

Statistical Methods

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Designing the Questionnaire

In order to design the questionnaire as a group we had to combine our thoughts and develop a questionnaire that would maximise the proportion of subjects answering the questionnaire, and obtain accurate relevant information.

We decided to include questions that would prompt a response from the subject in a closed and open manner. Short simple sentences were used to minimise the subjects' confusion, we avoided negative questions where possible. We designed questions to minimise bias and we did decided to include some questions that have a grading value from 1-5.

The question regarding the most important issues we allowed multiple answers to this as the subjects usually had more than one issue at the forefront of their concern e.g. 1 subject could want Education and Health and Law and Order on their priority list.

We also included a question at the end of the survey to allow the subject to share any other views that they thought pertinent to the upcoming General Election.

Once we had gathered our questions we compiled a draft questionnaire using Microsoft Excel. We chose Excel instead of Microsoft Word to compile the questionnaire, as it is easier to combine and assess the data extrapolated from the questionnaires. The draft was run through twice to check for validity of the questions and their relevance to the topic of the questionnaire. When we were happy with the layout of the questionnaire, we proceeded to stage two, collecting the data.

Collecting the Data

After combining questions and producing our questionnaire, we went our separate ways to gather the data from our subjects. We each had 10 questionnaires, which had 14 questions on it. The ideal scenario being to capture data from a cross section of the population to include as many different age ranges as possible to maximise the proportion.

We visited various locations around the town and carried out the questionnaire, most of the subjects were happy to answer the questions, and only a small percentage of subjects were unable to supply us with the information we were looking for.

Combining the Data

Once all the data had been gathered it was decided that one member of the group should collate the data from all the questionnaires, and using a blank questionnaire and the Tally system we calculated the amounts for each response to each question.

When the Tally was complete we proceeded to enter the information into the Excel spreadsheet and work out the percentages for the responses to questions.

		Tally	Percentage
1) Which Age Group do you fall into?	18-25	14	35
	26-35	6	15
	36-45	8	20
	46-55	5	12.5
	56-65	3	7.5
	65+	4	10
2) Are you Male or female?	Male	23	57.5
	Female	17	42.5
3) What is your employment status?	Employed	14	35
	Self Employed	3	7.5
	Unemployed	3	7.5
	Retired	5	12.5
	Student	11	27.5
	Other	4	10

Data Analysis

From the data we gathered from the questionnaires we could formulate the following conclusions:

- The greatest percentage of age range was 18-25 year old at 35% followed by 36-45 year olds at 20%
- 57.5% of the population was Male and 42.5% was Female
- 35% of the Population was employed, 27.5% were students and 7.5% was unemployed.
- 40% of the Population was single and 35% was married.
- 35% of the Population thought they may vote at the next election
- 42.5% were somewhat interested by the next election
- 35% of the Population thought they would vote Labour at the next election, 27.5% would vote Conservative, 12.5% would vote Liberal Democrat and Green Party, 7.5% would vote UK Independent Party and 5% would vote for an undisclosed party.
- 45% thought that the government had neither failed or delivered on its last election promises, 17.5% thought it had done very badly and 5% thought it had done excellent.
- 16% of the population thought that Education was an important issue, 14% thought the price of petrol was important while 13% thought that the NHS and taxes were important.
- 52.5% thought they would vote for the part with the best policies, 17.5% thought they would vote for the party with the best leader.
- 30% of the Population thought that Labour would win the next election in the Taunton Constituency, while 17.5% didn't know and thought Liberal Democrat would win. 12.5% thought Conservative would win, and 7.5% thought UK Independence would win. 15% refused to answer.

Population Parameters

The parameters that we had, when we were making the questionnaire, were what kind of people that we are going to ask them. When we had to work out the limits we had was that the amount that we needed to know was the minimum and maximum total of people that we were going to ask for the questionnaire to be filled out sufficiently. We thought that a minimum of 36 an maximum of 44 so we thought that the best idea was to split the amount of the two and went with 40 as it was the median of the two numbers.

