



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

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SUMMARY

- Between 2007 and 2009, 33% of adults surveyed in Clare-Limerick actively participated in sport or recreational exercise during the previous week
- 57% of adults undertook a recreational walk during the previous week
- 19% of adults were effectively sedentary
- Levels of physical activity in Clare-Limerick are generally in line with national figures, although a lower proportion of individuals walk for transport (36% versus 46%)
- Swimming (7.3%), personal exercise (7.0%), soccer (6.1%) are the most popular activities
- The range of different sporting activities undertaken in the area is broad and almost 10% of adults actively participate in more than one sport – significantly higher than the national figure
- More than two-thirds of all sporting activity (excluding recreational walking) consists of individual sport and recreation activities, as opposed to team games
- Team sports are overwhelmingly undertaken by young men
- Active participation is strongly linked to socio-economic status, especially educational attainment
- Individuals with high income are also more likely to play sport
- People in higher skilled occupations are more likely to play, even after education and income are controlled for
- Farmers and people living in isolated areas are significantly less likely to be active participants
- Women are less likely to play sport than men, although the gender gap narrows with age
- Older people are less likely to play sport than younger people
- A lower likelihood of playing sport and undertaking recreational walks mean those in lower socio-economic groups are more likely than those in higher socio-economic groups to be sedentary
- 7% of adults volunteered for sport in the previous week, 30% are members of sports clubs and 17% attended a sporting event
- The findings have policy implications regarding the targeting of participation programmes at specific social groups, the types of sport and exercise activities promoted, and the need to address lower participation in rural areas

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 counties Clare and Limerick (hereafter 'Clare-Limerick'). The analysis aims to be of interest and assistance 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 1,862 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 Clare-Limerick, 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 and 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 Clare-Limerick, together with the equivalent national figures. Levels of activity are generally in line with the national picture, in particular with respect to the proportion who actively engaged in sport in the previous 7 days. However, significantly fewer individuals walk regularly for transport, which contributes to marginally higher levels of sedentarism in Clare-Limerick than nationally. Based on Census 2006, the 33% rate for active participation in sport translates into approximately 67,900 adults playing regular sport in Clare-Limerick.¹

Table 1: Summary of physical activity

Activity	%	National %
Played sport in previous 7 days	33	33
Walked for recreation in previous 7 days	57	59
Regularly walks for transport	36	46
Regularly cycles for transport	9	11
Sedentary	19	17

Comparing the two counties, there are no clear, statistically significant differences between Clare and Limerick with respect to the proportions who play sport, walk for recreation, cycle for transport or who are sedentary. However, the proportion who walk regularly for transport, while on the low side in both counties, is particularly so in Limerick (33.7%, compared to 39.2% in Clare).

2.2 MOST POPULAR SPORTING ACTIVITIES

Table 2 lists the most popular sporting activities undertaken in Clare-Limerick, for all adults and separately by gender. Only activities with a recorded participation rate of at least 1% are listed. Given the sample of 1,862, the percentage figures should be regarded as indicative rather than precise – they could vary by 1-2 percentage points either way.

Overall, the top three sports are swimming, personal exercise² and soccer. This pattern matches the national picture, but the gap between these three activities and the rest is particularly large in Clare-Limerick, in part because

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

² 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.

golf appears to be somewhat less popular than elsewhere in the country. Several other aspects of the table are notable. Hurling and rugby have relatively high participation rates in the area, while Gaelic football has a relatively low rate. While participation in hurling is relatively high in both Clare and Limerick, the high participation rate in rugby is exclusive to Limerick, in which we record 4.9% of males as having played in the previous week. Limerick's reputation as a stronghold of Irish rugby is therefore apparent at the grassroots level.

Overall, Clare-Limerick is striking for the breadth of sporting activity undertaken. Further analysis reveals that while the proportion of adults actively participating in Clare-Limerick is the same as nationally, at 33%, the proportion who play more than one sport is higher (9.8% versus 6.9%).

