



Public Confidence in Official Statistics: An analysis based on data collected in the National Statistics Omnibus Survey

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Key findings

- Survey respondents were asked about how much they trusted various sets of official figures. For each set of figures, there was a wide spectrum of opinion, ranging from strong trust to strong distrust. However for most people, their level of trust was somewhere between these extremes.
- Some official figures were trusted because they were seen as easy to measure, or there was no benefit in manipulating them. Commonly stated reasons for not trusting official figures were that they didn't tell the whole story, or that people did not trust the way figures were used or presented. Many people also stated that personal experience was a reason for either trusting or distrusting figures.
- When respondents were asked whether they thought official figures were generally accurate, the responses were evenly balanced between those who agreed and those who disagreed. However, most people believed that there was political interference in the production of official figures, that the public wouldn't be told about mistakes, and that the government did not use official figures honestly.
- Those people who were more trusting of the UK Government, Police, courts, NHS, and local council, were likely to have higher levels of trust in official figures. Those people who thought that official figures were an important basis for decision making in society were also likely to trust official figures more.
- The young were generally more inclined to trust official figures. Other personal characteristics such as sex, region, socio-economic status, level of education and income were not strongly related to people's level of trust.

Introduction

This report presents findings on the level of confidence the British public has in official statistics. It is based on data collected from 1708 adults aged 16 and over interviewed in the July 2004 National Statistics Omnibus Survey, and provides information on the following:

- the level of trust survey respondents had in official figures;
- the reasons respondents trusted or distrusted official figures; and
- a comparison of the attitudes, opinions, and personal characteristics of respondents who trusted official figures and those who did not.

To ensure the questions asked on the Omnibus Survey made sense to the general public, and elicited the information required, focus groups and cognitive interviews were used to develop the questions. Focus group and interview participants showed

diverse levels of knowledge and interest in statistics, and varied in their ability to give informed opinions on the subject. Participants showed limited awareness of the amount and range of official statistics produced and of the organisations which produced them.

The survey questions therefore focused on a variety of official statistics produced by a range of government institutions. The term 'figures' rather than 'statistics' was used in the questions, as participants found this less intimidating, and because of their lack of knowledge in this area, questions focused on trust in particular statistics rather than on the institutions that produced them. For example, rather than asking about the level of trust in the Office for National Statistics (ONS) - which around half of respondents had heard of prior to participating in the survey - the questions focused on unemployment statistics. A range of statistics were included, covering a variety of subjects with which respondents may have been familiar.

The data collected on the Omnibus Survey are part of a joint ONS/Statistics Commission project to understand better the nature of confidence in official statistics. Other strands of the project include additional focus groups with the general public, and interviews with 'opinion-formers' in the media, academia, Parliament and government, public services, the business community, and the voluntary sector.

Trust in official statistics

A number of questions on the Omnibus Survey were designed to measure the extent of trust in particular official figures. Respondents were asked about the extent to which:

- Department of Transport figures give a true picture of the number of casualties on Britain's roads;
- Department for Education and Skills figures on exam passes give a true picture of how well schools are performing;
- Office for National Statistics unemployment figures give a true picture of what is happening to unemployment;
- Home Office figures on domestic burglaries give a true picture of the level of burglaries;
- Local councils' figures on their performance in providing services give a true picture of how well your local council is doing;
- Department of Health figures about hospital waiting lists give a true picture of how long people have to wait for hospital treatment.

