



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

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SUMMARY

- Between 2007 and 2009, 29% of adults surveyed in the Midlands actively participated in sport or recreational exercise during the previous week
- This is lower than the national figure of 33%, due to the relatively low proportion of both men and women in the region who participate in individual activities
- Women are most likely to participate in swimming (5.9%) and personal exercise (5.6%)
- Men are most likely to participate in soccer (10.5%), golf (6.9%) and Gaelic football (6.5%)
- Among men, Gaelic games, both football and hurling, have higher participation rates in the area than nationally
- Those with educational attainment below Leaving Certificate are less likely to play sport
- Current students are no more likely to play than non-students, implying surprisingly little sporting benefit to current attendance at school or college
- Those in higher occupations (e.g. professionals/managers) are much more likely to play sport
- People generally become less likely to play sport with age but, for any given age, more likely to play sport if their children are older
- Rates of recreational walking (56%), walking for transport (45%) and cycling for transport (12%) are in line with national figures
- 20% of people are effectively sedentary, but the proportion is considerably greater in Laois (26%) and lower in Longford (13%)
- This discrepancy is caused by fewer people walking for both recreation and transport in Laois, along with cycling for transport, and higher levels of walking for recreation in Longford

Policy Implications:

- Policymakers might consider how to promote a broader range of individual activities in the region that individuals will continue to participate in as they get older
- Participation programmes need to target lower socio-economic groups
- Sports policymakers and sports clubs in the Midlands might try to raise awareness about generally low levels of physical activity in the county, particularly in Laois

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 Westmeath, Offaly, Laois and Longford, which will hereafter be referred to as “the Midlands”. The analysis aims to be of interest and assistance to those involved in the promotion of sport and exercise within this area, from councils and local sports partnerships, to individual participants and volunteers.

The results are based on telephone interviews with 1,474 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 the Midlands, 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 the Midlands, together with equivalent national figures. Twenty-nine percent of the population in this area participated in sport in the previous 7 days which, based on Census 2006, translates into approximately 55,600 adults playing sport on a regular basis in the Midlands.¹ This participation rate is lower than the national rate of 33 per cent. Some variation in levels of participation across the country can arise simply because of demographic differences, e.g. areas with a relatively high proportion of older people, who tend to play less sport, can be expected to have a lower sports participation rate. However, the age profile of the Midlands region is similar to the national profile; thus, demographic factors do not explain its lower participation rate.

Table 1: Summary of physical activity (%)

Activity	Midlands	National
Played sport in previous 7 days	29	33
Walked for recreation in previous 7 days	56	59
Regularly walks for transport	45	46
Regularly cycles for transport	12	11
Sedentary	20	17

We can see from Table 1 that the amount of recreational walking undertaken in the Midlands is also lower than the national figure, 56% compared to 59%. The corollary of this, and the region's lower sports participation rate, is that its rate of sedentarism is higher than the national rate, 20% compared to 17%. With respect to the four counties that make up the Midlands, there are no significant differences with respect to the numbers playing sport but there is for recreational walking. The effect of this divergence in physical activity engagement within the region is that the rate of sedentarism also varies: this is discussed further in Section 2.6.

2.2 MOST POPULAR SPORTING ACTIVITIES

Table 3 lists the most popular sporting activities undertaken in the Midlands, for all adults and separately by gender. Only activities with a recorded participation rate of at least 1% are listed. Given the sample of 1,474, the percentage figures should be regarded as indicative rather than precise – they could vary by 1-2 percentage points either way.

¹ 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 exercise² and golf, all with participation rates of 4% or more, i.e. over 4% of adults over 16 had played the sport in the previous week. These four sports also dominate the national picture. However, the rankings are different, and the percentages participating in these four activities are lower than the equivalent national figures. An interesting feature to emerge for the Midlands is that the proportions participating in both Gaelic football and Hurling are higher than the national figures, with Hurling at 3.1%, just over double the national participation rate of 1.5%, and Gaelic football at 3.8%, compared with a national figure of 2.4%.

Table 3: Most popular sporting activities in the Midlands³

All		Male		Female	
	%		%		%
Soccer	5.3	Soccer	10.5	Swimming	5.9
Swimming	5.3	Golf	6.9	Exercise	5.6
Exercise	4.0	Gaelic Football	6.5	Jogging	3.3
Golf	4.0	Swimming	4.7	Dancing	2.4
Gaelic Football	3.8	Hurling	4.0	Camogie	2.0
Jogging	3.2	Jogging	3.2	Cycling	1.3
Hurling	3.1	Cycling	3.1	Gaelic Football	1.1
Cycling	2.2	Exercise	2.5	Golf	1.0
Dancing	1.6	Rugby	1.7		
Rugby	1.0				

Gender differences exist in terms of the sporting activities that people in the Midlands engage in. The strong preference for soccer and golf observed in Table 3 is driven by males, while engagement in personal exercise is higher among females. In terms of individual and team activities, both genders engage in a mixture of both. However, the number of team activities, and percentages involved, are much higher among males. We can see from this gender breakdown also that the high participation rate in Gaelic games in the region is being driven by males. Female activities, on the other hand, are mainly comprised of individual sports, especially swimming and exercise.

