ONS Longitudinal Study
Sampling quality at the 2001 Census

2001 sampling fractions by sex and age

People aged 65 to 69 had the highest sampling fractions overall (1.12). The lowest sampling fractions (1.07 each) were found among children aged 0 to 4 and people aged 20 to 24.

Females had slightly higher observed sampling fractions (1.10) than males (1.10). The biggest difference between sexes was for 25 to 29 year-olds: 1.11 for females compared with 1.08 for males.

Among males, the highest observed sampling fractions (1.12 each) were found among men aged 45 to 49 and 60 to 74. Among females, the highest observed sampling fractions (1.11 each) were found among women aged 25 to 29, 40 to 49 and 65 to 69.

Using sampling fractions calculated using One Number Census (ONC) populations, sampling fractions were lowest among people aged 20 to 29.

Table S01.1 2001 LS sampling fractions by sex and age: traced LS members

Age	Males					Females						
			Sam	pling Fractio	ns (%) based	on			Sam	pling Fraction	ns (%) based (on
	2001 Traced	2001 One Number Census	One Numbe		Census population without adjustments for underenumeration		2001 Traced	2001 One Number Census	One Number		Census po without adju- underenu	stments for
	LS Sample	Population	Observed	Expected	Observed	Expected	LS Sample		Observed	Expected	Observed	Expected
0 - 4	15,326	1,584,115	0.97	1.02	1.07	1.10	14,742	1,510,026	0.98	1.04	1.08	1.10
5 - 9	16,810	1,694,550	0.99	1.02	1.07	1.10	16,254	1,613,304	1.01	1.04	1.09	1.10
10 - 14	17,861	1,754,009	1.02	1.02	1.09	1.10	17,251	1,671,014	1.03	1.04	1.10	1.10
15 - 19	16,505	1,643,975	1.00	1.02	1.09	1.09	15,808	1,573,333	1.00	1.03	1.08	1.10
20 - 24	14,421	1,553,228	0.93	1.00	1.07	1.07	14,952	1,568,984	0.95	1.02	1.08	1.08
25 - 29	15,958	1,684,729	0.95	1.00	1.08	1.07	17,401	1,750,279	0.99	1.02	1.11	1.09
30 - 34	18,901	1,952,606	0.97	1.01	1.07	1.08	20,527	2,031,315	1.01	1.03	1.09	1.09
35 - 39	20,503	2,019,630	1.02	1.02	1.10	1.09	21,571	2,073,554	1.04	1.04	1.10	1.10
40 - 44	18,821	1,814,937	1.04	1.02	1.10	1.09	19,448	1,841,431	1.06	1.04	1.11	1.10
45 - 49	17,389	1,632,780	1.06	1.02	1.12	1.10	17,763	1,663,273	1.07	1.04	1.11	1.10
50 - 54	18,564	1,780,556	1.04	1.02	1.08	1.10	19,403	1,810,487	1.07	1.04	1.10	1.10
55 - 59	15,584	1,466,976	1.06	1.02	1.10	1.10	15,986	1,495,297	1.07	1.04	1.10	1.10
60 - 64	13,552	1,249,632	1.08	1.02	1.12	1.10	13,849	1,295,122	1.07	1.04	1.10	1.10
65 - 69	12,060	1,100,967	1.10	1.02	1.12	1.10	12,921	1,191,515	1.08	1.04	1.11	1.10
70 - 74	10,302	944,034	1.09	1.02	1.12	1.10	12,074	1,130,516	1.07	1.04	1.09	1.10
75+	15,311	1,449,202	1.06	1.02	1.09	1.10	26,555	2,496,540	1.06	1.04	1.09	1.10
All people	257,868	25,325,926	1.02	1.02	1.09	1.09	276,505	26,715,990	1.03	1.03	1.10	1.10

Table S01.1 2001 LS sampling fractions by sex and age: traced LS members

Age	All people	•												
			Sam	pling Fractio	ns (%) based	on								
	2001 Traced	2001 One Number Census	One Number		Census po without adjust underenur	stments for								
	LS Sample	Population	Observed	Expected	Observed	Expected								
0 - 4	30,068	3,094,141	0.97	1.03	1.07	1.10								
5 - 9	33,064	3,307,854	1.00	1.03	1.08	1.10								
10 - 14	35,112	3,425,023	1.03	1.03	1.10	1.10								
15 - 19	32,313	3,217,308	1.00	1.03	1.08	1.09								
20 - 24	29,373	3,122,212	0.94	1.01	1.07	1.07								
25 - 29	33,359	3,435,008	0.97	1.01	1.09	1.08								
30 - 34	39,428	3,983,921	0.99	1.02	1.08	1.09								
35 - 39	42,074	4,093,184	1.03	1.03	1.10	1.09								
40 - 44	38,269	3,656,368	1.05	1.03	1.11	1.10								
45 - 49	35,152	3,296,053	1.07	1.03	1.11	1.10								
50 - 54	37,967	3,591,043	1.06	1.03	1.09	1.10								
55 - 59	31,570	2,962,273	1.07	1.03	1.10	1.10								
60 - 64	27,401	2,544,754	1.08	1.03	1.11	1.10								
65 - 69	24,981	2,292,482	1.09	1.03	1.12	1.10								
70 - 74	22,376	2,074,550	1.08	1.03	1.10	1.10								
75+	41,866	3,945,742	1.06	1.03	1.09	1.10								
All people	534,373	52,041,916	1.03	1.03	1.09	1.09								

¹ Source: Office for National Statistics Longitudinal Study (LS)

² 'Traced' means the LS members' records were found on the National Health Service Central Register before or at the 2001 Census-LS link

 $^{^{3}}$ The LS sample in this table does not include 201 cases for whom data is incomplete

⁴ The Census population base counts students as resident at their term-time addresses. A total of 1,853 LS members were enumerated as full-time students or schoolchildren studying away from the family home, but were not enumerated at their term-time addresses. This group were not included in this table

⁵ The One Number Census adjusted for people who were missed from the Census

⁶ The Census populations are taken from HMSO (2003) 'Census 2001. National Report for England and Wales', Table S001

2001 sampling fractions by sex, age and marital status

Sampling fractions varied by marital status, with 1.11 for married LS members, 1.09 for divorced or widowed members and 1.08 for those who were never married.