In the following table shows the questions which was asked that the results found was that we found that the percentages was as follows:

1)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
Which age group do you fall into?	18 – 25	35%
	26 - 35	15%
	36 - 45	20%
	46 - 55	12.5%
	56 - 65	7.5%
	65 +	10%

2)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
What is your employment status?	Employed	35%
	Male	57.5%
	Female	42.5%

3)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
What is your employment status?	Employed	35%
	Self Employed	7.5%
	Unemployed	7.5%
	Retired	12.5%
	Student	27.5%
	Other	10%

4)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
What is your marital status?	Married	35%
	Single	40%
	Separated	10%
	Divorced	10%
	Single	5%

5)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
On a scale of 1 to 5 how likely is it that you will be voting at the next election?	Not voting	15%
	Probably not	17.5%
	May Vote	35%
	Likely to vote	22.5%
	Will Vote	10%

6)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
How interested are you in the general election that is likely to be held soon?	Very Interested	15%
	Somewhat interested	42.5%
	Not very interested	25%
	Not at all interested	10%

7)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
Which political party might you vote for at the next general election?	Labour	35%
	Conservative	27.5%
	Liberal Democrat	12.5%
	Green Party	12.5%
	Independent	7.5%
	Other	5%

8)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
On a scale of 1 to 5 how do you feel the current government has delivered on its election promises from the last election?	Very bad	17.5%
	Poor	10%
	Not bad not good	45%
	Good	22.5%
	Excellent	5%

9)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
On a scale of 1 to 5 how do you feel the current government has improved education?	Very bad	2.5%
	Poor	15%
	Not bad not good	32.5%
	Good	37.5%
	Excellent	12.5%

10)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
On a scale of 1 to 5 how do you feel the current government has improved the health service?	Very bad	2.5%
	Poor	20%
	Not bad not good	35%
	Good	30%
	Excellent	12.5%

11)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
What is the most important issue to you in the next election?	Joining the euro	6%
	Law and order	10%
	Education	16%
	Environment	3%
	NHS	13%
	Inflation prices generally	5%
	Pubic Transport	6%
	Taxes	13%
	The Economy	3%
	Unemployment	4%
	Price of petrol	14%
	Don't know	2%
	Refused to answer	3%
	Other	1%

12)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
Why would you vote for one party over another? Which is the best reason	The party has the best policies	52.5%
	The party has the best leader	17.5%
	I really preferred another party but it stood no chance of winning	10%
	Other	20%

13)

<u>Question</u>	<u>Category</u>	<u>Percentage</u>
Which party do you think will win in this constituency	Labour	30%
	Conservative	12.5 %
	Liberal Democrat	17.5%
	Green Party	7.5%
	Independent	17.5%
	Other	15%

Looking at the percentage results it shows that the most common answers would have been from a male that is between 18-25 and employed. They are single that is likely to vote and is somewhat interested in the election. They will be voting for the Labour party and think that the current party has not done good but also has not done bad on its election promises, has done good towards delivering the education side of their promises and not good but not bad on the National Health Service. Education is the main priority and the population has decided to go with the labour because of its best policies.

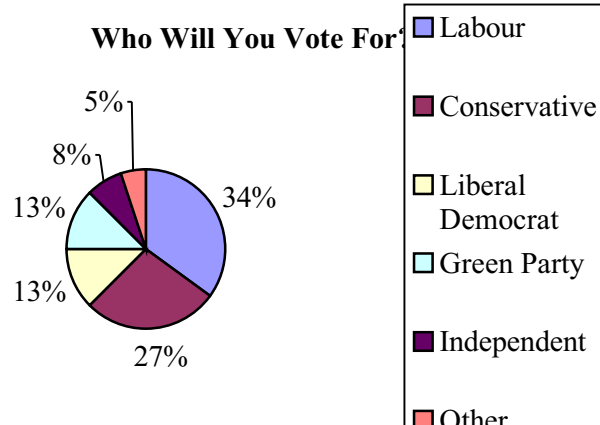
Predictions for the Next General Election

Based on the information we collected from the questionnaires, we conclude that the population would prefer for Labour to win the next election, with the Conservatives in a very close second, and Liberal Democrats in third place.

The table below shows the tallied results of our questionnaire, which backs up our prediction:

		Tally	Percent
Who Will You Vote For?	Labour	14	35
	Conservative	11	27.5
	Liberal Democrat	5	12.5
	Green Party	5	12.5
	Independent	3	7.5
	Other	2	5

The graph below also shows the results:



The question ‘Which party do you think will win the Next General Election in this constituency?’ was also asked in the questionnaire. The results are shown below:

		Tally	Percent
Which party do you think will win in this constituency?	Labour	12	30
	Conservative	5	12.5
	Liberal Democrat	7	17.5
	Independent	3	7.5
	Don't Know	7	17.5
	Refused To Answer	6	15

These results also back up our conclusion that the population would prefer the Labour party to win the election, as 30% of the population think that Tony Blair will win, even if they don't want him to.