Table 2. Most popular sporting activities³

All		Male		Female	
	%		%		%
Swimming	7.3	Soccer	11.0	Exercise	8.6
Exercise	7.0	Swimming	6.7	Swimming	8.0
Soccer	6.1	Golf	5.5	Dancing	4.4
Golf	3.4	Exercise	5.4	Jogging	2.2
Cycling	3.2	Cycling	4.5	Yoga	1.9
Dancing	2.7	Hurling	4.3	Cycling	1.9
Jogging	2.6	Rugby	3.4	Gaelic football	1.5
Hurling/camogie	2.4	Jogging	3.0	Horse riding	1.3
Gaelic football	2.3	Gaelic football	2.9	Golf	1.2
Rugby	1.9	Athletics	1.6	Soccer	1.2
Yoga	1.0	Dancing	1.2		
Athletics	1.0				

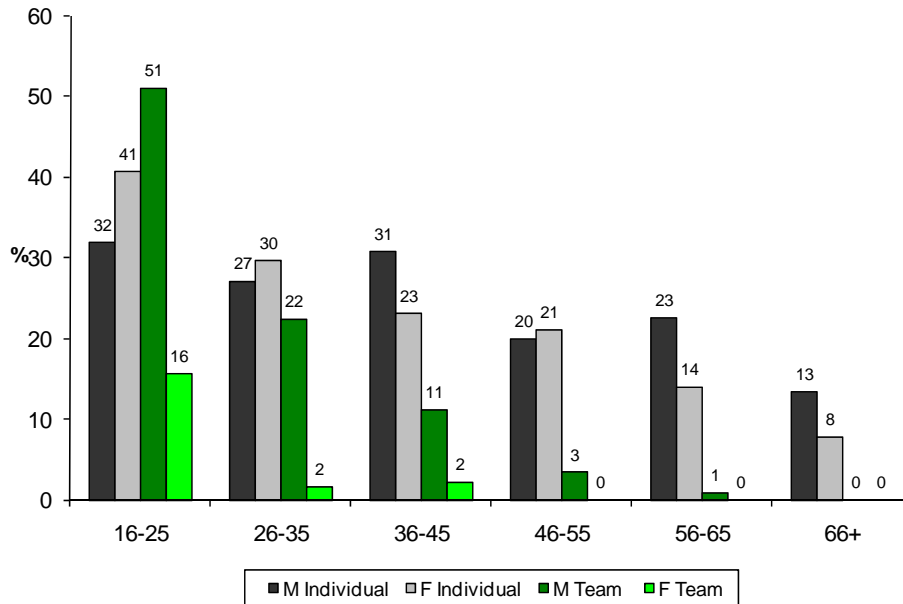
There are strong gender differences. Male sporting activity consists of a mixture of team and individual activities, while female activity is dominated by individual activities (especially swimming and exercise), the majority of which are non-competitive. Greater insight into this pattern can be had from Figure 1, which shows participation in individual and team sports by gender and age.

Figure 1 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 25%, versus 11% for team sports. Second, the gender gap for individual sporting activities is very small: overall, the participation rate for males, at 39%, is much higher than that for females, at 26%, but for individual sports this

³ From this point onwards, all results presented are for Clare-Limerick only. Readers interested in comparative national figures should consult the ISM Annual Reports, available at www.irishsportscouncil.ie and www.esri.ie.

reduces to 26% and 24% respectively. Lastly, many young adults, especially women, appear to drop out of team sport fairly rapidly with age.

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, eight factors emerge as having a strong association with active participation in sport in Clare-Limerick. These are educational attainment, gender, age, income, occupation, health, residential location and car ownership. The first four factors are also the most significant factors countrywide. In relation to Clare-Limerick, playing sport is not significantly related to an individual’s marital status or whether they have children.

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, higher income⁴ or who work in higher skilled occupations are very 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

⁴ Measured as weekly household income after tax.

possible to disentangle the effects. For instance, the model can compare the likelihood of participation across people with the *same* income and occupation (and other background characteristics), but *different* educational attainment. In other words, it makes it possible to compare like with like.

