

# SNA INTEGRATIVO

SNA  
INTEGRATIVO



**HRV**

**HERRAMIENTA TERAPÉUTICA Y DIAGNÓSTICA**

Prof. Luis Gonzaga de Moura Junior



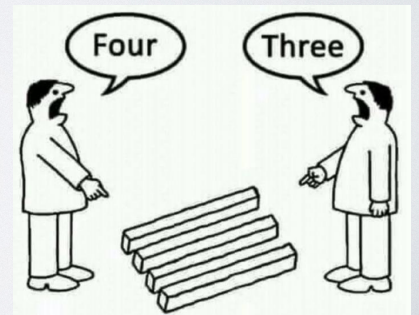
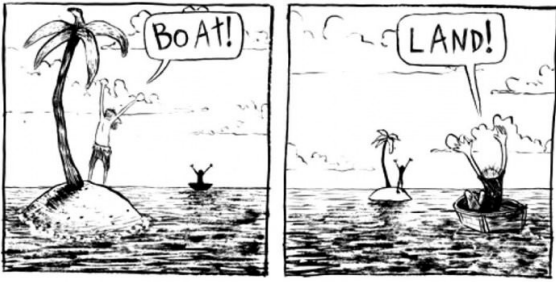
# El problema SNA

**"La tarea no es ver lo que nadie ha visto todavía, sino pensar lo que nadie ha pensado sobre lo que todo el mundo ve".**

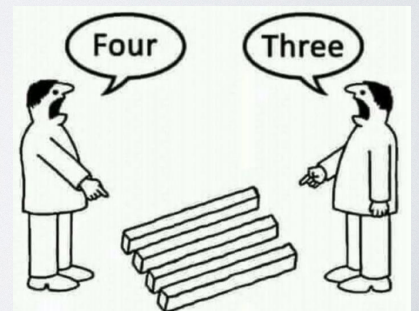
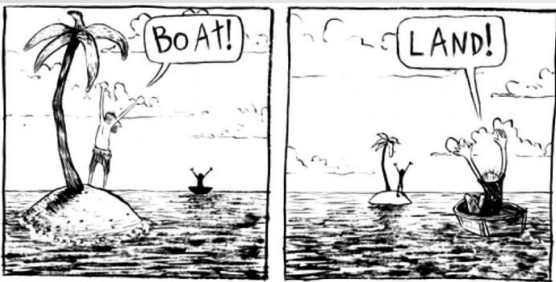
Arthur Schopenhauer