The results shown are just for this constituency, so based on our conclusions it is of our opinion that this trend of the Labour party being ahead in the polls will reflect the national outcome of the next General Election.

Limitations of the Survey

Location

In our group we surveyed about 40 people throughout the Taunton area; we would have had more choice of comparison if we chose some different towns rather than just Taunton on its own. If we had collected information and analysed different towns points of views we might have received different opinions, e.g. if they had better services than us or if they have more pollution it might make the voter think more about those areas and party policies towards those areas.

Population

There are a lot of the population that don't vote, never have voted or don't know anything about the elections or the parties. We are expecting from the target population an answer to which party they may vote for, the information we received we expect to be right. We are limited to the correctness of the data we collect, as some people may not put correct information down on the survey, as they may not know anything about the parties and their policies.

Quality of survey

The quality of the survey may be limited, due to the way the survey is carried out. The response we get from our target population may vary as the effort in answering the questions might change from person to person, e.g. we may get a person who is wide awake and knows everything about the general elections and then we might get data from someone else who is half asleep and has little knowledge on the general elections.

When answering question 11 in our group survey, we only gave our target population the option to choose one important issue and we have limited views from them, it would have been better to ask the target population this question, from one to five give your views to which is the most important issue or issues? So we get a wider range of views of what our target population want.

Random Sampling or self selected data

If when the survey was taken and the people were self selected and not random sampled. We wouldn't get the data we wanted to collect from our target population. We collected random data and we wanted random views from our target population so we could understand what issue/s they would prefer to have discussed at the next general election in 2005.

If we self select our target population and we choose to ask the questions to a target group of all students or people aged 65+ we would get similar views on some of the issues. E.g. a student moans about finance all the time so they would complain about petrol prices, tax and student loans. A person who is 65+ may be interested in public transport, National Health Service and joining the euro. So our data wouldn't be very random at all. We looked at getting views from a wide range of different people.

Personal Questions

We were limited to how far we could delve into people's lives, so we didn't upset them by being too nosy. We made simple questions that didn't need names, address or any other personal data, just whether they were male or female and what age group they would fall under. Simple questions the target population would be happy to answer.

How did the Group Work?

I personally feel that the group could have contributed a lot more than they actually did. I issued timescales and deadlines, all of which were very rarely met and chasing members of the group for information and completion of their assigned sections of the report became very exasperating.

We started out with the group designing their individual questionnaires, myself and person N, had designed our questionnaires whilst the other members of the group Person R and Person A had still to come up with any questions at all. So with only 4 weeks to go Person N and myself decided that we would combine the questions that we had come up with, as we could see real possibilities that the group would not have time to gather the information and process it before hand in time.

I collated the questions in Excel and issued copies of the spreadsheet to the other members of the group. The following week I asked how many questionnaires had been completed and the answer was somewhat limited. I was ready to present the data that I had gathered and so I tallied my information up, the others were asked to ensure that they had gathered their information by the next week (2 weeks to hand in).

At the 2 week to hand in stage, the questionnaires I requested were given over to me to tally up the results. I decided that due to the lack of interest shown by person A and Person R that it would be best to take on the responsibility for collating the information, or I could see it not getting done. I collated the data and drew up some of the charts and most of the report in the tutorial lesson, and asked Person R to take care of the Parameters section of the report and Person A to take care of the predictions section. Person N was responsible for the limitations section of the report, whilst I prepared the rest. Person A completed his section that day and handed it over for amalgamation into the main report, as did Person N, however yet again Person R did not hand in anything, I asked him to email me over the weekend the results, however nothing arrived. I asked Person R when I arrived on Tuesday, and he stated that he had been busy working all weekend, and had not had the time to complete it, so I reminded him that the work was due in 2 days from then, and that if the section he was working on was not handed in with the report, we would lose marks as a group. With one day to go I have just been handed the information for parameters from Person R.