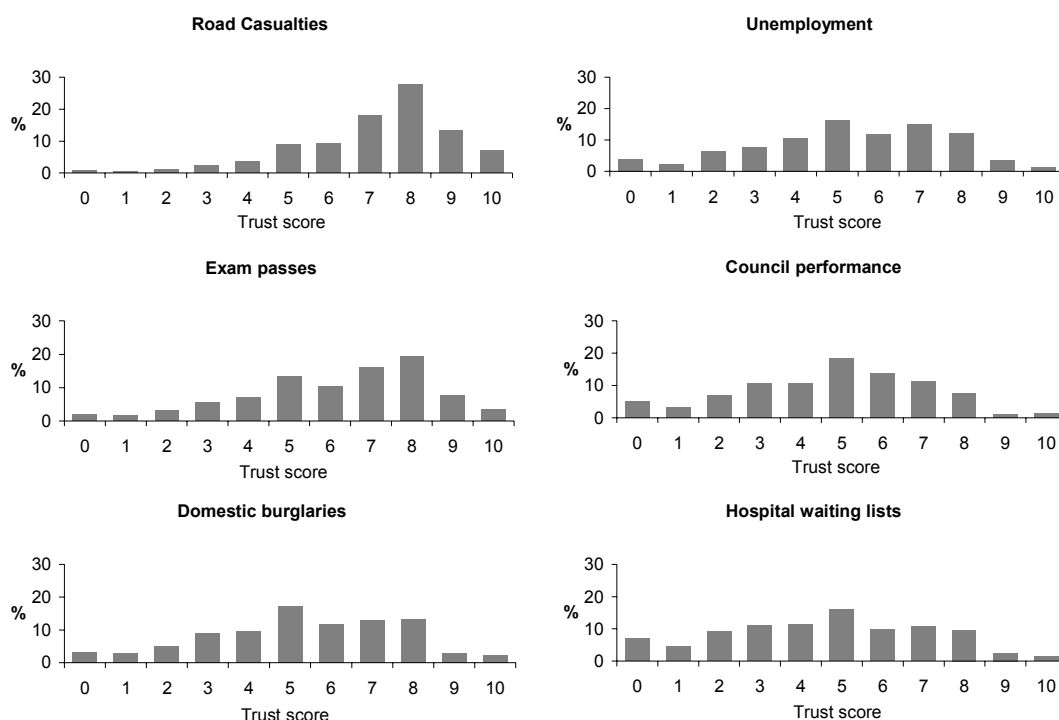
(For respondents interviewed in Wales and Scotland, the name of the relevant Department was substituted, where different from that in England.)

Respondents were asked to answer on a scale from 0 to 10, where 0 was 'do not trust at all', and 10 was 'trust completely'.

As Figure 1 illustrates, the responses were distributed across the full range of this scale.

Figure 1: Levels of trust in six sets of official figures (scored 0-10)¹

Great Britain, 2004



¹ Where 0 means 'do not trust at all' and 10 means 'trust completely'.

The average trust score for each of the six official figures that respondents were asked about in the survey is shown in Figure 2. The statistics most likely to be trusted were road casualty figures, with an average score of 7.2, and the least likely to be trusted were hospital waiting lists, with a score of only 4.6.

Figure 2: The average level of trust in six sets of official figures, July 2004

Great Britain	scored 0-10 ¹
Average score	
Road casualties	7.2
Exam passes	6.2
Domestic burglaries	5.3
Unemployment	5.3
Council performance	4.8
Hospital waiting lists	4.6
Average	5.6

¹ Where 0 means 'do not trust at all' and 10 means 'trust completely'.

Average levels of trust in these official figures can be compared with average levels of trust in various public sector institutions. As with official figures, respondents were asked about how much they trusted various institutions, namely the local council,

Civil Service, UK Government, Police, courts and National Health Service. Figure 3 shows the average level of trust in a range of institutions.

Figure 3: The average level of trust in various public sector institutions

Great Britain, 2004	
scored 0-10 ¹	
Average score	
National Health Service	6.6
Police	6.4
Courts	5.9
Civil Service	5.3
Local council	4.9
UK Government	4.0
Average	5.5

¹ Where 0 means 'do not trust at all' and 10 means 'trust completely'.

Interestingly, while hospital waiting lists were the least trusted figures (4.6), the NHS was the most highly trusted institution (6.6).

Generally though, the average level of trust in official figures was closer to the level of trust in the institution producing them. Figures on local council performance produced by the councils, were not highly trusted (4.8). This is very similar to the level of trust in the local councils themselves (4.9).

To examine this issue further, survey respondents were asked independently, about their level of trust in crime statistics produced by the police, and crime statistics produced by the Home Office. Half of the survey respondents were asked about how much they would trust crime statistics produced by the police, while the other half were asked about how much they would trust crime statistics produced by the Home Office.

