

GEOGRAPHY COURSEWORK

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Study Title:

Do people have different perceptions of districts within a city and does this influence where they would prefer to live?

I declare that this individual study for the GCSE Geography examination of 2003 is my own work. It was produced without external assistance and is acceptable under the WJEC regulations.

Signed _____

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Geography Coursework Investigation

By Sarah King 10LW

Introduction

The purpose of my investigation is to investigate whether people have different perceptions of districts within Swansea and whether these perceptions influence where they would prefer to live.

There can be a big difference between the world as it is and the world as we perceive it to be. Geographers have long distinguished between the objective (actual) and subjective (perceived) worlds. Perceptions vary from person to person and influence their attitudes to the places around them. This investigation is to study people's perceptions to show how people's attitudes are an important dimension to where they would choose to live.

People's perceptions of different areas will be influenced by the environmental quality of a given area, the quality of the housing, the nature of the community, the services available and crime rates. Their perceptions may vary according to a person's age, gender, social class, ethnicity and experience.

Prediction

It is predicted that the most popular areas in Swansea will be those with good amenities, a good location (i.e. near the sea), little overcrowding and with a good community spirit.

Data Collection

A. Primary data

i) Questionnaire survey

The primary data that was needed to answer the question set was collected by means of a questionnaire survey. The questionnaire was designed to discover the most preferred and least preferred areas of a sample of 65 people. The people sampled were asked three questions:

- where they lived
- to rank the three areas they would most prefer to live in Swansea
- to rank the three areas they would least prefer to live in Swansea.

To help them with their answers, a base map of Swansea showing thirty residential areas was provided. An example of the recording sheet used and the map is in the Appendix.

Sampling method used

A sample of around 65 people (respondents) was asked as the sample needed to be representative of the population of Swansea as a whole. The larger the sample, the more reliable are the conclusions that can be drawn from it. The sampling method used was to stand at given points in Swansea's Central Business District (shown on CBD Map 1) and to ask people as they passed by to answer the questionnaire. These points were chosen across a wide variety of shops and areas in the C.B.D in order to ensure a wide variety of respondents. The sample was selected randomly. We could have asked every fifth person that passed, or asked a range of people across different ages and of both genders in order to get a good cross-section of the population. This was not practical as not everyone asked was happy to co-operate and answer the questionnaire.

ii) Photographs

Photographs were taken to show variation in the physical environment and the type of houses in some of the 30 residential areas on the map. (see pages 4 b and d)

Secondary data

i) House prices and sizes

In addition to the questionnaire survey, secondary data about house prices in Swansea was collected from estate agents. Estate agents were visited and information on house prices and house sizes was collected for the 30 Swansea districts. From this data the mean house price and the mean number of rooms was calculated for each of the 30 districts.

ii) 1991 Census data

To add to the information collected from estate agents, census data from 1991 was obtained from the City and County of Swansea. The census contains information about households with more than 1 person per room. This gives a measure of overcrowding in the different residential areas of Swansea and should back up the data collected from the estate agents.

Problems with the primary and secondary data

Questionnaire survey

Unfortunately some people were not prepared to co-operate and answer the questionnaire, they were rude and unfriendly and this made our survey more difficult. The kind of people usually willing to participate were young (i.e. thirty year old) men, this probably made our results biased. Some people's answers were not on the map so we didn't include them in our results, this makes the results a bit less accurate as it provided irrelevant material. This explains why the total scores for least preferred and most preferred areas do not match.

House prices and sizes

House prices will vary according to the size of the house as well as from area to area. This must be taken into account when looking at the variation in house prices across the city.

1991 Census data

The census data is now over 10 years old and there may have been changes since it was collected. Some areas may be more run down now compared to 10 years ago, whilst others may have been improved. This information is recorded in the Appendix.

Data representation and analysis

People's first preference was given a score of three, their second preference was given a score of two and their third preference was given a score of one. Their least preferred districts were ranked in the same way. A tally of the results obtained is summarised in Table 1. A net score was then calculated by subtracting the least preferred total score from the most preferred total score. This net score was then used to rank the 30 areas from highest (the most preferred area) to lowest (the least preferred area).