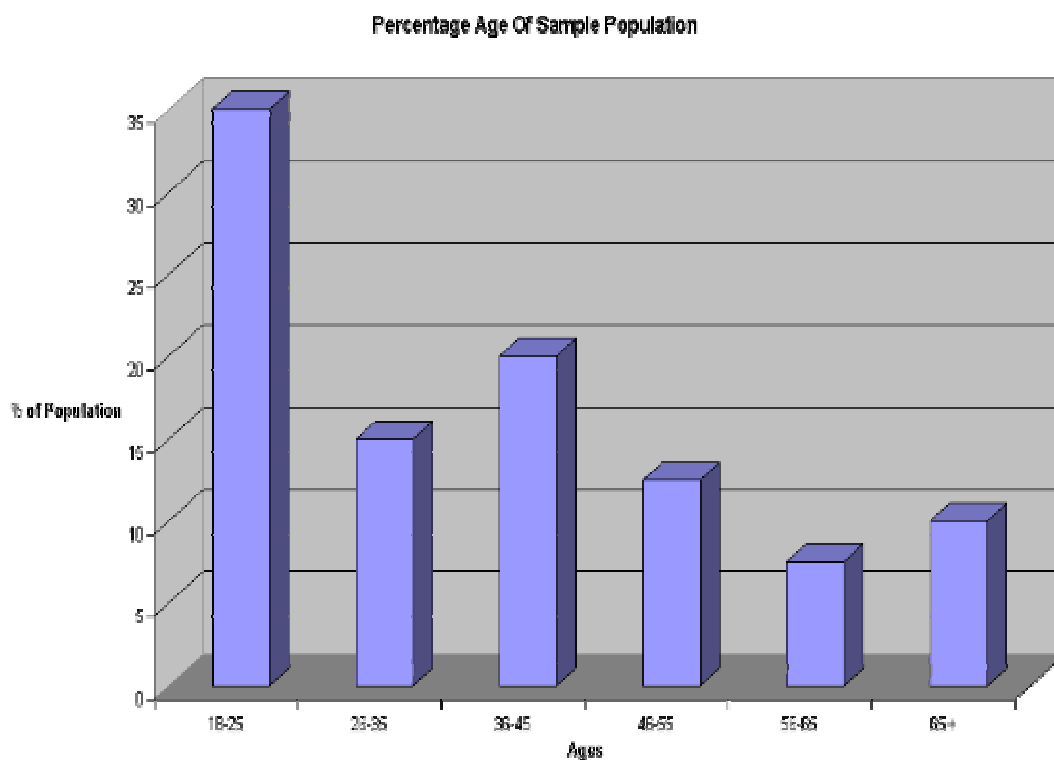
I feel that it isn't fair to penalise the rest of the group (well myself and Person N really!!) due to the neglect of the other members of the group, and some of their inabilities to use basic time management skills to prepare their workload. It does seem to be a re-occurring flair within certain members of the group to ensure that work due to be handed in is prepared at the very last minute available.

Now this may seem as if I'm saying that I did most of the work on this report, and if I'm being honest, I probably did, and that was because I could see us handing in nothing of value, and I am on this course to pass. If we could do it all over, I'd ensure a better enforcement of deadlines was adhered too, greater group participation and that there was improved communication between members of the group.

Appendices

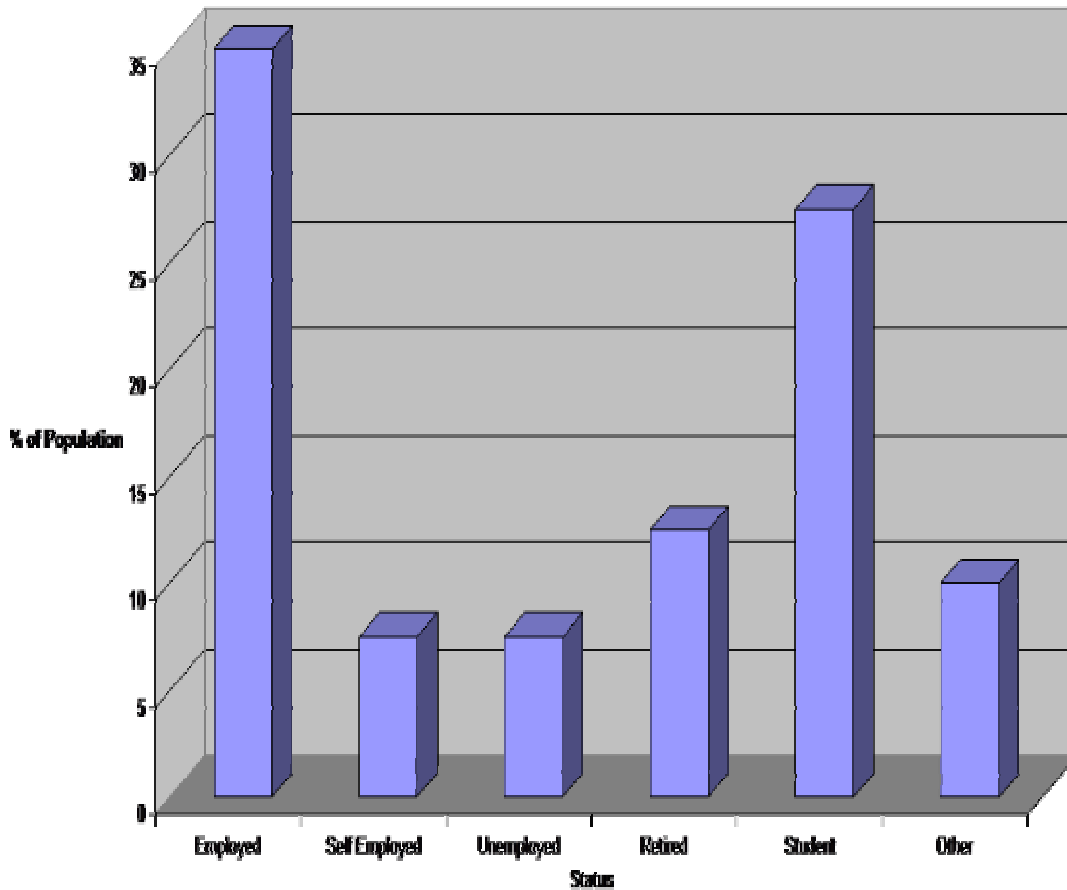
Appendix (A) Graphical Representation of Data