The average level of people's trust in Police crime statistics (6.2), was higher than their level of trust in Home Office crime statistics (5.3). These figures are very similar to the respective figures for trust in the institutions publishing the statistics (6.4 for the police, and 5.3 for the Civil Service).

The average level of trust in official figures is likely to be dependent on the level of trust in the institutions collecting or producing the figures. However the example of the NHS and hospital waiting lists, shows that trust in an institution does not automatically mean that figures collected by that institution will be trusted.

Reasons given for trusting or distrusting official statistics

Survey respondents were asked why they trusted or distrusted each of the six sets of official figures, and the answers were then categorised.

As noted above, of those figures respondents were asked about, road traffic casualties were the most trusted. The two most common reasons given for this were

that these figures were easy to measure (28% of respondents), and there was no benefit in manipulating them (20%).

Exam passes were the next most trusted figures. Sixteen per cent of respondents trusted these figures because of personal experience and a slightly smaller proportion, 14%, said they trusted them because the figures were easy to measure. However, 16% of respondents felt that the figures were accurate, but did not tell the whole story.

Respondents had a slightly below average level of trust in official unemployment and domestic burglary figures. The main reasons for distrusting unemployment and burglary figures were the belief that they were difficult to measure (12% and 20% respectively) and distrust in how they were collected/produced (14% and 12% respectively). For unemployment statistics there was also a relatively high proportion (12%) of respondents who said that they did not trust the way politicians used the figures.

The most common reason for distrusting local council performance figures was the council's use or presentation of the figures, with 18% of respondents saying this. Sixteen per cent did not trust these figures because of personal experience.

Finally, hospital waiting lists were the least trusted of the official figures asked about in the survey. Personal experience was the most common reason for distrusting them, with 26% of respondents saying this. Around 13% had heard or read something bad about the figures, and 12% did not trust the way they were used or presented by the department.

General views about official statistics

Respondents were also asked to agree or disagree with several more general statements about official figures. The results are shown in Figure 4.

When asked about the general accuracy of official figures there was a roughly even split between those who thought they were accurate and those who did not (34% and 36% respectively), with 30% neither agreeing or disagreeing. The picture in relation to the perceived integrity of official statistics was different, however. The majority of respondents believed official figures were changed to support a particular argument (68%), that there was political interference in their production (58%), and that mistakes were suppressed (69%). This suggests that respondents were more concerned about the integrity of figures than their accuracy.

Respondents were also asked whether they agreed or disagreed with the statement 'The Government uses official figures honestly when talking about its policies'. The majority of respondents (59%) disagreed with this statement. The level of distrust in the Government's use of figures is similar to the level of distrust in other aspects of integrity.

Figure 4: General views about official figures, July 2004

Great Britain

	Agree %	Neither agree nor disagree %	Disagree %	Base (=100%)
Official figures are generally accurate	34	30	36	1703
Official figures are changed to support whatever argument people want them to	68	20	12	1703
Official figures are produced without political interference	17	25	58	1703
If a mistake had been made when producing official figures the public would not be told about it	69	16	14	1703
The Government uses official figures honestly when talking about its policies	15	25	59	1702

Respondents' views regarding the accuracy and integrity of official figures were assessed against their average level of trust in official figures (see Figure 5). Respondents were categorised into three groups based on an average of their level of trust in each of the six official figures asked about in the survey: those with high, medium or low levels of trust in official figures.

As would be expected, most respondents' general view on the quality of official figures reflected their average level of trust in the six sets of official figures: 62% of those with a high level of trust agreed that official figures are generally accurate, compared with only 9% of those with a low level of trust. The majority of respondents with a high level of trust in official figures generally believed that the figures were accurate, while those with a low level of trust generally did not.