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

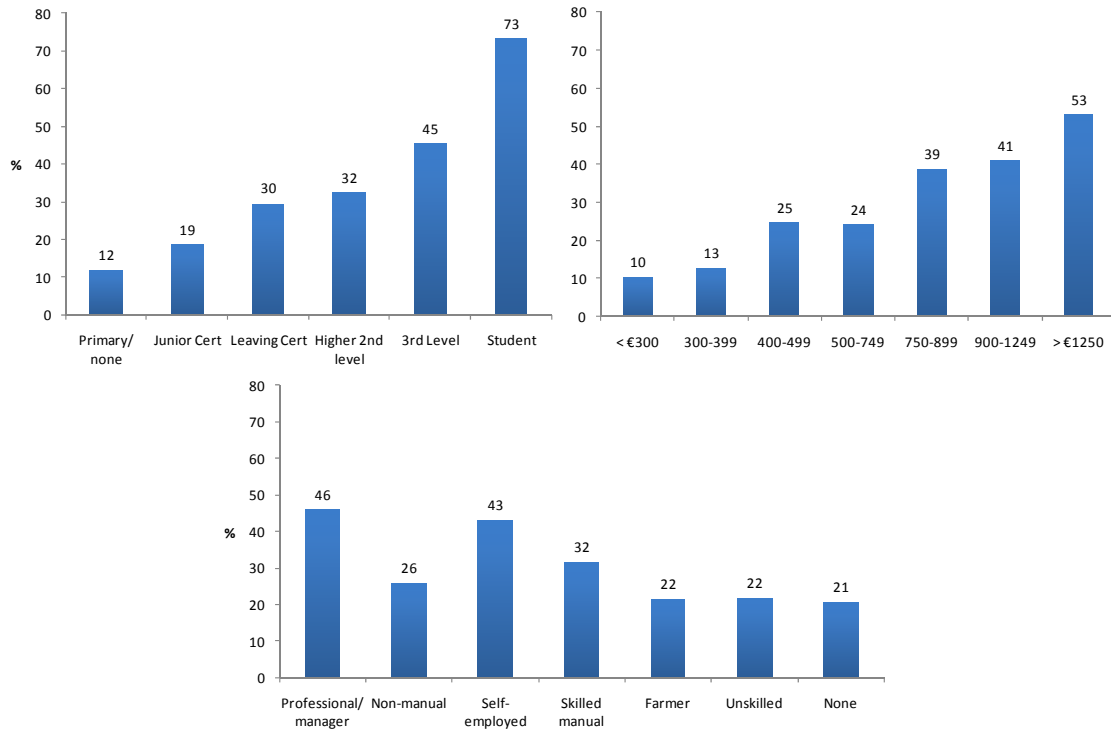


Figure 3 shows the results when this method is used to isolate the impact of educational attainment. For illustrative purposes, we use the model to estimate predicted participation rates for two “typical” adults in Clare-Limerick, one male and one female, whose characteristics are selected to get them as close as possible to a median individual for the area. Our hypothetical individuals are 43 years old, healthy, live in a town and own a car. They also have average incomes (€500-749 per week) and skilled manual occupations. Hence, Figure 3 reveals what happens when people who are otherwise similar differ only in terms of educational attainment.

The analysis reveals that the impact of educational attainment on playing sport remains very strong even after other characteristics associated with educational attainment (e.g. age, income, etc.) are accounted for. As educational attainment increases, so does the likelihood of playing sport.

In Figure 2 above, current students have a very high participation rate of over 70%, which is well over twice as high as the rate for people who finished their

education after Leaving Cert. Part of this effect is due to the fact that current students tend to be young. Figure 3 shows that once age (and other factors) are controlled for in the statistical model, although the gap narrows, the predicted participation rate for current students is 56%, which is still very much higher than the rate for those who have finished full-time education. This implies that having a direct link to a school or college may be very beneficial for participation in sport.

Figure 3: Predicted participation rates for typical male and female differing only by educational attainment