Within this appendix is a selection of the charts that we have compiled based on the information we received for each question we asked.



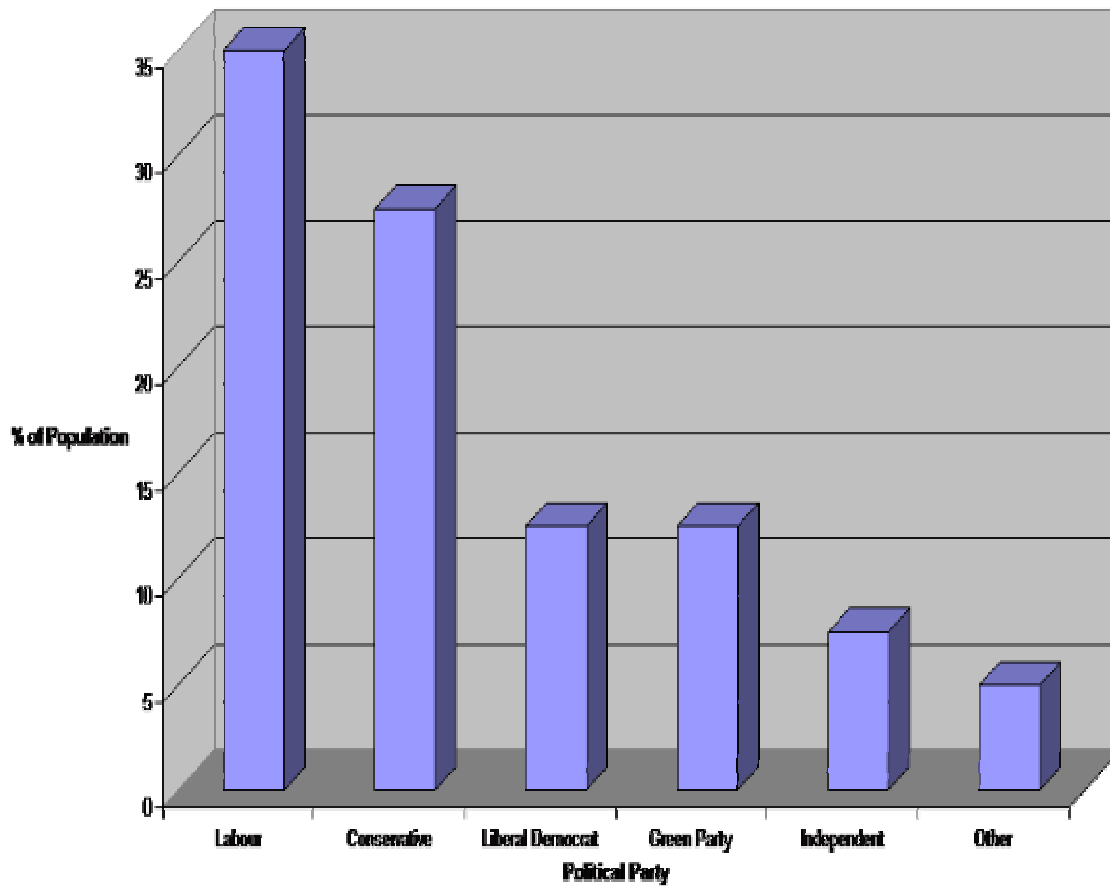
This table shows the ages of the population we sampled as a percentage. We can clearly see from this that the largest range of the population was between 18 and 25 years old with 35%, whilst the oldest was between 56-65 with 7.5%