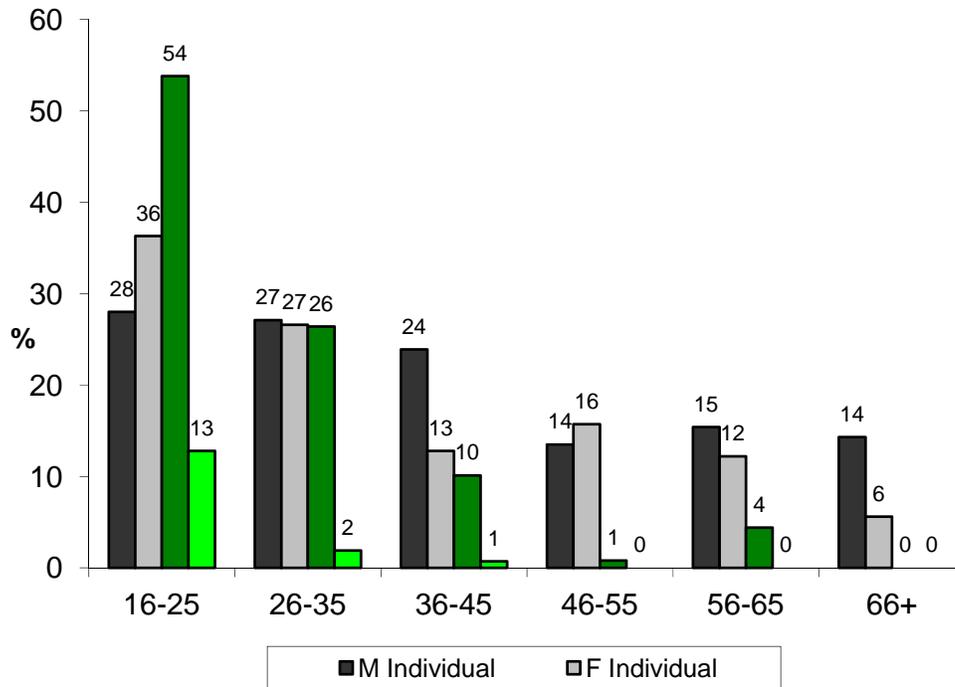
These gender differences in sporting activities produce overall participation rates of 38% and 21% for males and females respectively, both of which are lower than the national figures (40% and 26%), particularly the female participation rate. In terms of individual and team activities, the proportions of men that engage in each are quite similar, 21% for individual activities and 19% for team. However, the percentage of females that engages in team activities is considerably lower than that for individual activities, at just 3% versus 19%. Overall, the rate of participation in individual activities for both

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.

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

men and women is lower than the equivalent national rates of 27% and 24% respectively. Contrastingly, the proportion of males participating in team sports is higher than the national figure of 17%, with the low female rate matching the national situation. 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: Active participation in individual and team sports by gender and age



The first noteworthy feature of Figure 1 is that the high participation rate in team sports in the Midlands, both overall and among males, is driven by males aged 16 to 25. This age group’s involvement in team activities is considerably higher than the national figure, 54% compared to 43%; however, their participation in individual activities is lower, 28% compared to 32%. There is a huge reduction in the proportion of men playing team sports after this age-level, with more than half of males playing team sport dropping out – a pattern that is apparent on a somewhat smaller scale nationally. Turning to female participation, it can be seen from Figure 1 that their low involvement in team activities exists across the age spectrum, as is the case nationally.

The second striking finding that emerges from Figure 1 is the falloff in individual sporting activities with age, which occurs for females from age 36 and above and for males from age 46. Overall, participation rates for all age groups above 26-35 are much lower than the national figures. Figure 1 also shows that the gender gap for individual sporting activities is much smaller than the gap for team sports. The large discrepancy in the overall participation

rates for men and women falls to 21% and 19% respectively for individual sports, whereas for team sports the rates are 19% and 3% respectively.

