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Summary report: Attending heritage sites
A quantitative analysis of data from the Taking Part survey

A report for English heritage

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Introduction

This is a summary report from the centre for economics and business research ltd (cebr) describing our findings of our analysis of data from *Taking Part: the National Survey of Culture, Leisure and Sport*.

English Heritage would like to explain attendance and non-attendance at heritage sites by reference to the range of social, economic and geographical data that has been collected with each individual response in the *Taking Part survey*. This report is the summary of our technical report that details our findings. The technical report is aimed at those with a statistical background.

In this report we first **summarise our main findings**. This includes a look into the main factors that are related to attendance and their relative importance. We also discuss the factors that have not been found to significantly affect attendance and the factors which relationship with attendance are unclear. Following this we discuss **regional variations** in more detail. We also discuss the **frequency of attendance** and compare this with attendance.

We investigate people's **reasons for attendance** and the places they attend. We have also analysed the types of people who respond as attending heritage sites for 'personal enjoyment/ relaxation', 'accompanying children' and 'recommended' and summarise our results in this report.

We also summarise what we found when analysing the reasons people give for **not attending** heritage sites. We discuss the types of people who respond as 'not having time', 'not interested' and 'health isn't good enough'. We use the same technique as in our main analysis – finding the relative importance of factors taking them into account simultaneously.

We also use a grouping procedure (cluster analysis) to examine people's tastes in music, free-time activity and encouragement as a child. We analyse these **behavioural characteristics**, the people in each group, their attendance and socio-economic factors.

Finally, we **conclude** in the last section. In particular, we discuss what our findings mean in terms of encouraging more people to attend heritage sites and the PSA targets.

Background

The Department of Culture, Media and Sport (DCMS) aims to provide everyone with the chance to get involved with a variety of sports, arts and cultural activities. Increasing participation in these activities will improve individuals quality of life through health benefits, developing new personal and professional skills, as well as stimulating economic growth and promoting community cohesion.

To increase participation the DCMS must first find what factors, and to what extent these factors, affect individual's decisions on whether or not to participate in specific activities. It is also vital to assess the link between such factors and their relative importance. Once these have been estimated the DCMS can set strategies to increase participation and forecast potential changes to rates.

For reliable and robust estimates it is necessary to have a large enough dataset containing preferences and factors that are related to such decisions. *Taking Part: the National Survey of culture, Leisure and Sport* was commissioned to create a detailed database of such information. The *Taking Part* survey contains a considerable amount of information including the characteristics and personal situation of the people responding to the survey.

In particular, the survey includes:

- Social-economic factors; such as income, class, employment status

- Demographics; such as age, gender, size and nature of household, ethnicity

- Opinions and personal information; including attitudes to heritage, whether visited site as a child

- Geography; region and whether place of residence is urban or rural

Published outputs from the survey include quarterly updates on performance against PSA targets, a report on why people attend and do not attend, and a report providing information derived from data collected in the first year of the survey.

The published reports concentrate on looking at one or two factors of attendance at a time. We supplement this by providing further analysis specific to attendance of heritage sites that examines all factors simultaneously to determine their relative importance.

The main factors behind attendance

We found that the main factors that are related to whether or not a person attends a heritage site are **accessibility** and a person's **background**.

In particular, whether or not a person has access to a **vehicle** (owned by the household) has a strong relationship with heritage attendance. Out of the people who have access to a vehicle 74.8 per cent attend heritage sites. In households were a person does not own a vehicle 48.5 per cent attend heritage sites, as can be seen in Figure 1.

However, access to a vehicle is highly correlated with many other factors such as a person's health and their income. The model takes into account these factors to calculate its individual relationship with attendance. It calculates the predicted probability to be 67.0 per cent. This means, holding all other factors at their margin so a person is on the balance of attending or not, if a person owns a vehicle the probability of them attending a heritage site is 67.0 per cent. On the other hand, the probability of a person attending a heritage site who does not have access to a vehicle is 33.0 per cent. A summary table that includes all predicted probabilities and their interpretation is on page 9.