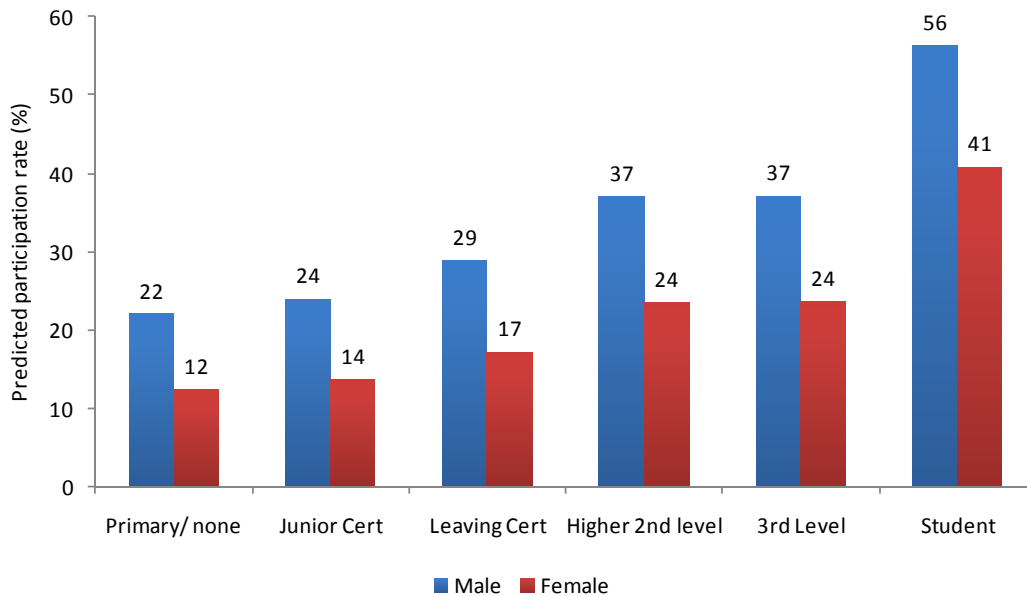


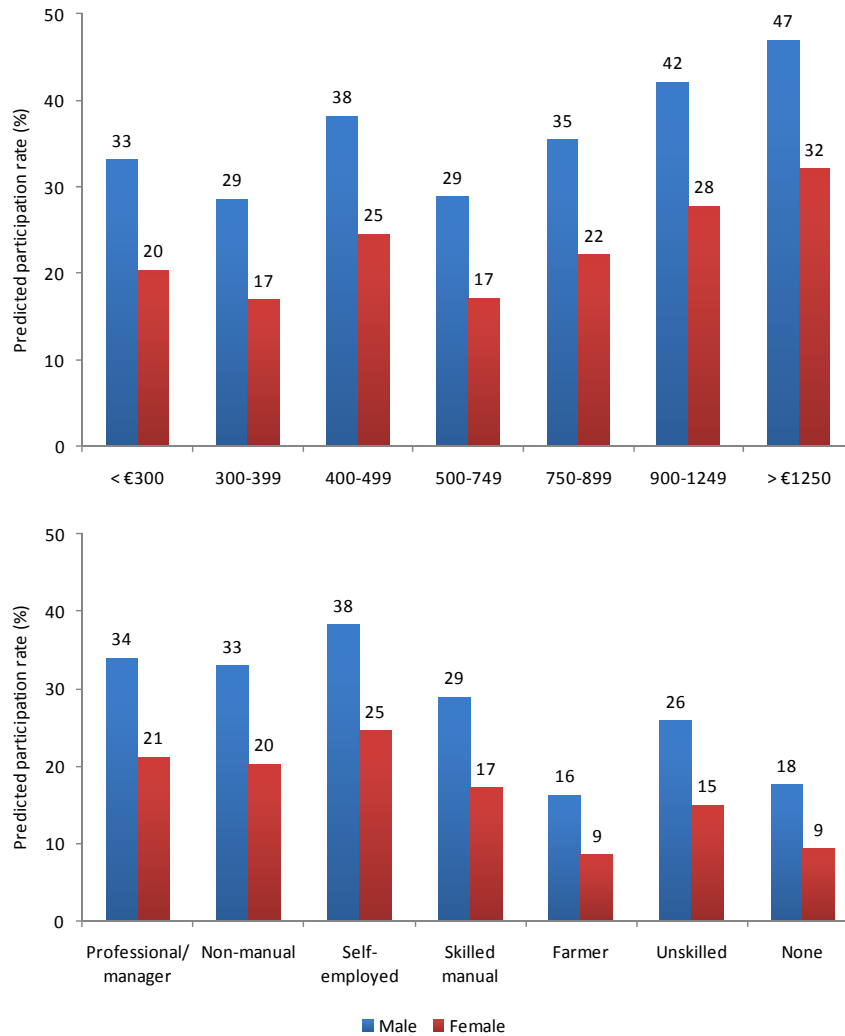
Figure 4 replicates the multivariate analysis for income and occupation. The typical male and female have the same characteristics as before, except that their educational attainment is now fixed at Leaving Cert level, and either their income only or occupation only is allowed to vary. The results show that while income and occupation both have a significant impact on participation, their influence is weaker than that of educational attainment (cf. Figure 3).