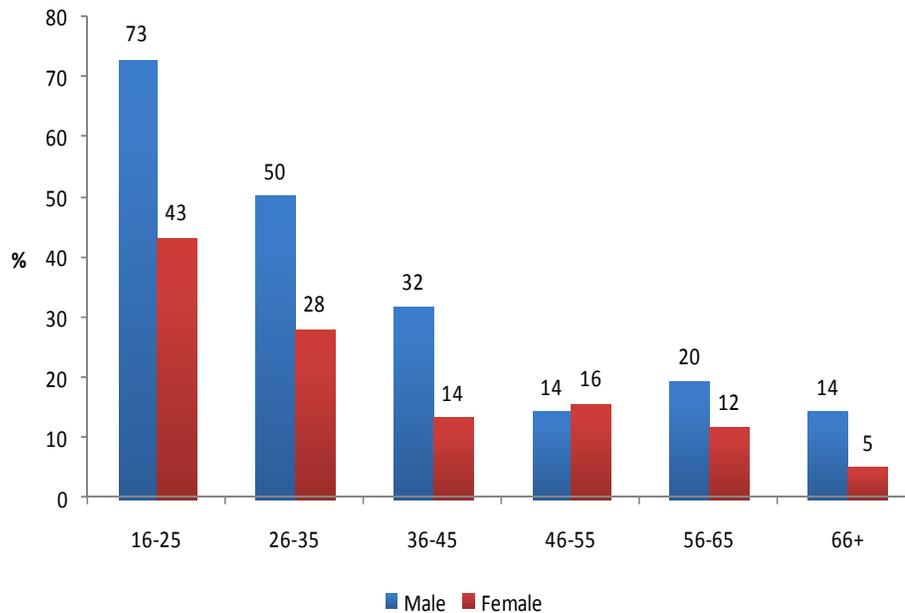
2.3 DEMOGRAPHY AND ACTIVE PARTICIPATION

Using a multivariate statistical model to identify the individual impact of various characteristics on a person's likelihood of playing sport in the Midlands, we found that gender, age, educational attainment, occupation, the presence of children, health status and car ownership had a statistically significant impact. The first three of these factors are also the most important characteristics countrywide. In relation to the Midlands, income, economic status, marital status and residential location (living in a town, village or isolated location) did not have a significant impact on whether or not someone played sport. This section focuses on the affect of age and gender.

Figure 2 provides participation rates for different categories of age and gender. As indicated earlier, the overall participation rates for men and women in the Midlands are 38% and 21% respectively. There is a large gender gap, particularly among those aged 16-25. However, the divergence in sports participation is not stable across age categories. Specifically, while the gap is quite large for younger people it narrows considerably in middle-age, particularly in the 46-55 year-old age group.

Figure 2 is not straightforward to interpret, though, because in addition to age other characteristics of older and younger adults influence whether or not someone plays sport. For example, younger people are, on average, better educated, which tends to be positively associated with participation. Furthermore, women (especially younger women) have higher average educational attainment than men, but women are less likely to play sport than men. Given all of these various interlinked factors, a multivariate statistical model is required to isolate and assess the impact of different competing influences on sports participation. Such a model can compare the likelihood of participation across males and females of different ages but the same educational attainment, occupation and other background characteristics. In other words, the use of multivariate techniques allows us to isolate the impact of gender and age independently of other background factors that also influence whether or not someone plays sport.

Figure 2: Active participation by age and gender



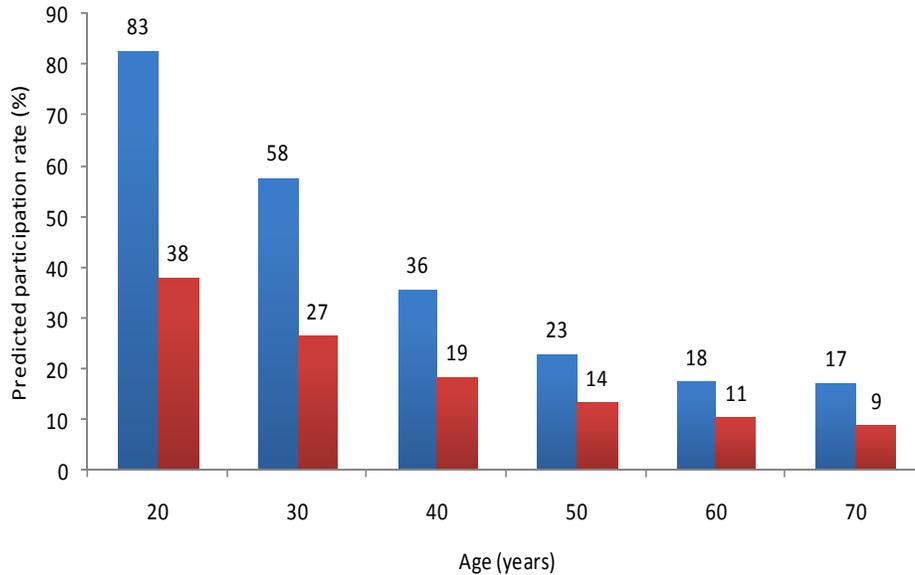
For illustrative purposes, we use the model to estimate the predicted participation rates for two “typical” adults in the region, one male and one female. Based on 2006 Census data for the Midlands,⁴ this “typical” person is 40 years of age, has a Leaving Certificate qualification, works in a skilled manual occupation, has children, owns a car and does not suffer from ill-health. Based on this profile, Figure 3 provides predicted participation rates for a “typical” male and female from the Midlands who differ in only age (in steps of ten years from the median age of 40), but are the same with respect to all other significant background characteristics.