The high relevance of vehicle access is despite low numbers of people expressing that '*lack of transport*' as a main factor behind them not attending. In the group that expressed their reason for not attending as '*lack of transport/I can't easily there*' there was a higher share of people in **low socio-economic groups** and with a **limiting illness or disability**.

Figure 1: Percentage of people who have attended a heritage site within the last year, for people with access to a vehicle and people without access to a vehicle, %
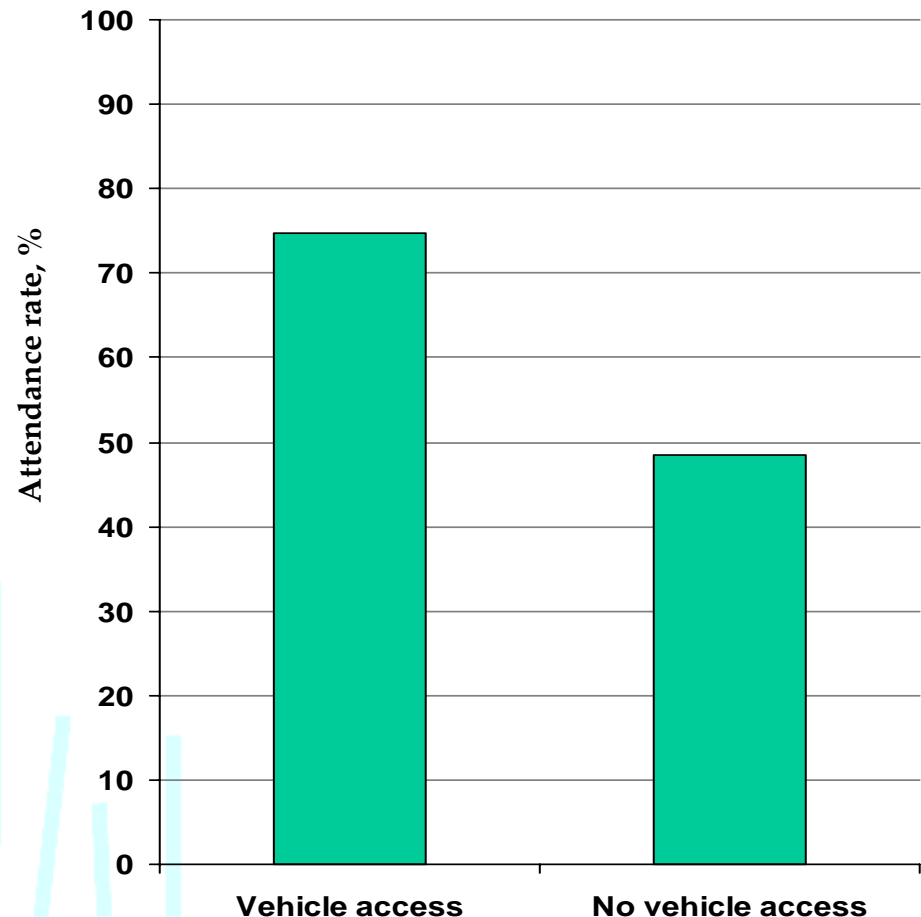
A person's **socio-economic group** is also a strong factor linked to attendance. Although this is itself related to many other factors, including vehicle access and health, even after taking into account these factors a person's socio-economic group remains correlated to attendance. Our model finds a person from a low socio-economic group (5-9) has a 44.4 per cent chance of attending a heritage site compared to 55.6 per cent for a person in a higher socioeconomic group (1-4).

Similarly, the **highest qualification gained** by a person is a good predictor of attendance – although not as good as socio-economic group. We find a person's income is not as strongly related to heritage attendance suggesting the reason behind the relationship is not financial.

A main barrier to attendance is a person's general **health**. We find that a person's general health has more of an impact on attendance rates than disability. People who are classified as having a limiting disability or illness are more likely to give their reason for not attending '*health isn't good enough*' rather than '*lack of facilities*' or '*would not feel welcome*'.