There was also some variation by sex and marital status, with the largest difference being among divorced or widowed males and females: 1.08 for divorced or widowed men and 1.10 for divorced or widowed women.

Differences across age groups should be treated with care as many are based on small numbers.

Among married people, sampling fractions were highest for 0 to 19 year olds: 1.20 for males and 1.39 for females.

Table S01.2 2001 LS sampling fractions by sex, age and marital status: traced LS members

Marital status	Males		Sampling Fractions (%) based on							
	2001 Traced	2001 One Number Census	One Number	er Census	Census po without adjus underenur	pulation stments for				
	LS Sample	Population	Observed	Expected	Observed	Expected				
Never Married										
0 - 19	66,433	6,669,061	1.00	0.98	1.08	1.08				
20 - 24	13,671	1,477,510	0.93	0.96	1.06	1.05				
25 - 29	11,452	1,248,766	0.92	0.95	1.06	1.05				
30 - 34	8,320	896,124	0.93	0.96	1.05	1.06				
35 - 39	5,568	586,826	0.95	0.97	1.07	1.07				
40 - 44	3,360	352,349	0.95	0.97	1.06	1.07				
45 - 49	2,253	228,752	0.98	0.97	1.07	1.08				
50 - 54	1,837	185,613	0.99	0.98	1.07	1.08				
55 - 59	1,234	125,495	0.98	0.97	1.06	1.08				
60 - 64	927	96,121	0.96	0.98	1.04	1.08				
65 - 69 70 - 74	833	82,389	1.01	0.97	1.08	1.07				
70 - 74	762	72,420	1.05	0.98	1.12	1.08				
75+ Tatal	1,022	97,799	1.05	0.97	1.11	1.07				
Total	117,672	12,119,225	0.97	0.97	1.07	1.07				
Married	0.4	F 700	4.07	4.00	4.00	4.07				
0 - 19	61	5,709	1.07	1.03	1.20	1.07				
20 - 24	723	72,364	1.00	1.03	1.15	1.07				
25 - 29	4,259	408,180	1.04	1.05	1.16	1.09				
30 - 34	9,571	949,240	1.01	1.06	1.09	1.10				
35 - 39	12,998	1,241,385	1.05	1.07	1.11	1.11				
40 - 44	13,261	1,236,899	1.07	1.07	1.12	1.11				
45 - 49	12,884	1,175,694	1.10	1.07	1.13	1.11				
50 - 54	14,234	1,341,295	1.06	1.08	1.09	1.12				
55 - 59	12,348	1,138,125	1.08	1.08	1.11	1.12				
60 - 64	10,853	979,351	1.11	1.08	1.13	1.12				
65 - 69 70 - 74	9,584	857,908	1.12	1.08	1.13	1.12				
70 - 74 75+	7,862	706,546	1.11	1.08 1.08	1.13	1.12				
Total	9,582 118,220	902,717 11,015,413	1.06 1.07	1.06	1.08 1.11	1.12 1.11				
Divorced or Wic	lowed									
0 - 19	8	1,879	0.43	1.08	0.60	1.12				
20 - 24	27	3,354	0.81	1.08	0.97	1.12				
25 - 29	247	27,783	0.89	1.06	1.02	1.10				
30 - 34	1,010	107,242	0.94	1.05	1.05	1.09				
35 - 39	1,937	191,419	1.01	1.07	1.12	1.11				
40 - 44	2,200	225,689	0.97	1.07	1.07	1.11				
45 - 49	2,252	228,334	0.99	1.07	1.07	1.11				
50 - 54	2,493	253,648	0.98	1.07	1.06	1.11				
55 - 59	2,002	203,356	0.98	1.07	1.06	1.11				
60 - 64	1,772	174,160	1.02	1.07	1.09	1.11				
65 - 69	1,643	160,670	1.02	1.07	1.09	1.11				
70 - 74	1,678	165,068	1.02	1.07	1.07	1.11				
75+	4,707	448,686	1.05	1.08	1.10	1.12				
Total	21,976	2,191,288	1.00	1.07	1.08	1.11				
All people										
0 - 19	66,502	6,676,649	1.00	1.02	1.08	1.10				
20 - 24	14,421	1,553,228	0.93	1.00	1.07	1.07				
25 - 29	15,958	1,684,729	0.95	1.00	1.08	1.07				
30 - 34	18,901	1,952,606	0.97	1.01	1.07	1.08				
35 - 39	20,503	2,019,630	1.02	1.02	1.10	1.09				
40 - 44	18,821	1,814,937	1.04	1.02	1.10	1.09				
45 - 49	17,389	1,632,780	1.06	1.02	1.12	1.10				
50 - 54	18,564	1,780,556	1.04	1.02	1.08	1.10				
55 - 59	15,584	1,466,976	1.06	1.02	1.10	1.10				
60 - 64	13,552	1,249,632	1.08	1.02	1.12	1.10				
65 - 69	12,060	1,100,967	1.10	1.02	1.12	1.10				
70 - 74	10,302	944,034	1.09	1.02	1.12	1.10				
75+	15,311	1,449,202	1.06	1.02	1.09	1.10				
Total	257,868	25,325,926	1.02	1.02	1.09	1.09				

Table S01.2 2001 LS sampling fractions by sex, age and marital status: traced LS members

