

# The Different Categories of Stressors are:

- Cognitive Challenges:**

- Public speaking
- Mathematics tasks
- Mental arithmetic problems
- Stroop color test
- Montreal Imaging Stress Task (MIST)

- Emotional Stimuli:**

- International Affective Picture System (IAPS)
- Films designed to elicit emotional responses

- Social Evaluative Threats:**

- Trier Social Stress Test (TSST)
- Perceived Stress Scale (PSS) questionnaire
- State-Trait Anxiety Inventory (STAI)

- Physical Activities:**

- Intense exercise
- Driving in real or simulated environments
- pilgrimage

- Academic Stressors:**

- College academic final exams
- Daily life stress related to school engagement

## Different biophysiological and Biochemical Factors which can determine stress level from different stressors

Category	Biophysiological Factors	Biochemical Factors
<b>Cognitive Challenges</b>	Heart rate variability (HRV), Skin Conductance (EDA), Blood Pressure (BP)	Cortisol, Alpha-Amylase
<b>Emotional Stimuli</b>	Pupil dilation, Electroencephalography (EEG)	Cortisol, Norepinephrine
<b>Social Evaluative Threats</b>	Heart rate (HR), Respiratory rate, Blood Pressure (BP)	Cortisol, Epinephrine
<b>Physical Activities</b>	HRV, BP, Electromyography (EMG), Body Temperature	Cortisol, Lactate
<b>Academic Stressors</b>	HRV, BP, Electrocardiogram (ECG)	Cortisol, Salivary Alpha-Amylase
<b>Miscellaneous</b>	Sleep patterns(working in night shifts), HRV, BP	Cortisol, C-reactive protein (CRP)

**Note:** Cortisol is known as the stress hormone(found in sweat, saliva, urine and blood).

**Source:** <https://pmc.ncbi.nlm.nih.gov/articles/PMC11230864/table/neurosci-11-02-006-t01/#b68>

## Different databases which recorded stress level in real world settings:

S.L	Papers of Different Stress Analysis Databases	Database Link
1	<b>Stress NL Database</b> paper(Not accessible): <a href="https://pure.uva.nl/ws/files/72051408/The_STRESS_NL_database.pdf">https://pure.uva.nl/ws/files/72051408/The_STRESS_NL_database.pdf</a>	<a href="https://stressdatabase.eu/">https://stressdatabase.eu/</a>
2	<b>Stress detection among medical staff during COVID:</b> <a href="https://www.nature.com/articles/s41597-022-01361-y">https://www.nature.com/articles/s41597-022-01361-y</a>	<a href="https://datadryad.org/stash/dataset/doi:10.5061/dryad.5hqbzkh6f#methods">https://datadryad.org/stash/dataset/doi:10.5061/dryad.5hqbzkh6f#methods</a>
3	Physiological signals(Electrodermal Activity,Blood Volume Pulse, Heart Rate, Temperature,etc) from 36 healthy volunteers collected during structured <b>acute stress induction</b> and aerobic/anaerobic exercise sessions using the Empatica E4 wearable device(open source dataset):	<a href="https://physionet.org/content/wearable-device-dataset/1.0.0/">https://physionet.org/content/wearable-device-dataset/1.0.0/</a>
4	<b>Exam Stress dataset</b> (open source dataset):	<a href="https://physionet.org/content/wearable-exam-stress/1.0.0/">https://physionet.org/content/wearable-exam-stress/1.0.0/</a>
5	<b>Stress in Car Drivers dataset</b> (open source dataset):	<a href="https://physionet.org/content/drivedb/1.0.0/">https://physionet.org/content/drivedb/1.0.0/</a>