People from black and minority **ethnic** groups are less likely to attend a heritage site than people from a white background. This relationship is strong even after accounting for many social and economic factors.

Taking into account more wide ranging social factors, we find that being **taken to a heritage site as a child** has a stronger relationship on attendance as an adult than any other factor studied. If a person has been taken as a child the probability of attending as an adult is 67.0 per cent compared to 33.0 per cent for a person who was not taken as a child.

Being taken as a child has strong links to a person's socio-economic background and ethnicity. Taking these factors into account we find its influence is the most prominent. People who were encouraged to read and write as a child and taken to other places of interest are also more likely to attend heritage sites.

A person has been involved in any **volunteer** work in the last twelve months is more likely to attend a heritage site. Holding all other factors constant, our model predicts the likelihood of a person who has volunteered attending a heritage site is 64.8 per cent.

People running and leading volunteer work have highest attendance rates. They tend to be older, male, white and from higher socio-economic groups.

We also found that people with **internet access** at home are more likely to attend a heritage site even after accounting for income and socio-economic differences. A person with access is 58.7 per cent likely to attend compared to 41.3 per cent for someone without access to the internet.

Table 1: Factors linked to attendance at heritage sites, their predicted probability and implications

In order of strength of relationship

Factor	Predicted probability	Coefficient	Interpretation
Taken to a site of historic interest as a child	67.0%	0.44**	Being taken as a child has the strongest relationship with attending as an adult
Volunteer	64.8%	0.38**	The likelihood of a volunteer attending is 64.8 per cent
Vehicle owner in household	64.1%	0.36**	Having access to a vehicle increases probability of attending to 64.1% from 35.9%
Internet access	58.7%	0.22**	Internet access is strongly related to heritage attendance
Ethnic group	42.5%	-0.19**	People from a white background are more likely to attend than people from a non-white background
Smoker	43.6%	-0.16**	Smokers are less likely to attend heritage sites
Socio-economic group	44.4%	-0.14**	Higher socio-economic groups are more likely to attend
Health	54.8%	0.12**	Better health encourages attendance, bad health is a barrier to attendance
Highest qualification gained	54.8%	0.12**	More people with higher qualifications attend
Gender	45.6%	-0.11**	All else equal, women are more likely to attend
Area type	47.2%	-0.07**	People living in rural areas are more likely to attend but correlation is relatively low
Number of children	47.2%	-0.07**	More children in a household discourages attendance but limited relationship
Number of adults in household	48.0%	-0.05**	More adults in a household discourages attendance but limited relationship
Age	48.8%	0.03**	Older people are more likely to attend but age is not always significant
Income	48.8%	0.03**	Income has less predictive power for attendance than other factors
Region	-	-	We found the region in which a person lives does not impact attendance
Disability	-	-	A person's health has greater predictive power for attendance than disability

Factors that are found to not be important

We found that a person's **age, income**, the **region in which** they live and their **family structure** are not important factors behind a person's attendance at a heritage site.

Family structure, although sometimes important, is not found to be a strong factor behind heritage attendance. Both the number of **children** and the **number of adults** in a household have a limited correlation with heritage attendance. Although health and a being female have more of an influence when a person has children it has low significance. Results imply that having more adults in a household decreases the probability of attending heritage sites but this significance is also low. There is a high correlation between ethnicity and number of adults in a household and this could affect results.

A person's **disability** has limited or no impact on attendance at heritage sites once their health is taken into consideration.

Socio-economic group and education level have much more of an impact than their **income**. This is suggestive of background having more of an impact than a person's financial status. This is supported by low numbers reporting the reason for non-attendance as 'it costs too much'.

The **region** in which a person lives also makes no significant difference to whether or not they will attend a heritage site given their personal characteristics. Instead, it is the difference in the mix of people within the region that affects heritage attendance rates between regions. Regional differences are discussed in more detail on the next page.

Factors which are unclear

A person's **gender** has a limited impact on attendance. Evidence suggests that all else equal a female is more likely to attend a heritage site. However, the significance is low and this could be due to a partner's characteristics not being fully captured.

