

Table S1*Search Queries – (online only)*

Database	Query
	Mesh Terms
PubMed	((heart rate variability*[Title/Abstract] OR hrv[Title/Abstract]) AND (“Education”[Mesh] OR educat*[Title/Abstract] OR learn*[Title/Abstract] OR student*[Title/Abstract] OR teach*[Title/Abstract])) AND (“attention”[Majr] OR “stress”[Mesh] OR psychological stress*[Title/Abstract]))
Web of Science	((TS=(heart rate variability or hrv)) AND TS=(Education OR educat* OR learn* OR student* OR teach*)) AND AB=(attention* OR stress* OR psychological stress*)
PsycINFO	APA Thesaurus Psychological Index Terms (via EBSCOhost) ((MM“Heart Rate Variability” OR heart rate variability* OR HRV) AND (MM“Education” OR educat* OR learn* OR student* OR teach*)) AND (MM“Attention” OR MM“stress” OR psychological stress*)
ERIC	Thesaurus (via EBSCOhost) ((heart rate variability* OR HRV) AND (MM“Education” OR educat* OR learn* OR student* OR teach*)) AND (MM“Attention” OR MM“Stress Management” OR stress* OR psychological stress*)

Table S2*Classification Scheme – (online only)*

Domain		Classification ($N = 48$) *
Educational setting	Exam ($n = 11$)	1. Written Exam ($n = 2$) 2. Oral Exam ($n = 7$) 3. Skill Assessment ($n = 2$)
	Learning ($n = 20$)	1. Face-to-face lecture ($n = 1$) 2. Online lecture ($n = 2$) 3. Clinical practice ($n = 17$) 4. Peer tutoring ($n = 1$)
	Experiment ($n = 24$)	1. Cognitive task ($n = 7$) 1.1. Stroop test ($n = 2$); Math ($n = 3$); Memory ($n = 2$); d2 test ($n = 1$) 2. Psychomotor task ($n = 2$) 3. Intervention ($n = 15$)
Measurement tools	Wearable ($n = 28$)	1. Polar series – Polar watch ($n = 8$); Polar chest belt ($n = 7$) 2. Holter series ($n = 3$) 3. VarCorPF8 chestbelt ($n = 2$) 4. Medeia chest belt ($n = 1$) 5. Single-lead, chest HealthPatch ($n = 1$) 6. Zephyr chest belt ($n = 1$) 7. Fitbit Charge 2 wristband ($n = 1$) 8. Biopac MP 150 chest belt ($n = 1$) 9. eMotion Faros chest belt ($n = 1$) 10. movisens ECG Move 3 chest belt ($n = 1$) 11. ECG Move 3 chest belt ($n = 1$)
	Static ($n=20$)	1. 3-lead ECG ($n = 7$) 2. SA-6000 ($n = 1$) 3. Biopac MP150 ($n = 2$) 4. 2-lead CardioDiagnostics cardiac monitoring devices ($n = 2$) 5. Brainvision BrainAmp ENRG Research Amplifier ($n = 1$) 6. NeNRus-4 ($n = 4$) 7. Shimmer3 GSR ($n = 1$) 8. b-AlertX10 ($n = 1$) 9. LabChart ($n = 1$)
	Analysis software	1. Kubios ($n = 19$) 2. SA-6000 ($n = 1$) 3. Biopac MP150WSW ($n = 2$) 4. Holter series ($n = 1$) 5. Qhrv assessment ($n = 1$) 6. Polar series software ($n = 3$) 7. LabChart Pro software ($n = 1$) 8. BEAT software ($n = 1$) 9. MATLAB ($n=3$) 10. ConsensysPro ($n=1$) 11. HRVAS ($n=1$) 12. HRV-Scanner BioSign ($n=1$) 13. Prism ($n=1$) 14. Biotrace+ ($n=1$) 15. Not reported ($n = 11$)
Parameters	Time domain ($n = 38$)	1. NN - 1.1. SDNN ($n = 15$); pNN50 ($n = 12$); meanNN ($n = 1$); AVNN ($n = 1$); SDANN ($n = 1$); SDNNIdx ($n = 1$) 2. RR- 2.1. meanRR ($n = 3$); RRinterval ($n = 3$); SDRR ($n = 1$) 3. RMSSD ($n = 28$); LnRMSSD ($n = 1$) 4. HRV coefficient ($C_{HRV} = SDNN/NN \times 100$) ($n = 2$)
	Frequency domain ($n = 37$)	1. LF ($n = 23$); LFn ($n = 2$); LnLF ($n = 1$) 2. HF ($n = 29$); HFn ($n = 2$); LnHF ($n = 1$) 3. LF/HF ($n = 24$) 4. VLF ($n = 2$) 5. TotPow ($n = 3$)
	Non-linear domain ($n = 10$)	1. SD1 ($n = 8$); SD2 ($n = 9$) 2. SampEn, D2, dfa1, dfa2, RPImean, RPImax, REC, Rpadet, ShanEn ($n = 2$) 3. NCI, NUPI, 0V%, 1V%, 2LV%, 2UV% ($n = 1$)