This analysis reveals that there is a significant interaction between age and gender, such that the drop in sports participation with age among men is much steeper than it is among women. Figure 1 sheds some light on the reason for this outcome: a higher proportion of males in the Midlands play team sport when they are young adults, but they are very likely to have ceased playing such activities by their mid- to late-thirties. Although the reasons for this are not entirely established, it may well be due to the physical demands of team sports, the time commitment involved in such activities, and/or the absence of team sports in less competitive structures for older age groups. The decline in participation with age among females is not as sharp as it is among males, because of their higher engagement in individual activities (e.g. swimming, etc.) at a younger age, which are activities that people tend to continue with as they get older. Although the sharp fall off in sports participation among men with age, combined with females participating more in individual activities, leads to a reduction in the gender gap in sports

⁴ The “typical” adults characteristics are selected to get them as close as a possible to a median individual from the Midlands.

participation in the Midlands, the gap in middle-age remains wider than is typically the case in the rest of the country, because fewer adults in the region, both males and females, take up individual activities as they get older.

Figure 3: Predicted participation rates by age and gender for individuals with typical socio-economic characteristics



2.4 SOCIO-ECONOMIC STATUS AND ACTIVE PARTICIPATION

This section focuses on the impact of socio-economic characteristics on sports participation; specifically, the impact of an individual’s educational attainment and occupation. Figure 4 illustrates that individuals with higher levels of education are more likely to play sport, as are those that are currently in education (students), while Figure 5 shows that those who work in higher skilled occupations are also more likely to participate in sport.

These education and occupation results, however, are not easy to interpret because educational attainment and occupation are themselves related, i.e. those with higher levels of education tend also to work in more skilled occupations. Given this, it is not clear what is driving the relationship between active participation and socio-economic status. However, the multivariate statistical model allows us to identify the separate effects of educational attainment and occupation on sports participation. Specifically, the model allows us to compare the likelihood of participation across people with the *same* occupation, and other background characteristics, but *different* educational attainment and vice-versa.