A person's **age** has little or no relation on the attendance at heritage sites. Although an older person is more likely to have bad health, taking this into account we find that older people are not more or less likely to attend than the younger generation or people who are middle-aged.

People living in **rural** areas are more likely to attend but the strength of the relationship is unclear. It appears people living in urban areas are less likely to be interested and have slightly worse health but no firm conclusions can be made.

Smokers are much less likely to attend heritage sites but the reasons behind this are unclear and the factor has strong links with socio-economic background and health.

Regional variations

Our results implied different attendance rates between the regions were a result of the different mix of people rather than any difference between the regions. The only difference (although not statistically significant) is that having access to a vehicle is not as important for Londoners. To test this we used our main model (specified in the technical report) to find what it would predict to be the attendance rates for each region given the types of people who live in the region.

The model accurately predicts that attendance in London should be lower than all other regions given the mix of people. The factors behind this are: less people with access to a vehicle; a higher share of ethnic minorities; more males (although not as many as East Midlands and West Midlands); it is a mainly urban area with more children in the household; a higher proportion of young people; and more households with four or more adults. This is despite London being a relatively healthy region with a high level of education.

Our model also accurately predicts that the South East will have the highest levels of attendance given the mix of people living in the region.

Also of interest is that the model suggests attendance rates in the West Midlands should be higher given the economic and social factors of the people in the region. It also suggests attendance in Yorkshire and Humberside is high relative to the types of people in the region.

Figure 1: Actual and predicted attendance at heritage sites, by region
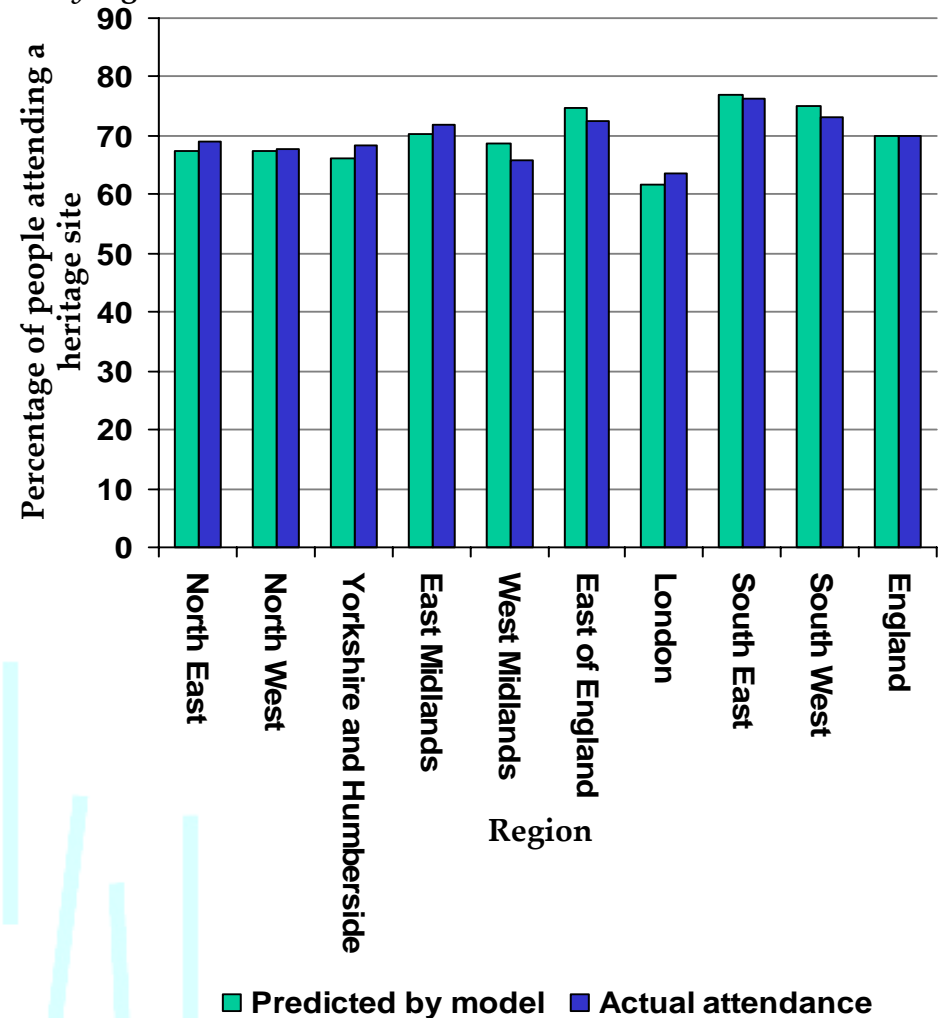
Attendance for different age groups