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. But it is notable that an individual's occupation remains important even after educational attainment and income are controlled for. This suggests the possibility that the social networks and norms that surround different workplaces may be a factor in the likelihood of involvement in sport.

Furthermore, once other characteristics have been accounted for in the model, certain categories stand out. Specifically, income is most influential with respect to increasing the likelihood of participation for the highest two

categories, i.e. those earning in excess of €900 per week. And while individuals in higher occupations are generally more likely to play sport than those in lower skilled occupations, it is notable that farmers have a particularly low rate of participation.

Figure 4: Predicted participation rates for typical male and female differing only by income (top) and occupation (bottom)



Taken together, the analyses of Figures 2-4 provide a clear message: there is a strong association between socio-economic status and participation in sport in Clare-Limerick. Individuals with higher educational attainment, higher income and who work in skilled occupations are very much more likely to take part, with educational attainment being the most influential of these three characteristics.

2.4 DEMOGRAPHY AND ACTIVE PARTICIPATION

Figure 5 provides participation rates for different categories of age and gender. As indicated previously, the overall participation rates for men and women are 39% and 26% respectively. This is a large gender gap, but it is not stable across age categories. Instead, the gap narrows in middle-age, particularly in the 46-55 year-old age group.

Figure 5 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. Given all of these various interlinked factors, a multivariate statistical model is again necessary to isolate and assess the relative influence of the different factors associated with active participation.

Figure 5: Active participation by age and gender

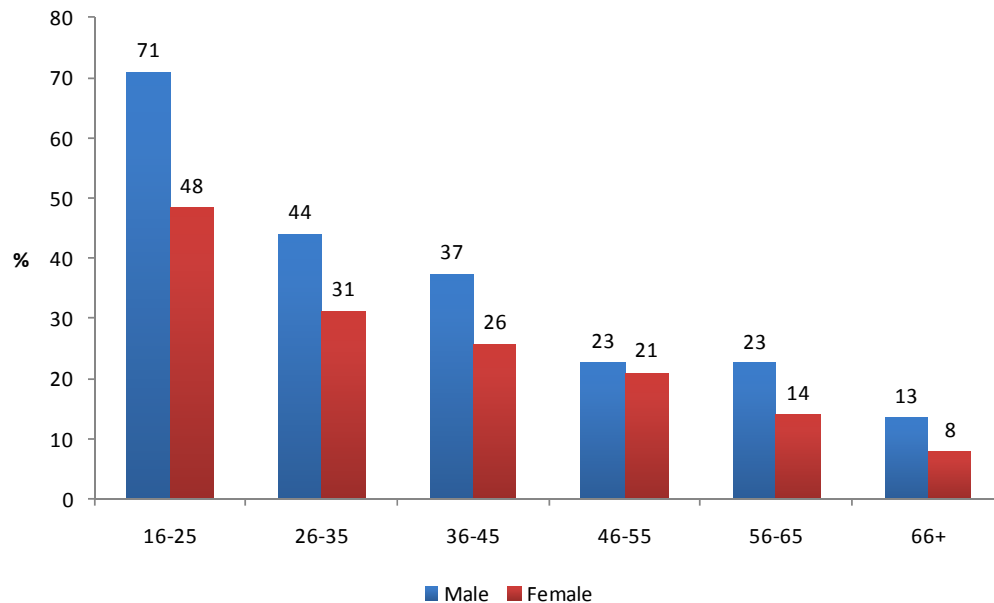
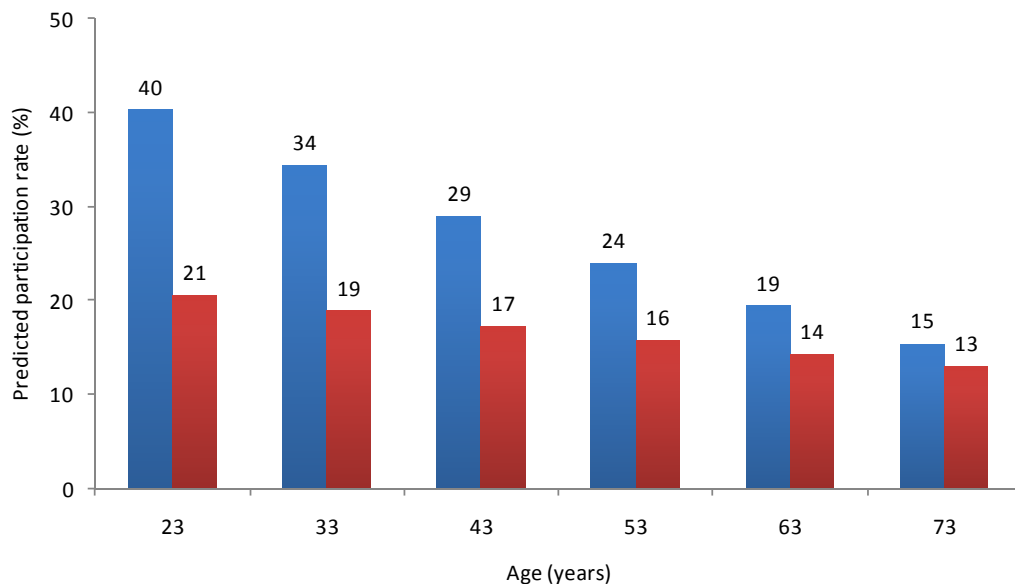