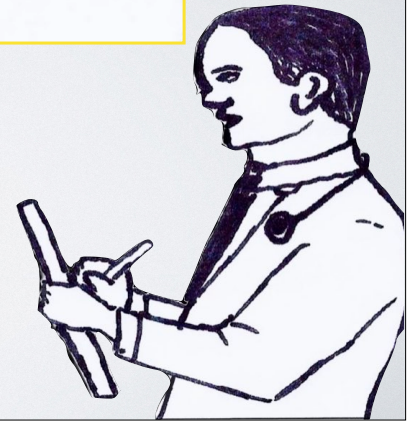
# SNA INTEGRATIVO



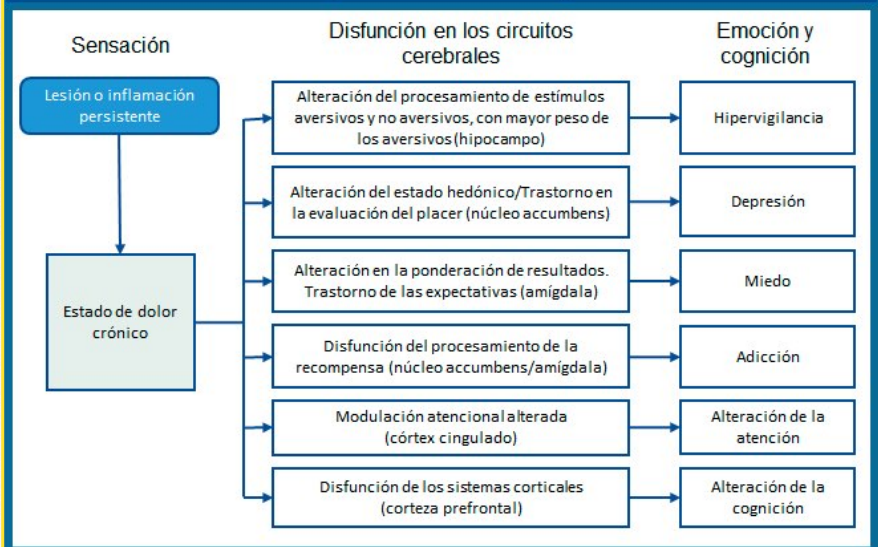
# SNA INTEGRATIVO



You're a perfectly healthy horse\* except for those stripes. But I wouldn't worry about the stripes too much. We see this sometimes... You just need to diet and exercise. If that doesn't work, try these antidepressants.



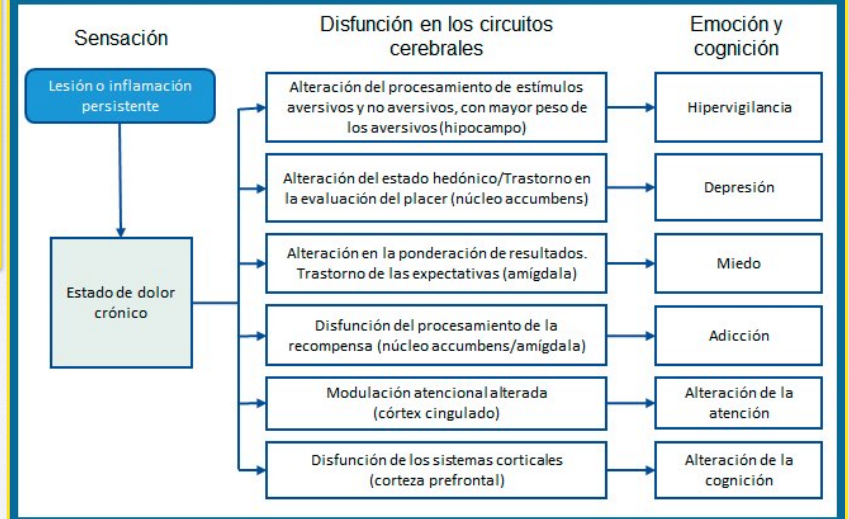
Las alteraciones en la sensibilidad y los cambios funcionales en algunas regiones cerebrales favorecen los estados emocionales negativos, la adicción y las alteraciones cognitivas.



## Neuroplasticidad ... Intensidad y tiempo dependiente

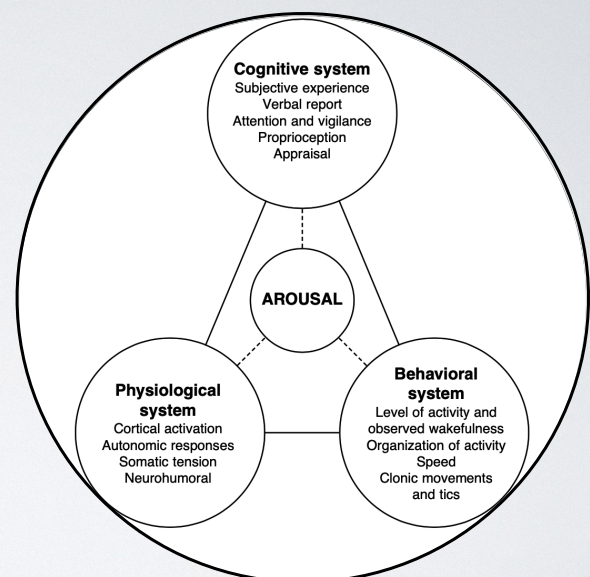


Las alteraciones en la sensibilidad y los cambios funcionales en algunas regiones cerebrales favorecen los estados emocionales negativos, la adicción y las alteraciones cognitivas.