We found that a person's age had a limited correlation with attendance at heritage sites once other factors had been taken into account. Analysis implied low rates of attendance within the older generation were due to health factors and a lack of transportation. Results also suggested that low attendance by younger generations was not necessarily due to them being disinterested.

We the mix of people in each age group further to determine the main factors that behind different attendance rates. We let our main model predict attendance rates for each age group and compared it with actual attendance rates.

The model's predicted rates of attendance were similar to actual attendance rates. It suggested attendance among the 16 to 24 age group and the over 75s should be the lowest. However, a person's general health may not be accurately gauged from the survey. This may cause the average health level – and therefore their attendance rate – of people in the over 75 group to be overestimated. Similarly, the average health level of people between the age of 16 and 24 may be underestimated.

The main factors behind low attendance among people between the age of 16 and 24 are: there is a higher share of ethnic minorities; a higher proportion of males than females; more adults in the house; less likely to have access to a vehicle (although more likely than for people over 75 years of age); more likely to live in an urban area. People between the age of 16 and 24 also have the lowest average level of education. However, the relationship with education may be misleading because younger generations have had less time to complete their studies.

Figure 1: Actual and predicted attendance at heritage sites, by age
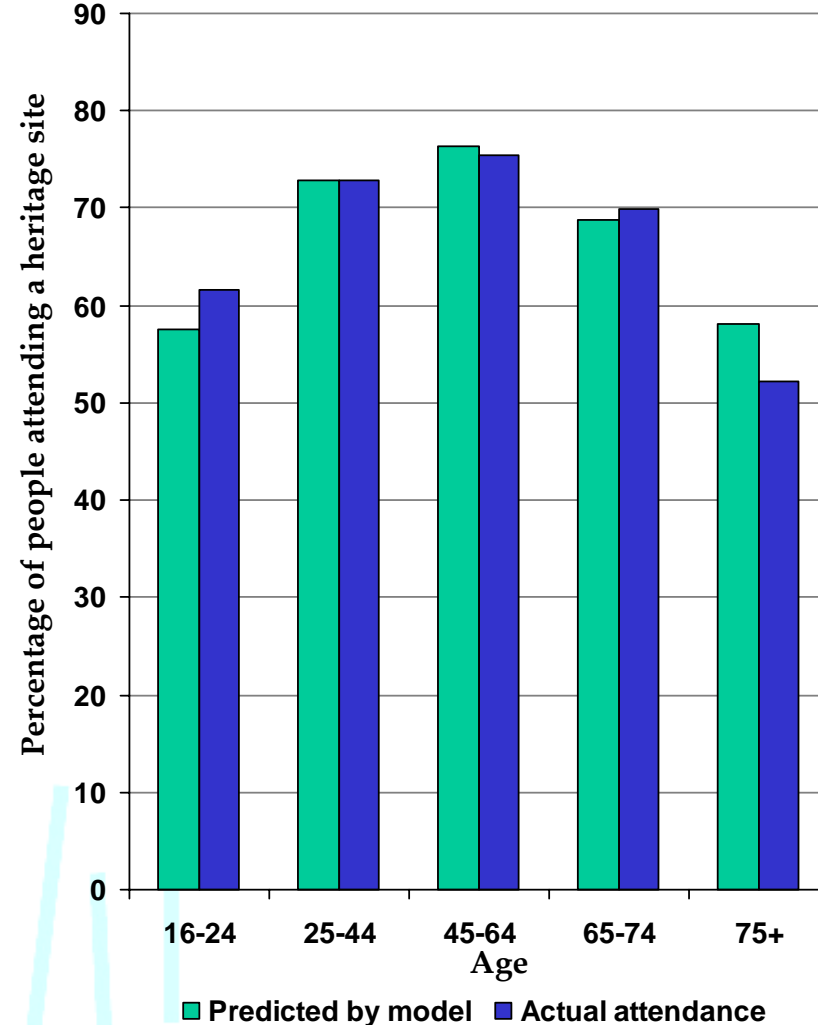
Frequency of attendance

