

Supplementary Table S 1. Covariate effects on Subjective stress levels

Covariate (contrast)	Mobility	Self-care	Usual activities	Pain/Discomfort
Gender (Male–Female)	-0.078 [-0.085 , -0.072]	-0.089 [-0.095 , -0.082]	-0.084 [-0.091 , -0.078]	-0.059 [-0.066 , -0.052]
Education(Univ–High School)	0.019 [0.011 , 0.027]	0.013 [0.005 , 0.021]	0.018 [0.01 , 0.026]	0.028 [0.02 , 0.036]
Employed (Yes–No)	0.093 [0.086 , 0.101]	0.091 [0.084 , 0.099]	0.099 [0.092 , 0.106]	0.096 [0.089 , 0.103]
AgeGroup (30–39 vs 19–29)	0.065 [0.049 , 0.081]	0.069 [0.053 , 0.085]	0.064 [0.048 , 0.079]	0.053 [0.038 , 0.069]
AgeGroup (40–49 vs 19–29)	0.005 [-0.012 , 0.021]	0.01 [-0.006 , 0.026]	0.003 [-0.013 , 0.019]	-0.013 [-0.029 , 0.004]
AgeGroup (50–59 vs 19–29)	-0.127 [-0.144 , -0.11]	-0.116 [-0.133 , -0.099]	-0.127 [-0.144 , -0.11]	-0.152 [-0.169 , -0.135]
AgeGroup (60–69 vs 19–29)	-0.268 [-0.285 , -0.25]	-0.243 [-0.26 , -0.225]	-0.26 [-0.277 , -0.242]	-0.299 [-0.317 , -0.282]
AgeGroup (70+ vs 19–29)	-0.436 [-0.454 , -0.418]	-0.382 [-0.4 , -0.364]	-0.422 [-0.441 , -0.404]	-0.462 [-0.48 , -0.444]
Marriage (Div/Separated–Married)	0.073 [0.059 , 0.087]	0.077 [0.063 , 0.091]	0.072 [0.058 , 0.086]	0.063 [0.05 , 0.077]
Marriage (Widowed–Married)	-0.128 [-0.139 , -0.117]	-0.115 [-0.126 , -0.105]	-0.125 [-0.135 , -0.114]	-0.128 [-0.139 , -0.117]
Marriage (Never married–Married)	-0.015 [-0.028 , -0.002]	-0.01 [-0.023 , 0.003]	-0.016 [-0.029 , -0.003]	-0.011 [-0.024 , 0.001]

Supplementary Table S 2. Covariate effects on PHQ-9

Covariate (contrast)	Mobility	Self-care	Usual activities	Pain/Discomfort
Gender (Male–Female)	-0.41 [-0.437 , -0.382]	-0.496 [-0.523 , -0.468]	-0.459 [-0.486 , -0.431]	-0.294 [-0.321 , -0.267]
Education(Univ–High School)	-0.14 [-0.174 , -0.107]	-0.19 [-0.224 , -0.156]	-0.15 [-0.183 , -0.116]	-0.095 [-0.128 , -0.062]
Employed (Yes–No)	-0.304 [-0.333 , -0.275]	-0.316 [-0.345 , -0.287]	-0.257 [-0.286 , -0.228]	-0.32 [-0.348 , -0.291]
AgeGroup (30–39 vs 19–29)	0.252 [0.188 , 0.317]	0.281 [0.216 , 0.346]	0.238 [0.174 , 0.303]	0.187 [0.124 , 0.251]
AgeGroup (40–49 vs 19–29)	-0.048 [-0.115 , 0.019]	-0.009 [-0.077 , 0.058]	-0.067 [-0.133 , 0]	-0.144 [-0.21 , -0.078]
AgeGroup (50–59 vs 19–29)	-0.18 [-0.25 , -0.111]	-0.099 [-0.169 , -0.029]	-0.184 [-0.253 , -0.114]	-0.319 [-0.387 , -0.25]
AgeGroup (60–69 vs 19–29)	-0.326 [-0.398 , -0.254]	-0.12 [-0.192 , -0.048]	-0.265 [-0.337 , -0.194]	-0.479 [-0.55 , -0.409]
AgeGroup (70+ vs 19–29)	-0.347 [-0.422 , -0.272]	0.085 [0.011 , 0.159]	-0.247 [-0.321 , -0.174]	-0.372 [-0.445 , -0.3]
Marriage (Div/Separated–Married)	0.863 [0.806 , 0.92]	0.895 [0.838 , 0.953]	0.858 [0.801 , 0.914]	0.811 [0.755 , 0.867]
Marriage (Widowed–Married)	0.206 [0.162 , 0.251]	0.304 [0.259 , 0.349]	0.231 [0.186 , 0.275]	0.255 [0.212 , 0.299]
Marriage (Never married–Married)	0.263 [0.21 , 0.316]	0.304 [0.251 , 0.357]	0.258 [0.205 , 0.31]	0.301 [0.249 , 0.353]

