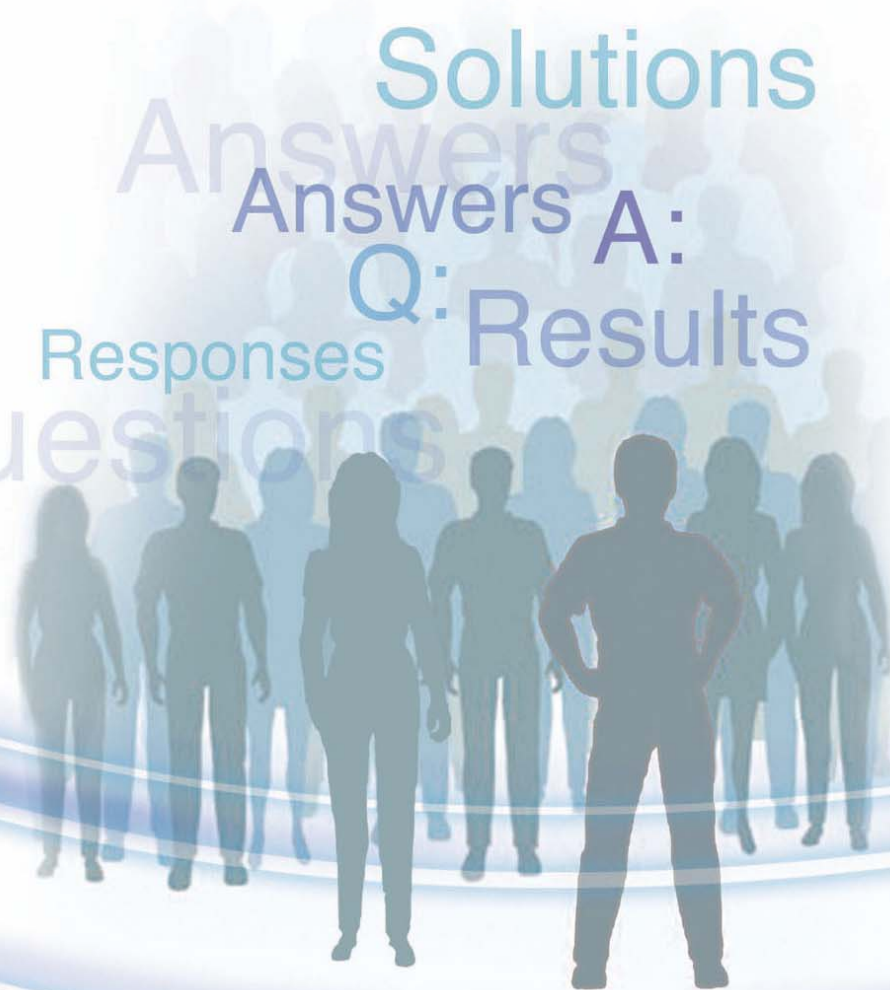


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Responses
Questions



Internet Poll Trial

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**Published by The Guardian and the
International Journal of Market Research**

1. Introduction

Considerable interest has been expressed in the possibility of conducting polls via the internet, and such interest has been heightened by the appearance in the UK of the internet polling company YouGov.

Popular belief that opinion polls can accurately measure public opinion is based largely on their success in predicting the outcome of elections. Despite some notable failures (1992) for the most part polls in the UK have given a good guide to the eventual result. ICM's telephone methodology, developed after 1992 with the full support of The Guardian's editorial team, proved extremely accurate in particular in 1997 and 2001 as well as at several other elections in between.

But neither ICM or The Guardian are complacent and recognise that past success is no guarantee of future accuracy. However before switching to a new polling methodology both organisations are concerned to ensure that any alternative they adopt is likely to be at least as successful as telephone polls.

The accusation most easily levelled at on-line polls is that because only about half of the population have access to the internet their samples – and thus their results – cannot possibly be representative of the population as a whole. Nevertheless, YouGov have been successful in predicting the outcome of the last general election, the Conservative Leadership election and the first pop idol TV contest.

So ICM, with the financial support of The Guardian, decided to test the efficacy of on-line polling. As a first step a series of questions have been put to a sample of 4,014 people interviewed between October 11th and 24th 2002 using ICM's standard telephone poll methodology. In so doing we both identified those who have access to the internet and those who say they are willing to join an internet polling panel. The resulting data allow us to analyse and compare the characteristics and attitudes of those who are accessible via the internet and those who state that they are willing to join an internet panel with those of voters accessible to a telephone poll.

If this test were to indicate that data collected from those willing to join an internet panel were capable of producing similar results to those of a telephone poll, we would have the confidence to go-ahead and set up an internet polling web-site in the knowledge that doing so would not undermine the reliability of ICM/Guardian polls.

2. Outline of the trial

Researchers on both sides of the Atlantic agree that on-line polling is only practical by the use of a previously recruited panel. E-mails sent at random to known e-mail addresses yield a pitifully low response. Additionally, using panels opens up possible ways of overcoming at least some of the difference between the demographic characteristics of those with access to the internet and that of the adult population as a whole.

So when ICM interviewed by telephone between 11th and 24th October a geographically unclustered sample of 4,014 adults aged 18 plus respondents were not only asked whether they had access to the internet (either at home, at work or elsewhere), but also whether they would be interested in joining an internet polling panel. The incentive for joining the panel was stated to be that each respondent would be paid 50p for each survey they complete, with the money earned being paid after their account

had reached a positive balance of £50. This incentive mimics that which YouGov currently offers people to join its internet panel.

Once an internet panel is established, its members would be alerted to any new survey by e-mail. They would only respond within the short time period normally allowed for the conduct of opinion polls if they look through their in-coming e-mails reasonably frequently. Therefore, we defined as 'likely panel members' those who are willing to join the panel and who say they look through their e-mails at least once a week.