We examined peoples attendance at heritage sites, taking into account whether or not they have attended at least once in the last twelve months.

We found there was no significant difference in the factors that determine whether or not a person attends a site and how often a person attends. This suggests by addressing the factors of attendance, frequency of attendance will also be addressed.

There is some evidence that suggests **disability** affects whether or not a person attends a heritage site but this is not significant. We find no evidence that a person's disability and the frequency they attend a site are related, given they have attended at least once in the last twelve months. As found in previous analysis, a person's health is a better predictor of attendance and frequency of attendance.

Ethnicity and number of **children** in a household, had a stronger relationship with frequency of attendance than attendance but the difference is not significant.

As with heritage attendance, we found being **taken as a child** is the most influential factor behind frequency of attendance. Following this, being a **volunteer** has the strongest relationship with frequency. Having access to a **vehicle** is also a good predictor.

Gender has less significance in the frequency of attendance model than the model that does not incorporate frequency.

The number of **adults** in a household, a persons **age**, **income** and the type of **area** they live in have low correlations with frequency of attendance.

Reasons for attendance and the place attended

We analysed peoples reasons for attending heritage sites and grouped them using statistical software. We found four main groups which are summarised below. We also analysed the types of people in each group and the heritage sites they attended, the latter can be seen in Figure 2.
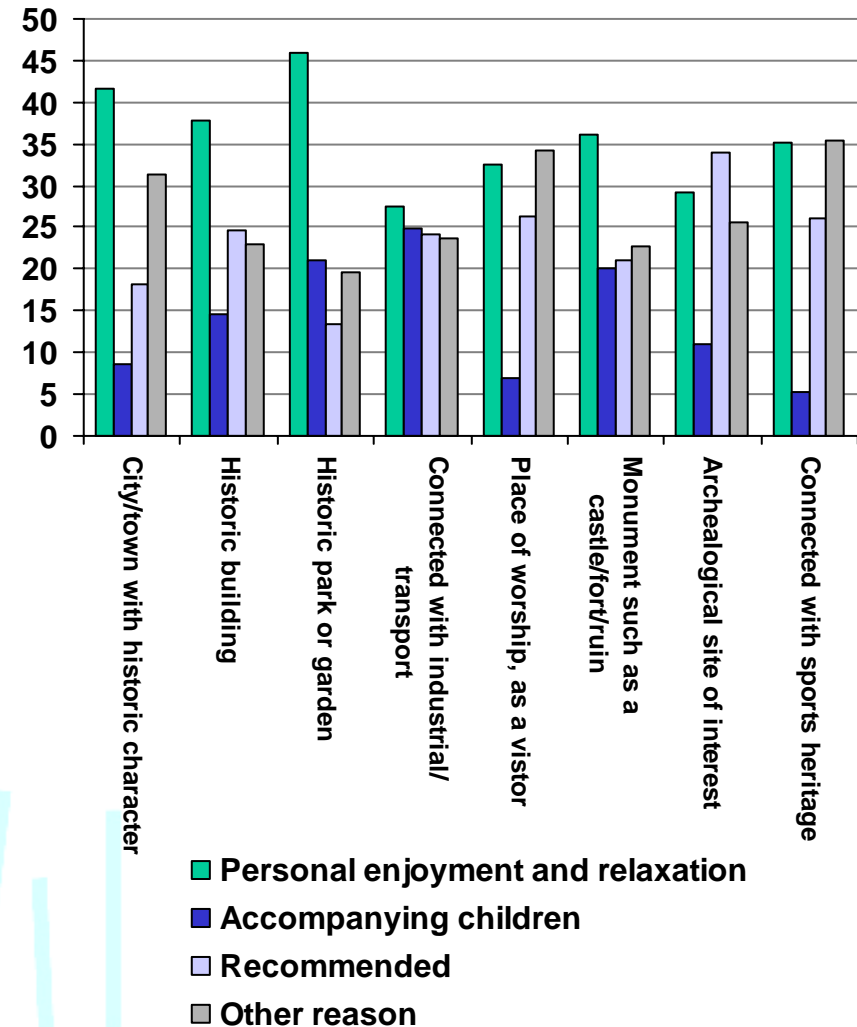
In the first group people went to heritage sites for **personal enjoyment and relaxation**. This group contains the largest share, 38.9 per cent, of those in the four groups analysed. People in this group tend to be male. They are more likely to visit a historic park or garden open to the public and/or a city or town with historic character.

