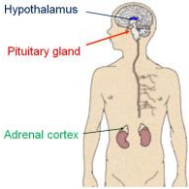
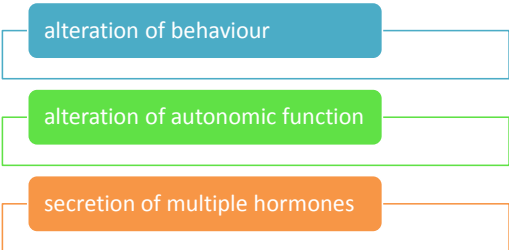


- influenced by the subject's assessment/interpretation of the situation
- if an active response is required → activation of cortical and hypothalamic brain centers



### Composition of Stress Response

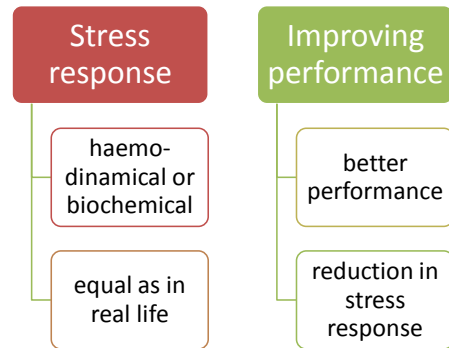
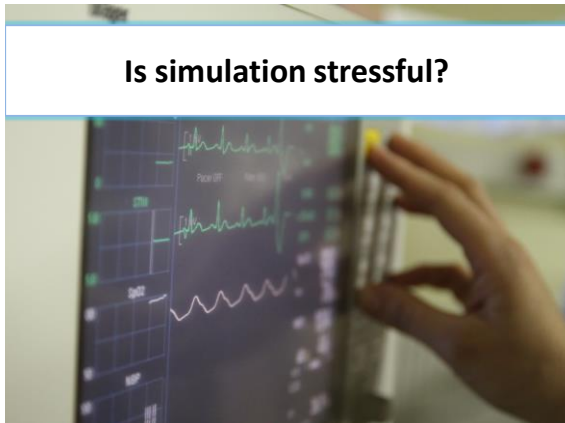
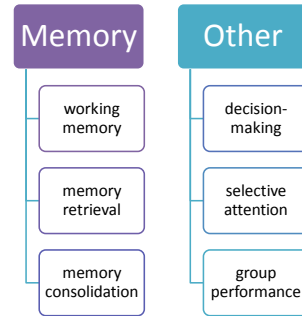


### Influence of stress on cognitive and psychomotor performance

- results of studies in this field are inconclusive
- positive and negative effects on the cognitive abilities



### Influence of stress on cognitive and psychomotor performance



### Our (pilot) studies

- **Study 1:**
  - Year-3 medical students
  - N=39
  - acute coronary syndrome simulation
  - academic year 2011/2012
- **Study 2:**
  - Year-6 medical students
  - N=25
  - acute coronary syndrome simulation
  - academic year 2012/2013

### Methodology



## Results

### • Study 1:

	Pre-simulation	Post-simulation	Significance
MAP (mmHg)	100.4	98.9	NS
HR (bpm)	93.1	88.5	p=0.014
SaO <sub>2</sub> (%)	98.0	97.5	p<0.001
PP (mmHg)	55.4	50.2	p=0.016

### • Study 2:

	Pre-simulation	Post-simulation	Significance
MAP (mmHg)	100.36	100.44	NS
Mean systolic BP (mmHg)	131.48	130.68	NS
Mean diastolic BP (mmHg)	84.8	85.32	NS
SaO <sub>2</sub> (%)	98.36	98.16	NS
HR (bpm)	84.2	80.0	p=0.033

## Conclusions

- ACS simulation does not elicit a stress response in Year-3 students per se
- more stress before than after simulation?



How  
much  
stress  
is too  
much  
?



Thank you for  
your attention!