Respondents were asked questions about a range of aspects of their social background and consumption habits for which reliable information is available as to their incidence amongst the adult population as a whole. In addition they were asked about their voting behaviour, newspaper readership and a range of attitudinal questions on which we would expect opinions to be influenced either by whether people usually have left-wing or right-wing views about the role of government or by whether they normally incline towards a liberal or an authoritarian position on social issues. A full list of the topics covered is listed below:

- ⇒ Internet access at home, work or elsewhere
- ⇒ Interest in joining voting panel
- ⇒ Number of times e-mails are looked at in the course of a normal week
- ⇒ Demographics
 - Age
 - Sex
 - Class
 - Region
 - Work status
 - Household tenure
 - Number of cars in household
 - Foreign holidays taken in the last three years
 - Age completed full time education
 - Marital status
 - Children in household
 - (All the above demographics can be matched to the profile of the National Readership Survey, a very large and reliable source of such data)
 - Postcodes which have been matched to MOSAIC, a classification of residential neighbourhood types
 - Newspaper readership (In the course of a normal week the daily Newspaper read most often)

- ⇒ Voting behaviour
 - Vote intentions, declared votes in 2001 party ID and strength of present party affiliation

- ⇒ Attitudinal questions
 - Agreement or disagreement with each of the following statements
 - Britain should adopt the Euro
 - I am interested in political news
 - I tend to have quite firm views on political issues of the day
 - We should spend more on public services even if my taxes have to rise

- We should replace the present voting system and introduce proportional representation
- The monarchy is an outdated institution
- Reform is the key to improved public services not more money
- We need to have much tighter asylum laws
- The government should redistribute income and wealth from the rich to the poor
- Britain should re-introduce the death penalty for murder

⇒ Can you name the present foreign secretary?

3. Sample Profiles

Sampling theory tells us that a sample of any given population should on average give answers that are representative of the population as a whole. But for this to be the case those contacted need to be a random sample of that population. In the case of telephone samples random digit dialling ensures that every domestic telephone number in the country has an equal chance of being selected. True, not all households have a telephone, but with penetration now over 95%, only a small amount of weighting of the data is required to make a sample of telephone owning households representative of all households. Indeed even before weighting, contacting a random sample of people by telephone and using just age as a criterion in selecting who in the household should be interviewed produces a sample that matches the demographic profile of the whole population fairly closely.

People with access to the internet at home or elsewhere (but excluding those with access only at work) account for 52% of our total telephone sample. Their demographic profile is somewhat different from that of the whole population. As table 1 shows they are more likely than those without internet access to be below retirement age, working full time, with a mortgaged property, to own two or more cars, and to have taken a foreign holiday in the last three years.

These discrepancies are even more marked among those people willing to join an internet polling panel who in total constitute just 16% of our total sample. This suggests that those demographic groups that are least enthusiastic about getting on-line at all are also those least likely to want to use it extensively – or at least to seize the opportunity it offers of joining an internet polling panel! And of course it could also be the case that those who actually participate in an internet panel (rather than just say they will) are even more distinctive in their demographic background and so the biases of any individual internet poll could be even more marked.

Table 1. Demographic Characteristics of Internet Users and Panellists

	Population (Source*)	Internet accessible. Un-weighted	Difference from Population	Willing panel members Un-weighted	Diff
Base		2,088(52%)		588 (16%)	
SEX	%	%	%	%	%
Male	49	51	+2	57	+8
Female	51	49	-2	43	-8
AGE					
18-24	11	15	+4	18	+7
25-34	19	22	+3	28	+9
35-44	19	25	+6	27	+8

45-54	17	19	+2	14	-3
55-64	13	11	-2	8	-5
65+	20	8	-12	4	-16
CLASS					
AB	24	28	+4	30	+6
C1	28	36	+8	37	+9
C2	21	22	+1	20	-1
DE	28	15	-13	12	-16
TENURE					
Owned outright	28	24	-4	19	-9
Mortgage	42	54	+12	57	+15
Rented/other	30	22	-8	24	+6
WORK STATUS					
Work Full time	46	56	+10	62	+16
Part time	11	18	+7	16	+5
Not working	44	26	-18	22	-22
CARS					
No Car	23	9	-14	10	-13
1 car	44	42	-2	39	-5
2+ Cars	34	49	+15	51	+17
HOLIDAYS					
Foreign Hols last 3 yrs	60	76	+16	78	+18
No Foreign hols	40	24	-16	22	-18
EDUCATION					
Terminal Education age 16 or under	58	36	-22	29	-29
Terminal education age 21+	17	29	+12	32	+15
Still in Education	3	3	0	6	+3
READERSHIP					
	* Total sample		* diff from		
Read Quality	18	23	+5	26	+8
Tabloid	48	44	-4	43	-5
Read none	17	17	0	17	0

* Data not available from any authoritative source. Data is from the telephone sample. Quality papers include the Times, Telegraph, Guardian, Independent and FT, Tabloid includes the Mail, Express, Sun, Mirror and Star

** National Readership Survey 2001 data, Random sample of 33,439 adults aged 18+

Another way to look at the sample profile is by reference to Mosaic. This system uses census and postcode data to classify residential neighbourhoods according to the type of housing stock and people found living in those areas. It classifies each postcode into 12 Mosaic groups and, within that, 52 different Mosaic types, from the wealthiest areas containing people mosaic describes as "clever capitalists" to areas such as "coalfield legacy" and council "families in the sky". Internet penetration is highest in residential neighbourhoods described by Mosaic as containing high income families, stylish singles and suburban semis. Internet penetration is lowest in areas housing blue collar workers, low rise council, council flats and areas housing independent elders. In the most affluent areas of the country, residential neighbourhoods occupied by what Mosaic describes as "clever capitalists", 70% have access to the internet and 20% would be willing to join an internet polling panel. Two thirds of people living in areas classified by Mosaic as "studio singles" have access to the internet and one third of them would be willing to join a panel. At the other extreme only 25% of pensioners living in low

rise council estates have access to the internet and only 6% would be willing to join an internet panel. Only 23% of families living in high rise council flats have access to the internet and, in ICM's survey, none would be willing to join an internet panel.