## Es más de lo que imaginamos...

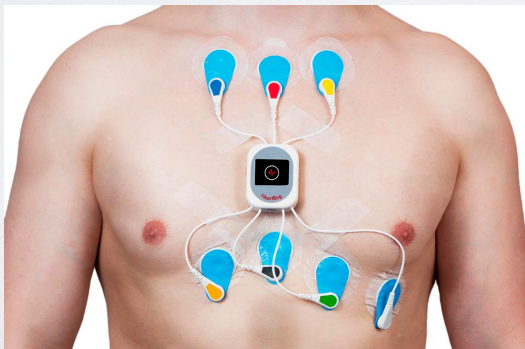
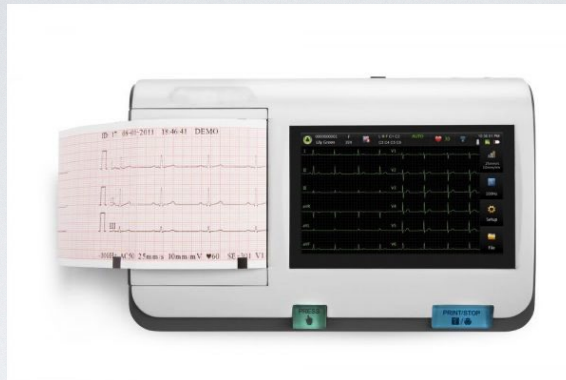
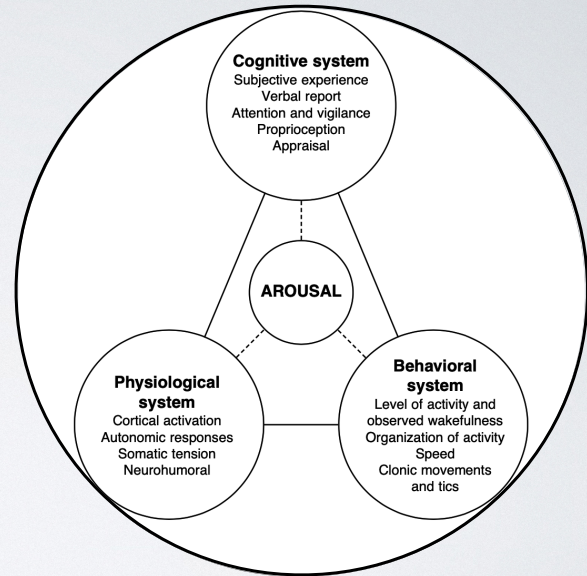
**Procesamiento emocional**  
**Procesamiento del dolor**  
**Procesamiento metabólico**  
**Deportivo**  
**Prevención**  
**Donde el cuerpo encuentra la mente...**