Marital status	Females		San	npling Fractio	Sampling Fractions (%) based on						
	2001 Traced	2001 Census	One Number	er Census	Census po without adjus underenur	pulation stments for					
	LS Sample	Population	Observed	Expected	Observed	Expected					
Never Married				<u> </u>		'					
0 - 19	63,850	6,348,953	1.01	0.99	1.09	1.08					
20 - 24	13,017	1,383,063	0.94	0.98	1.06	1.07					
25 - 29	10,207	1,060,162	0.96	0.98	1.08	1.07					
30 - 34	6,695	703,613	0.95	0.99	1.05	1.08					
35 - 39	4,231	437,352	0.97	0.99	1.07	1.08					
40 - 44	2,366	242,652	0.98	0.99	1.06	1.08					
45 - 49	1,433	145,261	0.99	0.99	1.06	1.08					
50 - 54	1,102	107,381	1.03	0.99	1.10	1.08					
55 - 59	737	72,130	1.02	0.99	1.09	1.08					
60 - 64	634	61,761	1.03	0.99	1.09	1.08					
65 - 69	653	62,706	1.04	0.99	1.10	1.08					
70 - 74	691	67,731	1.02	1.00	1.07	1.09					
75+	1,986	187,761	1.06	0.99	1.10	1.08					
Total	107,602	10,880,526	0.99	0.99	1.08	1.08					
Married	400	10 507	4.40	4.00	4.00	4.05					
0 - 19	193	16,587	1.16	1.02	1.39	1.05					
20 - 24 25 - 29	1,845 6,568	176,462 629,025	1.05 1.04	1.05 1.06	1.20 1.15	1.08 1.10					
		·			1.13	1.10					
30 - 34 35 - 39	11,943 14,477	1,146,314 1,355,230	1.04 1.07	1.07 1.07	1.11	1.11					
35 - 39 40 - 44	13,859		1.07	1.07	1.12	1.11					
40 - 44 45 - 49	·	1,287,837	1.00	1.07	1.12	1.11					
50 - 54	13,127 14,637	1,205,827 1,348,979	1.09	1.07	1.12	1.11					
55 - 59	11,896	1,107,064	1.03	1.08	1.09	1.11					
60 - 64	9,653	904,311	1.07	1.07	1.08	1.11					
65 - 69	8,234	744,021	1.11	1.08	1.12	1.11					
70 - 74	6,145	573,163	1.07	1.08	1.08	1.11					
75+	6,840	634,161	1.08	1.08	1.09	1.11					
Total	119,417	11,128,981	1.07	1.07	1.11	1.11					
Divorced or Wid	lowed										
0 - 19	12	2,137	0.56	1.08	0.73	1.11					
20 - 24	90	9,459	0.95	1.04	1.09	1.08					
25 - 29	626	61,092	1.02	1.06	1.13	1.10					
30 - 34	1,889	181,388	1.04	1.07	1.13	1.11					
35 - 39	2,863	280,972	1.02	1.07	1.09	1.11					
40 - 44	3,223	310,942	1.04	1.07	1.11	1.11					
45 - 49	3,203	312,185	1.03	1.07	1.09	1.11					
50 - 54	3,664	354,127	1.03	1.07	1.10	1.11					
55 - 59	3,353	316,103	1.06	1.07	1.12	1.11					
60 - 64	3,562	329,050	1.08	1.08	1.14	1.11					
65 - 69	4,034	384,788	1.05	1.07	1.09	1.11					
70 - 74	5,238	489,622	1.07	1.07	1.11	1.11					
75+ Total	17,729 49,486	1,674,618 4,706,483	1.06 1.05	1.08 1.07	1.09 1.10	1.11 1.11					
All people	.,	. ,									
0 - 19	64,055	6,367,677	1.01	1.04	1.09	1.10					
20 - 24	14,952	1,568,984	0.95	1.02	1.08	1.08					
25 - 29	17,401	1,750,279	0.99	1.02	1.11	1.09					
30 - 34	20,527	2,031,315	1.01	1.02	1.09	1.09					
35 - 39	21,571	2,031,313	1.04	1.03	1.10	1.10					
40 - 44	19,448	1,841,431	1.04	1.04	1.10	1.10					
45 - 49	17,763	1,663,273	1.07	1.04	1.11	1.10					
50 - 54	19,403	1,810,487	1.07	1.04	1.10	1.10					
55 - 59	15,986	1,495,297	1.07	1.04	1.10	1.10					
60 - 64	13,849	1,495,297	1.07	1.04	1.10	1.10					
65 - 69	12,921	1,191,515	1.08	1.04	1.10	1.10					
70 - 74	12,074	1,130,516	1.07	1.04	1.09	1.10					
10-14			1.07	1.04	1.09	1.10					
75+	26,555	2,496,540	I Un		1 110	1 111					

Table S01.2 2001 LS sampling fractions by sex, age and marital status: traced LS members

	All people		San	npling Fractio	ns (%) based o	on
		2001	One Number		Census po without adjust underenur	stments for
	2001 Traced	Census				
Never Married	LS Sample	Population	Observed	Expected	Observed	Expected
0 - 19	130,283	13,018,014	1.00	0.99	1.08	1.08
20 - 24	26,688	2,860,573	0.93	0.97	1.06	1.06
25 - 29	21,659	2,308,928	0.94	0.96	1.07	1.06
30 - 34	15,015	1,599,737	0.94	0.97	1.05	1.07
35 - 39	9,799	1,024,178	0.96	0.98	1.07	1.07
40 - 44	5,726	595,001	0.96	0.98	1.06	1.08
45 - 49	3,686	374,013	0.99	0.98	1.07	1.08
50 - 54	2,939	292,994	1.00	0.98	1.08	1.08
55 - 59	1,971	197,625	1.00	0.98	1.07	1.08
60 - 64	1,561	157,882	0.99	0.98	1.06	1.08
65 - 69	1,486	145,095	1.02	0.98	1.09	1.08
70 - 74	1,453	140,151	1.04	0.99	1.09	1.08
75+	3,008	285,560	1.05	0.98	1.10	1.08
Total	225,274	22,999,751	0.98	0.98	1.08	1.08
Married						
0 - 19	254	22,296	1.14	1.02	1.33	1.06
20 - 24	2,568	248,826	1.03	1.04	1.19	1.08
25 - 29	10,827	1,037,205	1.04	1.06	1.15	1.10
30 - 34	21,514	2,095,554	1.03	1.07	1.10	1.10
35 - 39	27,475	2,596,615	1.06	1.07	1.11	1.11
40 - 44	27,120	2,524,736	1.07	1.07	1.12	1.11
45 - 49	26,011	2,381,521	1.09	1.07	1.13	1.11
50 - 54	28,871	2,690,274	1.07	1.08	1.10	1.11
55 - 59	24,244	2,245,189	1.08	1.08	1.10	1.11
60 - 64	20,506	1,883,662	1.00	1.08	1.11	1.11
65 - 69	17,818	1,601,929	1.11	1.08	1.13	1.12
70 - 74	14,007	1,279,709	1.09	1.08	1.13	1.12
75+	16,422	1,536,878	1.09	1.08	1.08	1.11
Total	237,637	22,144,394	1.07	1.08	1.11	1.12
Divorced or Wid	owed					
0 - 19	20	4,016	0.50	1.08	0.67	1.12
20 - 24	117	12,813	0.91	1.05	1.06	1.09
25 - 29	873	88,875	0.98	1.06	1.10	1.10
30 - 34	2,899	288,630	1.00	1.07	1.10	1.10
35 - 39	4,800	472,391	1.02	1.07	1.11	1.11
40 - 44	5,423	536,631	1.02	1.07	1.09	1.11
45 - 49	5,455	540,519	1.01	1.07	1.08	1.11
50 - 54	6,157	607,775	1.01	1.07	1.08	1.11
55 - 59	5,355	519,459	1.03	1.07	1.10	1.11
60 - 64	5,334	503,210	1.06	1.07	1.12	1.11
65 - 69	5,677	545,458	1.04	1.08	1.09	1.11
70 - 74	6,916		1.04	1.07	1.10	1.11
70 - 74 75+	22,436	654,690 2,123,304	1.06	1.07	1.09	1.11
Total	71,462	6,897,771	1.04	1.07	1.09	1.11
All people						
0 - 19	130,557	13,044,326	1.00	1.03	1.08	1.10
20 - 24	29,373	3,122,212	0.94	1.01	1.07	1.07
25 - 29	33,359	3,435,008	0.97	1.01	1.09	1.08
30 - 34	39,428	3,983,921	0.99	1.02	1.08	1.00
35 - 39	42,074	4,093,184	1.03	1.03	1.10	1.09
40 - 44	38,269	3,656,368	1.05	1.03	1.11	1.10
45 - 49	35,152	3,296,053	1.03	1.03	1.11	1.10
50 - 54	37,967	3,591,043	1.07	1.03	1.09	1.10
	31,570					
55 - 59		2,962,273	1.07	1.03	1.10	1.10
60 - 64	27,401	2,544,754	1.08	1.03	1.11	1.10
65 - 69	24,981	2,292,482	1.09	1.03	1.12	1.10
70 - 74	22,376	2,074,550	1.08	1.03	1.10	1.10
75+	41,866	3,945,742	1.06	1.03	1.09	1.10
Total	534,373	52,041,916	1.03	1.03	1.09	1.09