Percentage of Employment status



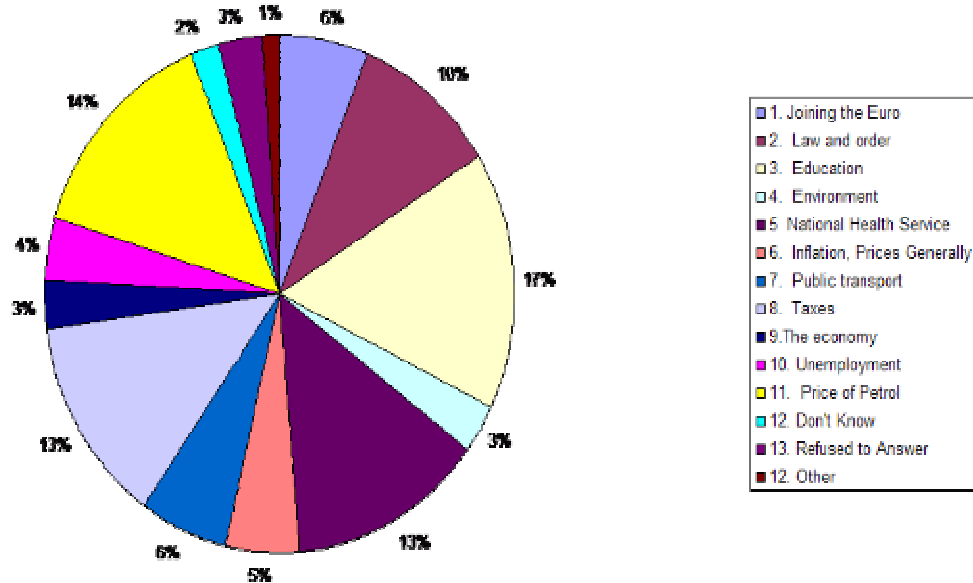
From this graph we can see that the majority of those questioned were in Employment, followed closely by Students, which is interesting when you think back to the Ages of the population, 35% of those questioned were between 18-25, does this indicate that a majority of the population questioned were located at the college or was the group lucky to catch students in town, as 35% of the population were also Employed as well as between 18-25.

Which Political Party Percentage



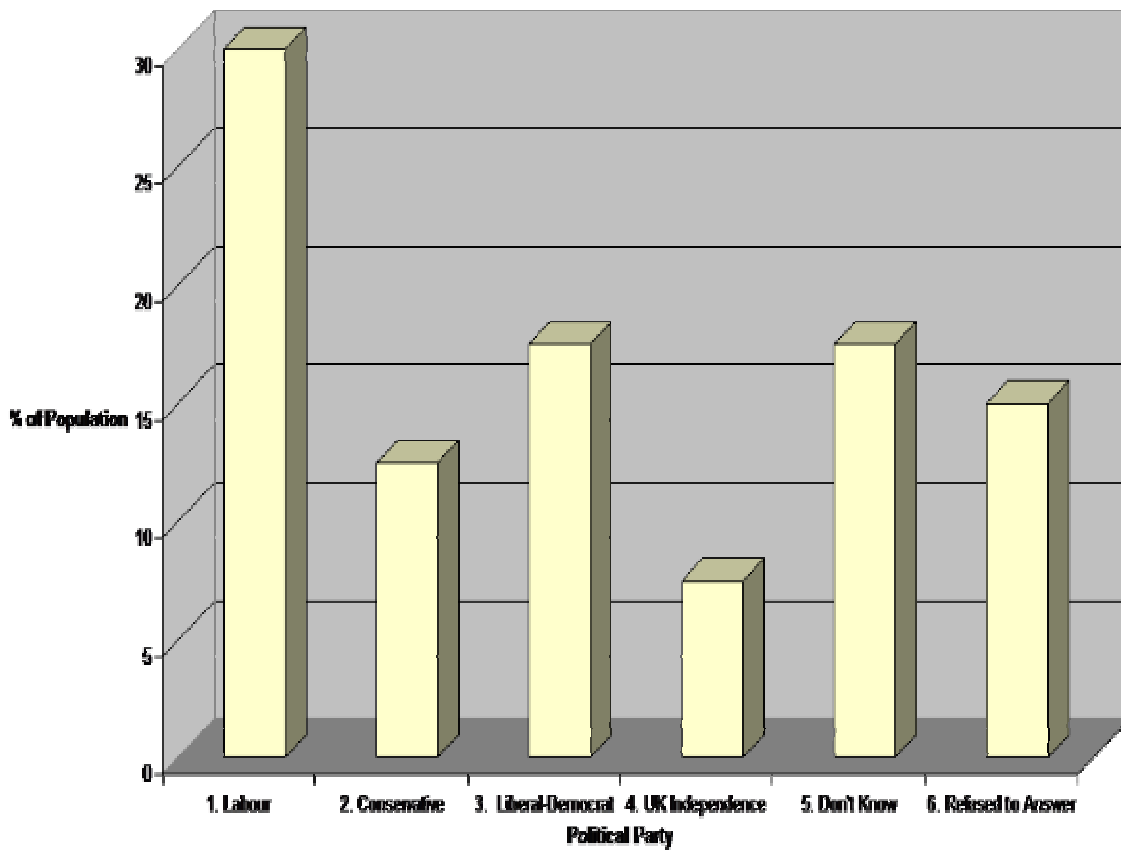
From the population that we questioned we also found that 35% of the population would vote for Labour. So we have 35% of the population are between 18-25 are Employed and would be voting Labour. The next highest percentage of the population, 27.5% would vote conservative.

