

Table SI Details About the Chinese Version of MMSE.

Dimensions	Item	Scores
Orientation	1.what time of day is it right now? morning, noon, afternoon, or evening?	1
	2.what is the animal year of this year?	1
	3.what is the date of the mid-autumn festival?	1
	4.what is the season right now? spring, summer, fall, or winter?	1
	5.what is the name of this county or district?	1
	6.Please tell me as many foods as a man can eat. (Take a minute) (1 point for each food and 7 points for those who name 7 or more foods).	7
Registration	7–9. Please repeat these three objects: table, apple, clothes.	3
Attention and calculation	10–14. If you have \$20 and you spent \$3, how many dollars do you have left? You then have to spend another \$3 from the money you have left, and continue to spend \$3 until you are asked to stop.	5
	15.Please draw the figure on B Card.	1
Recall	16–18. Please name the three things I just asked you to repeat. (table, apple, clothes).	3
Language	19–20. Please name pen and watch.	2
	21. Please repeat what I said below: "As you sow, so you reap."	1
	22–24. I will give you a piece of paper. Please take this paper in your right hand, fold it in half with both hands, and put it on the floor.	3

Table SII Clinical Characteristics of Subjects

Clinical variables	Total (N=2951)	Non- diabetes(N=2646)	diabetes (N=305)	P value
Age M (P25, P75)	80(74, 86)	80(74, 86)	78(74, 84)	0.007
PWB M (P25, P75)	26(24, 28)	26(24, 28)	26(23, 28)	0.987
ADL M (P25, P75)	6(6, 6)	6(6, 6)	6(6, 6)	0.118
BMI M (P25, P75)	22.1(19.6, 24.8)	22.0(19.5, 24.7)	22.9(20.5, 26.0)	<0.001
Years of education M (P25, P75)	0(0, 0)	0(0, 0)	0(0, 2)	0.003
Residence n (%)				<0.001
Rural 0	2603(88.2)	2365(89.4)	238(78.0)	
Urban 1	3489(11.8)	281(10.6)	67(22.0)	
Male n (%)	1489(50.5)	1356(51.2)	133(43.6)	0.011
Smoke n (%)	507(17.2)	472(17.8)	35(11.5)	0.005
Drink n (%)	482(16.3)	452(17.1)	30(9.8)	0.001
Exercise n (%)	889(30.1)	771(29.1)	118(38.7)	0.001
Community support M (P25, P75)	1(0, 3)	1(0, 2)	2(0, 3)	<0.001
Somnipathy n (%)	405(13.7)	343(13.0)	62(20.3)	<0.001
Dysaudia n (%)	1034(35)	921(34.8)	113(37.0)	0.437
Hypertension n (%)	1126(38.2)	961(36.3)	165(54.1)	<0.001
Cerebrovascular n(%)	292(9.9)	244(9.2)	48(15.7)	<0.001
Cardiopathy n (%)	416(14.1)	343(13.0)	73(23.9)	<0.001
pulmonary disease n(%)	331(11.2)	292(11.0)	39(12.8)	0.359

Notes: *A significant difference between groups. Categorical values are shown as n (%). Continuous variables presented skewed data and were expressed as medians and interquartile ranges.

Abbreviations: PWB, psychological well-being; ADL, activities of daily living; BMI, body mass index;

Table SIII Baseline Characteristics Before and After Propensity Score (PS) Matching