¹ Source: Office for National Statistics Longitudinal Study (LS)

² 'Traced' means the LS members' records were found on the National Health Service Central Register before or at the 2001 Census-LS link

The LS sample in this table does not include 201 cases for whom data is incomplete

⁴ The Census population base counts students as resident at their term-time addresses. A total of 1,853 LS members were enumerated as full-time students or schoolchildren studying away from the family home, but were not enumerated at their termtime addresses. This group were not included in this table

The One Number Census adjusted for people who were missed from the Census

⁶ The Census populations are taken from HMSO (2003) 'Census 2001. National Report for England and Wales', Table S002

⁷ Married includes 'first marriage', 'remarried' and 'separated'

2001 sampling fractions by sex and National Statistics Socio-economic Classification

At the 2001 Census, the National Statistics Socio-economic Classification (NS-SeC) replaced Social Class based on Occupation (formerly Registrar General's Social Class) and Socio-Economic Group (SEG) used in previous censuses. NS-SeC is still based on occupation, employment status and size of work establishment but takes greater account of the benefits associated with occupation.

There was little variation in sampling fractions by NS-SeC for members of the 2001 Longitudinal Study (LS) sample. Observed values were at their highest among 'small employers and own-account workers' as well as among people in routine occupations (1.05). Observed sampling fractions were at their lowest among those who were 'not classified' (0.95).

Females had slightly higher sampling fractions (1.03) than males (1.02).

Table S01.3 2001 LS sampling fractions by sex and NS-SeC: economically active traced LS members aged 16 to 74

NS-SeC	Males				Females				Total			
	2001 Traced 2	2001 Census	Sampling Fr	actions (%)	2001 Traced	2001 Census	Sampling Fra	actions (%)	2001 Traced	2001 Census	Sampling Fr	actions (%)
	LS Sample	Population	Observed	Expected	LS Sample	Population	Observed	Expected	LS Sample	Population	Observed	Expected
Higher Managerial and professional occupations	21,245	2,141,902	0.99	1.01	8,158	824,032	0.99	1.02	29,403	2,965,934	0.99	1.01
1.1 Large employers and higher managerial occupations	8,634	857,086	1.01	1.01	3,381	332,509	1.02	1.02	12,015	1,189,595	1.01	1.02
1.2 Higher professional occupations	12,611	1,284,816	0.98	1.01	4,777	491,523	0.97	1.02	17,388	1,776,339	0.98	1.01
2. Lower managerial and professional occupations	31,600	3,166,156	1.00	1.02	32,123	3,162,858	1.02	1.03	63,723	6,329,014	1.01	1.02
3. Intermediate occupations	8,615	866,538	0.99	1.01	23,175	2,242,628	1.03	1.03	31,790	3,109,166	1.02	1.02
Small Employers and own account workers	18,401	1,749,000	1.05	1.02	6,559	619,333	1.06	1.03	24,960	2,368,333	1.05	1.02
5. Lower supervisory and technical occupations	18,187	1,767,949	1.03	1.02	6,393	607,337	1.05	1.03	24,580	2,375,286	1.03	1.02
6. Semi-routine occupations	14,759	1,437,507	1.03	1.02	22,984	2,189,025	1.05	1.03	37,743	3,626,532	1.04	1.02
7. Routine occupations	18,651	1,780,259	1.05	1.02	10,573	998,010	1.06	1.03	29,224	2,778,269	1.05	1.02
8. Never worked and long-term unemployed	2,984	304,320	0.98	1.01	1,982	194,819	1.02	1.02	4,966	499,139	0.99	1.02
Never worked	696	69,165	1.01	0.99	466	47,586	0.98	1.02	1,162	116,751	1.00	1.00
Long-term unemployed	2,288	235,155	0.97	1.02	1,516	147,233	1.03	1.03	3,804	382,388	0.99	1.02
Not classified	4,190	442,673	0.95	0.95	4,984	527,858	0.94	0.94	9,174	970,531	0.95	0.95
Total	138,632	13,656,304	1.02	1.02	116,931	11,365,900	1.03	1.03	255,563	25,022,204	1.02	1.02

¹ Source: Office for National Statistics Longitudinal Study (LS)

² 'Traced' means the LS members' records were found on the National Health Service Central Register before or at the 2001 Census-LS link

³ The LS sample in this table does not include 201 cases for whom data is incomplete

⁴ The Census population base counts students as resident at their term-time addresses. A total of 1,853 LS members were enumerated as full-time students or schoolchildren studying away from the family home, but were not enumerated at their term-time addresses. This group were not included in this table

⁵ There are no unadjusted Census denominators available for NS-SeC

⁶ The Census populations are taken from HMSO (2003) 'Census 2001. National Report for England and Wales', Table S043

⁷ NS-SeC stands for National Statistics Socio-economic Classification.