People who attend heritage sites to **accompany children** tend to be female, between the age of 30 and 59. This was the smallest out of the four groups identified, containing 13.6 per cent of the people grouped. Within this group there are more from lower socio-economic groups and less people with a longstanding illness, disability or infirmity. People accompanying children are unlikely to attend a place connected with sports heritage or a historic place of worship.

People **recommended** by someone; want to learn something new; have been as a part of a group/ tour; recommended by the tourist information centre; or not been before are most likely to attend a site of archaeological interest. There are more young people (16-29) and old people (60+) and more people who have access to a vehicle in this group.

People in the last group had **other reasons** for attending that are not stated above. This group had the widest range of people and are most likely to attend places connected with sports heritage.

Figure 2: Reasons for attending sites and place attended

Legend:
- ■ **Personal enjoyment and relaxation**
- ■ **Accompanying children**
- □ **Recommended**
- □ **Other reason**

Reasons for not attending

We examined the reasons people gave for not attending heritage sites. We used a 'clustering' procedure to highlight groups within the wide range of reasons given. Four groups were found, these were:

The **first group** mainly responded to say they were '*Not really interested*'. This was the most popular response and consisted of 7.8 per cent of all those surveyed and 24.1 per cent of those in the four groups studied.

The **second group** had a wide variety of responses. This group contained 13.1 per cent of people surveyed and 40.3 per cent of people in the four groups.

In the **third group** were the people who stated their '*health isn't good enough*'. In this group were 4.1 per cent of people surveyed and 12.6 per cent of those in the four groups.

People the **fourth group** said '*it's difficult to find the time*'. This was the second most popular response and had 7.1per cent of people surveyed within it and 23.1 per cent of people in the four groups.

We then analysed the reasons given using a similar methodology as we used for analysing attendance. In particular, looking at all factors simultaneously we calculated which economic and social characteristics were most related to a person responding as '*not interested*', '*health isn't good enough*' and '*difficult to find the time*'.

We found a person's socio-economic group had the strongest relationship with a person's reason being '***not interested***'. Having access to a vehicle also has high predictive power. Males and smokers are less likely to be interested. There was also a high proportion of people between the age of 16 and 24.

We found whether a person has a longstanding disability or illness has the strongest relationship them responding as '***health isn't good enough***'. Older people are far more likely to declare this as their reason. Health is a similarly strong factor. Having access to a vehicle also has a particularly strong relation with health not being good enough. Likewise, but by a lesser extent, lower socio-economic groups and people living in an urban area are more likely to be found in this category.

Many of the usual factors that are related to heritage attendance did not have a significant relationship with the response: '***it's difficult to find the time***'. In particular, we find the following to be insignificant: a person's health; whether the person has access to a vehicle; area type; and gender.