Figure 4: Active participation by educational attainment

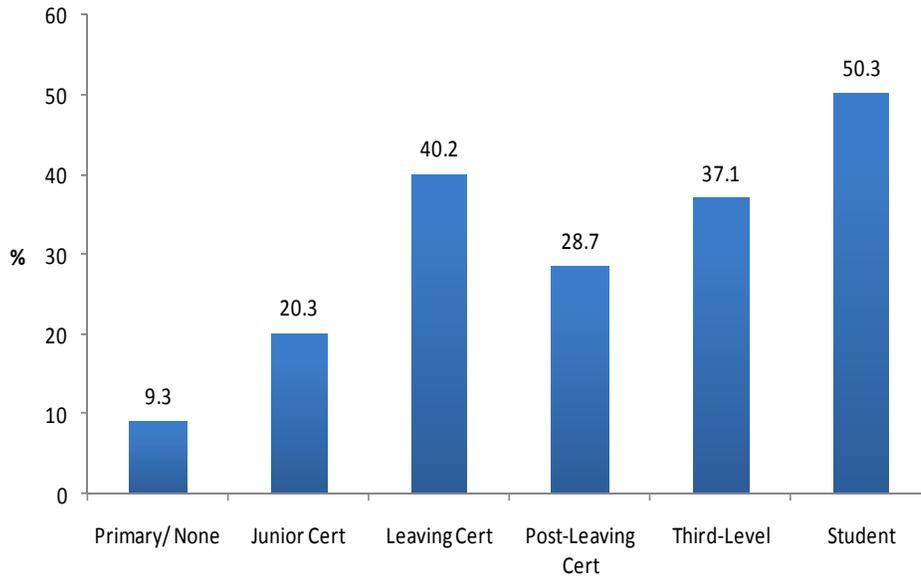


Figure 5: Active participation by occupation

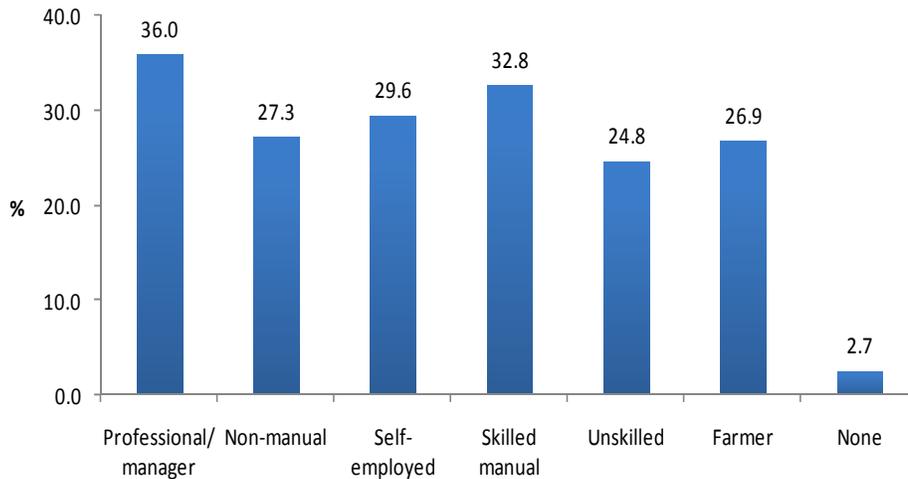


Figure 6 shows the outcome when this method is used to isolate the impact of educational attainment. The chart gives predicated probabilities for a “typical” male and female who have the same background characteristics (40 years old, healthy, works in a skilled occupation, owns a car and has children) but different levels of education. In other words, Figure 6 reveals what happens when people with otherwise similar characteristics differ only in terms of educational attainment.

Figure 6: Predicted participation rates for typical individual with differing levels of educational attainment

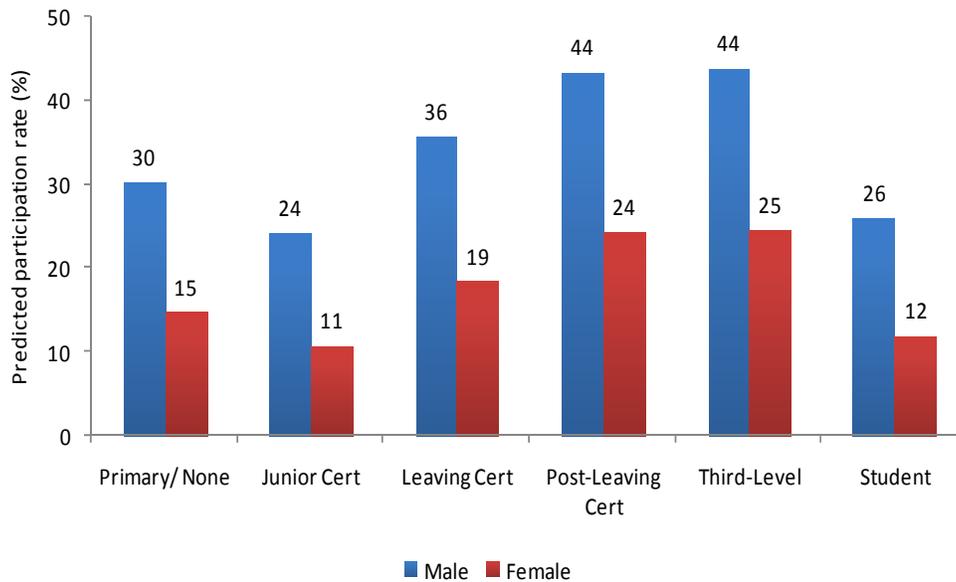
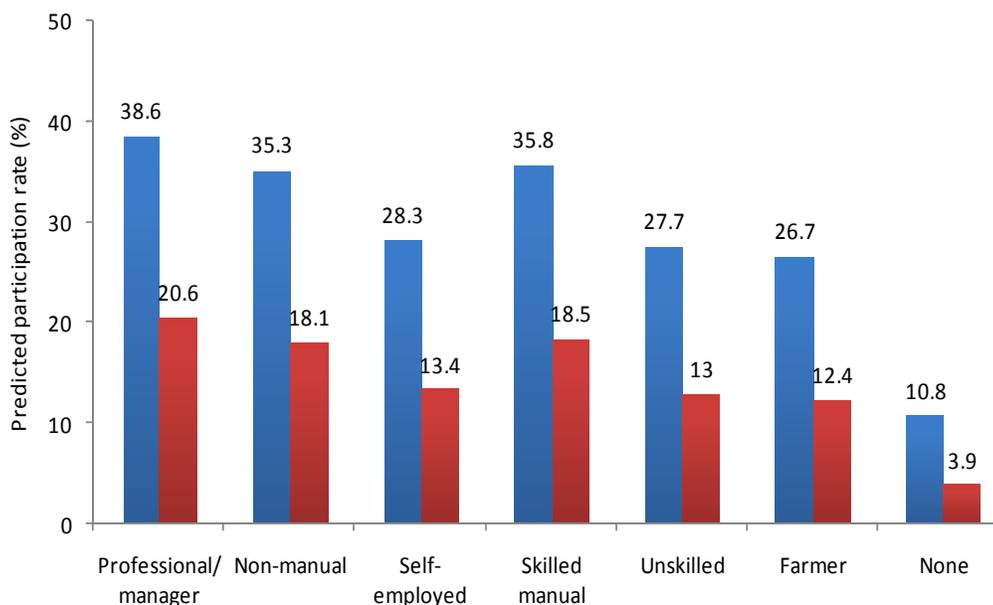