Table 1 - A tally chart to show the results of the questionnaire survey

RESIDENTIAL AREA OF SWANSEA	MOST PREFERRED	LEAST PREFERRED	NET SCORE
Bishopston	21	0	21
Newton	12	0	12
Langland	41	0	41
Mumbles	46	0	46
West Cross	22	0	22
Mayals	32	0	32
Killlay	23	0	23
Dunvant	6	0	6
Derwen Fawr	4	2	2
Tycoch	12	3	9
Sketty	32	1	31
Cockett	10	2	8
Townhill	10	41	-31
Uplands	29	2	27
Brynmill	13	3	10
Marina	18	21	-3
Hafod	11	11	0
St Thomas	2	25	-23
Port Tennant	0	32	-32
Bon-y-Maen	0	45	-45
Llansamlet	1	12	-11
Morryston	11	15	-4
Clase	0	11	-11
Treboeth	0	10	-10
Landore	1	13	-12
Manselton	2	1	1
Penlan	0	33	-33
Port Mead	0	31	-31
Fforestfach	1	20	-19
Winchwen	0	9	-9

Table 2 – A ranking of 30 Swansea districts from most preferred (rank 1) to least preferred (rank 30)

RANKING	RESIDENTIAL AREA
1	Mumbles
2	Langland
3	Mayals
4	Sketty
5	Uplands
6	Killay
7	West Cross
8	Bishopston
9	Newton
10	Brynmill
11	Tycoch
12	Cockett
13	Dunvant
14	Derwen Fawr
15	Manselton
16	Hafod
16	Marina
18	Morrison
19	Winchwen
20	Treboeth
21	Llansamlet
22	Clase
23	Landore
24	Fforestfach
25	St Thomas
26	Townhill
26	Portmead
28	Port Tennant
29	Penlan
30	Bonymaen

Table 3 – A tally chart to show the residential location of the 90 people questioned

RESIDENTIAL LOCATION	NUMBER OF RESPONDENTS
Mount Pleasant	4
Killay	2
Uplands	5
Mayhill	3
Birch Grove	1
Tycoch	4
Sketty	6
Rhossili	1
Brynmill	2
Langland	3
Mayals	2
Llansamlet	3
Brynhyfryd	1
Haford	1
Gowerton	1
Wuanarlwydd	4
Penclawdd	1
Pontliw	2
Mumbles	6
Newton	4
Crofty	1
Port Talbot	2
Dunvant	1
Morrison	5

Choropleth maps were used to show: the areas people would most like to live in Swansea (Map 1); the areas people would least like to live (Map 2); house prices in Swansea for 2002 (Map 3); and house sizes in Swansea (Map 4).

Areas people would most like to live in Swansea (Map 1)

This map shows a clear pattern, with the most desirable houses located in the south and west of the city, with scores of over 20 points. There is one exception, Morrison, which lies to the north of the city and has a score of over 20 points.

Areas people would least like to live (Map 2)

This map shows a pattern of the least desirable houses located in the central and eastern parts of the city, where the scores were over 40 points. In general this pattern was the opposite of the pattern shown in Map 1.

House prices in Swansea for 2002 (Map 3)

This map shows that in general house prices were higher to the south and west of Swansea. However, there is one area, Uplands, an area of high house prices (£121-220,000) that is surrounded by houses with a generally low price (£20 -121,000). These are very broad bands of house prices however.

House sizes in Swansea (Map 4).

This map shows a more even pattern, with many areas in the city with three or four bedrooms. One area that was an exception was The Marina, with an average score of only 2 rooms as it is made up of flats.

Map 5 is a Flow Chart to show the areas the respondents lived. It shows that the people questioned came from a variety of locations across Swansea, with some living outside the urban area.

Spearman Rank Correlation

This is a technique that looks at relationships between two sets of data. First a scattergraph and best fit line were drawn (Graph 1) The five most preferred areas were listed in the table together with the five least preferred areas. The net scores were recorded in one column and the census data on overcrowding was recorded in another column. The Spearman rank correlation technique was used to see if there was a relationship between these two sets of data.

Residential area	Net score	Rank	Overcrowding (percentage%)	Rank	Difference in ranks (d)	Difference squared (d) ²
Mumbles	46	1	1.1	8	7	49
Langland	41	2	0.2	10	8	64
Mayals	32	3	1.2	7	4	16
Sketty	31	4	0.7	9	5	25
Uplands	27	5	2.2	5.5	0.5	0.25
Townhill	-31	6.5	4.6	1	5.5	30.25
Portmead	-31	6.5	3.5	3.5	3	9
Port Tennant	-32	8	2.2	5.5	2.5	6.25
Penlan	-33	9	3.5	3.5	5.5	30.25
Bonymaen	-45	10	3.7	2	8	64

$$\begin{aligned}
 \text{Equation} &= 1 - \frac{6 \times \sum d^2}{n_3(n-1)} \\
 &= 1 - \frac{6 \times 294}{10(100-1)} \\
 &= 1 - \frac{1764}{990} \\
 &= 1 - 1.78
 \end{aligned}$$

$$\text{ans} = -0.78$$

If the answer was 1 there would have been a perfect 'correlation', if it was 0 there would be no correlation. A number near -1 would tell us it had a strong negative correlation. The answer of -0.78 is very close to -1 and thus tells us that there is a strong negative correlation between people's perceptions of an area and how overcrowded a place is. The more overcrowded an area is, the less desirable it is.

