

Supplementary Material

Ueda P, Mercer CH. Prevalence and types of sexual inactivity in Britain –analyses of national cross-sectional probability survey data. *BMJ Open* (2019)

Natsal-3 variables used to define and categorize types of sexual inactivity, satisfaction with sex life and avoidance of sex because of sexual difficulties

lastvag last occasion of vaginal sex

- 1: in last 7 days
- 2: between 7 days and 4 weeks
- 3: between 4 weeks and 6 months
- 4: between 6 months and 1 year
- 5: between 1 year and 5 years
- 6: longer than 5 years

analsex last occasion of heterosexual anal sex

- 1: in last 7 days
- 2: between 7 days and 4 weeks
- 3: between 4 weeks and 6 months
- 4: between 6 months and 1 year
- 5: between 1 year and 5 years
- 6: longer than 5 years

oralprt last occasion of heterosexual oral sex from partner

- 1: in last 7 days
- 2: between 7 days and 4 weeks
- 3: between 4 weeks and 6 months
- 4: between 6 months and 1 year
- 5: between 1 year and 5 years
- 6: longer than 5 years

oralyou last occasion of heterosexual oral sex to partner

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samahim last occasion of homosexual anal sex from partner

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samopar last occasion of homosexual oral sex from partner

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totalsex age at first sex (heterosexual intercourse or same sex experience with genital contact)

afsam13a age 1st homosexual sex if aged ≥ 13 years

sffsatis:

Thinking about your sex life in the last year, how much do you agree or disagree with the following statement: "I feel satisfied with my sex life"

- 1. Agree strongly
- 2. Agree
- 3. Neither agree nor disagree
- 4. Disagree
- 5. Disagree strongly

sffavoid:

I have avoided sex because of sexual difficulties, either my own or those of my partner.

- 1. Agree strongly
- 2. Agree
- 3. Neither agree nor disagree
- 4. Disagree
- 5. Disagree strongly

relstatgp relationship status at time of interview, grouped

- 1: Living with partner (includes married / civil partnership)
- 2: In a steady relationship, not living with partner

- 3: Not in a steady relationship, previously cohabited (includes previously married / civil partner)
- 4: Not in a steady relationship, never cohabited

Supplementary Table 1 Sociodemographic and sexual behaviour/attitudinal characteristics of survey participants who were included in the analyses and those excluded due to missing data on variables used to categorize sexual inactivity. Numbers are weighted %.

	Men			Women		
	Included	Excluded	p	Included	Excluded	p
Age group						
16-24 y	16.6	13.8		15.8	16.3	
25-34 y	18.6	[11.0]		18.3	11.3	
35-44 y	19.2	[[12.8]]		19.1	[17.7]	
45-54 y	18.8	[19.6]		18.9	[17.6]	
55-64 y	15.8	[21.1]		16.2	[14.7]	
65-74 y	11.1	21.9	<0.001	11.9	22.5	<0.001
Have felt sexual attraction						
Yes	99.5	91.9		99.2	93.5	
No	0.4	[[1.4]]		0.7	[[1.8]]	
Not answered	[[<0.1]]	[[6.7]]		[[<0.1]]	[[4.7]]	<0.001
Sexual identity						
Heterosexual	97.0	88.5		97.1	93.3	
Other	2.8	[[3.5]]		2.7	[[2.4]]	
Not answered	[[0.2]]	[[7.9]]	<0.001	[[0.2]]	[[4.3]]	<0.001
Religion						
None	52.7	38.7		43.4	29.4	
Christian	39.7	41.3		50.1	53.7	
Other religion	7.4	[[12.3]]		6.4	[14.7]	
Not answered	[[0.2]]	[[7.7]]	<0.001	[[0.2]]	[[2.2]]	<0.001
Ethnicity						
White	87.8	67.5		88.2	68.4	
Other	12.0	25.1		11.7	29.1	
Not answered	[[0.2]]	[[7.5]]	<0.001	[[0.2]]	[[2.6]]	<0.001
Education*						
No academic qualification	19.5	35.5		19.6	32.3	
Academic qualifications typically gained at age 16 y	31.4	17.1		33.2	20.7	
Studying for/attained further academic qualification	45.3	30.4		42.9	33.3	
Not applicable as age <16 y or not answered	3.8	17.1	<0.001	4.3	13.7	<0.001
Body mass index (kg/m²)						
<25 (underweight or normal weight)	40.7	42.6		48.4	47.3	
25 to <30 (overweight)	37.4	32.4		26.6	20.6	
30 or higher (obese)	18.6	[18.8]		18.9	[16.1]	
Not answered	3.3	[[6.2]]	0.111	6.1	[16.0]	<0.001
Height (cm)						
Below average	42.3	53.4		42.3	53.4	
Average or above	56.9	46.0		56.9	46.0	
Not answered	0.8	[[0.6]]	0.006	0.8	0.6	0.002
Masturbated in past 7 days						

