

Sensitivity Analysis

Table S1 Model estimation using categorical K10 vs continuous K10

| Predictors | Coeff | p-value | 95% CI |
|--------------------------------|-------|---------|-----------|
| Sleep quality PSQI<7 (ref.) | | | |
| PSQI \geq 7 | 1.27 | <0.001 | 1.11-1.42 |
| Estimation on continuous K10 | | | |
| Sleep quality PSQI<7 (ref.) | | | |
| PSQI \geq 7 | 0.53 | <0.001 | 0.47-0.60 |

Table S2 Model estimation using categorical K10 vs continuous K10

| Predictors | Model with mediators | | | Model without mediators | | |
|-------------------------------------|----------------------|---------|-----------|-------------------------|---------|-----------|
| | OR | p-value | 95% CI | OR | p-value | 95% CI |
| Sleep quality PSQI<7 (ref.) | | | | | | |
| PSQI \geq 7 | 1.44 | <0.001 | 1.19-1.76 | 1.84 | <0.001 | 1.53-2.23 |
| Psychological distress No (ref.) | | | | | | |
| Mild | 1.63 | <0.001 | 1.29-2.05 | | | |
| Moderate | 2.34 | <0.001 | 1.81-3.02 | | | |
| Severe | 4.43 | <0.001 | 3.15-6.22 | | | |
| Estimation with continuous K10 | | | | | | |
| Sleep quality PSQI<7 (ref.) | | | | | | |
| PSQI \geq 7 | 1.37 | <0.001 | 1.16-1.62 | 1.84 | <0.001 | 1.53-2.23 |
| Psychological distress | 1.07 | <0.001 | 1.06-1.09 | | | |