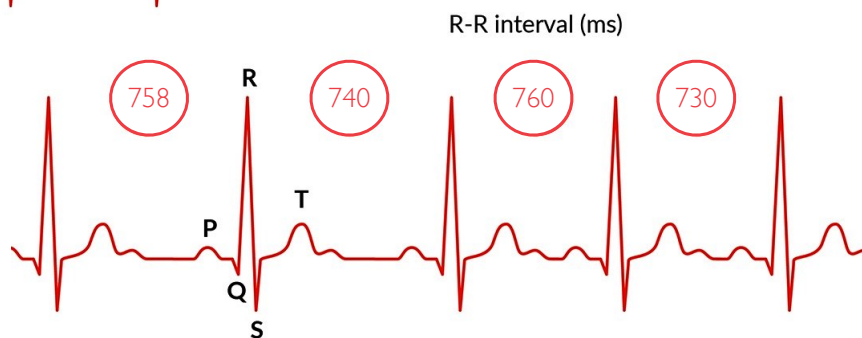
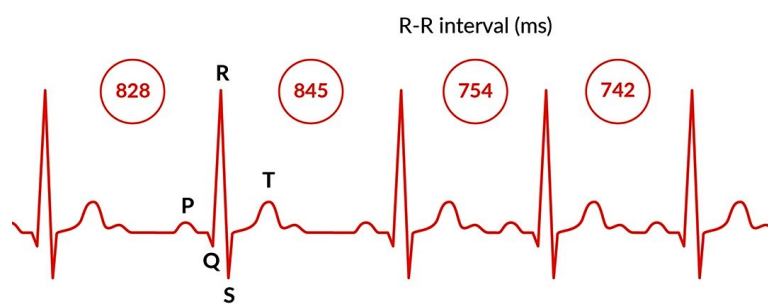
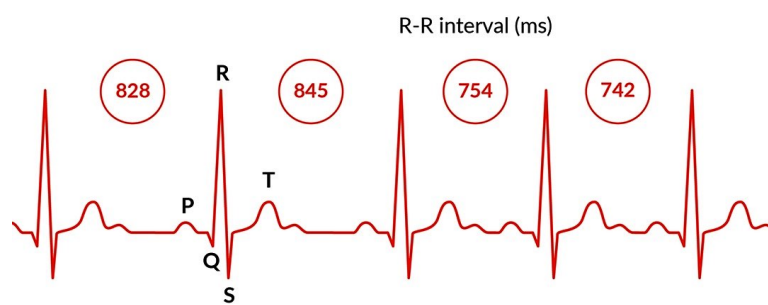


