

SUPPLEMENTARY MATERIAL

**Do Sleep-Related Metacognitive Strategies Shape My Sleep? The Relationships between
Strategies for Controlling Sleep-Related Intrusive Thoughts and Subjective and Objective
Sleep Quality in Young Adulthood and Older Age**

DETAILS OF RESULTS – ADDITIONAL TABLES

Table S1. Results of the linear mixed-effects models for subjective sleep parameters (sleep diary)

Measure	Predictors	B	CI	p
<i>of interest</i>				
TST	Intercept	459.40	402.73 – 516.06	<0.001
	Age	-0.84	-1.26 – -0.41	<0.001
	Sex	7.03	-8.14 – 22.20	0.364
	MEQ-r	1.55	-0.78 – 3.88	0.193
	PSQI	-6.12	-10.69 – -1.54	0.009
	TCQI-r, Agg Supp	2.88	0.45 – 5.30	0.020
	TCQI-r, Cogn Dist	-1.70	-4.52 – 1.11	0.236
	TCQI-r, Behav Dist	1.35	-1.02 – 3.73	0.263
	TCQI-r, Reapp	0.54	-1.75 – 2.83	0.646
	TCQI-r, Worry	-4.13	-6.66 – -1.59	0.001
SOL	Intercept	-15.51	-38.06 – 7.05	0.178
	Age	0.36	0.19 – 0.53	<0.001
	Sex	-4.06	-10.10 – 1.98	0.187
	MEQ-r	0.12	-0.81 – 1.05	0.798
	PSQI	2.48	0.66 – 4.30	0.008
	TCQI-r, Agg Supp	0.32	-0.65 – 1.28	0.517
	TCQI-r, Cogn Dist	-0.03	-1.15 – 1.09	0.959
	TCQI-r, Behav Dist	-0.29	-1.23 – 0.66	0.553
	TCQI-r, Reapp	-0.85	-1.76 – 0.07	0.069
	TCQI-r, Worry	1.56	0.56 – 2.57	0.002
SE	Intercept	99.56	92.71 – 106.42	<0.001

Age	-0.13	-0.19 – -0.07	<0.001
Sex	1.63	-0.67 – 3.94	0.165
MEQ-r	0.30	-0.06 – 0.65	0.101
PSQI	-1.48	-2.17 – -0.78	<0.001

Note. MEQ-r= Circadian preference; PSQI= Pittsburgh Sleep Quality Index; TST= total sleep time; SOL= sleep onset latency; SE= sleep efficiency; TCQI-R, Agg Supp=Aggressive suppression; TCQI-R, Cogn Dist= Cognitive distraction; TCQI-R, Reapp= Reappraisal; TCQI-R, Behav Dist= Behavioral distraction; TCQI-R, Worry= Worry; TST= total sleep time; SOL= sleep onset latency; SE= sleep efficiency.

Table S2. Results of the linear mixed-effects models for actigraphic sleep parameters

<i>Measure of interest</i>	<i>Predictors</i>	<i>B</i>	<i>CI</i>	<i>p</i>
TST	Intercept	411.73	353.65 – 469.81	<0.001
	Age	-0.19	-0.63 – 0.24	0.387
	Sex	10.03	-5.53 – 25.58	0.207
	MEQ-r	1.18	-1.22 – 3.57	0.336
	PSQI	-2.33	-7.02 – 2.36	0.331
	TCQI-r, Agg Supp	-0.61	-3.10 – 1.88	0.631
	TCQI-r, Cogn Dist	-0.66	-3.56 – 2.23	0.654
	TCQI-r, Behav Dist	1.45	-0.98 – 3.89	0.243
	TCQI-r, Reapp	0.35	-2.00 – 2.71	0.768
	TCQI-r, Worry	-1.75	-4.35 – 0.84	0.185
SOL	Intercept	4.82	-6.63 – 16.27	0.409
	Age	0.07	-0.03 – 0.17	0.162
	Sex	-4.22	-8.08 – -0.37	0.032
	MEQ-r	-0.06	-0.65 – 0.53	0.837

	PSQI	1.26	0.10 – 2.42	0.033
SE	Intercept	110.73	85.34 – 136.11	<0.001
	Age	0.10	-0.09 – 0.30	0.298
	Sex	3.08	-3.56 – 9.72	0.363
	MEQ-r	-1.23	-2.11 – -0.35	0.006
	PSQI	-0.34	-2.33 – 1.64	0.735
	TCQI-r, Agg Supp	0.51	-0.97 – 1.98	0.498
	TCQI-r, Cogn Dist	-0.05	-1.25 – 1.16	0.940
	TCQI-r, Behav Dist	0.79	-0.67 – 2.25	0.286
	TCQI-r, Reapp	-1.00	-2.26 – 0.26	0.119
	TCQI-r, Worry	-0.89	-2.16 – 0.39	0.173

