

Supplementary Table S1. Demographic information distribution of smokers in Beijing communities ($n = 442$)

Demographic indicators		Male ($n = 407$)		Female ($n = 35$)		χ^2	P
		Frequency	Percentage (%)	Frequency	Percentage (%)		
Age (years)	19–	13	3.2	0	0	3.915	0.271
	30–	78	19.3	3	8.6		
	45–	156	38.5	16	45.7		
	≥ 60	158	39.0	16	45.7		
Marital status	unmarried	20	4.9	1	2.9	7.320	0.120
	married	364	89.7	29	82.9		
	separation	3	0.7	0	0.0		
	divorced	11	2.7	1	2.9		
	widowed	8	2.0	4	11.4		
Educational level	elementary and below	23	5.7	5	14.3	9.729	0.021
	junior high school	103	25.3	11	31.4		
	high school/secondary school	102	25.1	12	34.3		
	college and above	179	44.0	7	20.0		
Occupation	agriculture, forestry, animal husbandry and fishery	8	2.0	0	0.0	12.818	0.025
	business services	52	12.9	2	6.1		
	professional skill worker	47	11.6	2	6.1		
	institutions or enterprises	74	18.3	3	9.1		
	retirement	165	40.8	24	72.7		
	unemployed or other	58	14.4	2	6.1		
Age (years) at which smoking is started	7–	9	2.3	0	0.0	46.062	< 0.001
	10–	289	72.8	10	29.4		
	20–	94	23.7	19	55.9		
	30–	5	1.3	5	14.7		
Smoking age (years)	2–	30	7.7	3	9.4	5.697	0.127
	10–	149	38.2	17	53.1		
	30–	192	49.2	9	28.1		
	50–	19	4.9	3	9.4		
Nicotine Dependence Assessment Scale	mild	137	33.7	13	37.1	0.331	0.847
	moderately	195	47.9	15	42.9		
	heavy	75	18.4	7	20.0		

Continued

Demographic indicators		Male (<i>n</i> = 407)		Female (<i>n</i> = 35)		χ^2	<i>P</i>
		Frequency	Percentage (%)	Frequency	Percentage (%)		
Quit smoking attempts (times)	1	136	33.9	14	40.0	3.784	0.993
	2	124	30.9	9	25.7		
	3	82	20.4	6	17.1		
	4	12	3.0	1	2.9		
	5–	27	6.7	3	8.6		
	≥ 10	20	4.9	2	5.7		
Time to stop smoking when you last tried to quit	less than 1 day	26	6.6	1	2.9	3.901	0.420
	1–7 days	107	27.3	7	20.0		
	8–10 days	79	20.2	5	14.3		
	more than a month	101	25.8	12	34.3		
	more than half a year	79	20.2	10	28.6		

Supplementary Table S2. Reasons for failure of community smokers in Beijing to try to quit smoking (multiple choices, *n* = 442)

Reasons for quitting smoking failure	Frequency	Percentage (%)
Smoking addiction is difficult to restrain and self-willpower is insufficient	240	54.3
Lack of professional guidance	90	20.4
Lack of caring and understanding	18	4.1
Lack of a smoke-free support environment	115	26.0
No confidence	53	12.0
Nervous and anxious	70	15.8
Weight gain	9	2.0
Work or study stress	68	15.4
Impact of other smokers	156	35.3
Other	31	7.0

Supplementary Table S3. Distribution of reasons for the failure of smoking cessation among Beijing community smokers in different demographic indicators