Important Election Issues Percentages



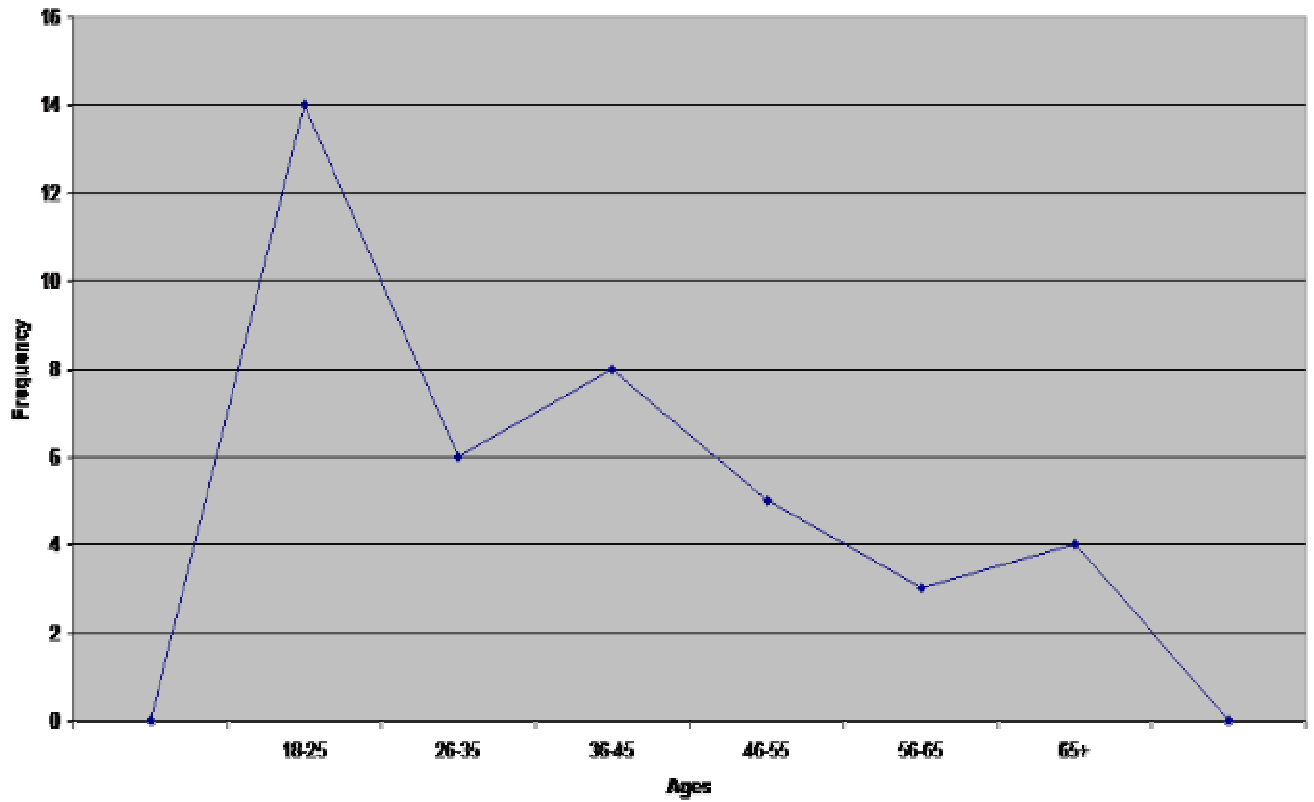
When it came to asking the population about any issues that they were concerned about, we allowed for multiple answers and adjusted the calculations for the percentages to reflect this. Not surprisingly the most concerning issue was Education with 17% of the population agreeing that this was their biggest issue for the next Government. Surprisingly Petrol prices came next on the list of issues with 14%. Taxes and National Health Service were the next biggest issue with 13%. Aside from those that didn't want to answer or those that did not know Unemployment and the Economy were the least of the populations concerns.