Figure 6 confirms that educational attainment is a powerful influence on whether or not an individual in the Midlands plays sport. A second aspect of the chart that is worth highlighting is that the predicted participation rate associated with being a current student is somewhat low, a result that does not hold on a national scale, where there is generally a sporting benefit to being currently in education. This result seems to suggest that being at school or college provides less of a boost to the likelihood of playing sport in the Midlands than it does in most other parts of the country, which, if the case, may say something about the availability of sport activities in educational institutions in the region. However, as the student result is only marginally statistically significant,⁵ it should be regarded as indicative rather than definitive with respect to the role that educational institutions play in sports participation in the Midlands.

Figure 7 replicates the multivariate analysis for occupation, separately for males and females. The typical individual has the same characteristics as before, except that this time educational attainment is fixed at Leaving Cert level and occupation varies. The results show that occupation has a very strong impact on active participation. Those in higher occupations are much more likely to play sport even after controlling for higher educational attainment and other significant background characteristics.

⁵ The reason why the student effect, which appears large, is only marginally statistically significant, is that the subsample of students within the overall sample is quite small. Hence, the result needs to be interpreted with caution.

Figure 7: Predicted participation rates for typical individual differing only by occupation



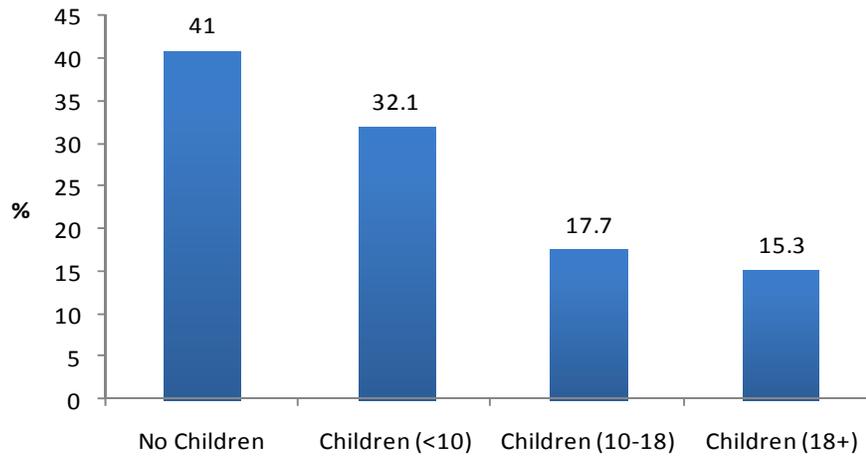
Three other factors are significantly related to the likelihood that individuals in the Midlands play sport: (i) car ownership, (ii) a person’s health status and (iii) whether an individual’s parents played sport. In relation to car ownership, the multivariate model estimates, after controlling for other background characteristics (e.g. age, education level, occupation, etc.), that those that own a car are 7% more likely to play sport. Regarding health status, those with a health problem are 13% less likely to participate in sporting activities. Finally, individuals with parents that played sport are more likely themselves to follow suit.