Views regarding the integrity of official statistics present a different picture. As might be expected, the less respondents trusted official figures, the more likely they were to believe that the figures are changed to support a particular argument, that there is political interference in their production, that mistakes are suppressed, and that the Government does not use figures honestly when talking about its policies. About four in five respondents with a low level of trust had these views. However, these views were also common among those with comparatively high levels of trust in the six sets of official statistics: 57 per cent of those with high levels of trust in official figures thought that figures are changed to support a particular argument, while 56 per cent thought that mistakes are suppressed, 42 per cent that there is political interference in the production of figures, and 39 per cent that the Government does not use figures honestly.

Figure 5: General views about official figures, by average level of trust in official figures, July 2004

Great Britain

		General views about official figures			
		Agree %	Neither agree nor disagree %	Disagree %	Base (=100%)
Official figures are generally accurate					
Average level of trust in official figures	High ¹	62	25	13	465
	Medium ¹	32	35	33	785
	Low ¹	9	24	67	426
Official figures are changed to support whatever argument people want them to					
Average level of trust in official figures	High ¹	57	25	19	466
	Medium ¹	69	20	11	785
	Low ¹	81	12	7	427
Official figures are produced without political interference					
Average level of trust in official figures	High ¹	26	33	42	465
	Medium ¹	16	25	58	786
	Low ¹	9	13	78	426
If a mistake had been made when producing official figures the public would not be told about it					
Average level of trust in official figures	High ¹	56	23	22	465
	Medium ¹	71	15	14	786
	Low ¹	85	8	7	426
The Government uses official figures honestly when talking about its policies					
Average level of trust in official figures	High ¹	31	31	39	464
	Medium ¹	13	27	60	785
	Low ¹	5	11	83	427

¹ Respondents are categorised according to their average trust score for each of the six official statistics asked about in the Omnibus Survey.

What attitudes or opinions are closely associated with trust in official statistics?

In addition to the questions about official statistics, respondents were also asked about a number of other, possibly related, matters:

- whether or not they felt that in general, most people could be trusted;
- whether or not they thought official statistics were important;
- the extent to which they were interested in politics;
- which newspapers they read;
- which sources they drew on for informing their opinions about current issues;
- which forms of the media they did and did not trust.

An analysis was carried out to assess how levels of trust in official figures varied according to respondents opinions on these matters. The results of this analysis are summarised below, with further details provided in the annex.

Figure 6 shows those personal attitudes and opinions which were most strongly associated with trust in official figures. It shows how levels of trust vary between high, medium or low, according to those attitudes and opinions.

Figure 6: Attitudes and opinions of respondents, by average level of trust in official figures, July 2004

Great Britain

	Average level of trust in official figures			Base (=100%)
	High ¹ %	Medium ¹ %	Low ¹ %	
Average level of trust in government institutions				
High ²	55	40	6	446
Medium ²	24	58	18	806
Low ²	6	34	60	427
Views on the importance of official statistics				
Very important	38	38	24	389
Fairly important	30	50	20	825
Neither	14	53	33	222
Fairly unimportant	12	46	42	156
Very unimportant	9	35	56	34
Trust in other people				
Generally trust others	34	47	19	527
It depends	29	50	20	238
Can't be too careful	24	46	30	899
Level of interest in politics				
A lot	31	45	24	344
Some	29	47	25	563
Not very much	26	51	23	507
None at all	24	42	34	278
All persons	27	46	25	1681

¹ Respondents are categorised according to their average trust score for each of the six official statistics asked about in the Omnibus Survey.

² Respondents are categorised according to their average trust score for each of the eight government institutions asked about in the Omnibus Survey.

There is a strong association between trust in official figures and trust in government institutions. Respondents were asked about how much they trusted the local council, Civil Service, UK Government, Police, courts and National Health Service. An average of their score was used to classify them as having high, medium or low levels of trust in government institutions. The majority of respondents that showed high levels of trust in government institutions also showed high levels of trust in official figures. Conversely, the majority of those with low levels of trust in government institutions had low levels of trust in official figures.

Those people who thought that official figures were important for decision making in society, tended to trust the figures more.

There were some further attitudes that had a weaker association with trust in official figures. Respondents were asked about how trusting they were of other people in general. Those who were more trusting, were slightly more likely to trust official figures. Respondents' who had a higher level of interest in politics were slightly more likely to have a higher degree of trust in official figures.