Figure 6 shows predicted participation rates by age (in steps of ten years from the average age of 43) and gender, once other background characteristics are controlled for. The hypothetical individuals all have a Leaving Certificate, average income of €500-749 per week, a skilled manual occupation, live in a town, own a car and do not suffer from ill-health – they differ only in age and gender.

There is a significant interaction between age and gender, such that the drop in participation with age is considerably steeper for males. One cause of this difference was suggested earlier by Figure 1: a higher proportion of men play

team sports as young adults, from which they are very likely to have dropped out by their mid-thirties. As we have seen, the gender gap for individual activities (e.g. swimming and personal exercise) is small and such activities tend to be continued as people progress through middle age.

Figure 6: Predicted participation rates by age and gender for individuals with typical socio-economic characteristics



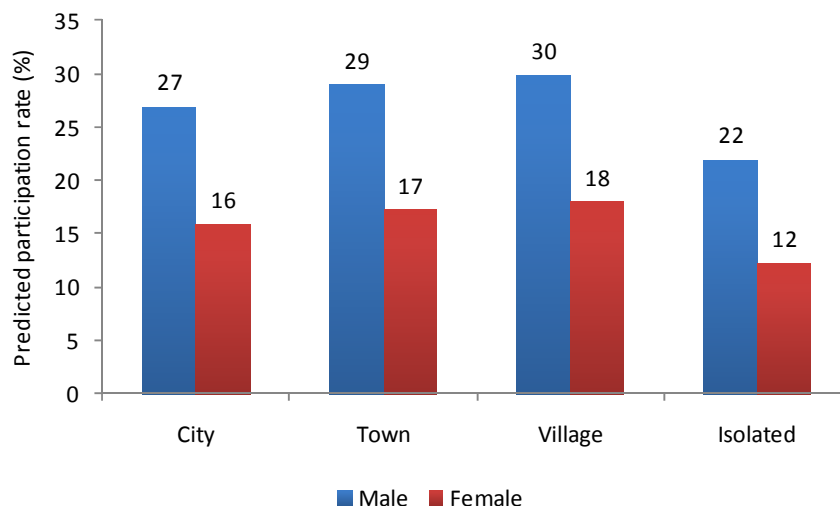
Another significant influence is where people live. The ISM records whether people live in a city, town, village or isolated location.⁵ It is again important to control for different background characteristics, in order to isolate the impact of location from other factors (e.g. cities tend to have higher participation rates because they have more students). Figure 7 provides predicted participation rates for a typical male and female differing only by residential location.

The differences between predicted participation rates associated with living in Limerick city, in a town and in a village are not statistically significant. But individuals living in an isolated location are significantly less likely to be active participants. More than one third of residents in the Clare-Limerick area live in such isolated locations.