No	50.5	39.0		81.3	45.8	
Yes	46.0	[16.4]		15.4	[[4.8]]	
Not answered	3.5	44.6	<0.001	3.4	49.3	<0.001
Lifetime sexual partners						
0.0	4.2	[[5.5]]		3.6	[[7.2]]	
1.0	12.7	[14.3]		21.5	[12.9]	
2 to 4	22.4	[[10.5]]		29.1	[13.0]	
5 or more	58.0	[13.2]		43.3	[[5.8]]	
Unknown	2.7	56.4	<0.001	2.5	61.1	<0.001
Ever paid for sex						
No	87.8	49.6		98.5	51.4	
Yes	10.6	[[3.9]]		[[0.1]]	[[0.2]]	
Now answered	1.6	46.6	<0.001	1.4	48.3	<0.001
National Statistics Socio-Economic Classification						
Managerial & professional occupations	35.4	[20.3]		30.6	[20.3]	
Intermediate occupations	16.6	[14.8]		19.5	[14.0]	
Semi-routine/routine occupations	32.1	26.4		26.1	23.0	
Never worked and long-term unemployed	6.6	[19.6]		14.9	29.2	
Student in full-time education	8.9	[10.4]		8.4	[8.6]	
Not answered	[[0.4]]	[[8.5]]	<0.001	0.5	[[4.9]]	<0.001
Quintile of Index of Multiple Deprivation						
1 (least deprived)	20.4	[15.9]		20.1	[15.5]	
2	21.3	[19.6]		20.5	18.5	
3	19.4	[19.1]		19.8	19.1	
4	20.2	[14.8]		20.3	21.2	
5 (most deprived)	18.7	30.6	0.002	19.4	25.8	0.159
Denominator**						
Weighted	7245	263		7410	244	
Unweighted	6045	248		8578	291	

* Not defined when asked in interview

** All participants (denominators vary across variables because of item non-response)

[] Small numerator (between 30 and 50 participants)

[[]] Small numerator (<30 participants)

Supplementary Table 2: Percentage distribution (95% CI) of sexual (in)activity and types of sexual inactivity by age-group and gender. Raw data for Figure 1.

Age group	Men				Women			
	Sexually inactive			Sexually active	Sexually inactive			Sexually active
	Sexually inexperienced	Single	In a relationship		Sexually inexperienced	Single	In a relationship	
16-19y	29.5 (26.2-33.1)	[[3.4 (2.3-5)]]	[[0.2 (0-1.1)]]	66.9 (63.2-70.4)	32.5 (29.3-35.9)	[[1.3 (0.7-2.3)]]	[[0.4 (0.1-1.0)]]	65.8 (62.3-69.1)
20-24y	9.6 (7.4-12.5)	[3.8 (2.7-5.4)]	[[0.3 (0-2.0)]]	86.2 (83.3-88.8)	9.3 (7.2-11.9)	[3.6 (2.5-5.2)]	[[0.2 (0.1-0.6)]]	86.9 (84.1-89.3)
25-29y	[5.6 (3.8-8.2)]	[4.8 (3.4-6.6)]	[[0.3 (0.1-1.2)]]	89.3 (86.4-91.7)	[3.0 (2.0-4.4)]	4.1 (3.2-5.3)	[[0.3 (0.1-0.8)]]	92.6 (90.7-94.1)
30-34y	[[0.7 (0.3-1.7)]]	[[2.9 (2-4.3)]]	[[0.9 (0.4-2.2)]]	95.5 (93.7-96.7)	[[1.0 (0.5-2.1)]]	4.5 (3.5-5.8)	[[1.2 (0.6-2.2)]]	93.4 (91.7-94.7)
35-39y	0	[[3.2 (1.8-5.5)]]	[[0.9 (0.3-2.4)]]	95.9 (93.4-97.5)	[[0.3 (0.1-1.1)]]	[5.8 (3.9-8.4)]	[[0.3 (0.1-1.2)]]	93.6 (90.7-95.6)
40-44y	[[1.3 (0.5-3.2)]]	[4.6 (3.2-6.8)]	[[2.3 (1.1-4.7)]]	91.8 (88.7-94.0)	0	6.8 (5.2-8.9)	[[2.8 (1.7-4.7)]]	90.3 (87.8-92.4)
45-49y	[[0.7 (0.3-1.6)]]	[6.3 (4.4-9)]	[[3.8 (2.2-6.4)]]	89.2 (85.8-91.9)	[[0.1 (0-0.5)]]	8.8 (6.9-11.1)	[[4.8 (3.1-7.3)]]	86.4 (83.3-89.1)
50-54y	[[0.9 (0.2-3.7)]]	[7.5 (5.5-10.1)]	[[2.2 (1.1-4.4)]]	89.4 (86.0-92.0)	[[0.5 (0.2-1.1)]]	12.2 (9.8-15.1)	[[5.5 (3.6-8.3)]]	81.8 (78.2-84.9)
55-59y	[[1.3 (0.5-3.2)]]	9.7 (7.2-12.9)	[[6.4 (4-10.1)]]	82.6 (78.2-86.3)	[[0.6 (0.3-1.3)]]	19.5 (16.3-23.3)	12.9 (9.8-16.7)	67.0 (62.3-71.3)
60-64y	[[1.4 (0.7-2.8)]]	9.9 (7.6-12.9)	[14 (10.4-18.7)]	74.6 (69.6-79.0)	[[0.7 (0.3-1.5)]]	19.4 (16.3-22.9)	23.1 (19.1-27.7)	56.8 (52.1-61.4)
65-69y	[[0.8 (0.3-2.4)]]	11.6 (9-14.8)	19.3 (15.2-24.2)	68.4 (63.0-73.3)	[[0.4 (0.1-1.3)]]	24.8 (21.2-28.8)	26.9 (22.7-31.6)	47.8 (42.9-52.8)
70-74y	[[1.0 (0.4-2.7)]]	17.2 (13.2-22)	30.4 (24.7-36.7)	51.4 (45.0-57.8)	[[0.9 (0.3-2.4)]]	38.4 (33.2-43.9)	26.4 (21.5-31.9)	34.3 (28.9-40.1)