In some cases, there was a particularly strong association between respondent's trust in a particular government institution, and their trust in particular sets of official figures. Trust in local councils was strongly related to trust in council performance statistics. Trust in the NHS was also strongly related to trust in hospital waiting lists. For all of the figures except road traffic casualties, trust in the UK Government was strongly related with the extent of trust in the figures.

What other personal characteristics are closely associated with trust in official statistics?

Analysis was also carried out to assess whether the personal characteristics of respondents were closely associated with trust. The variables which were analysed included age, gender, region, socio-economic status, level of education, and income. A full list is provided in the annex.

Generally the personal characteristics of respondents were not closely associated with their level of trust in official statistics. The exception to this was age. As figure 7 shows, the young were the most inclined to trust official figures, followed by those over 55. People in the age range 35 to 54 were least likely to trust official figures.

Figure 7: Characteristics of respondents, by average level of trust in official figures, July 2004

	Average level of trust in official figures			Base (=100%)
	High ¹ %	Medium ¹ %	Low ¹ %	
Great Britain				
Age				
16 to 34	30	51	19	443
35 to 54	22	49	29	606
55 and over	31	43	26	632
All persons	27	46	25	1681

¹ Respondents are categorised according to their average trust score for each of the six official statistics asked about in the Omnibus Survey.

Annex

This annex provides a summary of the analysis that was carried out to examine the extent to which various attitudes, opinions, and personal characteristics were related to trust in official figures.

Separate models were developed for the following response variables:

- Trust in official figures (scored 0-10; calculated as the average of the 6 variables below);
- Trust in official figures on council performance (scored 0-10);
- Trust in official figures on unemployment (scored 0-10);
- Trust in official figures about hospital waiting lists (scored 0-10);
- Trust in official figures on exam passes (scored 0-10);
- Trust in official figures on domestic burglaries (scored 0-10);
- Trust in official figures on road casualties (scored 0-10).

For all of these variables except the last one, multiple linear regression models were used, and so the variables were treated as continuous. The exception was trust in official figures on road casualties. In this case an ordinal logistic regression model was used. Trust in figures on road casualties had a more skewed distribution, and the linear regression model did not fit well.

A wide range of explanatory variables were considered. These included the following variables which were treated continuously:

- Trust in the local council (scored 0-10);
- Trust in the Civil Service (scored 0-10);
- Trust in the Police (scored 0-10);
- Trust in the UK government (scored 0-10);
- Trust in the courts (scored 0-10);
- Trust in the NHS (scored 0-10);
- Views about the importance of official statistics (scored 1-5, corresponding to: very unimportant, fairly unimportant, neither important or unimportant, fairly important, very important);
- Level of interest in politics (scored 1-5, corresponding to: none at all, not much, some, quite a lot, a great deal).

The following variables were treated categorically:

- Gender;
- Age (16-24; 25-34; 35-44; 45-54; 55-64; 65-74; 75+);
- Region (government office regions);
- Nationality (England, Scotland, Wales);
- National Statistics Socio-Economic Classification (NSSEC) (managerial /professional, intermediate, routine and manual, not classified);
- Highest level of education attained (degree or equivalent, below degree level, none);

- Age left full-time education (up to 14; 15 or 16; 17 or 18; 19 to 25; over 25; still in education);
- Employment status (working, not working);
- Income (gross weekly income <£100, £100 < £200, £200 < £400, £400 <);
- Marital status (married/cohabiting, single, widowed, divorced/separated, same sex cohabiting);
- Source of information used to form opinions on current issues (family or friends, school/college/work, newspapers, television, radio, internet, other);
- Views on whether other people can generally be trusted (most people can be trusted, it depends, can't be too careful);
- Whether the respondent had heard of the ONS (yes, no);
- Newspaper that is read most often (a wide range of national newspapers);
- Most trusted media source (national TV news, regional TV news, national newspapers, local newspapers, national radio news, local radio news, internet news, any forms of media news).