Two other factors that have a significant impact on playing sport are car ownership and health status. In relation to the former, Individuals who own a car are more likely to play sport than those who do not (34% versus 23%), while individuals who report long-term health problems are less likely to play. These two findings match the nationwide picture.

⁵ In Clare-Limerick, living in a city implies living in Limerick city.

Figure 7: Predicted participation rates for a typical male and female differing only by residential location



2.5 SEDENTARISM

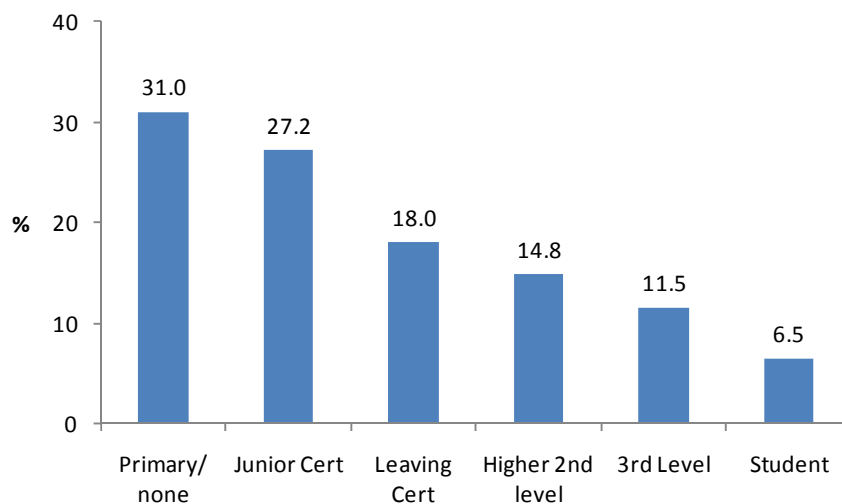
Complete physical inactivity carries particular risks to health. An analysis of which social groups are most likely to be sedentary in Clare-Limerick is consequently of interest from a policy perspective. Here, someone is defined as sedentary if they meet four criteria: (1) did not play sport in the 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 Clare-Limerick area, the analysis reveals no significant effect of gender on the likelihood of being sedentary. While women are less likely to play sport than men, they are more likely to walk, for both recreation and transport. The likelihood of being sedentary increases with age, but the multivariate statistical model suggests that the impact of age is not strong. Socio-economic status, on the other hand, does have a strong and significant effect on the likelihood of being sedentary.

Figure 7 gives rates of sedentarism by educational attainment. The gradient across the categories is severe and the relationship remains significant after controlling for all available background characteristics. Indeed, over and above the impact of educational attainment, there is a further effect of income such that those in the lowest income category are particularly likely to be

sedentary.⁶ This link between socio-economic status and physical activity is likely to have serious health implications for those in lower socio-economic groups. Further analysis reveals that, while those with higher education and income are somewhat more likely to walk and, especially, to cycle for transport, the primary contributors to the relationship between socio-economic status and sedentarism are differences in levels playing sport and levels of recreational walking.

Figure 7: Sedentarism by educational attainment



The multivariate analysis also reveals that sedentarism is more likely among individuals living in non-urban areas, parents of young children and people with a long-term health problem.

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 Clare-Limerick volunteered for sport during the previous week, 30% 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.

⁶ Those not in work were also found to be less likely to participate in sport compared to those in work, although this relationship is somewhat weaker,

3. POLICY IMPLICATIONS

With respect to participation in sport, Clare-Limerick 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 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 Clare-Limerick: drop-out from team sports, the strength of socio-economic factors, and the importance of residential location.

The large majority of sport played by adults in Clare-Limerick consists of individual rather than team activities, with the latter very highly concentrated among young males. Very 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 that are 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 simultaneously on promoting individual activities.

The relationship between socio-economic status and playing sport in Clare-Limerick is 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 link between the likelihood of playing sport and occupational categories implies that identifying larger workplaces with concentrations of semi-skilled or unskilled workers might produce potential targets for promoting sport.

Finally, although the Clare-Limerick area contains one substantial city and a number of large towns, over one third of the population lives in isolated locations and these individuals are less likely to participate in sport. Similarly, farmers stand out as an occupation with low participation. These 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.