Domain		Classification ($N = 48$) *
Co-measurements	Psycho-physiological Measure ($n = 33$)	Stress-Related Data 1. Heart rate ($n = 23$) 2. Cortisol ($n = 11$) - Salivary ($n = 10$); Hair ($n = 1$); Blood ($n = 1$) 3. Respiration frequency ($n = 1$); Respiration rate ($n = 1$) 4. Brain ($n = 3$) - Prefrontal cortex activity ($n = 1$); TNF - α ($n = 2$) 5. Blood pressure ($n = 6$); BVP (Blood Volume Pulse) ($n = 2$) 6. Skin - Skin conductance ($n = 3$) 7. Real time stress percentage ($n = 1$) 8. Salivary testosterone ($n = 1$) 9. Eye-tracking data ($n = 1$)
		Attention-Related Data 1. Heart rate ($n = 3$) 2. Cortisol ($n = 2$) – Salivary 3. Eye-tracking data ($n = 1$) 4. Brain ($n = 2$); TNF – α ($n = 1$); EEG ($n = 1$) 5. Blood pressure ($n = 1$) 6. Pulse rate variability ($n = 1$) 7. Accommodative response ($n = 1$) 8. Respiration rate ($n = 2$)
		Other Data 1. Energy consumption ($n = 1$) 2. Acc (3-axis hand motion activity) ($n = 1$) 3. IBI (Inter-Beat Interval) ($n = 1$) 4. Sleep quality (sleeping time) ($n = 1$)
		Stress-Related Data Stress - STAI ($n = 9$); SUDS ($n = 3$); PSQ ($n = 1$); KUSTA ($n = 1$); VAS ($n = 3$); TICS ($n = 1$); DASS ($n = 1$); AMOS 8-15 ($n = 1$); Not validated scale ($n = 6$); TAI ($n = 1$); PSRS ($n = 1$); EMA-Survey ($n = 1$); SSQ ($n = 1$);
		Attention-Related Data 1. Mindfulness: MAAS
	Self-report Measures ($n = 31$)	Other Data 1. Affect - PANAS ($n = 3$); GVA ($n = 1$) 2. Depression - PHQ-9 ($n = 1$); DASS ($n = 1$) 3. Emotion: AEQ ($n = 3$); Emotional Experience Report ($n = 1$) 4. Mood: EVEA 5. Temperament: EAS-CF; 6. Personality: BFI-K 7. Perfectionism: SAPS-R 8. Empathy: JSPE-S 9. Self-efficacy: GSE 10. Resilience: RS 13 11. Burnout- - MBI-SS; MBI-HSS 12. Coping strategy: SVF-78 13. Self-monitoring ability (not validated) 14. Creativity: GAU 15. Milestones: SDB
	Performance Data ($n = 21$)	Stress-Related Data 1. Grade ($n = 4$) 2. Skill assessment ($n = 3$); CPR ($n = 1$); clinical simulation ($n = 2$) 3. Surgical training; OTAS ($n = 2$), EPA ($n = 2$), OSATS ($n = 2$); surgical decision making ($n = 1$) 4. Tutoring quality ($n = 1$)
		Attention-Related Data 1. Cognitive test ($n = 5$) – Stroop test ($n = 3$); PVT ($n = 2$); d2 test ($n = 1$); Memory ($n = 2$) 2. Gaze behavior ($n = 1$) 3. Cognitive load (PVM); Task load (NASA-TLX) ($n = 2$)
	Correlation	L1: large effect size, $r > 0.5$ L2: medium and small effect size, $r < 0.3$; $r < 0.1$ L3: coherence but no correlation info L4: not correlated

* Coded more than once

**** Note:**

Psychophysiological Measures: TNF – α (Tumor Necrosis Factor alpha)

Self-report Measures:

AAS (Adult Attachment Scale);
AEQ (Achievement Emotions Questionnaire);
AMOS 8-15 (Abilità e motivazione allo studio - Ability and Motivation);
BFI-K (Big Five Inventory);
DASS (Depression, Anxiety and Stress Scale);
EAS-CF (Emotionality Activity Sociability Temperament Survey-Child Form);
EVEA (Escala de Valoración del Estado de Ánimo, Mood Assessment Scale);
GSE (The Scale of General Perceived Self-Efficacy);
GVA (Global Vigor and Affect Scale);
JSPE-S (The Jefferson Scale of Physician Empathy: Student version);
KUSTA (Kurz-Skala Stimmung/Aktivierung -Short Mood/Activation Stress);
MAAS (Mindful Attention and Awareness Scale);
MBI-HSS (The Maslach Burnout Inventory – Human Service Survey);
MBI-SS (The Maslach Burnout Inventory- Student Survey);
MEQ (Morningness-Eveningness Questionnaire); NASA-TLX (NASA-Task Load Index);
PANAS (Positive Affect and Negative Affect Scale);
PHQ-9 (Patient Health Questionnaire with 9 item);
PSQ (Perceived Stress Questionnaire);
PSRS (Perceived Stress Reactivity Scale);
RS 13 (Resilience Scale Short Version with 13-items);
PVM (Paas and Van Merriënboer Cognitive Load Scale);
SAPS-R (Short Revised Almost Perfect Scale);
SASK (German Academic Self-Concept questionnaire);
SDB (Sleep Disordered Breathing);
SESSKO (Subject-specific Adaptation of the Academic Self-Concept Scales);
SSS (Stanford Sleepiness Scale);
STAI (State-Trait Anxiety Inventory);
SUDS (Subjective Perception of Distress Strait);
SVF-78 (Stress Verarbeitungs Fragebogen – Stress Coping);
TAI (Test Anxiety Inventory);
TICS (Trier Inventory for the Assessment of Chronic Stress);
VAS (Visual Analogue Scale)

Performance Data:

EPA (End Product Assessment Rating Scale);
GAU (Guilford's Alternative Uses Test)
OTAS (Observational Teamwork Assessment for Surgery);
OSATS (Objective Structured Assessment of Technical Skill);
PVT (Psychomotor Vigilance Test)