Index	Grade	Smoking addiction is difficult to restrain and self-willpower is insufficient												No confidence				Nervous and anxious				Weight gain				Work or study stress				Impact of other smokers				Other		χ^2	p
		insufficient		Lack of professional guidance		Lack of caring and understanding		Lack of a smoke-free support environment		No confidence		Nervous and anxious		Weight gain		Work or study stress		Impact of other smokers		Other																	
		Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)										
Sex	Male	224	28.5	85	10.8	18	2.3	106	13.5	51	6.5	63	8.0	9	1.1	63	8.0	135	17.2	31	3.9	12.02	0.170														
	Female	16	24.6	5	7.7	0	0.0	9	13.8	2	3.1	7	10.8	0	0.0	5	7.7	21	32.3	0	0.0	1															
Age (years)	19~	7	28.0	1	4.0	0	0.0	2	8.0	0	0.0	2	8.0	0	0.0	7	28.0	6	24.0	0	0.0																
	30~	44	22.3	21	10.7	2	1.0	33	16.8	13	6.6	23	11.7	3	1.5	26	13.2	31	15.7	1	0.5																
	45~	88	28.4	36	11.6	8	2.6	37	11.9	19	6.1	23	7.4	4	1.3	20	6.5	62	20.0	13	4.2	123.1	<0.001*														
	≥ 60	100	31.9	32	10.2	8	2.6	42	13.4	21	6.7	21	6.7	2	0.6	14	4.5	56	17.9	17	5.4																
Marital status	Unmarried	9	21.4	6	14.3	0	0.0	3	7.1	3	7.1	4	9.5	0	0.0	11	26.2	6	14.3	0	0.0																
	Married	215	28.4	82	10.8	18	2.4	106	14.0	47	6.2	60	7.9	8	1.1	54	7.1	140	18.5	28	3.7	31.38	0.513														
	Separation	3	50.0	0	0.0	0	0.0	1	16.7	1	16.7	0	0.0	0	0.0	0	0.0	1	16.7	0	0.0	0															
	Divorced	7	30.4	2	8.7	0	0.0	3	13.0	0	0.0	3	13.0	0	0.0	2	8.7	4	17.4	2	8.7	0															
	Widowed	5	29.4	0	0.0	0	0.0	2	11.8	1	5.9	3	17.6	0	0.0	1	5.9	4	23.5	1	5.9																
Education	Elementary and below	12	25.0	5	10.4	1	2.1	7	14.6	3	6.3	3	6.3	0	0.0	5	10.4	10	20.8	2	4.2																
	Junior high school	58	29.6	21	10.7	5	2.6	23	11.7	11	5.6	13	6.6	2	1.0	8	4.1	44	22.4	11	5.6	32.43	0.170														
	High school/secondary school	63	29.6	27	12.7	1	0.5	29	13.6	14	6.6	15	7.0	3	1.4	11	5.2	39	18.3	11	5.2	9															
	College and above	107	27.2	37	9.4	11	2.8	56	14.2	25	6.4	39	9.9	4	1.0	44	11.2	63	16.0	7	1.8																
Occupation	Agriculture, forestry, animal husbandry and fishery	4	30.8	0	0.0	0	0.0	1	7.7	3	23.1	0	0.0	0	0.0	1	7.7	3	23.1	1	7.7																
	Business services	28	27.7	16	15.8	1	1.0	12	11.9	6	5.9	8	7.9	0	0.0	12	11.9	15	14.9	3	3.0																
	Professional skill worker	28	25.5	10	9.1	0	0.0	18	16.4	5	4.5	13	11.8	2	1.8	12	10.9	22	20.0	0	0.0	58.28	0.042**														
	Institutions or enterprises	44	24.9	20	11.3	5	2.8	26	14.7	12	6.8	14	7.9	4	2.3	16	9.0	32	18.1	4	2.3	7															
	Retirement	103	30.4	33	9.7	10	2.9	47	13.9	23	6.8	23	6.8	1	0.3	13	3.8	69	20.4	17	5.0																
	Unemployed or other	30	29.1	10	9.7	2	1.9	11	10.7	4	3.9	11	10.7	2	1.9	14	13.6	13	12.6	6	5.8																

Note. * : Pairwise comparison results suggest that there is a difference between 30– and 60–, and there is a difference between 45– and 60–, and there is no difference between other groups. ** : Pairwise comparison results suggest that there are differences between the retirement group and the business service group, unemployed or other working groups, and no difference between the other groups.

