

Additional file 1: Sexual risk behaviour score and fitting results of sexual risk behaviour trajectories

Sexual risk behaviour score

Table S1 Sexual risk behaviour score

Variable		Score
Condom use during last sexual intercourse with a man	Yes	0
	No	1
Frequency of condom use[†]	Seldom	2
	Sometimes	1
	Always	0
Number of instances of anal sex within 7 days	Less than 5 times	0
	5 times to 10 times	1
	More than 10 times	2
Number of anal sex partners[†]	≤ 10	0
	> 10	1

[†]within the previous 6 months

Fitting results of sexual risk behaviour trajectories

Table S2 Five subgroups (3 3 3 3 3)

Subgroup	Parameter	Estimate	$s_{\bar{x}}$	t	P value
1	Intercept	0.39170	0.16076	2.437	0.0149
	Linear	-8.81262	1.13655	-7.754	0.0000
	Quadratic	6.27995	0.74877	8.387	0.0000
	Cubic	-1.04891	0.12788	-8.203	0.0000
2	Intercept	0.57861	0.15971	3.623	0.0003
	Linear	4.08821	95.78189	0.043	0.9660
	Quadratic	-20.36571	52.65772	-0.387	0.6990
	Cubic	2.48239	6.75021	0.368	0.7131
3	Intercept	0.91557	0.07857	11.653	0.0000
	Linear	1.02104	0.13323	7.664	0.0000
	Quadratic	-0.40922	0.05580	-7.333	0.0000
	Cubic	0.03351	0.00586	5.718	0.0000
4	Intercept	0.68402	0.16146	4.236	0.0000
	Linear	9.62703	56.20621	0.171	0.8640
	Quadratic	-9.23708	63.23110	-0.146	0.8839
	Cubic	1.00260	7.02567	0.143	0.8865
5	Intercept	1.27171	0.18807	6.762	0.0000
	Linear	0.60289	0.31649	1.905	0.0568
	Quadratic	0.05497	0.14013	0.392	0.6948
	Cubic	-0.02416	0.01548	-1.561	0.1186
BIC	-8384.20	AIC	-8314.35	LL	-8289.35

Table S3 Five subgroups (3 1 3 1 1)

Subgroup	Parameter	Estimate	$s_{\bar{x}}$	t	P value
1	Intercept	0.30561	0.12515	2.442	0.0146
	Linear	-3.53521	7951000	0.000	1.0000
	Quadratic	-3.48732	25770000	0.000	1.0000
	Cubic	-3.55515	33610000	0.000	1.0000
2	Intercept	1.08492	0.25451	4.263	0.0000
	Linear	-0.00576	0.10379	-0.056	0.9557
3	Intercept	0.34227	0.27776	1.232	0.2179
	Linear	3.31334	164.88786	0.020	0.9840
	Quadratic	1.46920	184.33444	0.008	0.9936
	Cubic	-2.92560	198.61576	-0.015	0.9882
4	Intercept	1.05668	0.19691	5.366	0.0000
	Linear	-0.25330	0.12499	-2.027	0.0428
5	Intercept	1.37860	0.22625	6.093	0.0000
	Linear	0.41291	0.09971	4.141	0.0000
BIC	-8491.88	AIC	-8438.79	LL	-8419.79

Table S4 Four subgroups (3 3 3 3)

Subgroup	Parameter	Estimate	$s_{\bar{x}}$	t	P value
1	Intercept	0.41936	0.11587	3.619	0.0003
	Linear	-14.18229	1226.28487	-0.012	0.9908
	Quadratic	2.29128	282.69364	0.008	0.9935
	Cubic	-0.06429	17.09955	-0.004	0.9970
2	Intercept	0.74587	0.10902	6.841	0.0000
	Linear	0.01734	0.26206	0.066	0.9472
	Quadratic	-0.07376	0.10454	-0.706	0.4805
	Cubic	0.00865	0.00998	0.866	0.3864
3	Intercept	0.89798	0.13711	6.549	0.0000
	Linear	0.25128	0.43217	0.581	0.5610
	Quadratic	0.26721	0.31845	0.839	0.4014
	Cubic	-0.09857	0.05515	-1.787	0.0739
4	Intercept	1.15274	0.16085	7.167	0.0000
	Linear	0.88784	0.27634	3.213	0.0013
	Quadratic	-0.12718	0.12640	-1.006	0.3144
	Cubic	-0.00289	0.01435	-0.201	0.8406
BIC	-8435.58	AIC	-8379.70	LL	-8359.70

Table S5 Four subgroups (1 1 1 3)

Subgroup	Parameter	Estimate	$s_{\bar{x}}$	t	P value
1	Intercept	0.95133	0.14003	6.794	0.0000
	Linear	-0.35379	0.05411	-6.538	0.0000
2	Intercept	1.07476	0.10992	9.778	0.0000
	Linear	-0.04420	0.04698	-0.941	0.3468
3	Intercept	1.34503	0.22170	6.067	0.0000
	Linear	0.40739	0.09785	4.163	0.0000
4	Intercept	0.25123	0.13924	1.804	0.0713
	Linear	-5.66785	16570000	0.000	1.0000
	Quadratic	-4.91756	17220000	0.000	1.0000
	Cubic	-0.09287	2515000	0.000	1.0000
BIC	-8494.17	AIC	-8455.05	LL	--8441.05

Table S6 Three subgroups (3 3 3)

Subgroup	Parameter	Estimate	$s_{\bar{x}}$	t	P value
1	Intercept	0.40589	0.11301	3.592	0.0003
	Linear	-7.59321	2.20459	-3.444	0.0006
	Quadratic	2.25242	0.66506	3.387	0.0007
	Cubic	-0.16169	0.05058	-3.197	0.0014
2	Intercept	0.76990	0.09947	7.740	0.0000
	Linear	0.06803	0.30371	0.224	0.8228
	Quadratic	0.09781	0.19962	0.490	0.6242
	Cubic	-0.04882	0.03336	-1.463	0.1434

3	Intercept	0.94883	0.09176	10.341	0.0000
	Linear	0.71552	0.16112	4.441	0.0000
	Quadratic	-0.17590	0.06334	-2.777	0.0055
	Cubic	0.00838	0.00628	1.335	0.1819
BIC	-8436.98	AIC	-8395.07	LL	-8380.07

Table S7 Three subgroups (3 1 2) (used in the main document)

Subgroup	Parameter	Estimate	$s_{\bar{x}}$	t	P value
1	Intercept	0.39298	0.11148	3.525	0.0004
	Linear	-1.78024	42845.71112	0.000	1.0000
	Quadratic	-1.60567	65321.86924	0.000	1.0000
	Cubic	-0.64193	50468.56515	0.000	1.0000
2	Intercept	0.89225	0.11792	7.566	0.0000
	Linear	0.03656	0.03189	1.146	0.2517
3	Intercept	0.83883	0.13200	6.355	0.0000
	Linear	1.10087	0.17544	6.275	0.0000
	Quadratic	-0.31683	0.03871	-8.185	0.0000
BIC	-8449.23	AIC	-8415.71	LL	-8403.71