So our exercise confirms what many already know, that an internet poll will be conducted among a small sub sample of the whole public and there is a danger that some groups are going to be severely under-represented. Nevertheless, special efforts can be made to recruit a sufficient number of people belonging to those demographic groups that are under-represented among internet panellists to make an on-line sample resemble the population as a whole. But whether this will ensure that the results of an internet panel are representative depends on the answer to a key question: -

- 1) Do people on the internet (and those prepared to join a panel) have views that are *similar* to those who are not on the internet that share their demographic profile or...
- 2) Do people on the internet (and those on an internet panel) have views that are *different* from those who are not on the internet that share demographic profile.

If 1) is true we should be able to make the results of an internet accessible sample or an internet based panel sample match the results of a conventional poll. If 2) is true, no amount of re-balancing or re-weighting of the sample will make an internet poll say the same thing as one based on face-to-face or telephone interviews.

4. Results

The first question that we need to address is whether the attitudes of those who are internet accessible and those who are willing to join an internet panel are in fact different from those of the adult population as a whole. In order to examine this we first of all applied demographic weights to our total sample of 4,014 people to ensure that the data are representative of the known characteristics of all adults within a 56 cell matrix as measured by authoritative external sources. This matrix comprised categories of sex, age, tenure and class within three regions together with separate cells for work status, car ownership and having taken a foreign holiday in the last three years. This represents a typical demographic weighting system that might be used by any market researcher to ensure a sample is representative of the population.

In the first column of table 2 below we show the responses obtained from our telephone sample to the attitudinal questions that we asked after the sample had been demographically weighted to be representative of the whole population. Then in columns 2 and 3 we show the pattern of responses given by those of our respondents who are internet accessible and those who are not.

Two key points stand out. First, despite the demographic differences that we saw in table 1, the current voting intentions of those who are internet accessible are in fact similar to those of our telephone sample as a whole. At most there is a suggestion that those who are internet accessible are a little more favourably inclined towards the Liberal Democrats, a little less likely to say that they would abstain and are rather less likely to remain loyal to the party that they currently support.

Moreover, on some issues too the views of the internet accessible are reasonably similar to those of our sample as a whole. Perhaps surprisingly people on the internet are just as divided on the issue of proportional representation as everybody else, while

they are no more likely to think the monarchy is outdated than adults as a whole. They have fairly similar views too on both tax and spend and reform of the public services.

But in other respects the views of those who are internet accessible are not the same as those of our sample as a whole. People with access to the internet are more likely than those without to agree that they like to try new things. This attitude probably partly explains why they have the internet in the first place. But it also suggests that the internet accessible have a somewhat different outlook on life. And indeed on three key issues at least they display more socially liberal attitudes than do those not on the internet. They are much less likely to agree that asylum laws should be tightened, are far more positive about Britain adopting the Euro and far less keen on the re-introduction of the death penalty. In addition, people with access to the internet are also somewhat more knowledgeable about politics (as measured by their ability to name the Foreign Secretary) and are somewhat more likely to want to keep up with political news. And as a relatively affluent group it is perhaps not surprising that they are rather less keen than adults as a whole on the redistribution of income and wealth from the rich to the poor.

The sub sample of internet accessible people willing to join a panel not only largely echo the differences between the telephone and internet accessible sample but in most cases those differences are of even greater magnitude. Unsurprisingly, somewhat fewer of those willing to join an internet polling panel are unsure how they would vote in a general election, and fewer say they would not vote. Equally refusal to give a voting intention runs at half the level recorded among the telephone accessible sample. Overall, only 28% of willing panellists fail to nominate a party they would support in a new general election, a figure that compares to 34% of all internet accessible people and 36% of the telephone accessible sample. However, this discrepancy may not be significant so long as it is equally the case in both samples that those who don't know how they would vote or refuse to answer, actually cast their votes in proportion to those who have made up their minds, though previous research indicates this is not necessarily the case.

Meanwhile, support for the Liberal Democrats is even higher among willing internet panellists than it is among the internet accessible population. As a result, once we eliminate those who fail to state a voting intention, support for the Liberal Democrats stands at 22% among our internet panellists compared with 19% in our telephone sample as a whole. Still, on this basis the estimated Labour lead over the Conservatives at least remains the same in the two samples at 18%.

People willing to join an internet panel are even more politically aware than all those who are internet accessible (as measured by awareness that Jack Straw is Foreign Secretary). They are also even more likely to want to keep up with political news, to hold firm views on political issues. Meanwhile, there is a majority of no less than 95% willing to try new things amongst internet panellists, compared with 89% amongst the internet accessible population and 79% amongst our telephone same as a whole. And we find that internet panellists are even less opposed to the Euro and less in favour of tighter asylum laws, though they are no more opposed to the death penalty.

