

Table 1: academic achievement measures across sleep groups

		Failed most courses	Previous GPA (a)	Negative impact of sleep over performance (b)	End-of-semester marks (c)
		%	M	M	M
Sleep Quality Index	Very Good	10.4	3.43	1.55	.13
	Good	9.8	3.28	1.74	-.05
	Poor	13.2	3.30	1.70	-.04
	Very Poor	11.0	3.29	2.10	-.08
		<i>NS</i>	<i><0.05</i>	<i><0.0001</i>	<i><0.05</i>
Enough sleep (frequency)	Never + Rarely	11.2	3.27	2.28	-.05
	1-2 nights /week	10.5	3.34	2.02	-.09
	3-4 nights /week	12.4	3.27	1.71	-.02
	Almost all nights/ always	10.3	3.42	1.15	.14
		<i>NS</i>	<i>NS</i>	<i><0.0001</i>	<i><0.05</i>
CMQ	Morningness tendency	7.6	3.49	1.50	.14
	Intermediate-toward morning.	9.4	3.34	1.62	.00
	Intermediate-toward evening.	13.1	3.27	1.83	-.06
	Eveningness tendency	14.3	3.24	2.07	-.08
		<i><0.0001</i>	<i><0.001</i>	<i><0.0001</i>	<i><0.05</i>
Sleep phase on week nights	< 3:56 a.m.	5.3	3.51	1.61	.11
	3:56 to 4:25 a.m.	9.2	3.46	1.62	.09
	4:26 to 5:00 a.m.	9.3	3.16	1.74	-.13
	> 5:00 a.m.	21.7	3.20	2.09	-.09
		<i><0.0001</i>	<i><0.0001</i>	<i><0.0001</i>	<i><0.001</i>
Sleep phase on weekend nights	< 5:15 a.m.	7.9	3.44	1.68	.13
	5:15 to 6:00 a.m.	9.1	3.30	1.68	.05
	6:01 to 7:00 a.m.	12.2	3.30	1.79	-.10
	> 7:00 a.m.	16.4	3.29	1.92	-.11
		<i><0.0001</i>	<i>NS</i>	<i><0.01</i>	<i><0.01</i>
Week-weekend sleep phase displacement	< 1 h	12.7	3.33	1.81	.09
	1 h - 1h30	11.2	3.30	1.76	.02
	1h31 - 2h15	10.3	3.33	1.71	-.01
	> 2h15	10.3	3.37	1.75	-.09
		<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>
Bedtime oscillation along the school week	≤ 1 h	10.8	3.34	1.58	.09
	1h01 - 2 h	10.6	3.32	1.85	-.03
	> 2 h	12.3	3.33	1.86	-.07
		<i>NS</i>	<i>NS</i>	<i><0.0001</i>	<i><0.05</i>
Rise time oscillation along the school week	< 1 h	8.5	3.41	1.62	.07
	1h - 1h59	9.4	3.32	1.74	-.01
	≥ 2 h	15.8	3.26	1.92	-.07
		<i><0.01</i>	<i><0.05</i>	<i><0.0001</i>	<i>NS</i>

Notes: (a) Expressed in a 6-point scale: 10 points or less [coded as 1]; from 10 to 11 points [coded as 2]; 12-13 points [coded as 3]; 14-15 points [coded as 4]; 16-17 points [coded as 5]; 18 points or more [coded as 6]. (b) Assessed through a 5-point scale, coded from 0 = «strongly disagree» to 4 = «strongly agree». (c) Transformed into standardized z scores. M = mean values. NS = not significant ($p > 0.05$).

Table 2: Descriptive statistics for the variables in the regression analyses – z scores (criterion variable) and potential predictors (n = 1240*)

Variable	M	SD	Min	Max
Z scores	0.03	0.97	-2.73	3.06
Age	19.82	1.58	17	25
Vocational Preferences Match (1st, 2nd, 3rd+...)	1.45	0.73	1	3
Previous academic achievement (self-reported GPA)	3.41	0.96	1	6
Class attendance – transf. [Log ₁₀]	0.18	0.24	0	0.70
Study hours / week – transf. [Log ₁₀]	0.86	0.31	0	1.75
Cognitive Functioning	9.56	2.46	0	16
Night Outings (past midnight)	2.38	1.25	0	5
Cigarettes – transf. [Log ₁₀]	0.16	0.35	0	1.43
Coffee – transf. [Log ₁₀]	0.22	0.21	0	0.78
Alcohol – transf. [Log ₁₀]	0.12	0.20	0	1.11
Other substances – transf. [Log ₁₀]	0.06	0.15	0	0.70
Enough Sleep (frequency)	2.56	1.12	0	4
Sleep Quality Index (7 items)	8.75	3.92	0	24
Weekend sleep phase	6:05	1h21	1:15	12:00
Bed time irregularity along the school week	1h58	1h24	0h	9h

* Excluding 8 outliers and participants with missing data in one of the 16 variables (listwise deletion)

Table 3: significant predictors of z scores selected through stepwise regression

Model (variables added at each step)	R	R ²	Adjusted R ²	Standard error of the estimate	Change statistics			
					R ²	F	df	p
1. Previous GPA	.307	.094	.093	.926	.094	128.572	(1, 1238)	.000
2. Class attendance (trasf. Log ₁₀)	.362	.131	.130	.908	.037	52.849	(1, 1237)	.000
3. Enough Sleep frequency	.369	.136	.134	.905	.005	6.814	(1, 1236)	.009
4. Night outings	.373	.139	.137	.904	.003	4.825	(1, 1235)	.028
5. Sleep Quality Index	.377	.142	.139	.903	.003	4.475	(1, 1234)	.035

Notes: Constant included. Criterion variable: Z scores. Durbin-Watson: 1.852. Condition Index = 14.270. Collinearity statistics for each predictor: tolerance values > .89, VIF < 1.1.