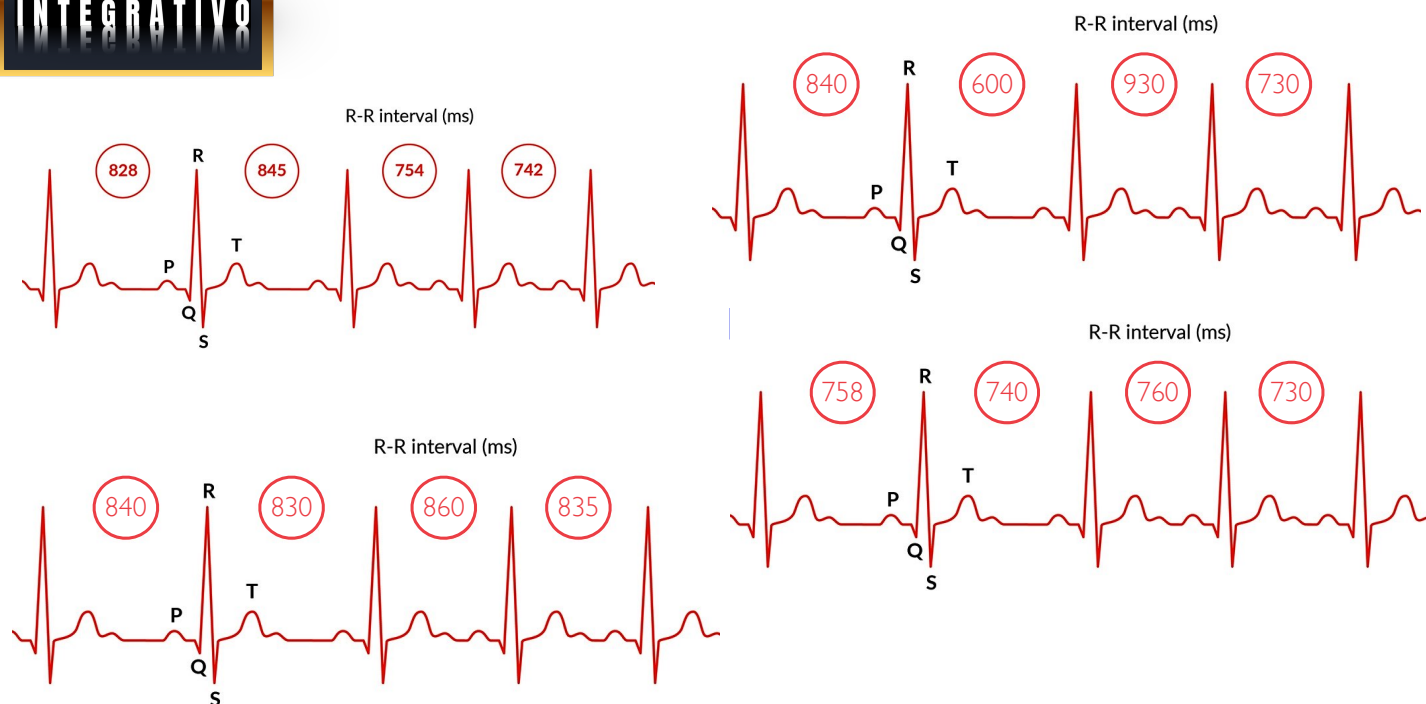
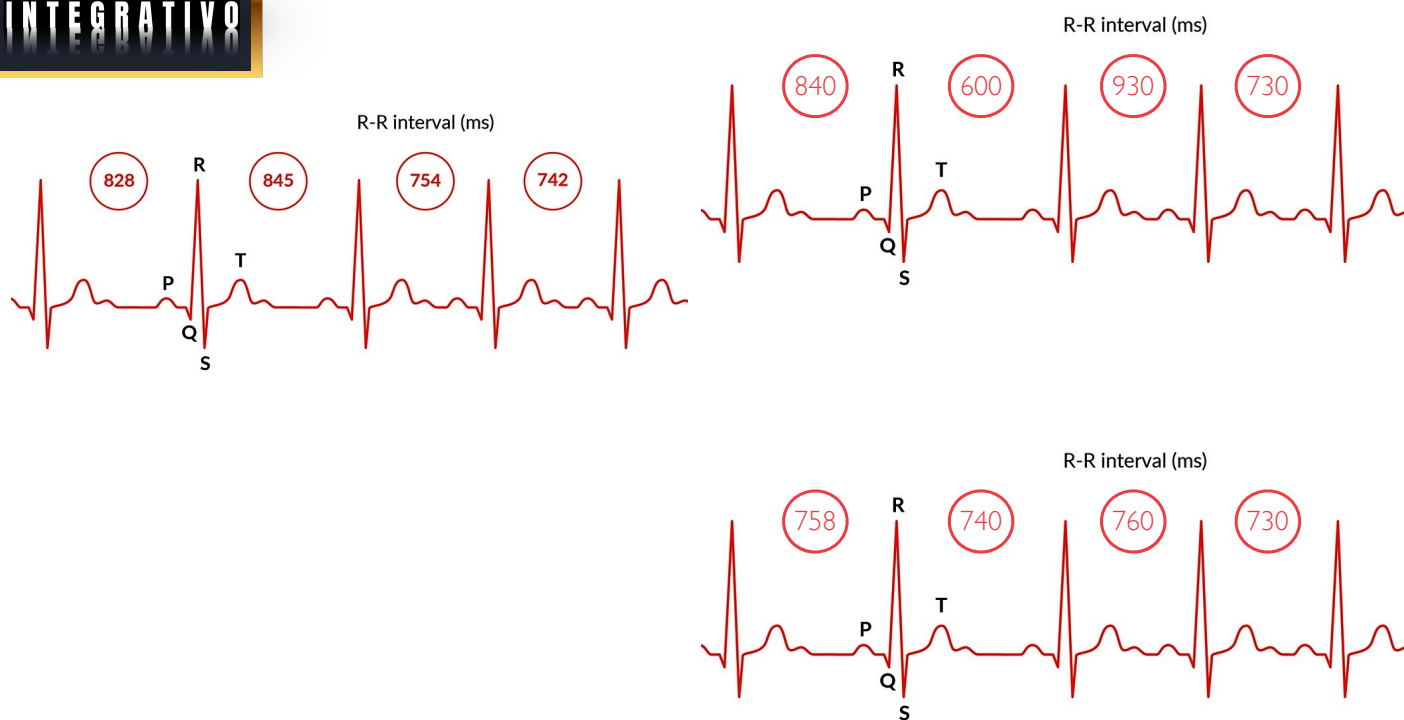
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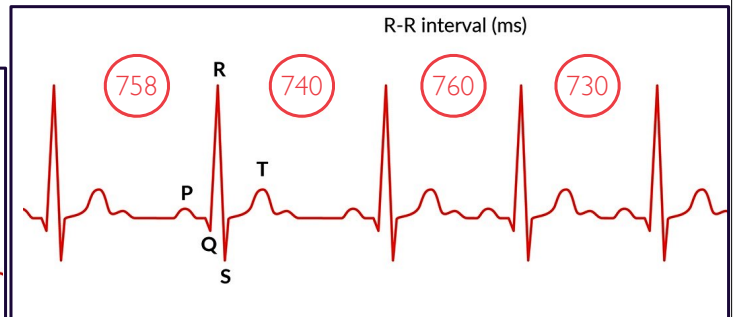
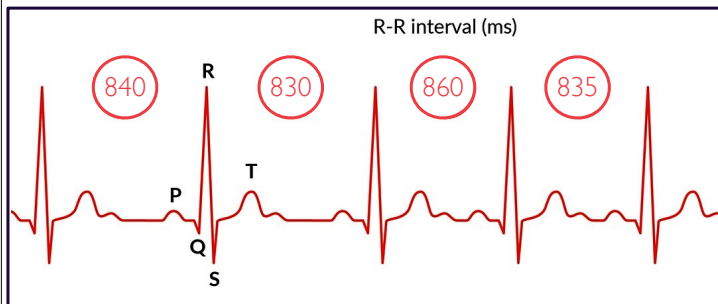