Table 2 Comparing the attitudes of those on and not on the internet

	Total Sample. (Demographically weighted)	Internet accessible	Not internet accessible	Willing Internet Panellists
COLUMNS	1	2	3	4
Vote intentions (%)				
Conservative	18	19	18	19

Labour	29	29	30	32
Liberal Democrat	12	14	10	16
Other	4	4	4	5
Don't Know	16	16	16	14
Will not vote	12	11	14	10
Refused	8	7	9	4
Among supporters, % certain to vote for that party				
Conservative	54	49	60	54
Labour	46	41	53	40
Liberal Democrat	33	30	37	31
Political Knowledge				
% know that Foreign Secretary is J Straw	37	41	33	46
Underlying attitudes. % agree-% disagree				
Like to keep up with political news	49	52	45	57
Have firm views on politics	35	37	34	44
Like to try new things	79	89	65	95
Other issues. % agree - % disagree				
Better public services even if more tax	49	48	51	47
Redistribute wealth from rich to poor	20	13	31	14
Should reform public services not give more money	50	49	54	47
Introduce PR	0	0	-1	4
Monarchy outdated	-21	-23	-19	-18
Asylum laws should be tightened	68	62	78	60
Adopt the Euro	-34	-22	-49	-16
Re-introduce death penalty for murder	12	-5	34	-2

It is also worth noting that even where the views of the internet accessible population are similar to those of the population as a whole, this is not necessarily true of particular sub-groups of the population. We can see this in table 3 which compares the views of young middle class (ABC1) people who are internet accessible with those who are not and also does the same for older working class people (social groups C2DE). Thus for example, younger AB/C1s who are internet accessible are *more* likely to agree the statement, "We should spend more on public services even if my taxes have to rise". But internet accessible older C2/DEs are rather *less* likely to agree than their counterparts who are not on line. Across the sample as a whole, the latter difference compensates for the former, and especially so because it is upweighted in any weighting scheme or quota selection process. But it still means that the difference between the attitudes of younger middle class voters and older working class ones is understated in our internet accessible population as compared with our total sample.

As table 3 further reveals this is also true of attitudes towards the monarchy and even attitudes towards asylum laws, an issue on which the views of internet panellists as a whole are different from our total sample. Meanwhile on a number of issues where we

have seen there is a difference of view between the internet accessible population and our whole sample, that difference is as we might expect replicated among both young middle class and older working class voters.

Table 3 Comparison of internet and non-internet users among specific sub-groups

	ABC1, 18-34		C2DE, 55+	
	Internet accessible	Not internet accessible	Internet accessible	Not internet accessible
% agree-% disagree				
Compensating differences				
Spend more on public services even if my taxes have to rise	37	31	51	55
Monarchy is outdated	-18	-13	-20	-29
We should have tighter asylum laws	55	50	74	82
Non compensating differences				
Adopt the Euro	-22	-37	-27	-55
Government should re-distribute wealth from, rich to poor	12	32	3	24
Britain should re-introduce death penalty for murder	-23	3	20	37

So, those who have access to the internet have similar views to the population as a whole on some subjects, most notably in their relative level of support for Labour and the Conservatives, but dissimilar on others, most notably some social issues, while they also have a higher level of political knowledge. But if we undertook a poll only among internet accessible people or only among an internet panel we would either have weighted the resulting samples to be demographically representative of the whole population and/or employed quotas to ensure that those who were asked to respond to a poll were demographically representative of the general population in the first place. So in column 2 of table 4 we show the pattern of responses given by those who are internet accessible after that sample has been demographically weighted to the general population profile. Column 3 meanwhile does the same for those who are willing to join an internet panel. How far the results of these two samples now differ from those of our total sample can be seen by comparing the figures in these two columns with those in column 1 in table 4 which shows the results from the whole telephone sample demographically weighted just as in column 1 of table 2.

We look first at the results for the internet accessible sample. It would seem that even after demographic weighting a random sample of all internet accessible people would still give voting intentions that closely match those of a telephone poll. The only difference seems to be that a random survey of all people available on the internet might be somewhat more likely to place the Liberal Democrats on a slightly higher score. 14% of those with internet access say they would vote for the Liberal Democrats as against 12% of our total telephone sample. At the same time those who say they would vote Liberal Democrat now appear more certain of their convictions if they are internet accessible than if they are not.

Meanwhile, once our internet accessible sample is appropriately weighted, some of the differences we saw in table 2 are reduced. There is now little difference between the level of political knowledge displayed by our internet accessible sample and that of our whole sample. Neither is there much difference in their keenness to follow politics. There is also now little difference in attitudes towards redistribution. But at the same

time the internet accessible do remain more keen to try new things and more liberal on the three issues on which we identified a difference earlier, asylum laws, the Euro, and the death penalty. We have here a hint that on some issues at least the results of an internet poll will not necessarily reflect the attitudes of the public as a whole even after it has been demographically weighted or careful quota controls applied to who are invited to take part.

But as we indicated earlier, in practice any internet poll has to be conducted among those who have previously been recruited on to a panel. So what matters most is whether the views of those people in our sample who indicated that they would be willing to join an internet panel (and look at their e-mails at least once a week) are the same as those of our adult sample as a whole after the internet panel sample has been demographically weighted. The answer to this question can be gleaned by comparing column 3 in table 4 with column 1 and column 4 in table 2.

This comparison reveals that some of the differences noted in table 2 reduce in size somewhat, on issues such as asylum, the Euro and capital punishment, but some others remain and new ones appear. The additional weighting has no effect on the percentage who know that Jack Straw is foreign secretary and the very high proportion who like to try new things is only marginally reduced. Divergences also emerge on other questions. Our internet panellists emerge as *more* likely to be in favour of redistribution and also in favour of higher taxes in order to improve public spending. While they are also more keen on reforming public services rather than just giving them more money, it appears that as well being somewhat more pro-Labour our internet panellists are also somewhat more left-wing in their views.

Unsurprisingly perhaps given their willingness to participate in opinion polls, we find that internet panellists are markedly more knowledgeable about politics, to be keen on following what goes on in politics and indeed to say they have firm views about politics. In short, the weighting has failed to move the results in a clear and consistent direction

But more importantly the figures for current voting intention no longer look quite the same. As we would expect from our earlier analysis, internet panellists are less likely to say they would not vote. But at the same time they are more likely to say they would vote Labour, while the proportion saying they would vote Conservative is unchanged. As a result if we just look at the voting intentions of those who state a voting intention, what is an 18 point Labour lead in our whole sample (Labour, 46%, Conservatives, 28%) becomes a 22 point lead among our internet panellists (Labour 47%, Conservatives, 25%). Meanwhile Liberal Democrats still score more highly among internet panellists, with a score of 21% compared with 19% among our total sample.

