## Supplementary Table 1: Descriptive Statistics & Comparison of Observed and Analysis Samples

		S	Observed Sample (N=5122) N %		Imputed Analysis* (N=5122) N %	
Gender	Male Female	2613 2509	51.0 49.0	2613 2509	51.0 49.0	
Year (at age 11)	1990-94 1995-99 2000-04 2005-08	848 1475 1735 1064	16.6 28.8 33.9 20.8	848 1475 1735 1064	16.6 28.8 33.9 20.8	
Country	England Scotland Wales Northern Ireland	2889 884 849 500	56.4 17.3 16.6 9.8	2889 884 849 500	56.4 17.3 16.6 9.8	
Parental Social Class	I & II III IV & V Missing	2237 2007 778 100	44.5 40.0 15.5	2252 2042 828	44.0 39.9 16.2	
Parental Education	Degree or Higher Other Qualifications No Qualifications Missing	827 3656 592 47	16.3 72.0 11.7	830 3688 604	16.2 72.0 11.8	
Household Income	Top Tertile Middle Tertile Bottom Tertile Missing	1323 1525 1661 613	29.3 33.8 36.8	1504 1711 1907	29.4 33.4 37.2	
Housing Tenure	Owned/Mortgaged Rented/Other Missing	3520 1583 19	69.0 31.0	3534 1588	69.0 31.0	
Parental Employment	Employed Not employed Missing	4139 948 35	81.4 18.6	4154 968	81.1 18.9	
Initiation	Yes Did not initiate Missing	1958 2703 461	42.0 58.0	2866 2256	56.0 44.0	
Age of Initiation	11 years 12 years 13 years 14 years 15 years Did not initiate Missing	394 372 442 434 316 2703 461	20.1 19.0 22.6 22.2 16.1	522 513 612 655 564 2256	18.2 17.9 21.4 22.9 19.7	
Experimentation	Yes Tried only Did not initiate Missing	878 920 2703 621	48.8 51.2	1508 1358 2256	52.6 47.4	
Age of Experimentation	11 years 12 years 13 years 14 years 15 years Tried only Did not initiate Missing	74 102 179 268 255 920 2703 621	8.4 11.6 20.4 30.5 29.0	215 347 590 836 878 1358 2256	7.5 12.1 20.6 29.2 30.7	

Escalation	200	34 1	561	37.2
				42.4
				20.4
		20.5		20.7
			2230	
riissirig	022			
11 years	7	2.3	7	1.2
12 years	21	7.0	39	6.9
13 years	47	15.7	86	15.4
14 years	101	33.8	191	34.0
15 years	123	41.1	238	42.4
Quitting	398		640	
Occasional only	180		307	
Tried only	920		1358	
Did not initiate	2703		2256	
Missing	621			
11 years	43	10.8	54	8.5
12 years	66	16.6	97	15.1
13 years	82	20.6	141	22.0
	96	24.1	166	25.9
•	111	27.9	182	28.5
Escalation	299		561	
Occasional only	180		307	
	920		1358	
	2703		2256	
	621			
	12 years 13 years 14 years 15 years Quitting Occasional only Tried only Did not initiate Missing  11 years 12 years 13 years 14 years 15 years Escalation	Quitting         398           Occasional only         180           Tried only         920           Did not initiate         2703           Missing         622           11 years         7           12 years         21           13 years         47           14 years         101           15 years         123           Quitting         398           Occasional only         180           Tried only         920           Did not initiate         2703           Missing         621           11 years         43           12 years         66           13 years         82           14 years         96           15 years         111           Escalation         299           Occasional only         180           Tried only         920           Did not initiate         2703           Missing         621	Quitting       398       45.4         Occasional only       180       20.5         Tried only       920       20         Did not initiate       2703       23         Missing       622       622         11 years       7       2.3         12 years       21       7.0         13 years       47       15.7         14 years       101       33.8         15 years       123       41.1         Quitting       398       0ccasional only       180         Tried only       920       0id not initiate       2703         Missing       621       10.8       10.8         12 years       43       10.8       10.8         12 years       43       10.8       10.8         12 years       66       16.6       16.6         13 years       82       20.6       14.9         14 years       96       24.1       15.7         15 years       111       27.9         Escalation       299       0ccasional only       180         Tried only       920       0.0         Did not initiate       2703       1.0      <	Quitting       398       45.4       640         Occasional only       180       20.5       307         Tried only       920       1358         Did not initiate       2703       2256         Missing       622         11 years       7       2.3       7         12 years       21       7.0       39         13 years       47       15.7       86         14 years       101       33.8       191         15 years       123       41.1       238         Quitting       398       640         Occasional only       180       307         Tried only       920       1358         Did not initiate       2703       2256         Missing       621       10.8       54         12 years       43       10.8       54         12 years       43       10.8       54         12 years       66       16.6       97         13 years       82       20.6       141         14 years       96       24.1       166         15 years       111       27.9       182         Escalation       299

<sup>\*</sup>Percentages are based on average results across 20 imputed data-sets.

## Supplementary Table 2: Relative importance of different transitions for inequalities in daily smoking by age 15

		Percentage reduction of expected inequality <sup>a</sup> in number				
		of daily smokers by age 15				
		1995-1999			2005-2009	
		Males	Females	Males	Females	
Removing Inequalities	All Ages (11-15) <sup>b</sup>	72.7	68.9	82.0	80.8	
in Initiation at	Age 11 only	10.6	6.5	15.2	11.4	
	Age 12 only	13.2	10.9	15.6	14.1	
	Age 13 only	12.7	12.8	13.8	14.2	
	Age 14 only	8.9	9.9	9.6	10.9	
	Age 15 only	3.7	4.1	4.3	4.9	
Removing Inequalities	All Ages (11-15) <sup>b</sup>	52.2	57.5	51.9	54.6	
in Escalation at	Age 11 only	1.2	1.2	1.5	1.6	
	Age 12 only	3.9	4.1	4.3	4.6	
	Age 13 only	7.7	8.7	8.2	8.9	
	Age 14 only	12.6	14.5	13.3	14.5	
	Age 15 only	22.2	24.2	21.4	22.3	

<sup>&</sup>lt;sup>a</sup>Contrasting those whose parents have no qualifications with those whose parents have a degree or higher.

<sup>&</sup>lt;sup>b</sup>Contributions for removing inequalities at specific ages do not sum to the contributions from all ages as effects are multiplicative; transitions in one year affect numbers at risk in subsequent years.