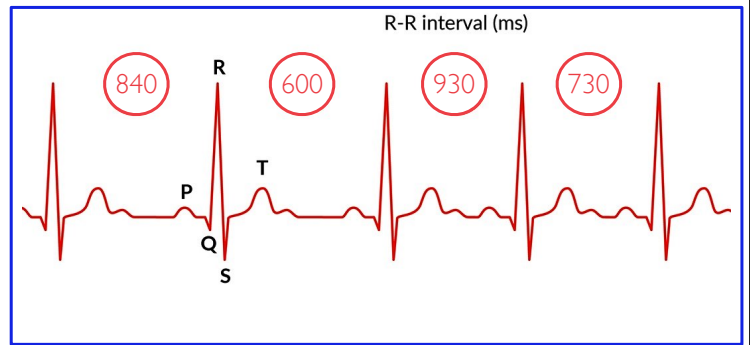
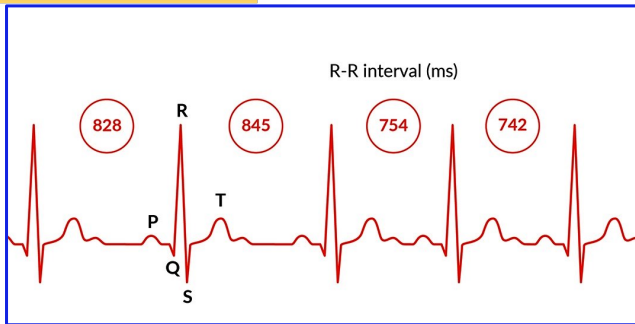
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**Donde el cuerpo encuentra la  
mente...**