Table 4 Comparing Demographically Weighted Samples

	Total Sample.	Internet accessible sample.	Willing Internet panellists.
COLUMNS	1	2	3
Vote intentions (%)			
Conservative	18	17	18
Labour	29	30	34
Liberal Democrat	12	14	15
Other	4	4	6
Don't Know	16	16	15
Will not vote	12	11	8
Refused	8	8	4
Among supporters, % certain to vote for that party			
Conservative	54	54	56
Labour	46	44	40
Liberal Democrat	33	38	44
Political Knowledge			
% know that Foreign Secretary is J Straw	37	39	45
Underlying attitudes. % agree - % disagree			
Like to keep up with political news	49	50	59
Have firm views on politics	35	37	49
Like to try new things	79	86	91
Other issues. % agree - % disagree			
Better public services even if more tax	49	50	58
Redistribute wealth from rich to poor	20	19	25
Should reform public services not give more money	50	52	56
Introduce PR	0	0	2
Monarchy outdated	-21	-21	-25
Asylum laws should be tightened	68	64	66
Adopt the Euro	-34	-26	-24
Re-introduce death penalty for murder	12	0	5

5. Further Weighting

However, most pollsters would argue that demographic weighting alone is insufficient to ensure that a sample is politically representative. Therefore, ICM and others have argued that opinion polls should be weighted so that the proportion of people who say they voted for each party at the last election (past vote) matches some expected figure (though not necessarily simply the result of the last election because of errors in people's recall of their past vote). Perhaps once weighted in this way the differences between our internet panellists and our total sample will disappear. Meanwhile previous

academic research has found that attitudes towards social issues such as the death penalty are often heavily influenced by educational background, something that has not featured in the demographic weighting we have undertaken so far. Perhaps further weighting by the age that someone left full time education would help eliminate the differences in attitudes we have seen on some social issues.

Weighting by past votes assumes that all people who, for example say they voted Labour last time, can be treated as a group, and up-weighted or down-weighted to their correct proportions. The underlying assumption is that the sample of Labour voters is representative of all Labour voters but that the sample simply contains too many or too few of them. But Mosaic suggests this is not the case. In particular, those Mosaic groups least likely to be internet accessible (low and high rise council) also contain the staunchest, most traditional Labour supporters. If internet accessible Labour voters are drawn disproportionately from Mosaic types that are less firm in their support then an internet poll will not behave in the same way as a telephone survey through times of political turbulence.

Table 5 shows in column 1 the data from our whole sample demographically weighted and then weighted further by past votes. The data from internet panellists have been treated in an identical manner and are shown in column 2. Column 3 shows data from the total sample further weighted by terminal education age and column 4 shows the same weighting scheme applied to the sample of internet panellists.

Comparison of columns 1 in table 5 with column 1 in table 4 above shows that additional weighting by past votes reduces the proportion of people intending to vote Labour. This is to be expected as this poll, and indeed do all others, finds slightly more people saying they voted Labour in 2001 than actually did. Nevertheless, the effect of this additional weighting on answers to other questions is minimal, as is the addition of weighting for terminal age of education. This indicates that so far as our total sample is concerned for questions other than voting intentions our original demographic controls and weights are sufficient, and that additional weighting is unnecessary. But it could still be the case that such weighting may make internet panellists more like the total sample.

Comparison of columns 1 and 2 and comparison of columns 3 and 4 shows that even under both our two new weighting schemes it remains the case that fewer people say they will not vote, while there also continues to be a somewhat higher Labour vote. True, the level of Liberal Democrat support now appears to be almost identical in the two samples, though those Liberal Democrats who are willing to join an internet panel are still more likely to say that they are certain they would actually vote for that party. Excluding those who do not express a voting intention we find that what in our total sample was but a ten point Labour lead (Labour 41%, Conservatives, 31%) after past vote weighting becomes no less than an 18 point lead when the same weighting is applied to our internet panellists (Labour 44%, Conservatives, 26%). The Liberal Democrats, meanwhile, score 20% and 21% respectively.

Moreover most of the other differences we found in examining table 4 remain in table 5. Internet panellists remain keener on redistribution, tax and spend, and reform of the public services. They still appear to be more politically knowledgeable and interested and to have firm views. Equally, they remain keener on trying new things, more favourable towards the Euro and opposed to the death penalty. They even begin to appear for the first time to be a little more in favour of proportional representation. The table also suggests that weighting by terminal education age has very little additional effect on the data from the panel.

So it appears that there are some serious question marks about the ability of internet panels to provide an adequate reflection of public opinion. Once they have been demographically weighted at least, those who are willing to join an internet panel appear to be more likely to vote Labour or Liberal Democrat. Internet panellists also show a tendency to be rather more socially liberal and left wing than the general population, as well as being more interested and perhaps knowledgeable about politics. Most importantly, these are not differences that any of a number of weighting schemes that we have applied is capable of eliminating. Indeed in some cases, such as a higher propensity to support Labour or adopt left-wing views, the differences only emerge after weighting has been applied.