[] Small numerator (between 30 and 50 participants)

[[]] Small numerator (<30 participants)

Supplementary Table 3: Variations in reporting avoidance of sex because of sexual difficulties among sexually active or inactive men and women by age-group, and whether in a relationship or not (those sexually inactive).

	Men					Women				
	Sexually active	Sexually inactive				Sexually active	Sexually inactive			
	All	All	By relationship status			All	All	By relationship status		
			In a relationship	Single	<i>p</i> -value ^a			In a relationship	Single	<i>p</i> -value ^a
	% (95% CI) [N] ^b	% (95% CI) [N] ^b	% (95% CI) [N] ^b	% (95% CI) [N] ^b		% (95% CI) [N] ^b	% (95% CI) [N] ^b	% (95% CI) [N] ^b	% (95% CI) [N] ^b	
All	10.9% (9.9-12.0%) [4,808]	22.3% (19.1-25.8%) [747]	33.3% (27.6-39.6%) [233]	13.3% (10.4-16.8%) [514]	<0.0001	13.4% (12.4-14.4%) [6,547]	18.3% (15.9-20.9%) [1,453]	33.2% (28.5-38.3%) [424]	8.0% (6.3-10.1%) [1,029]	<0.0001
<i>By age-group</i>										
16-44	8.9% (7.7-10.2%) [3,347]	9.6% (5.9-15.2%) [202]	7.1% (1.0-36.4%) [20]	10.2% (6.4-15.8%) [182]	0.7009	10.6% (9.6-11.7%) [4,886]	14.0% (9.9-19.5%) [320]	34.9% (20.3-53.1%) [40]	9.8% (6.4-14.7%) [280]	0.0001
45-74	13.7% (11.9-15.8%) [4,808]	25.8% (22.0-30.0%) [545]	35.8% (29.7-42.4%) [213]	14.8% (11.0-19.4%) [332]	<0.0001	17.7% (15.8-19.8%) [1,661]	19.0% (16.5-21.9%) [1,133]	33.1% (28.2-38.4%) [384]	7.5% (5.6-9.8%) [749]	<0.0001
<i>p</i> -value ^c	<0.0001	<0.0001	0.0272	0.1682		<0.0001	0.0924	0.8401	0.2688	

a. These proportions have been previously presented¹; slight differences in the estimates are due to differences in inclusion/exclusion criteria for the study population.

b. *p*-value for difference by relationship status

c. '% (95% CI) [N]' gives the denominator for the corresponding % (95% CI).

d. *p*-value for difference by age-group

References

- 1 Mitchell KR, Mercer CH, Ploubidis GB, *et al*. Sexual function in Britain: Findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3). *Lancet* 2013; **382**: 1817–29.