## ¿CÓMO?

**- Depende siempre de la pregunta**

### Measuring Positions at Rest – Consistency is Key!

#### Supine / Laying

Most repeatable  
Consistent for longer readings  
Most Parasympathetic activation

- ✓ Recommended when resting HR is above 50 bpm



#### Sitting

Repeatable with care  
More accessible throughout the day  
More difficult for longer readings

Back supported vs. unsupported

- ✓ Recommended when resting HR is below 50 bpm while lying



#### Resting Squat

Repeatable with care  
Accessible anywhere  
More stress on the system  
Less researched

- ✓ Recommended only if you have a truly easy, resting squat



#### Standing / Orthostatic

Repeatable with extreme care  
Easiest to do anywhere  
Most stress on the system

- ✓ Least recommended unless testing orthostatic intentionally
- ✓ Not recommended for longer duration



Back angle while sitting can affect HRV because of structural stress

- ✓ Be conscious of back angle and choose an easily repeatable position



## ¿CÓMO?

- **Depende siempre de la pregunta**

- **Supino - gold standard short term - 5 minutos.**

- **Tono vagal**

- **TI**

### Supine / Laying

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## ¿CÓMO?

- **Depende siempre de la pregunta**
- **Sentado - gold standard short term - 5 minutos.**
- **Equilibrio simpatovagal**
- **T2**

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## ¿CÓMO?

- **Depende siempre de la pregunta**

- **Ortostasis - gold standard short term - 5 minutos.**

- **Equilibrio simpátovagal**

- **T2**

**Proceed with care**

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## ¿CÓMO?

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- **Cucillas - ¿tiempo?**
- **Equilibrio simpátovagal**
- **T2**

**Proceed with care**

### Resting Squat

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## CONSTANCIA

- **Repetir posiciones y condiciones de verificación.**



# CONSTANCIA

- Repetir posiciones y condiciones de verificación.

T1

Reposo

T2

Task

T3

Post

# CONSTANCIA

- Repetir posiciones y condiciones de verificación.

T1

Reposo

T2

Task

T3

Post

Tonic  
measurement

Resting

Event

Post-Event

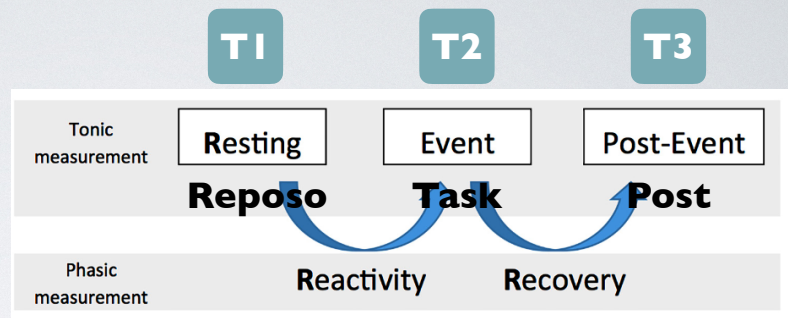
Phasic  
measurement

Reactivity

Recovery

# CONSTANCIA

- Repetir posiciones y condiciones de verificación.



frontiers  
in Neuroscience

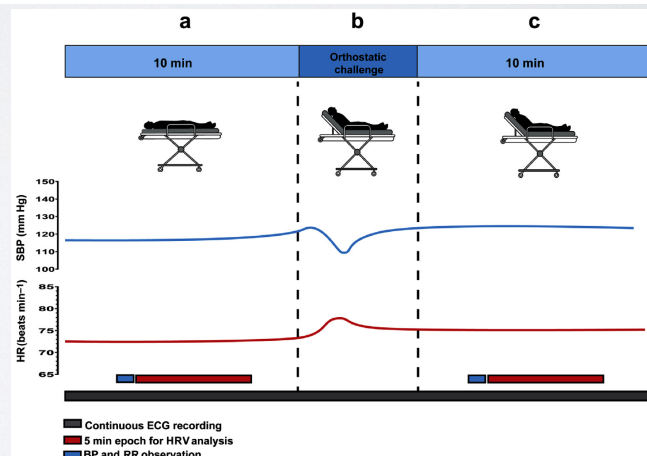
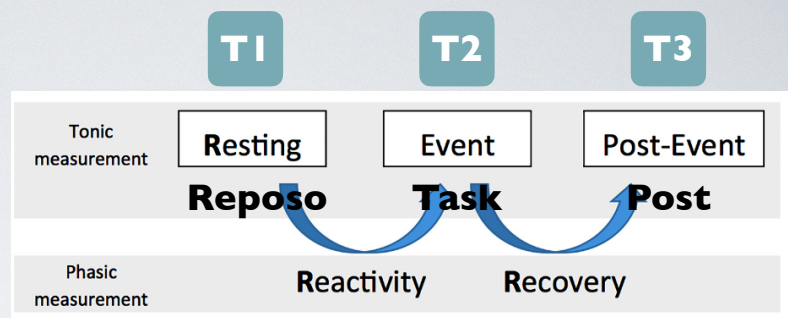
HYPOTHESIS AND THEORY  
published: 10 July 2018  
doi: 10.3389/fnins.2018.00458