Table 5 Weighting by Past Vote and Education

	Past Vote Weighted		Past Vote and Education Weighted	
	Total Sample.	Panellists	Total sample	Panellists
COLUMNS	1	2	3	4
Vote intentions (%)				
Conservative	20	18	20	17
Labour	26	30	26	31
Liberal Democrat	13	14	13	13
Other	5	6	5	7
Don't Know	16	17	16	19
Will not vote	12	9	12	9
Refused	8	5	8	4
Among supporters, % certain to vote for that party				
Conservative	55	52	55	55
Labour	45	37	46	42
Liberal Democrat	34	44	35	44
Political Knowledge				
% know that Foreign Secretary is J Straw	37	43	37	41
Underlying attitudes. % agree - % disagree				
Like to keep up with political news	49	59	48	55
Have firm views on politics	35	48	35	47
Like to try new things	79	92	78	94
Other issues. % agree - % disagree				
Better public services even if more tax	48	54	48	56
Redistribute wealth from rich to poor	19	24	20	23
Should reform public services not give more money	50	56	51	58
Introduce PR	0	4	0	6
Monarchy outdated	-23	-24	-23	-23
Asylum laws should be tightened	68	67	70	71
Adopt the Euro	-34	-23	-36	-22
Re-introduce death penalty for murder	12	4	16	8

There is, of course, a very large number of weighting schemes that could be applied to the data. The schemes we have used so far used apply standard demographics and other consumption data known to be correlated with voting behaviour to the whole data set and also to our sub-samples of people with access to the internet and those willing to join a panel. But perhaps this approach is too simple? Perhaps if we adopted a more sophisticated technique the differences we have found could be eliminated?

One possible approach is to undertake statistical analysis to find the group of demographic and other variables that, in combination, best predict the voting intentions of the whole sample and then ensure that our internet samples are weighted so that they match our total sample on those characteristics. CART is a statistical technique that attempts to explain a dependent variable – in our case voting intention – with a series of predictor variables – in our case this included demographic and socio-economic variables for which the population parameters are accessible from the Census or high quality probability samples such as the National Readership Survey. In so doing it seeks to ascertain the combination of predictor variables that best accounts for the dependent variable.

CART first looks at the distribution of the dependent variable and creates an impurity measure – the more dispersed the data the higher the level of impurity. At Stage 1, the algorithm splits the sample into two groups based on their value on one of the predictor variables such that the decrease in impurity of the dispersion of the dependent variable is maximised. At Stage 2, the algorithm examines each of the two groups formed at stage 1 separately, and tries to find which dichotomous split of which predictor variable again maximises the decrease in impurity. Both the split and the variable may be different for the two stage 1 groups. We have now formed four groups or branches of a tree. At stage 3 the algorithm examines each of these 4 branches separately for the best split as before. The CART algorithm will keep producing further branches of the tree until such time as any further split will not yield a statistically significant decrease in impurity.

We have applied this technique to our total sample and then re-weighted our internet samples accordingly. We found however that the results we have reported so far still stand.

6. Real World Comparisons

Still, it could be argued that the comparisons made in this paper are flawed because those who are internet accessible and those willing to join an internet panel have been contacted and interviewed by telephone and then only invited to participate in future internet polls. In reality, internet polls are conducted on-line, not on the telephone. People who answer an internet poll have more time to consider their response than do those who respond to a phone call. They can see the question they are being asked to answer rather than being reliant on a verbal cue. And they do not have to worry about giving possibly embarrassing answers to another human being. Such differences between the two different modes of interview could mean that internet polls secure different answers than telephone polls to the same questions. As a result perhaps some of the differences we have found here may be eliminated and perhaps even make internet polling more accurate than telephone polls. On the other hand there is no guarantee that modal differences will not actually compound the differences we have so far noted.

It might also be argued that the way in which we recruited our potential internet panel also differs from the reality of internet polling. Those who are actually recruited into an internet panel via having surfed the web may be different in their views from those actively recruited via random telephone dialling. And perhaps internet polling overcomes some of the flaws of telephone polling because those who use their answer-phones to filter out unsolicited calls are on the other hand willing to go on-line and

complete internet polls. Thus perhaps internet polls reach important parts of the electorate that telephone polls fail to reach.

So perhaps an acid test of our findings is whether we can find any evidence that when we compare already published telephone and internet polls the kinds of differences that we have identified in this paper are replicated in real world polling. To establish whether this is so we have attempted to find examples when an internet poll and a telephone poll have asked in at least a similar manner about the same subject in order to establish whether the kinds of differences noted in this paper have been apparent. Of course, the question wording on the two polls may vary a little and differences in question order may have an effect, but if we were to find much the same kinds of differences that we have noted in this paper so far, we would begin to have substantial evidence that internet polling may not always at present at least be capable of providing an accurate reflection of the opinions of the general population.

The first and one of the most extensive comparisons we can make is of reported voting intention. In table 6 we compare the results of YouGov and ICM polls over the last year. To make this comparison, we have paired the two organisations' polls so that each YouGov poll is compared with the ICM poll which is closest to it in terms of fieldwork dates.

Table 6. Comparing ICM and YouGov Vote Intentions

	ICM Estimate – YouGov Estimate				
	Lab	Con	LibDem	Others	Lab Lead
	%	%	%	%	%
Jan	3	0	-2	-1	3
Mar	1	3	-3	-1	-2
Apr	1	-3	0	2	4
May	2	2	-2	-2	0
Jun	4	-3	0	0	7
Jul	3	-1	0	-3	4
Aug	1	-1	1	-1	2
Sep	-1	2	-2	1	-3
Oct	3	1	-2	-1	2
Nov	1	-2	1	0	3
Dec	2	-5	2	0	7
AVERAGE	1.8	-0.6	-0.6	-0.5	3

We can see that in practice our expectation from our analysis so far that YouGov's internet polls would usually report a higher Labour lead than would ICM's telephone polls is not substantiated in practice. In fact on average YouGov has reported slightly lower Labour leads than ICM. We suspect, though we cannot be sure, that the explanation may well lie in differences between the two organisations in how they quota or weight by past vote and in what further adjustments they make to their data, such as in the allocation of "Don't Knows". Given the considerable range of practices that can be adopted in these respects, it is perfectly possible that the procedures that YouGov adopt successfully overcome the potential pro-Labour bias that our research suggests could exist amongst internet panellists. A detailed analysis of the procedures of the two organisations would be required to examine whether or not this is the case.