Note. MEQ-r= Circadian preference; PSQI= Pittsburgh Sleep Quality Index; TST= total sleep time; SOL= sleep onset latency; SE= sleep efficiency; TCQI-R, Agg Supp=Aggressive suppression; TCQI-R, Cogn Dist= Cognitive distraction; TCQI-R, Reapp= Reappraisal; TCQI-R, Behav Dist= Behavioral distraction; TCQI-R, Worry= Worry; TST= total sleep time; SOL= sleep onset latency; SE= sleep efficiency.

Table S3. Model comparison results. The most parsimonious, best-fit models with the lowest AIC and highest weights were selected appear in bold for each subjective sleep parameters (Sleep diary).

Measure of interest	Predictors	Conditional		
		AIC	AIC_w	R²
	m0: intercept	11570.27	0.00	0.373
TST	m1: + age, sex, circadian preferences (MEQ-r), self-reported sleep quality (PSQI)			
		11535.55	0.01	0.378
	m2: + thought control strategies	11528.12	0.99	0.385
SOL	m0: intercept	9475.827	0.00	0.441

	m1: + age, sex, circadian preferences (MEQ-r), self-reported sleep quality (PSQI)	9437.645	0.16	0.446
	m2: + thought control strategies	9434.303	0.84	0.478
	m0: intercept	7575.480	0.00	0.436
SE	m1: + age, sex, circadian preferences (MEQ-r), self-reported sleep quality (PSQI)	7536.554	0.99	0.441
	m2: + thought control strategies	7546.161	0.01	0.448

Note. MEQ-r= Circadian preference; PSQI= Pittsburgh Sleep Quality Index; TST= total sleep time; SOL= sleep onset latency; SE= sleep efficiency; TCQI-R, Agg Supp=Aggressive suppression; TCQI-R, Cogn Dist= Cognitive distraction; TCQI-R, Reapp= Reappraisal; TCQI-R, Behav Dist= Behavioral distraction; TCQI-R, Worry= Worry; TST= total sleep time; SOL= sleep onset latency; SE= sleep efficiency.

Table S4. Model comparison results. The most parsimonious, best-fit models with the lowest AIC and highest weights were selected appear in bold for each actigraphic sleep parameter.

<i>Measure of interest</i>	<i>Predictors</i>	<i>AIC</i>	<i>AIC_w</i>	<i>Conditional R²</i>
	m0: intercept	11555.61	0.01	0.313
TST	m1: + age, sex, circadian preferences (MEQ-r), self-reported sleep quality (PSQI)	11547.63	0.07	0.320
	m2: + thought control strategies	11542.54	0.93	0.329
SOL	m0: intercept	8497.133	0.035	0.404
	m1: + age, sex, circadian preferences (MEQ-r), self-reported sleep quality	8490.509	0.951	0.410

(PSQI)				
	m2: + thought control strategies	8498.904	0.014	0.419
	m0: intercept	748.5178	0.015	0.786
	m1: + age, sex, circadian preferences			
SE	(MEQ-r), self-reported sleep quality (PSQI)	742.3785	0.32	0.799
	m2: + thought control strategies	740.9372	0.66	0.804

Note. MEQ-r= Circadian preference; PSQI= Pittsburgh Sleep Quality Index; TST= total sleep time; SOL= sleep onset latency; SE= sleep efficiency; TCQI-R, Agg Supp=Aggressive suppression; TCQI-R, Cogn Dist= Cognitive distraction; TCQI-R, Reapp= Reappraisal; TCQI-R, Behav Dist= Behavioral distraction; TCQI-R, Worry= Worry; TST= total sleep time; SOL= sleep onset latency; SE= sleep efficiency.

Table S5. Pearson's Correlations between subjective and objective sleep parameters.

	1	2	3	4	5
Sleep diary					
TST (1)	—				
SOL (2)	-0.525***	—			
SE (3)	0.389***	-0.415***	—		
Actigraphy					
TST (4)	0.302***	0.031	0.155	—	
SOL (5)	-0.072	0.191*	-0.094	-0.143	—
SE (6)	0.136	-0.088	0.006	0.656***	-0.375***

Note. PSQI= Pittsburgh Sleep Quality Index; TST= total sleep time; SOL= sleep onset latency; SE= sleep efficiency. * $p < .05$, ** $p < .01$, *** $p < 001$.