All these explanatory variables were tested for inclusion in the models, and the variables which were included were those which were significant at the 5% level.

Results of the analysis

Only a relatively small number of the explanatory variables which were tested, were found to be consistently related to trust in official figures.

Those variables most closely associated with trust in official figures are trust in other institutions. Trust in the council, the UK Government, the Police, the courts, and the NHS were all strongly associated with trust in official figures – these variables were deemed to be statistically significant in several of the models. Particularly strong associations are apparent between trust in local councils, and local council performance statistics, between trust in the NHS and hospital waiting lists, and between trust in the UK Government and most of the measures of trust. Compared to the other institutions, trust in the civil service was less strongly associated with trust in official figures – significant in only one model.

Views about the importance of official statistics, and age, were the other variables which were statistically significant in several models. A range of other variables appeared in one or two models, although not in a sufficiently strong and consistent way to enable firm conclusions to be drawn.

Figure A1 shows those variables for which statistically significant results were obtained consistently, in several models.

Coefficients from the linear regression models should be interpreted in the following way:

- for continuous variables, the coefficient is the expected change in the response given a one unit increase in the explanatory variable, keeping everything else constant.

- for categorical variables the coefficient for each category, is the expected change in the response, if the respondent is in that category, rather than the reference category.

The ordinal logistic regression model used for trust in road traffic casualty figures, is interpreted using the odds ratios, in a similar way to a binary logistic regression model. The odds ratios illustrate the effect of the explanatory variables, on the odds of being in a higher rather than a lower category. Holding all other variables constant, the odds ratios are interpreted in the following way:

- for continuous variables, a one unit increase in the explanatory variable, changes the odds of being in a higher trust category by $100 \times (\text{odds ratio} - 1)\%$;
- for categorical variables, for each category, the odds of having higher trust are increased by $100 \times (\text{odds ratio} - 1)\%$, if the respondent is in that category, rather than the reference category.

Figure A1: Results from regression models designed to analyse factors affecting trust in official figures

Explanatory Variables	Response variables							Significant ² odds ratios from an ordinal logistic regression model
	Trust in official figures ¹	Trust in figures on council performance	Trust in unemployment figures	Trust in hospital waiting lists	Trust in figures on exam passes	Trust in figures on domestic burglaries	Trust in figures on road casualties	
	Statistically significant ² coefficients from linear regression models							
Trust in the Council	0.18	0.46	0.11	0.09	0.14	0.15	1.08	
Trust in UK Govt.	0.14	0.12	0.17	0.27	0.10	0.14	:	
Trust in the Civil Service	:	:	0.12	:	:	:	:	
Trust in the Police	0.06	0.11	:	:	:	0.14	1.08	
Trust in the Courts	0.14	0.10	0.19	0.12	0.17	0.17	1.11	
Trust in the NHS	0.09	0.06	:	0.33	:	:	1.08	
Views on importance of official statistics	0.18	0.15	0.24	:	0.19	0.29	1.19	
Age								
16-24 years	reference	:	reference	:	:	reference	:	
25-34 years	0.01	:	-0.44	:	:	-0.16	:	
35-44 years	-0.10	:	-0.71	:	:	-0.10	:	
45-54 years	-0.45	:	-1.05	:	:	-0.75	:	
55-64 years	-0.18	:	-0.74	:	:	-0.36	:	
65-74 years	-0.25	:	-0.99	:	:	-0.40	:	
75+ years	-0.23	:	-0.41	:	:	-0.53	:	

¹ Calculated for each respondent as the average of the scores by which they rated their level of trust in each of the six official figures.

² The significance level used was 5%.

: Denotes that this variable was not found to be significant.

For example:

- a one unit increase in a person's level of trust in the council (scored 0-10), increases the expected score for trust in council performance figures by 0.46 (again, on the scale 0-10);
- a one unit increase on the variable 'views on the importance of official statistics', which is scored 1-5, increases the odds of an individual having higher trust in road traffic casualty figures, by 19%;

- someone in the age group 45-54 has an expected score for general trust in statistics, which is 0.45 lower than someone in the reference age group of 16-24.