Supplementary Table S 3. Covariate effects on Subjective stress levels (Urban)

Covariate (contrast)	Mobility	Self-care	Usual activities	Pain/Discomfort
Gender (Male–Female)	-0.064 [-0.073 , -0.055]	-0.07 [-0.079 , -0.061]	-0.068 [-0.077 , -0.059]	-0.045 [-0.054 , -0.036]
Education(Univ–High School)	0.014 [0.004 , 0.024]	0.008 [-0.002 , 0.018]	0.013 [0.002 , 0.023]	0.023 [0.013 , 0.033]
Employed (Yes–No)	0.125 [0.115 , 0.135]	0.117 [0.108 , 0.127]	0.128 [0.118 , 0.138]	0.126 [0.117 , 0.136]
AgeGroup (30–39 vs 19–29)	0.071 [0.052 , 0.089]	0.076 [0.057 , 0.094]	0.07 [0.051 , 0.088]	0.059 [0.041 , 0.077]
AgeGroup (40–49 vs 19–29)	0.015 [-0.005 , 0.034]	0.021 [0.002 , 0.041]	0.013 [-0.006 , 0.033]	-0.004 [-0.023 , 0.016]
AgeGroup (50–59 vs 19–29)	-0.114 [-0.135 , -0.094]	-0.103 [-0.124 , -0.083]	-0.114 [-0.135 , -0.093]	-0.141 [-0.161 , -0.12]
AgeGroup (60–69 vs 19–29)	-0.232 [-0.253 , -0.21]	-0.208 [-0.23 , -0.186]	-0.224 [-0.246 , -0.202]	-0.263 [-0.284 , -0.241]
AgeGroup (70+ vs 19–29)	-0.402 [-0.426 , -0.379]	-0.352 [-0.374 , -0.329]	-0.389 [-0.412 , -0.366]	-0.426 [-0.448 , -0.403]
Marriage (Div/Separated–Married)	0.071 [0.054 , 0.089]	0.078 [0.06 , 0.095]	0.07 [0.052 , 0.087]	0.062 [0.044 , 0.079]
Marriage (Widowed–Married)	-0.13 [-0.147 , -0.114]	-0.115 [-0.131 , -0.098]	-0.126 [-0.143 , -0.11]	-0.131 [-0.147 , -0.114]
Marriage (Never married–Married)	-0.01 [-0.026 , 0.006]	-0.005 [-0.021 , 0.01]	-0.011 [-0.026 , 0.005]	-0.005 [-0.021 , 0.01]

Supplementary Table S 4. Covariate effects on Subjective stress levels (Rural)

Covariate (contrast)	Mobility	Self-care	Usual activities	Pain/Discomfort
Gender (Male–Female)	-0.097 [-0.108 , -0.087]	-0.112 [-0.123 , -0.102]	-0.106 [-0.116 , -0.095]	-0.078 [-0.088 , -0.068]
Education(Univ–High School)	-0.006 [-0.021 , 0.008]	-0.013 [-0.027 , 0.001]	-0.008 [-0.022 , 0.006]	0.004 [-0.01 , 0.018]
Employed (Yes–No)	0.08 [0.069 , 0.091]	0.082 [0.071 , 0.093]	0.089 [0.078 , 0.1]	0.08 [0.069 , 0.09]
AgeGroup (30–39 vs 19–29)	0.051 [0.021 , 0.081]	0.054 [0.024 , 0.084]	0.048 [0.019 , 0.078]	0.04 [0.011 , 0.07]
AgeGroup (40–49 vs 19–29)	-0.015 [-0.045 , 0.015]	-0.01 [-0.04 , 0.02]	-0.018 [-0.048 , 0.012]	-0.028 [-0.058 , 0.001]
AgeGroup (50–59 vs 19–29)	-0.138 [-0.169 , -0.108]	-0.127 [-0.158 , -0.097]	-0.139 [-0.169 , -0.109]	-0.16 [-0.19 , -0.13]
AgeGroup (60–69 vs 19–29)	-0.29 [-0.321 , -0.259]	-0.262 [-0.293 , -0.231]	-0.283 [-0.313 , -0.252]	-0.321 [-0.351 , -0.29]
AgeGroup (70+ vs 19–29)	-0.441 [-0.472 , -0.409]	-0.384 [-0.415 , -0.353]	-0.427 [-0.458 , -0.396]	-0.468 [-0.499 , -0.437]
Marriage (Div/Separated–Married)	0.058 [0.036 , 0.081]	0.062 [0.039 , 0.085]	0.059 [0.036 , 0.082]	0.053 [0.031 , 0.076]
Marriage (Widowed–Married)	-0.13 [-0.144 , -0.115]	-0.12 [-0.134 , -0.105]	-0.127 [-0.141 , -0.112]	-0.13 [-0.144 , -0.115]
Marriage (Never married–Married)	-0.032 [-0.055 , -0.01]	-0.026 [-0.048 , -0.003]	-0.033 [-0.055 , -0.01]	-0.03 [-0.052 , -0.008]