We have picked up some evidence earlier that internet panellists may be somewhat more favourable to the Liberal Democrats, and that certainly those internet panellists who do have Liberal Democrat sympathies have rather stronger ones than do the adult population in general. And table 6 does indicate that YouGov's polls have tended to paint a slightly rosier picture for the Liberal Democrats than have ICM's figures.

Moreover as table 7 shows when the two organisations asked in October and early November which party was providing the most effective opposition to Labour, YouGov obtained a relatively far more pro-Liberal Democrat response than did ICM. So there is some suggestion, if no more, that internet polls produce results that are more favourable to the Liberal Democrats than do telephone polls

Table 6 Comparing ICM and YouGov polls on the opposition

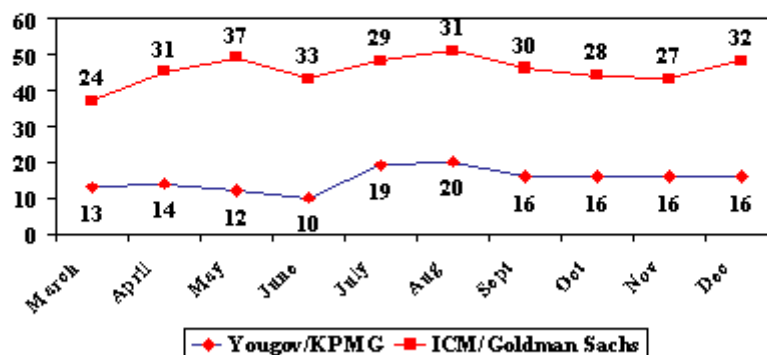
Which party provides the best opposition to Labour?		
	ICM/Telephone	YouGov/Internet/ITV1
Conservatives	46%	19%
Liberal Democrats	43%	41%
	6-7 Nov	30 Sept to 2 nd Oct

So our expectations about differences in the vote intentions between internet and telephone polls have at most only been somewhat fulfilled. But when it comes to a second of our earlier findings – that internet panellists are more socially liberal as evidenced by their attitudes towards the Euro and the death penalty – we can find quite consistent evidence from the reported findings of YouGov and ICM polls to confirm the suggestion that on these issues internet polls do not provide an accurate reflection of the opinion of all adults.

In table 7 we compare the percentage majority against Britain joining the Euro as recorded by ICM for Goldman Sachs since March this year with the equivalent in polls conducted by Yougov for KPMG. We can see that YouGov have consistently registered a smaller majority opposed to Britain’s membership of the Euro than have ICM.

Table 7 Comparing ICM and YouGov polls on the Euro

Euro Vote in Immediate Referendum. Majority Against



An even more startling finding can be identified. In October YouGov found that 38% were in favour of joining the Euro, 54% were against (giving the 16% figure above). These are *exactly* the same figures that make the 16% figure among internet panellists in table 2. In other words the percentages produced by YouGov/KPMG are identical to those derived from the sub sample of people in ICM’s trial willing to join a panel *before* any weighting has been applied in an attempt to make their demographic or political profile reflect the wider population.

This could easily be a statistical fluke, but it is not the only example. Immediately after the Soham Murders a YouGov poll found that only 53% wanted to re-introduce the death penalty for child murders. ICM and NOP repeated the question separately by conventional telephone poll methods. ICM found 64% in favour of the death penalty for child killers, NOP found 68% support. Both ICM and NOP were able to split out an internet accessible sub sample from the total telephone accessible samples. The results from the internet accessible sub samples by both NOP and ICM are similar to those obtained by YouGov. Again, the published YouGov data bears a close resemblance to NOP and ICM data before it has been separately weighted

Table 8. Support for the death penalty for child murder

	Yougov	ICM Internet accessible sample	NOP internet users in last 3 months
Support	53%	57%	59%
Oppose	43%	37%	35%
Don't know	4%	6%	6%
Fieldwork	21-23 Aug	24-25 th August	24-26 th August

The same YouGov/Sunday Times poll found 37% support for the re-introduction of the death penalty for any murder. This figure compares to 53% of ICM's internet poll trial survey. Obviously the two polls would give very different headlines in any poll report.

Table 9. Comparing YouGov and ICM polls on the death penalty

Support for re-introduction of death penalty for murder?		
	ICM/Telephone	YouGov/Internet
Yes	53%	37%
No	41%	57%
Don't know	6%	6%
Fieldwork	11-24 th October	21 ⁻²³ Aug

Another clue comes from looking at attitudes towards the leadership of the Conservative Party. One might expect an internet sample would show greater enthusiasm than a telephone poll for the more socially liberal Ken Clarke as a potential Tory leader and less enthusiasm for Iain Duncan-Smith (IDS). On 31st October and 1st November a poll of 1,741 people by Yougov and reported in the Mail on Sunday found Clarke led IDS by 23% as being best leader for the Conservative party (36% to 13%). ICM for the News of the World found Clarke's advantage was somewhat less at 15% (33% to 18%).

Of course it might be asked how does it appear to have been possible for YouGov to avoid producing figures that were more popular to the Labour party than ICM's telephone polls, but at the same time have apparently produced statistics that are more socially liberal? The answer is simple. Attitudes towards such subjects as the Euro and the death penalty do not align very strongly with voting intentions. So even if a sample is politically representative, this does not necessarily mean that it is representative on other topics.

True, on most of the comparisons we have been able to make, one may argue that the differences between internet and telephone polls do NOT matter. Clarke is the voters' favourite to lead the Conservatives by both methods. Both methods suggest we do not want the Euro. And both suggest that Labour still enjoys a comfortable lead. But on issues where the public is more evenly divided the differences we have found can suggest very different stories. A poll that says 53% support the re-introduction of the death penalty conveys a very different message from one that says only 37% support it. And even at present, on the issue of the Euro, it is much easier on the basis of the

Yougov data for a newspaper to write a story saying that a Euro referendum is at least winnable, than it is by reference to other polls. While many social liberals may prefer to read the results of an internet poll on these issues, this does not necessarily make them true.