The most significant factor correlated to '***difficult to find the time***' is whether or not a person has a longstanding illness or infirmity. A person with such a disability is much less likely to respond as 'difficult to find the time' than a person without such a disability. Asian's, younger people, people with children, smokers and lower socio-economic groups are more likely to declare 'difficult to find the time'.

Behavioural characteristics

A person's **age** and **gender** have limited impacts on attendance at heritage sites. However, if we look at behavioural characteristics these factors show that males, females, younger people and older people have different behavioural patterns that can be strongly linked to heritage attendance.

For instance, people who like folk or country and western music tend to have higher rates of attendance, at 90.3 per cent. This group is mainly male, between the age of 30 and 59 and from a white background.

People who like soul, R&B or Hip-Hop music have the lowest attendance out of the music lovers. However, attendance is still relatively high at 78.1 per cent. It has a high share of 16 to 29 year olds, the lowest level of longstanding illness, disability or infirmity. It has the highest level of vehicle ownership.

People who attended at least one arts event in the last twelve months had higher attendance at heritage sites. There were more females between the ages of 30 and 59 in this group. There is also high levels of vehicle access and low levels of longstanding illness, disability or infirmity in this group.

People who do not attend events had low attendance at heritage sites, at 41.7 per cent. There was a higher proportion of males, people over the age of 60, people with a longstanding illness, disability or infirmity, non-vehicle owners and people in lower socio-economic groups in this group.

We found people who run and lead volunteer work – usually individually rather than as a team – had the highest level of heritage attendance out of the people who volunteer, at 90.2 per cent. However, this group only contained 3.2 per cent of the total number surveyed. It had the largest share of people over 60, contained the most males, highest percentage of people from a white background and highest proportion of people in the higher socio-economic groups.

We found people who were encouraged as a child were more likely to attend heritage sites. Encouragement to read and write had more of an impact than encouragement to participate in sports, arts and other subjects. Females were much more likely to have given a response stating they were 'encouraged a lot'. This group also had a higher proportion of people between the ages of 20 to 44 than other age groups. There is a larger proportion of this group from London and the South East. People who were not encouraged at all tended to be over 60 years old.

Conclusion

We found that the main factors that are related to whether or not a person attends a heritage site are **accessibility** and a person's **background**. In particular access to a vehicle, being taken to a heritage site as a child and being in a high socio-economic group have the strongest relationships with attendance.

The factors that are associated with limited attendance are poor health, ethnicity and being in a lower socio-economic group.

Regional differences are due to the mix of people within the region. It will therefore be difficult to increase attendance at specific regions. Nevertheless, results suggest attendance rates in the West Midlands should be higher given the economic and social factors of the people in the region.

A person's age, income and family structure do not significantly affect the probability of them attending a heritage site.

We found there was no significant difference in the factors that determine whether or not a person attends and how often a person attends. This suggests by addressing the factors of attendance, frequency of attendance will also be addressed.

PSA targets

English Heritage would like to increase participation among groups highlighted in the Public Service Agreements. These are people with limiting disability, illness or infirmity, people from black and minority backgrounds and people from lower socio-economic groups.

We found that none of the factors examined could explain the extent of the low levels of attendance from **lower socio-economic groups** and **ethnic** minority groups even after controlling for vehicle and internet access.

A high proportion of Asians claim they cannot find the time. This cannot be explained by more children or other factors examined, nevertheless a more in-depth look into the types of activities specific ethnic groups partake in could explain a lower rates of attendance.

A person's disability does not appear to be a barrier to attendance. Instead, analysis implies a person's general health level has more of an impact. Rather than disability limiting attendance not feeling well enough discourages people from attending.

Overall, encouraging people within the PSA targets to attend heritage sites may be less to do with the heritage sites themselves and more with the health and background of individuals. This has implications for the strategies English Heritage may wish to take to meet the PSA targets. The factors that will encourage more people within these groups are not dissimilar to the factors that will encourage other groups, namely increasing access to the sites and encouraging involvement as a child.