Supplementary Table S 5. Covariate effects on PHQ-9 (Urban)

Covariate (contrast)	Mobility	Self-care	Usual activities	Pain/Discomfort
Gender (Male–Female)	-0.448 [-0.485 , -0.411]	-0.506 [-0.543 , -0.469]	-0.487 [-0.523 , -0.45]	-0.318 [-0.354 , -0.282]
Education(Univ–High School)	-0.179 [-0.222 , -0.137]	-0.227 [-0.269 , -0.185]	-0.189 [-0.231 , -0.147]	-0.127 [-0.168 , -0.086]
Employed (Yes–No)	-0.186 [-0.226 , -0.146]	-0.238 [-0.279 , -0.198]	-0.154 [-0.194 , -0.115]	-0.209 [-0.248 , -0.17]
AgeGroup (30–39 vs 19–29)	0.221 [0.144 , 0.298]	0.258 [0.181 , 0.336]	0.21 [0.133 , 0.286]	0.152 [0.077 , 0.228]
AgeGroup (40–49 vs 19–29)	-0.083 [-0.164 , -0.001]	-0.034 [-0.116 , 0.048]	-0.098 [-0.179 , -0.017]	-0.193 [-0.273 , -0.113]
AgeGroup (50–59 vs 19–29)	-0.211 [-0.296 , -0.125]	-0.126 [-0.212 , -0.039]	-0.213 [-0.298 , -0.127]	-0.369 [-0.453 , -0.285]
AgeGroup (60–69 vs 19–29)	-0.341 [-0.431 , -0.251]	-0.145 [-0.236 , -0.055]	-0.28 [-0.369 , -0.19]	-0.509 [-0.597 , -0.42]
AgeGroup (70+ vs 19–29)	-0.383 [-0.479 , -0.286]	0.017 [-0.079 , 0.113]	-0.284 [-0.379 , -0.188]	-0.411 [-0.505 , -0.317]
Marriage (Div/Separated–Married)	0.907 [0.834 , 0.981]	0.959 [0.885 , 1.033]	0.89 [0.817 , 0.963]	0.858 [0.786 , 0.93]
Marriage (Widowed–Married)	0.255 [0.186 , 0.324]	0.369 [0.299 , 0.438]	0.284 [0.216 , 0.353]	0.308 [0.24 , 0.375]
Marriage (Never married–Married)	0.253 [0.188 , 0.318]	0.291 [0.226 , 0.357]	0.245 [0.181 , 0.31]	0.301 [0.237 , 0.364]

Supplementary Table S 6. Covariate effects on PHQ-9 (Rural)

Covariate (contrast)	Mobility	Self-care	Usual activities	Pain/Discomfort
Gender (Male–Female)	-0.363 [-0.404 , -0.322]	-0.478 [-0.519 , -0.436]	-0.425 [-0.466 , -0.384]	-0.264 [-0.305 , -0.223]
Education(Univ–High School)	-0.194 [-0.251 , -0.137]	-0.244 [-0.301 , -0.187]	-0.204 [-0.261 , -0.148]	-0.14 [-0.196 , -0.084]
Employed (Yes–No)	-0.342 [-0.385 , -0.298]	-0.336 [-0.38 , -0.292]	-0.27 [-0.314 , -0.227]	-0.386 [-0.429 , -0.344]
AgeGroup (30–39 vs 19–29)	0.332 [0.213 , 0.451]	0.36 [0.24 , 0.479]	0.313 [0.195 , 0.431]	0.285 [0.168 , 0.402]
AgeGroup (40–49 vs 19–29)	0.042 [-0.078 , 0.161]	0.08 [-0.04 , 0.201]	0.016 [-0.103 , 0.135]	-0.014 [-0.132 , 0.103]
AgeGroup (50–59 vs 19–29)	-0.051 [-0.173 , 0.07]	0.038 [-0.084 , 0.16]	-0.059 [-0.18 , 0.062]	-0.147 [-0.267 , -0.028]
AgeGroup (60–69 vs 19–29)	-0.161 [-0.284 , -0.037]	0.06 [-0.064 , 0.184]	-0.104 [-0.227 , 0.018]	-0.283 [-0.405 , -0.162]
AgeGroup (70+ vs 19–29)	-0.103 [-0.229 , 0.024]	0.346 [0.22 , 0.472]	-0.002 [-0.127 , 0.123]	-0.119 [-0.242 , 0.005]
Marriage (Div/Separated–Married)	0.695 [0.603 , 0.786]	0.724 [0.632 , 0.816]	0.701 [0.61 , 0.792]	0.668 [0.578 , 0.758]
Marriage (Widowed–Married)	0.192 [0.133 , 0.251]	0.272 [0.213 , 0.331]	0.215 [0.156 , 0.273]	0.233 [0.175 , 0.29]
Marriage (Never married–Married)	0.238 [0.149 , 0.328]	0.291 [0.201 , 0.381]	0.235 [0.146 , 0.324]	0.269 [0.181 , 0.358]