Our test covered a limited range of social and political issues and suggest that internet polls do indeed produce similar results on some issues (PR and the Monarchy) but not others (capital punishment and the euro). As new issues arise we cannot therefore simply apply a rule of thumb to internet poll results without understanding how views on each new issue correlate to others on which we know internet users and panellists differ from the population as a whole.

In the end the only true test of different kinds of polling is when they both attempt to anticipate the outcome of a measurable event, such as a referendum or general election. Yet such events are few and far between. The vast majority of polls (and all of commercial and social research) are conducted on subjects for which a census could never be contemplated. In fact our evidence suggests that internet polls may well pass the test of the next general election, though they may have greater difficulty in any referendum on the Euro. But even so, our evidence suggests that on the wider untestable range of data collected by opinion polls, internet polling is at present a relatively risky research method, as the population surveyed is in some important respects different from the population it is trying to represent and such discrepancies as exist cannot necessarily be removed by setting quotas before interviewing starts and/or weighting data subsequently.

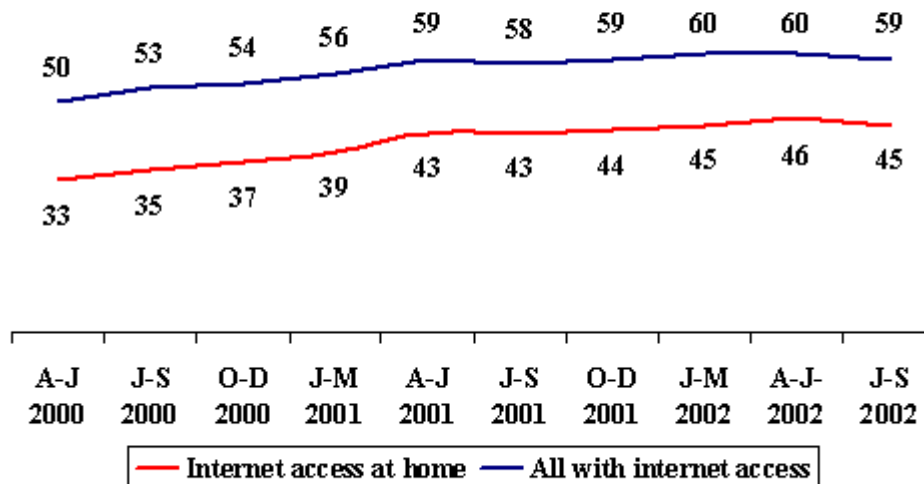
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7. The future

Of course, internet penetration may rise in future, and therefore the biases in the demographic composition of those who are internet accessible may reduce or change in nature. But the chances that internet penetration will continue to grow strongly seem to be fading. Over the last year or so it has not grown at all (see table 9). If we exclude web-phones, and web connected TV sets, which account for a tiny proportion of the total, getting on-line requires people to buy a computer and peripheral equipment. It is expensive and requires a certain degree of computer literacy. Therefore, while it is possible to imagine that internet penetration will grow, it is also possible that the more economically disadvantaged people in society and those with little confidence in their computer skills will still not get connected in the foreseeable future.

Table 10 Recent Trends in Internet Access

Internet Access



Longer term, interactive TV may offer a better solution or useful additional sampling source for internet polls. Research certainly suggests that the take up of interactive TV is more evenly distributed across all demographic groups. But even if this proves to be the case, internet polls are still likely to face the problem that they have to recruit panels of people willing to participate in their research. And for so long as this remains true, such polls are always likely to be biased to a greater extent than telephone or face to face samples towards the more politically knowledgeable and interested

There are also a number of other issues not addressed by this research that would have to be considered before any decision is taken to start an internet polling panel .

- 1) What levels of incentive are best? The characteristics of an internet panel may change if a higher level of incentive is offered and research would be needed to establish the costs of such schemes and their potential benefit in terms of getting a more representative sample. But higher incentives will add to costs.
- 2) The costs of setting up a polling panel with appropriate safeguards would be substantial. At present it costs £400 for a question on an ICM telephone poll. Most topics can be covered quite adequately with 4 or 5 questions costing £1,600 to £2,000. Are there many issues where a much larger number of questions would be journalistically desirable and therefore an internet panel would be more cost effective
- 3) There is an issue of security. Recently the UK Independence Party urged its members to sign up for YouGov polls by pretending to be older less well off people who had voted Conservative or Labour in the past. Their aim was to

ensure, as UKIP see it, that they are fairly represented in YouGov polls. YouGov claim to have security checks in place to thwart such attempts, but it is as yet unclear how internet polling panels that rely wholly or mostly on people actively seeking a chance to participate can effectively weed out attempts to nobble the results.

8. Conclusions

We have found that at present internet polls based on a recruited polling panel may not necessarily produce results that are representative of the population as a whole, even after very considerable weighting of the results has been undertaken or care exercised to ensure that those who are asked to complete an internet poll are demographically and politically representative of the whole population. Being on the internet reflects a difference of attitude towards life that is to a significant degree independent of socio-economic background. While it may be the case that internet polls conducted by YouGov may have hitherto avoided the potential pitfalls so far as voting intentions are concerned, this does not appear to be the case so far as least some social issues are concerned, most notably the Euro and the death penalty. It also appears highly likely that internet panellists are more politically interested and knowledgeable, and may perhaps be more inclined to take a left-wing stance on some issues too. As a result we would conclude that there is a risk that a switch towards internet polling could well undermined the reliability of ICM/*Guardian* polls, though this does not mean that the efficacy of this approach should not continue to be monitored.

9. The Authors

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ICM is a major opinion and market research company. It offers a full range of quantitative and qualitative techniques to political and business clients.