⁸ In the NS-SeC classification, all full-time students are recorded in the 'full-time students' category whether they are economically active or not

⁹ For long-term unemployed year last worked is 1999 or earlier

^{10 &#}x27;Not classifiable for other reasons' includes people whose occupation has not been coded and those who cannot be allocated to an NS-SeC category

¹¹ The very low sampling fraction in the unclassified category is due to the occupation topup coding done in the LS which results in a much lower proportion of not classified in the LS than the Census

2001 sampling fractions by sex and country of birth

There was considerable variation in sampling fractions among groups who were born outside of the UK. Observed values were at their highest among people born in Bangladesh (1.90), India (1.74) and Pakistan (1.72). The large difference between observed and expected values is attributable to the over-sampling of these groups in the LS.

Observed values were at their lowest for people born in the USA (0.85), which may be attributable to the large proportion of armed forces personnel among people born in the USA who are enumerated in England and Wales. People born in Japan (0.87) and Australia (0.90) also had very low sampling fractions.

Sampling fractions among females born in Bangladesh (2.01) were higher than sampling fractions among males in this category (1.79). Sampling fractions among males born in India (1.76) and Pakistan (1.79), were higher than sampling fractions for females in these groups (1.72 and 1.65 respectively).

Table S01.4 2001 LS sampling fractions by sex and country of birth: traced LS members

Country of birth	Males						Females					
•			Sar	npling Fractio	ons (%) based o	on			Sa	mpling Fractio	ns (%) based o	n
	2001 Traced	2001 One Number Census	One Numb		Census po without adjust underenui	stments for	2001 Traced	2001 One Number Census	One Numbe		Census po without adjust underenut	stments for
	LS Sample	Population	Observed	Expected	Observed	Expected	LS Sample	Population	Observed	Expected	Observed	Expected
Europe	240,855	23,806,507	1.01	1.02	1.08	1.10	258,172	25,091,843	1.03	1.04	1.08	1.10
United Kingdom	234,306	23,143,636	1.01	1.02	1.08	1.10	249,567	24,262,775	1.03	1.04	1.08	1.10
England	215,592	21,273,428	1.01	1.02	1.08	1.10	229,462	22,292,577	1.03	1.04	1.08	1.10
Scotland	4,001	409,069	0.98	0.99	1.05	1.06	4,027	409,897	0.98	1.03	1.03	1.09
Northern Ireland	1,064	107,147	0.99	0.99	1.07	1.07	1,157	115,828	1.00	1.03	1.06	1.09
Wales	13,649	1,353,992	1.01	1.03	1.08	1.10	14,921	1,444,473	1.03	1.04	1.09	1.10
Outside United Kingdom	23,562	2,184,834	1.08	0.97	1.24	1.03	26,938	2,455,962	1.10	1.00	1.23	1.06
Republic of Ireland	2,083	210,220	0.99	1.00	1.08	1.07	2,729	262,807	1.04	1.03	1.10	1.09
Channel Isles and Isle of Man	146	13,585	1.07	0.99	1.15	1.06	148	15,250	0.97	1.04	1.03	1.10
Other Western Europe	2,899	321,897	0.90	0.92	1.00	0.99	4,198	428,246	0.98	0.99	1.06	1.05
EU countries	2,568	291,739	0.88	0.92	0.98	0.98	3,825	389,937	0.98	0.99	1.06	1.05
France	279	35,895	0.78	0.80	0.91	0.86	500	53,564	0.93	0.96	1.03	1.02
Germany	949	101,058	0.94	0.97	1.02	1.04	1,342	142,496	0.94	1.02	1.00	1.08
Italy	449	51,095	0.88	0.96	0.97	1.03	509	50,925	1.00	1.00	1.08	1.06
Netherlands	133	16,168	0.82	0.87	0.90	0.93	207	20,617	1.00	0.99	1.07	1.05
Spain	196	21,149	0.93	0.88	1.02	0.94	306	30,414	1.01	0.98	1.09	1.03
Other EU	562	66,374	0.85	0.89	0.97	0.95	961	91,921	1.05	0.98	1.15	1.04
Non EU Countries in Western Europe	331	30,158	1.10	0.98	1.19	1.05	373	38,309	0.97	1.00	1.03	1.06
Eastern Europe	1,421	117,169	1.21	0.95	1.36	1.02	1,530	122,765	1.25	0.99	1.38	1.05
Poland	303	26,935	1.12	0.96	1.21	1.03	428	31,172	1.37	1.02	1.48	1.08
Other Eastern Europe	1,118	90,234	1.24	0.95	1.41	1.02	1,102	91,593	1.20	0.98	1.34	1.04
Africa	3,812	397,743	0.96	0.96	1.16	1.03	4,054	411,197	0.99	1.00	1.18	1.06
North Africa	388	39,209	0.99	0.96	1.13	1.03	308	29,506	1.04	1.01	1.18	1.07
Central and Western Africa	822	96,278	0.85	0.95	1.15	1.02	899	101,283	0.89	1.00	1.17	1.06
Nigeria	365	43,066	0.85	0.96	1.15	1.03	388	43,892	0.88	0.99	1.18	1.05
Other Central and Western Africa	457	53,212	0.86	0.94	1.15	1.01	511	57,391	0.89	1.00	1.17	1.06
South and Eastern Africa	2,602	262,256	0.99	0.97	1.16	1.04	2,847	280,408	1.02	1.00	1.18	1.06
Kenya	689	63,918	1.08	1.02	1.24	1.09	672	63,404	1.06	1.02	1.21	1.09
South Africa	507	62,687	0.81	0.90	0.91	0.96	629	69,614	0.90	0.95	1.00	1.01
Zimbabwe	201	21,507	0.93	0.93	1.12	1.00	246	25,650	0.96	1.00	1.14	1.05
Other South and Eastern Africa	1,205	114,144	1.06	0.98	1.28	1.05	1,300	121,740	1.07	1.02	1.29	1.08
Asia	10,246	783,692	1.31	0.99	1.52	1.06	10,647	810,610	1.31	1.02	1.50	1.08
Middle East	1,249	119,480	1.05	0.98	1.18	1.05	1,102	97,872	1.13	1.00	1.25	1.06
Cyprus	493	38,353	1.29	1.02	1.39	1.09	483	37,410	1.29	1.02	1.39	1.08
Iran	193	23,222	0.83	0.98	0.92	1.05	155	17,545	0.88	1.01	0.96	1.07
Other Middle East	563	57,905	0.97	0.95	1.13	1.02	464	42,917	1.08	0.99	1.24	1.04

