Supplementary Table 1 Univariate and multivariate logistic regression fitting results for associated factors of SH

Variable	Univariate model; Crude OR (90%CI)	Multivariate model; Adjusted OR (95%CI)
Age: +1 year	1.20 (1.14-1.27)	1.02 (0.95-1.10)
Sex (Ref: Boys): Girls	1.22 (1.01-1.46)	1.03 (0.82-1.30)
Grade (Ref: Primary school)		
Junior high school	2.64 (2.11-3.31)	2.05 (1.38-3.04)
Senior high school	2.65 (2.01-3.48)	1.94 (1.17-3.22)
Depression (Ref: PHQ9 < 10): PHQ9 ≥ 10	8.53 (6.29-11.59)	2.66 (1.85-3.81)
Anxiety (Ref: GAD7 < 7): GAD7 ≥ 7	5.52 (4.55-6.69)	1.86 (1.49-2.32)
Resilience		
Goal concentration	0.92 (0.90-0.93)	0.95 (0.94-0.97)
Emotion regulation	0.87 (0.86-0.88)	0.93 (0.91-0.95)
Positive perception	0.97 (0.95-0.99)	0.98 (0.95-1.00)
Family support	0.88 (0.86-0.90)	0.95 (0.92-0.97)
Interpersonal assistance	0.89 (0.88-0.91)	0.98 (0.96-1.00)

Supplementary Table 2 Multivariate Logistic regression fitting results for associated factors of SH repetition, SH severity

Variable	Multivariate SH repetition; Adjusted	Multivariate SH severity; Adjusted
Age: +1 year	0.94 (0.79-1.12)	0.95 (0.76-1.19)
Sex (Ref: Boys): Girls	0.70 (0.49-1.01)	0.79 (0.52-1.18)
Grade (Ref: Primary school)		
Junior high school	2.16 (0.98-4.79)	0.77 (0.37-1.58)
Senior high school	3.65 (1.18-11.36)	0.31 (0.07-1.27)
Depression (Ref: PHQ9 < 4): PHQ9 ≥ 4	2.12 (1.28-3.50)	1.72 (1.15-2.56)
Anxiety (Ref: GAD7 < 4): GAD7 ≥ 4	1.64 (1.17-2.31)	1.72 (1.36-2.16)
Personality traits		
EPQ-E (Ref: Extroversion, score E > 56.7)		
Intermediate (43.3 < score E ≤ 56.7)	0.95 (0.66-1.35)	1.18 (0.83-1.69)
Introversion (score E ≤ 43.3)	1.20 (0.82-1.77)	1.92 (1.18-3.12)
EPQ-N (Ref: Neuroticism, score N > 56.7)		
Intermediate (43.3 < score N ≤ 56.7)	0.61 (0.44-0.83)	0.71 (0.52-0.96)
Non-neuroticism (score N ≤ 43.3)	0.37 (0.25-0.54)	0.54 (0.35-0.81)
EPQ-P (Ref: Psychoticism, score P > 56.7)		
Intermediate (43.3 < score P ≤ 56.7)	0.87 (0.66-1.15)	0.80 (0.54-1.20)

Non-psychoticism (score $P \leq 43.3$)	0.77 (0.42-1.44)	0.48 (0.26-0.92)
Emotion regulation (Ref: RSCA < 18): RSCA ≥ 18	0.95 (0.64-1.40)	0.97 (0.73-1.30)