Who the Population think will Win the next Election In Taunton



The population thought that in the constituency of Taunton, the Labour party would win by a majority of nearly double that of the nearest competitor the Liberal-Democrats and the Don't Knows. If this was replicated amongst the other constituencies across the country we can see that the Labour party would win the next election with a comfortable majority.

Frequency Distribution of Ages of Population



This is a frequency distribution chart to show the frequency of the age ranges that were taken from the population, again we can clearly see from this chart that the 18-23 year old age range was the one that was the most frequently asked within our population.

Appendix (B) Questionnaire

<u>Question</u>	<u>Answer Selection</u>	<u>No. of Responders</u>
1) Which Age Group do you fall into?	18-25	14
	26-35	6
	36-45	8
	46-55	5
	56-65	3
	65+	4
2) Are you Male or female?	Male	23
	Female	17
3) What is your employment status?	Employed	14
	Self Employed	3
	Unemployed	3
	Retired	5
	Student	11
	Other	4
4) What is your Marital status?	Married	14
	Single	16
	Separated	4
	Divorced	4
	Other	2
5) On a scale of 1 to 5 how likely is it that You will be voting at the next election?	1 Not Voting	6
	2 Probably Not	7
	3 May Vote	14
	4 Likely to vote	9
	5 Will Vote	4
6) How interested are you in the general Election that is likely to be held soon?	Very interested	6
	Somewhat interested	17
	Not very interested	10
	Not at all interested	7
7) Which Political Party might you vote for at the next General Election?	Labour	14
	Conservative	11
	Liberal Democrat	5
	Green Party	5
	Independent	3
	Other	2
8) On a scale of 1 to 5 how do you feel the current government has delivered on it's Election promises from the last Election?	1 Very Bad	7
	2 Poor	4
	3 Not Bad not Good	18
	4 Good	9
	5 Excellent	2

<u>Question</u>	<u>Answer Selection</u>	<u>No. of Responders</u>
9) On a scale of 1 to 5 How do you feel the current government has improved Education?	1 Very Bad	1
	2 Poor	6
	3 Not Bad not Good	13
	4 Good	15
	5 Excellent	5
10) On a scale of 1 to 5 How do you feel the current government has improved the Health Service?	1 Very Bad	1
	2 Poor	8
	3 Not Bad not Good	14
	4 Good	12
	5 Excellent	5
11) What is the most Important issue to you in the next election?	1. Joining the Euro	6
	2. Law and order	10
	3. Education	16
	4. Environment	3
	5 National Health Service	13
	6. Inflation, Prices Generally	5
	7. Public transport	6
	8. Taxes	13
	9.The economy	3
	10. Unemployment	4
	11. Price of Petrol	14
	12. Don't Know	2
	13. Refused to Answer	3
12. Other	1	
12) Why would you vote for one party over another? Which is the best reason?	1. The party has the best policies	21
	2. The party has the best leader	7
	3. I really preferred another party but it stood no chance of winning	4
	4. Other	8
13) Which Party do you think will win in this Constituency?	1. Labour	12
	2. Conservative	5
	3. Liberal-Democrat	7
	4. UK Independence	3
	5. Don't Know	7
	6. Refused to Answer	6
14) Is there any other issues that you feel need to be included in the party manifesto at the next election?	No More Wars	
	Re-Introduce Fox Hunting	