Table S01.4 2001 LS sampling fractions by sex and country of birth: traced LS members

Country of birth	Males						Females					
•			San	npling Fractio	ons (%) based o	n			Sar	npling Fractio	ns (%) based or	n
		2001 One			Census po	pulation		2001 One			Census po	pulation
		Number	One Numb		without adjus	tments for		Number	One Numbe	er Census	without adjus	stments for
	2001 Traced	Census	popula	ation	underenur	neration	2001 Traced	Census	popula	ation	underenur	meration
	LS Sample	Population	Observed	Expected	Observed	Expected	LS Sample	Population	Observed	Expected	Observed	Expected
Far East	1,588	159,326	1.00	0.94	1.17	1.01	2,169	212,962	1.02	0.98	1.15	1.04
China	215	21,780	0.99	0.88	1.19	0.95	293	26,679	1.10	0.96	1.29	1.02
Hong Kong	465	44,042	1.06	0.98	1.22	1.05	426	43,589	0.98	1.03	1.10	1.09
Japan	83	14,450	0.57	0.78	0.73	0.83	174	21,827	0.80	0.89	0.96	0.94
Malaysia	194	20,139	0.96	1.00	1.10	1.07	261	26,275	0.99	1.02	1.10	1.08
Singapore	177	17,722	1.00	1.00	1.12	1.07	198	19,690	1.01	1.02	1.09	1.09
Other Far East	454	41,193	1.10	0.93	1.29	1.00	817	74,902	1.09	0.98	1.21	1.03
South Asia	7,409	504,886	1.47	1.00	1.72	1.07	7,376	499,776	1.48	1.03	1.70	1.09
Bangladesh	1,076	77,892	1.38	1.01	1.79	1.09	1,172	75,148	1.56	1.03	2.01	1.10
India	3,382	218,853	1.55	1.00	1.76	1.07	3,653	237,088	1.54	1.02	1.72	1.08
Pakistan	2,364	156,884	1.51	1.01	1.79	1.08	2,155	151,314	1.42	1.03	1.65	1.09
Other South Asia	587	51,257	1.15	0.94	1.29	1.01	396	36,226	1.09	1.02	1.18	1.08
North America	1,888	214,998	0.88	0.92	1.01	0.98	2,200	251,997	0.87	0.96	1.00	1.02
Canada	274	27,538	0.99	0.96	1.09	1.03	302	33,962	0.89	1.00	0.95	1.06
Caribbean and West Indies	1,087	115,539	0.94	1.01	1.12	1.08	1,250	137,637	0.91	1.02	1.08	1.08
Jamaica	658	67,122	0.98	1.01	1.17	1.08	755	78,812	0.96	1.01	1.14	1.07
Other Caribbean and West Indies	429	48,417	0.89	1.00	1.06	1.08	495	58,825	0.84	1.03	1.00	1.09
USA	494	68,501	0.72	0.75	0.80	0.81	604	75,415	0.80	0.85	0.88	0.90
Other North America	33	3,420	0.96	0.85	1.09	0.91	44	4,983	0.88	1.04	0.96	1.10
South America	306	30,635	1.00	0.97	1.14	1.04	451	43,150	1.05	1.00	1.17	1.06
Oceania	540	72,738	0.74	0.86	0.85	0.92	748	85,750	0.87	0.95	0.95	1.01
Australia	338	44,288	0.76	0.87	0.87	0.93	452	54,484	0.83	0.95	0.93	1.01
New Zealand	202	25,906	0.78	0.84	0.90	0.90	272	28,519	0.95	0.95	1.08	1.01
Other	221	22,157	1.00	0.98	1.16	1.05	233	24,190	0.96	0.88	1.21	1.03
All people	257,868	25,325,926	1.02	1.02	1.09	1.09	276,505	26,715,990	1.03	1.03	1.10	1.10

Table S01.4 2001 LS sampling fractions by sex and country of birth: traced LS members