	Before PSM				After PSM			
	Non-diabetes (N=2646)	diabetes (N=305)	P value	ASMD	Non-diabetes (N=1635)	Diabetes (N=293)	P value	ASMD
Age M (P25, P75)	80(74, 86)	78(74, 84)	0.007	0.1588	79(74, 86)	78(74, 85)	0.109	0.0216
PWB M (P25, P75)	26(24, 28)	26(23, 28)	0.987	<0.001	26(24, 28)	26(23, 28)	0.876	<0.001
ADL M (P25, P75)	6(6, 6)	6(6, 6)	0.118	0.0792	6(6, 6)	6(6, 6)	0.015	0.0449
BMI M (P25, P75)	22.0(19.5, 24.7)	22.9(20.5, 26.0)	<0.001	0.2218	22.3(19.9, 25.0)	22.8(20.5, 26.0)	0.440	0.0320
Years of education M (P25, P75)	0(0, 0)	0(0, 2)	0.003	0.1599	0(0, 0)	0(0, 2)	0.454	0.0404
Residence n (%)			<0.001				0.002*	
Rural 0	2365(89.4)	238(78.0)		0.2741	1432(87.6)	236(80.5)		0.0025
Urban 1	281(10.6)	67(22.0)		0.2741	203(12.4)	57(19.5)		0.0025
Male n (%)	1356(51.2)	133(43.6)	0.011	0.1541	798(48.8)	130(44.4)	0.181	0.0260
Smoke n (%)	472(17.8)	35(11.5)	0.005	0.1996	244(14.9)	35(11.9)	0.213	0.0016
Drink n (%)	452(17.1)	30(9.8)	0.001	0.2433	229(14.0)	30(10.2)	0.099	0.0234
Exercise n (%)	771(29.1)	118(38.7)	0.001	0.1961	527(32.2)	110(37.5)	0.087	0.0267
Community support M (P25, P75)	1(0, 2)	2(0, 3)	<0.001	0.1702	1(0, 3)	1(0, 3)	0.368	0.0389
Somnopathy n (%)	343(13.0)	62(20.3)	<0.001	0.1830	244(14.9)	55(18.8)	0.112	0.0034
Dysaudia n (%)	921(34.8)	113(37.0)	0.437	0.0464	590(36.1)	110(37.5)	0.681	0.0010
Hypertension n (%)	961(36.3)	165(54.1)	<0.001	0.3568	707(43.2)	153(52.2)	0.005*	0.0250
Cerebrovascular n(%)	244(9.2)	48(15.7)	<0.001	0.1789	165(10.1)	42(14.3)	0.040*	0.0064
Cardiopathy n (%)	343(13.0)	73(23.9)	<0.001	0.2571	236(14.4)	64(21.8)	0.002*	0.0104
pulmonary disease n(%)	292(11.0)	39(12.8)	0.359	0.0524	178(10.9)	38(13.0)	0.347	0.0397

Notes: *A significant difference between groups. Categorical values are shown as n (%). Continuous variables presented skewed data and were expressed as medians and interquartile ranges.

Abbreviations: PWB, psychological well-being; ADL, activities of daily living; BMI, body mass index; ASMD, Absolute Standardized Mean Difference.

Table SIV Multivariate Logistic Regression Analysis in Patients Based on the PSM

Variables	Non- Cognitive dysfunction (N=1692)	Cognitive dysfunction (N=236)	OR	95% CI	p-Value
Age M (P25, P75)	78.00(74.00, 85.00)	88.50(83.00, 94.75)	1.083	(1.061, 1.106)	<0.001*
Residence n (%)			0.688	(0.385, 1.229)	0.206
Rarul 0	1454(85.9)	214(90.7)			
Urban 1	238(14.1)	22(9.3)			
Male n (%)	853(50.4)	75(31.8)	0.849	(0.577, 1.248)	0.405
PWB M (P25, P75)	26(24, 28)	22(21, 25)	0.814	(0.767, 0.863)	<0.001*
Years of education M (P25, P75)	0(0, 0)	0(0, 0)	0.918	(0.844, 0.998)	0.046*
Smoke n (%)	260(15.4)	19(8.1)	0.852	(0.461, 1.575)	0.610
Drink n (%)	248(14.7)	11(4.7)	0.528	(0.254, 1.095)	0.086
Exercise n (%)	599(35.4)	38(16.1)	0.781	(0.505, 1.205)	0.264
ADL M (P25, P75)	6(6, 6)	7(6, 10)	1.302	(1.205, 1.406)	<0.001*
Community support M (P25, P75)	1(0, 3)	1(0, 2)	0.957	(0.880, 1.040)	0.304
Somnipathy n (%)	263(15.5)	36(15.3)	0.752	(0.470, 1.203)	0.235
BMI M (P25, P75)	22.5(20.2, 25.3)	20.8(18.7, 23.9)	0.994	(0.954, 1.034)	0.752
Dysaudia n (%)	513(30.3)	187(79.2)	4.073	(2.802, 5.919)	<0.001*
Hypertension n (%)	764(45.2)	96(40.7)	0.951	(0.666, 1.358)	0.781
Diabetes n (%)	249(14.7)	44(18.6)	1.727	(1.103, 2.705)	0.017*
Cardiopathy n (%)	276(16.2)	26(11.0)	0.695	(0.412, 1.174)	0.174

Cerebrovascular n (%)	173(10.2)	34(14.4)	1.573	(0.931, 2.657)	0.091
pulmonary disease n (%)	183(10.8)	33(14.0)	1.379	(0.832, 2.286)	0.212

Notes: *A significant difference between groups. Categorical values are shown as n (%). Continuous variables presented skewed data and were expressed as medians and interquartile ranges.

Abbreviations: PWB, psychological well-being; ADL, activities of daily living; BMI, body mass index.