

## **Supplementary Information**

A Health Ecological Model Study of Subjective Cognitive Decline

Among Hypertensive Patients in Rural Shanxi, China

Ruifeng Liang, Jiawei Liu, Wenhua Sun, Siyi Li, Jue Wang, Qiao Niu,  
Hongmei Yu, Xiaojiang Qin, Hongmei Zhang, Jisheng Nie, Zhihong Zhang,  
Jianying Bai, Simin Li, Shuhong Zhao

**Supplementary Table S1. Multiple Linear Regression Analysis of Factors Associated with the Continuous SCD Score in Hypertensive Patients**

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	<i>(β, 95% CI)</i>	<i>P</i>	<i>(β, 95% CI)</i>	<i>P</i>	<i>(β, 95% CI)</i>	<i>P</i>	<i>(β, 95% CI)</i>	<i>P</i>	<i>(β, 95% CI)</i>	<i>P</i>
<b>Individual Characteristics Layer</b>										
Age(year)	0.049 (0.028,0.070)	<0.001	0.047 (0.026,0.068)	<0.001	0.044 (0.023,0.065)	<0.001	0.030 (0.008,0.052)	0.007	0.030 (0.008,0.052)	0.007
Sex	0.457 (0.167,0.747)	0.002	0.428 (0.124,0.732)	0.006	0.433 (0.129,0.737)	0.005	0.379 (0.075,0.683)	0.015	0.379 (0.074,0.684)	0.015
Family History of Hypertension	0.452 (0.155,0.748)	0.003	0.473 (0.181,0.765)	0.002	0.472 (0.180,0.764)	0.002	0.472 (0.181,0.764)	0.002	0.472 (0.181,0.764)	0.002
Hypertensive Complications	0.679 (0.338,1.020)	<0.001	0.641 (0.305,0.978)	<0.001	0.667 (0.329,1.005)	<0.001	0.490 (0.149,0.831)	0.005	0.490 (0.148,0.831)	0.005
Duration of Hypertension (years)	0.008 (-0.012,0.027)	0.460	0.009 (-0.011,0.028)	0.385	0.008 (-0.011,0.028)	0.394	0.007 (-0.013,0.026)	0.496	0.007 (-0.013,0.026)	0.497
<b>Behavior and Lifestyle Layer</b>										
Alcohol Drinking			-0.040 (-0.271,0.191)	0.735	-0.043 (-0.274,0.188)	0.713	-0.066 (-0.294,0.162)	0.570	-0.066 (-0.294,0.162)	0.570
Physical Exercise			-0.398 (-0.683,-0.113)	0.006	-0.392 (-0.677,-0.106)	0.007	-0.363 (-0.649,-0.077)	0.013	-0.363 (-0.649,-0.077)	0.013
Sleep Quality - PSQI			0.352 (0.176,0.528)	<0.001	0.350 (0.174,0.525)	<0.001	0.230 (0.043,0.416)	0.016	0.230 (0.043,0.416)	0.016
Regular BP Monitoring			0.465 (0.177,0.753)	0.002	0.447 (0.158,0.735)	0.002	0.437 (0.147,0.727)	0.003	0.437 (0.147,0.727)	0.003
<b>Interpersonal Networks Layer</b>										
Number of household members					-0.268 (-0.626,0.091)	0.143	-0.197 (-0.551,0.158)	0.277	-0.197 (-0.551,0.158)	0.277

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**Working and Living Conditions Layer**

Annual Household Income, CNY	-0.171 (-0.278,-0.064)	0.002	-0.171 (-0.278,-0.064)	0.002
Education Level	-0.070 (-0.227,0.088)	0.387	-0.070 (-0.227,0.088)	0.387
Depression - PHQ-9 (Ref: Normal)	0.090 (-0.128,0.309)	0.417	0.090 (-0.128,0.309)	0.417
Self-Rated Health Status	0.293 (0.119,0.467)	<0.001	0.293 (0.119,0.467)	<0.001
Designated Healthcare Institution	0.497 (0.148,0.831)	0.005	0.497 (0.148,0.831)	0.005

**Policy Environment Layer**

Medical Payment Method			-0.004 (-0.236,0.227)	0.972
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