Country of birth	All people		San	npling Fraction	ns (%) based o	on
	2001 LS Census	2001 Census	One Numbe	er Census	Census po without adjus underenur	pulation stments for
	Sample	Population	Observed	Expected	Observed	Expected
Europe	499,027	48,898,350	1.02	1.03	1.08	1.10
United Kingdom	483,873	47,406,411	1.02	1.03	1.08	1.10
England	445,054	43,566,005	1.02	1.03	1.08	1.10
Scotland	8,028	818,966	0.98	1.01	1.04	1.08
Northern Ireland	2,221	222,975	1.00	1.01	1.06	1.08
Wales	28,570	2,798,465	1.02	1.03	1.08	1.10
Outside United Kingdom	50,500	4,640,796	1.09	0.99	1.24	1.05
Republic of Ireland	4,812	473,027	1.02	1.02	1.09	1.08
Channel Isles and Isle of Man	294	28,835	1.02	1.02	1.09	1.08
Other Western Europe	7,097	750,143	0.95	0.96	1.03	1.03
EU countries	6,393	681,676	0.94	0.96	1.03	1.02
France	779	89,459	0.87	0.90	0.98	0.95
Germany	2,291	243,554	0.94	1.00	1.01	1.06
Italy	958	102,020	0.94	0.98	1.03	1.05
Netherlands	340	36,785	0.92	0.94	1.00	1.00
Spain	502	51,563	0.97	0.93	1.07	0.99
Other EU	1,523	158,295	0.96	0.94	1.08	1.01
Non EU Countries in Western Europe	704	68,467	1.03	0.99	1.10	1.06
Eastern Europe	2,951	239,934	1.23	0.97	1.37	1.04
Poland	731	58,107	1.26	0.99	1.35	1.06
Other Eastern Europe	2,220	181,827	1.22	0.97	1.38	1.03
Africa	7,866	808,940	0.97	0.98	1.17	1.05
North Africa	696	68,715	1.01	0.98	1.15	1.05
Central and Western Africa	1,721	197,561	0.87	0.97	1.16	1.04
Nigeria	753	86,958	0.87	0.98	1.16	1.04
Other Central and Western Africa	968	110,603	0.88	0.97	1.16	1.04
South and Eastern Africa	5,449	542,664	1.00	0.99	1.17	1.05
Kenya	1,361	127,322	1.07	1.02	1.22	1.09
South Africa	1,136	132,301	0.86	0.93	0.96	0.99
Zimbabwe	447	47,157	0.95	0.97	1.14	1.03
Other South and Eastern Africa	2,505	235,884	1.06	1.00	1.28	1.06
Asia	20,893	1,594,302	1.31	1.00	1.51	1.07
Middle East	2,351	217,352	1.08	0.99	1.21	1.06
Cyprus	976	75,763	1.29	1.02	1.39	1.09
Iran _	348	40,767	0.85	1.00	0.94	1.06
Other Middle East	1,027	100,822	1.02	0.97	1.18	1.03

Table S01.4 2001 LS sampling fractions by sex and country of birth: traced LS members

Country of birth	All people					
			San	npling Fractio	ns (%) based o	n
	2001 LS Census	2001 Census	One Numbe		Census po without adjus underenur	tments for
	Sample	Population	Observed	Expected	Observed	Expected
Far East	3,757	372,288	1.01	0.97	1.16	1.03
China	508	48,459	1.05	0.92	1.25	0.99
Hong Kong	891	87,631	1.02	1.00	1.16	1.07
Japan	257	36,277	0.71	0.85	0.87	0.90
Malaysia	455	46,414	0.98	1.01	1.10	1.08
Singapore	375	37,412	1.00	1.01	1.11	1.08
Other Far East	1,271	116,095	1.09	0.96	1.24	1.02
South Asia	14,785	1,004,662	1.47	1.01	1.71	1.08
Bangladesh	2,248	153,040	1.47	1.02	1.90	1.09
India	7,035	455,941	1.54	1.01	1.74	1.08
Pakistan	4,519	308,198	1.47	1.02	1.72	1.09
Other South Asia	983	87,483	1.12	0.97	1.24	1.04
North America	4,088	466,995	0.88	0.94	1.01	1.00
Canada	576	61,500	0.94	0.98	1.02	1.05
Caribbean and West Indies	2,337	253,176	0.92	1.01	1.10	1.08
Jamaica	1,413	145,934	0.97	1.01	1.15	1.08
Other Caribbean and West Indies	924	107,242	0.86	1.02	1.03	1.08
USA	1,098	143,916	0.76	0.80	0.85	0.85
Other North America	77	8,403	0.92	0.95	1.01	1.01
South America	757	73,785	1.03	0.98	1.16	1.05
Oceania	1,288	158,488	0.81	0.91	0.90	0.97
Australia	790	98,772	0.80	0.91	0.90	0.97
New Zealand	474	54,425	0.87	0.90	0.99	0.96
Other	454	46,347	0.98	0.93	1.18	1.04
All people	534,373	52,041,916	1.03	1.03	1.09	1.09

¹ Source: Office for National Statistics Longitudinal Study (LS)

² 'Traced' means the LS members' records were found on the National Health Service Central Register before or at the 2001 Census-LS link

³ The LS sample in this table does not include 201 cases for whom data is incomplete

⁴ The Census population base counts students as resident at their term-time addresses. A total of 1,853 LS members were enumerated as full-time students or schoolchildren studying away from the family home, but were not enumerated at their term-time addresses. This group were not included in this table

⁵ The One Number Census adjusted for people who were missed from the Census

⁶ The Census populations are taken from HMSO (2003) 'Census 2001. National Report for England and Wales', Table S015

⁷ 68 LS members were classified as 'UK not otherwise specified'. These cases are combined with 'England'

⁸ The European Union as defined on Census day 2001 (29 April)

⁹ People born in Central America have been included in North America as 'Other North America'

¹⁰ 'Other' consists of people born in Oceanian Islands, at sea, in the air, or with country of birth not stated

^{11 &#}x27;Republic of Ireland' includes 'Ireland (not otherwise stated)'

2001 sampling fractions by sex and religion

Sampling fractions varied by religion. Sikhs had the highest sampling fraction (1.59), followed by Muslims (1.37), Hindus (1.31) and Buddhists (1.17). The large difference between observed and expected values, at its highest among Sikhs, is attributable to over-sampling in the LS.

Females had higher observed sampling fractions than males, with the largest difference found between male (1.55) and female (1.62) Sikhs. The only exception to this was for male and female Hindus with sampling fractions of 1.32 and 1.29 respectively.

Table S01.5 2001 LS sampling fractions by sex and religion: traced LS members

Religion	Males						Females					
-			San	npling Fractic	ns (%) based o	on	•		Sam	npling Fractio	ns (%) based c	n
	2001 One Number 2001 Traced Census		One Number Census population		Census po without adjus underenur	stments for	2001 Traced	2001 One Number Census	One Numb	er Census	Census population without adjustments for underenumeration	
	LS Sample	Population	Observed	Expected	Observed	Expected	LS Sample	Population	Observed	Expected	Observed	Expected
Christian	178,371	17,442,226	1.02	1.02	1.08	1.09	206,091	19,896,260	1.04	1.04	1.09	1.10
Buddhist	729	71,893	1.01	0.96	1.16	1.03	757	72,560	1.04	1.00	1.17	1.06
Hindu	3,171	278,649	1.14	1.00	1.32	1.07	3,080	273,772	1.13	1.03	1.29	1.09
Jewish	1,240	124,769	0.99	1.02	1.07	1.09	1,392	135,158	1.03	1.03	1.10	1.10
Muslim	8,999	798,614	1.13	1.00	1.36	1.07	8,587	748,012	1.15	1.03	1.38	1.09
Sikh	2,251	164,646	1.37	1.02	1.55	1.09	2,363	164,712	1.43	1.03	1.62	1.09
All other religions	707	72,111	0.98	1.01	1.09	1.09	794	78,609	1.01	1.03	1.10	1.09
No religion	42,565	4,344,646	0.98	1.02	1.07	1.09	33,528	3,364,621	1.00	1.03	1.08	1.10
Religion not stated	19,835	2,028,372	0.98	1.01	1.06	1.08	19,913	1,982,286	1.00	1.03	1.08	1.09
Total	257,868	25,325,926	1.02	1.02	1.09	1.09	276,505	26,715,990	1.03	1.03	1.10	1.10