2.5 CHILDREN AND ACTIVE PARTICIPATION

Figure 8 examines the impact of having children on sports participation in the Midlands. The results indicate that people with no children are more likely to play sport, and for those that have children that participation is lower among those with children aged 10 and over. However, people with children are also likely to be older and tend to have lower levels of educational attainment, mainly because younger generations have, on average, higher attainment. When these factors are controlled for in a multivariate statistical model, along with other significant background characteristics, the picture changes with regards to the impact of children on sports participation. This can be seen in Figure 9, which presents predicted participation rates for a “typical” individual from the Midlands (40 years old, healthy, Leaving Certificate qualification, works in a skilled occupation and owns a car) who differs only by whether he/she has children and, if so, their age. Once all other background characteristics are controlled for, having children has a positive impact on the likelihood that a person in the Midlands will participate in sport, and the

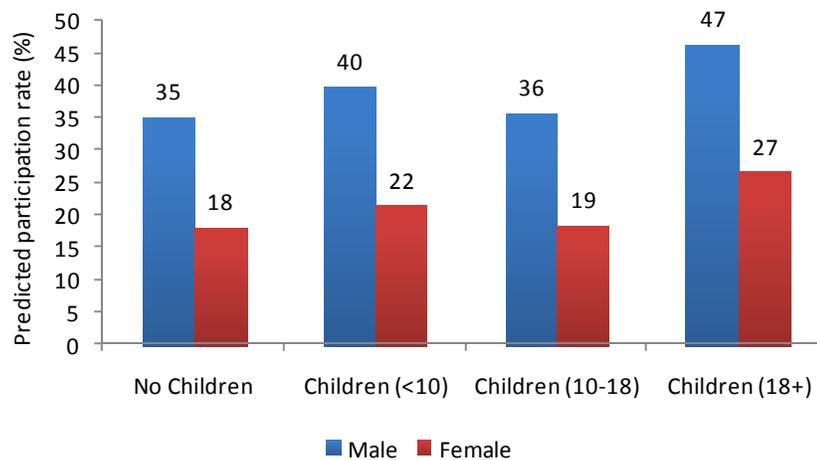
strength of the effect increases with the age of the children, especially beyond age 18. This result holds for both males and females.

Figure 8: Active participation by whether an individual has children



*Age of youngest child in brackets

Figure 9: Predicted participation rates for typical individual differing only by whether an individual has children



*Age of youngest child in brackets

2.6 SEDENTARISM

Complete physical inactivity carries particular risks to health. An analysis of the types of people that are most likely to be sedentary in the Midlands 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.

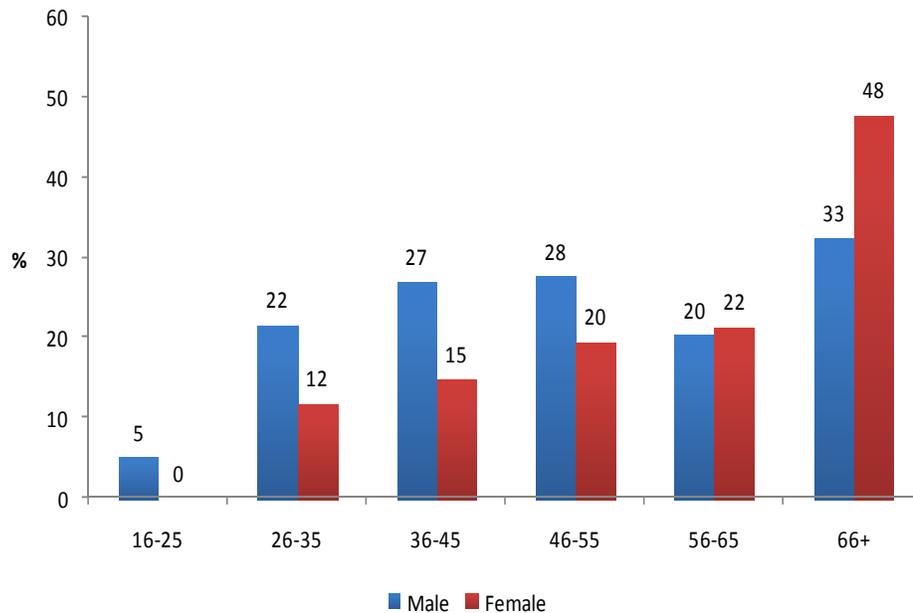
As with identifying the factors that impact on sports participation in the Midlands, we again used a multivariate statistical model to isolate the individual impact of various characteristics on a person's likelihood of being sedentary in the region. Age, educational attainment, health status and residential location (both the specific county within the region that a person is from and whether the individual lives in an urban or rural location), had a statistically significant impact.

Figure 10 gives rates of sedentarism by age and gender. Rates of sedentarism are very low among young people in the Midlands, specifically those aged 16 to 25⁶. After this, the pattern indicates a U-shaped relationship between sedentarism and age for men, whereas for women there is a gradual increase in levels of sedentarism up to age 65, but after this there is a dramatic jump in sedentarism among older women.