Supplementary Table S4. The distribution of the reasons for the failure of smoking cessation among community smokers in Beijing among smoking behaviors and the discomfort caused by different smoking cessation processes

Index	Grade	Smoking addiction is difficult to restrain and self-willpower is insufficient												χ^2	p																
		Lack of professional guidance			Lack of caring and understanding			Lack of a smoke-free support environment			No confidence					Nervous and anxious			Weight gain			Work or study stress			Impact of other smokers			Other			
		Frequency	Percentage (%)		Frequency	Percentage (%)		Frequency	Percentage (%)		Frequency	Percentage (%)				Frequency	Percentage (%)		Frequency	Percentage (%)		Frequency	Percentage (%)		Frequency	Percentage (%)			Frequency	Percentage (%)	
Average daily smoking (count)	<10	23	21.3	8	7.4	4	3.7	13	12.0	6	5.6	10	9.3	0	0.0	13	12.0	24	22.2	7	6.5										
	10~	81	28.5	27	9.5	6	2.1	47	16.5	15	5.3	27	9.5	4	1.4	23	8.1	46	16.2	8	2.8										
	20~	97	30.6	39	12.3	3	0.9	42	13.2	22	6.9	18	5.7	2	0.6	23	7.3	59	18.6	12	3.8										
	30~	14	24.6	8	14.0	2	3.5	3	5.3	6	10.5	7	12.3	0	0.0	2	3.5	11	19.3	4	7.0										
	40~	14	29.2	7	14.6	1	2.1	3	6.3	3	6.3	5	10.4	1	2.1	5	10.4	9	18.8	0	0.0										
	≥50	3	27.3	1	9.1	2	18.2	2	18.2	1	9.1	0	0.0	0	0.0	1	9.1	1	9.1	0	0.0										
Nicotine dependence	Mild	71	25.0	19	6.7	6	2.1	44	15.5	12	4.2	25	8.8	2	0.7	28	9.9	63	22.2	14	4.9										
	Moderate	94	30.2	33	10.6	7	2.3	42	13.5	16	5.1	26	8.4	3	1.0	24	7.7	54	17.4	12	3.9										
	Severe	50	28.4	28	15.9	4	2.3	21	11.9	16	9.1	12	6.8	1	0.6	13	7.4	27	15.3	4	2.3										
Craving for smoking		160	30.5	65	12.4	12	2.3	63	12.0	36	6.9	41	7.8	5	1.0	45	8.6	86	16.4	11	2.1										
	Anxiety	84	26.3	41	12.9	10	3.1	33	10.3	21	6.6	46	14.4	4	1.3	27	8.5	48	15.0	5	1.6										
	Depression	19	25.0	10	13.2	3	3.9	4	5.3	5	6.6	13	17.1	1	1.3	10	13.2	9	11.8	2	2.6										
	Fidget	94	27.4	44	12.8	11	3.2	40	11.7	28	8.2	38	11.1	5	1.5	27	7.9	50	14.6	6	1.7										
	Irritable,																														
	Frustrated or during quitting	37	25.5	19	13.1	4	2.8	14	9.7	9	6.2	21	14.5	3	2.1	14	9.7	23	15.9	1	0.7										
Discomfort during quitting	angry																														
	Difficulty concentrating	59	24.6	34	14.2	11	4.6	29	12.1	20	8.3	28	11.7	3	1.3	25	10.4	27	11.3	4	1.7										
	Sleep disorder	27	25.7	13	12.4	6	5.7	11	10.5	7	6.7	13	12.4	1	1.0	9	8.6	16	15.2	2	1.9										
	Increased appetite	33	24.1	14	10.2	4	2.9	24	17.5	4	2.9	15	10.9	2	1.5	15	10.9	24	17.5	2	1.5										
	Other	22	22.0	9	9.0	1	1.0	13	13.0	2	2.0	7	7.0	3	3.0	8	8.0	22	22.0	13	13.0										

Note. *Pairwise comparison results indicate that there is no difference between other discomfort feelings in the process of quitting smoking and depression and sleep disorders, and there are statistical differences with the other six types of discomfort feelings.