited, unless simultaneous efforts are made to encourage participation in other activities that are more appealing to women and more likely to be continued into middle age and beyond (e.g. swimming, personal exercise, etc.). Policy might do more to reduce drop-out from team sports (e.g. improving links between school, college and club teams), perhaps especially among women, but the data imply that policy effort also needs to focus on promoting individual activities. Indeed, it is the lower rate participation in individual activities that accounts for the lower overall rate of active participation in Cork compared to the rest of the country.

Finally, although Cork contains one substantial city and a number of sizeable towns, it is a large county with over one third of the population living in villages or isolated locations. These individuals are less likely to participate in sport and less likely to walk regularly, with the result that they are considerably more likely to be completely inactive. Thus, the findings imply the need for a policy mix that ensures focus on rural as well as urban areas. Attempts to tap into existing social networks to promote sport might be particularly fruitful in rural areas, where it may be more difficult to establish initial contact with potential participants.