Table S01.5 2001 LS sampling fractions by sex and religion: traced LS members

Religion	Total						
			San	npling Fraction	ns (%) based	on	
	2001 One Number 2001 Traced Census		One Numb		Census population without adjustments for underenumeration		
	LS Sample	Population	Observed	Expected	Observed	Expected	
Christian	384,462	37,338,486	1.03	1.03	1.08	1.10	
Buddhist	1,486	144,453	1.03	0.98	1.17	1.05	
Hindu	6,251	552,421	1.13	1.01	1.31	1.08	
Jewish	2,632	259,927	1.01	1.03	1.09	1.09	
Muslim	17,586	1,546,626	1.14	1.01	1.37	1.08	
Sikh	4,614	329,358	1.40	1.02	1.59	1.09	
All other religions	1,501	150,720	1.00	1.02	1.10	1.09	
No religion	76,093	7,709,267	0.99	1.03	1.07	1.09	
Religion not stated	39,748	4,010,658	0.99	1.02	1.07	1.08	
Total	534,373	52,041,916	1.03	1.03	1.09	1.09	

¹ Source: Office for National Statistics Longitudinal Study (LS)

² 'Traced' means the LS members' records were found on the National Health Service Central Register before or at the 2001 Census-LS link ³ The LS sample in this table does not include 201 cases for whom data is incomplete

⁴ The Census population base counts students as resident at their term-time addresses. A total of 1,853 LS members were enumerated as full-time students or schoolchildren studying away from the family home, but were not enumerated at their term-time addresses. This group were not included in this table

⁵ The One Number Census adjusted for people who were missed from the Census

⁶ The Census populations are taken from HMSO (2003) 'Census 2001. National Report for England and Wales'. Table S149

2001 sampling fractions by sex and ethnic group

There was variation in sampling fractions by ethnic group. As with sampling fractions by country of birth, the highest values were found among Bangladeshi (1.54), Pakistani (1.44) and Indian (1.40) ethnic groups.

Among males, sampling fractions were highest for Pakistani people (1.46), followed by Bangladeshis (1.45) and Indians (1.39). The largest difference between observed and expected values was found among Pakistani males.

Among females, sampling fractions were highest for Bangladeshi people (1.62), followed by Indians and Pakistanis (1.42). The largest difference between observed and expected values was among Bangladeshi females.

2001 sampling fractions by sex, age and ethnic group

Sampling fractions by sex and ethnic group varied by age.

Among males, observed sampling fractions were at their highest for Pakistani men aged 45 to 59 (2.21) and 60 and over (1.97), and among Indian men aged 45 to 59 (1.74) and 60 and over (1.89). Observed values were at their lowest among 15 to 24-year-old Black African and 'Other ethnic group' men (0.99), among Black Caribbean men aged 15 to 44 (1.00) and among Black African males aged 25 to 34 (1.02).

Among females, observed values were at their highest among Pakistani women aged 35 to 44 (1.79) and 45 to 59 (1.95), and among Indian women aged 45 to 59 (1.83) and 60 and over (1.71). Observed values were at their lowest among 15 to 34-year-old Black Caribbean women (1.02), and among 15 to 24-year-old Black African and 'Other ethnic group' women (1.03 each).

2001 sampling fractions by sex and provision of unpaid care

Sampling fractions were higher among people who provided care (1.06) than people who provided no care (1.04). The highest value (1.07) was found among people providing care for 50 hours or more.

Overall, females who did not provide unpaid care had higher sampling fractions (1.06) than males (1.03), while males providing care (1.07) had higher sampling fractions than females (1.05).

Females providing 20 to 49 hours (1.06) and 50 or more hours (1.08) of care had higher sampling fractions than males in these categories: 1.05 and 1.07 respectively. Conversely, males providing 1 to 19 hours of care (1.08) had higher sampling fractions than females providing the same amount of care (1.05).

The largest difference between observed and expected sampling fractions was found among males providing 1 to 19 hours of care.

2001 sampling fractions by sex, age and provision of unpaid care

Among people providing unpaid care, people aged 15 to 34 had the lowest sampling fractions (1.02) and children aged 0 to 14 had the highest (1.09), especially females (1.12).

People aged 60 years and over had relatively high sampling fractions whether they provided unpaid care (1.09) or not (1.12). People aged 0 to 34 who did not provide care had the lowest sampling fractions (about 1.00).

The largest difference in expected and observed sampling fractions among unpaid carers was for people aged 0 to 14. The expected sampling fraction (1.06) was lower than the observed sampling fraction (1.12).

Sampling fractions for unpaid carers are based on small numbers of LS members and should be interpreted with caution.

2001 sampling fractions by sex and type of establishment

Sampling fractions varied by establishment type: 1.03 for private households, 1.10 for communal medical and care establishments, and 0.96 for other communal establishments.

Observed values were at their highest for all hospitals (1.12), and other medical and care establishments (1.09), reflecting the higher traced rate for Longitudinal Study (LS) members in medical and care establishments (see Table T01.10 describing 'not traced' rates by sex and type of establishment for 2001 LS sample members).

Observed values were at their lowest among defence establishments (0.78), prison service establishments and probation/bail hostels (0.92). This was due to the high not-traced rates (13.32% and 9.29% respectively) among these establishments.

Females had slightly higher sampling fractions than males: 1.03 compared with 1.02 among people living in private households, and 1.04 compared with 1.01 among people living in communal establishments.

Observed values were at their lowest for both males and females living in other establishments, such as defence establishments (0.77 for males and 0.81 for females).