

	Model 1		Model 2		Model 3		Model 4	
	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P
Logistic regression analysis								
Single episode of depressive symptoms								
High GS + normal sleep	1.00 (reference)		1.00 (reference)		1.00 (reference)		1.00 (reference)	
High GS + sleep disturbance	1.65 (1.41–1.92)	<0.001	1.59 (1.35–1.87)	<0.001	1.50 (1.23–1.83)	<0.001	1.41 (1.13–1.75)	0.002
Low GS + normal sleep	1.99 (1.78–2.22)	<0.001	1.30 (1.15–1.48)	<0.001	1.22 (1.05–1.43)	0.011	1.18 (0.99–1.39)	0.069
Low GS + sleep disturbance	3.17 (2.63–3.82)	<0.001	1.88 (1.53–2.30)	<0.001	1.88 (1.47–2.42)	<0.001	1.75 (1.33–2.31)	<0.001
Recurrent depressive symptoms								
High GS + normal sleep	1.00 (reference)		1.00 (reference)		1.00 (reference)		1.00 (reference)	
High GS + sleep disturbance	2.30 (1.93–2.75)	<0.001	2.23 (1.86–2.68)	<0.001	2.15 (1.71–2.70)	<0.001	2.02 (1.57–2.60)	<0.001
Low GS + normal sleep	2.38 (2.08–2.72)	<0.001	1.48 (1.28–1.72)	<0.001	1.30 (1.08–1.57)	0.005	1.18 (0.95–1.39)	0.132
Low GS + sleep disturbance	4.84 (3.95–5.94)	<0.001	2.76 (2.21–3.44)	<0.001	2.79 (2.12–3.67)	<0.001	2.38 (1.75–3.23)	<0.001
Generalised estimating equation analysis								
High GS + normal sleep	1.00 (reference)		1.00 (reference)		1.00 (reference)		1.00 (reference)	
High GS + sleep disturbance	1.90 (1.73–2.10)	<0.001	1.83 (1.66–2.02)	<0.001	1.71 (1.51–1.94)	<0.001	1.66 (1.45–1.91)	<0.001
Low GS + normal sleep	1.73 (1.61–1.86)	<0.001	1.27 (1.18–1.37)	<0.001	1.21 (1.10–1.33)	<0.001	1.12 (1.01–1.25)	0.035
Low GS + sleep disturbance	2.98 (2.69–3.31)	<0.001	2.10 (1.88–2.35)	<0.001	2.11 (1.85–2.42)	<0.001	1.87 (1.60–2.17)	<0.001

CI: confidence interval; GS: grip strength; OR: odds ratio

Model 1: Unadjusted;

Model 2: Adjustment for age, sex and region;

Model 3: Adjustment model 2 and education years, work status and economic status;

Model 4: Adjusted for model 3 and smoking, alcohol consumption, physical activity, health status, number of chronic diseases.

Note: Values in bold indicate statistical significance (95% CI for OR does not include 1, and *P*<0.05).