Using a multivariate statistical model, we find that, overall there is no statistical difference in levels of sedentarism among younger men and women in the Midlands. However, women aged 65 and over are much more likely to be sedentary compared to similarly aged men, and this gender difference is statistically significant. Across Ireland as a whole, there is no consistent difference between men and women in levels of sedentarism. This is because the fact that men play more sport than women is compensated for by the fact that women are more likely to walk than men, both for recreation and as a mode of transport. However, in the Midlands this is not the case: older women both walk less for recreation (38% versus 47%) and as a mode of transport (29% versus 44%) compared to their male counterparts.

⁶ The sample actually recorded no sedentary females under the age of 25 at all. This zero figure is inevitably an underestimate, but the level of sedentarism among young women is nevertheless likely to be very low indeed.

Figure 10: Sedentarism by age and gender



The multivariate analysis also reveals that sedentarism is more likely among individuals with lower educational attainment, specifically those with primary education or less, along with people that have a disability (or long-term health problem) that prevents them from taking part in sport or exercise.

The ISM records whether people live in an isolated location, a village or a town/city. This was also found to have a significant impact on sedentarism. Specifically, those that live in isolated locations are more likely to be sedentary compared to those that live in villages or larger urban centres. This last finding may well be related to the extent of car dependency in more isolated locations, but there is no way to test this directly with the available data.

As well as the type of residential location having a significant impact on a person's likelihood of being sedentary in the Midlands, so too does the county that he/she resides in. Using a multivariate statistical model, to control for all relevant background characteristics (gender, age, educational attainment, health status and location size), we find that there is a statistical difference in levels of sedentarism by county and that those that reside in Laois are much more likely to be sedentary. Specifically, individuals that live in Longford are 9.1% less likely to be sedentary compared to those that live in Laois, while those that live in Offaly and Westmeath are 7.1% and 4.8% less likely respectively. The reason why sedentarism levels are higher among those that live in Laois is because they are less likely to walk for both recreational and transport purposes, and also bike for transport.

2.7 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 5% of adults in the Midlands volunteered for sport during the previous week, 28% are members of some type of sports club and 17% had attended a sporting fixture. The proportion attending fixtures does not differ significantly from the equivalent national figures. However, both the volunteering and club membership rates are significantly below the equivalent national figures. These differences mirror those for active participation, as might be anticipated from the earlier analysis.

3. POLICY IMPLICATIONS

With respect to participation in sport, the Midlands 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 four main findings that may be of relevance in the Midlands: drop-out from team sports combined with the low take-up of individual activities, the importance of socio-economic factors and differences in rates of sedentarism in the region.

The large majority of sport played by adults in the Midlands consists of individual rather than team activities, with the latter highly concentrated among young males. In relation to the latter finding, the proportion of males aged 16 to 25 who engage in team activities is considerably higher than the national figure. However, there is a huge reduction in men playing team sport after this age-level, which is not substituted with a corresponding increase in participation in individual activities. In fact, levels of participation in individual sports among both males and females in the Midlands are much lower than the national figures, and this applies across the age spectrum. This age and gender pattern has implications for the effectiveness of policies primarily based on promoting 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 appealing to both men and women in the region and that are likely to be continued into middle age and beyond (e.g. swimming, personal exercise, golf, etc.). Policy might be able to do more to reduce drop-out from team sports (e.g. improving links between school, college and club teams); however, the data indicates that policy effort also needs to focus on promoting individual activities.

The relationship between socio-economic status and playing sport in the Midlands 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 unskilled workers might produce potential targets for promoting sport. Attention also needs to be given to those that are self-employed and to those working in the agricultural sector in the region. The latter group could be targeted through bodies such as Macra na Feirme.

While there are no significant differences in the levels of active participation in sport within the region, there are large differences in rates of sedentarism. Complete inactivity is high for the Midlands region as a whole, but especially so in Laois. This is a matter of serious policy concern given the associated health risks. Further analysis shows that this is primarily due to low levels of both recreational walking and walking as a mode of transport in Laois, along with cycling for transport. Sports policy is clearly limited in the extent to which it can address this issue, which is more likely to reflect problems in planning and the built environment. Nevertheless, sports policy exists within a broader context of policy to promote physical activity. Thus, policymakers and sports clubs might aim to build awareness of the lower overall level of physical activity in the area and to advocate policies to change it. Policy also needs to focus on women aged over 65 in the Midlands, as in this demographic group women are significantly more likely to be sedentary than men. As with those working in farming, this might be achieved through collaboration with existing organisations that provide services to such individuals, such as local active retirement groups or the Irish Country Women's Association (ICA).