A scattergraph and best fit line were drawn (Graph 2) to show if there was any relationship between preference for an area and house prices. Next a Spearman rank correlation technique was used to see if there was a relationship between an area's ranking in terms of preference and the house prices collected. As the preference for an area increases, the house prices for that area should increase also. Therefore there should be a positive correlation.

Residential area	Net score	Rank	House prices (mean £)	Rank	Difference in ranks (d)	Difference square (d) ²
Mumbles	46	1	321,000	2	1	1
Langland	41	2	220,000	3	1	1
Mayals	32	3	322,000	1	2	4
Sketty	31	4	120,000	5	1	1
Uplands	27	5	198,000	4	1	1
Townhill	-31	6.5	37,500	7	0.5	0.25
Portmead	-31	6.5	35,000	8	1.5	2.25
Port Tennant	-32	8	33,000	9	1	1
Penlan	-33	9	39,950	6	3	9
Bonymaen	-45	10	31,500	10	0	0

$$\begin{aligned}
 \text{Equation} &= 1 - \frac{6 \times \sum d^2}{n_3(n-1)} \\
 &= 1 - \frac{6 \times 20.5}{10(10-1)} \\
 &= 1 - \frac{123}{990} \\
 &= 1 - 0.12
 \end{aligned}$$

$$\text{ans} = 0.88$$

As the answer is close to 1 this proves a positive correlation between house prices and where people would prefer to live.

Conclusion and Evaluation

From the investigation it can be concluded that Mumbles proved to be the most desirable location, with a net score of 46, those sampled identifying it as their preferred location. The photographic evidence helps to explain why this is the case. Mumbles is a seaside location with good views over Swansea Bay. It is also very accessible so people will have been more likely to visit it and know about its qualities. The second most preferred location was Langland, for similar reasons. The maps showing the most preferred location are supported by the maps giving house prices and house sizes. The most desirable locations had the highest house prices and the largest houses. People's preferred areas are mostly in the south and west of the city (see maps) these areas seem to be the ones with open space and a good standard of housing with some of the areas having nice views of the coast (see photographic evidence on p. 6b). One exception was Morriston which is in the north but has a high preference score; this can be explained by the number of respondents from this area. The Spearman Rank Correlation test proved that there is a strong relationship between the most preferred areas and the most expensive houses, while another Spearman rank test showed a negative correlation with preference decreasing as overcrowding increased.

The areas that people least preferred to live in tend to be in the north and east of Swansea. These appear to have a run down appearance (see photos on p. 6d) and areas of cheaper housing and higher levels of overcrowding.

Most of the respondents came from the west of Swansea, this may be because there are other big towns such as Neath and Port Talbot to the east of Swansea. Swansea is the main city for those living in west Wales and this imbalance may have affected the results obtained.

These results show an east west divide in the city with the western residential districts more desirable, more expensive and with larger houses. The reasons for this preference could be partly explained because of the south westerly prevailing winds that would blow pollution over to the east side of the city. As a result eastern parts of Swansea would be the least desirable with the poorest environmental quality, location of industry and location of workers' housing.

This study could be improved by investigating how people's perceptions vary according to their age, gender, ethnicity and where they were brought up. Additional questions could have been asked to help explain why people have a preference for certain areas or dislike others. For example people could have been asked to name two things that they like most about the areas they prefer and two things they like least about the areas they dislike. Even more interesting would be to ask them to rank areas according to particular qualities such as beauty, cleanliness, quietness, friendliness and accessibility. In addition an environmental survey could be done of the most desirable and least desirable areas to see how important the quality of the environment is in influencing people's perceptions. The study could also be repeated after a given period of time has passed to see if people's perceptions change as some areas of the city decline and other parts are improved. For example at one time the South Dock area of Swansea was a very run down area and it has been improved through urban regeneration programmes. It now contains Swansea's Marina and some high -grade housing. People's perception of this area may change over time as a result.

APPENDICES