**Vagal Tank Theory: The Three Rs of Cardiac Vagal Control Functioning – Resting, Reactivity, and Recovery**

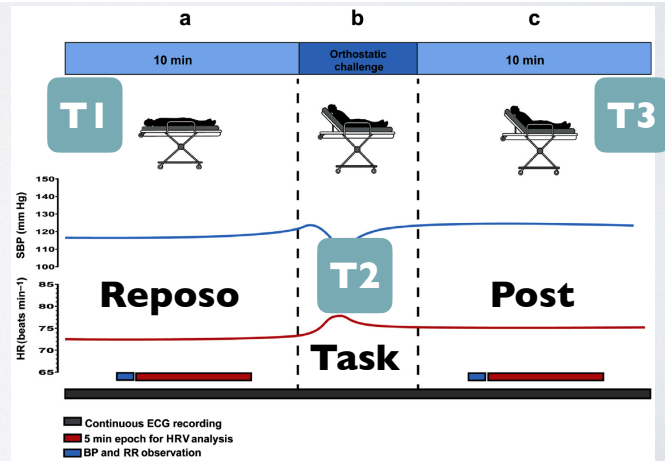
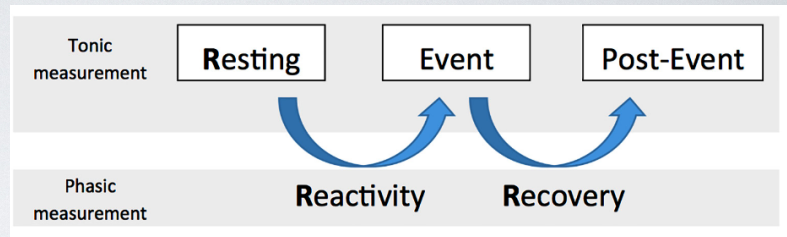
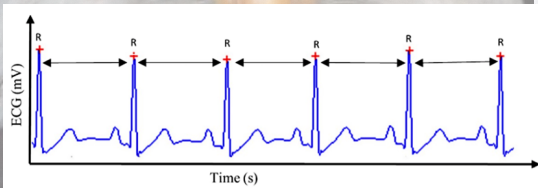
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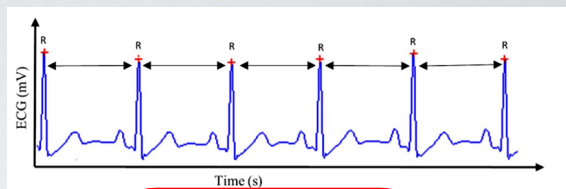
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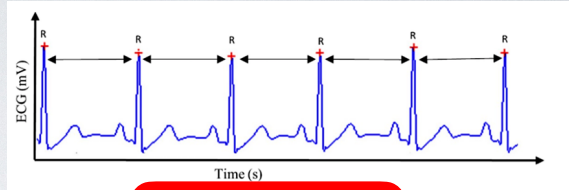
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**Elementos importantes**

# CONSTANCIA

- Repetir posiciones y condiciones de verificación.



## Elementos importantes

Temperatura

Comida

Ejercicio

Horário

Sueño

Estrés

Medicación

Interpretación  
del evento

Comorbilidades

Cazadores  
de  
Cebras



**“Encontraremos un camino, y si no, lo crearemos.”**

# RAZONAMIENTO CLÍNICO

Prof. Luis Gonzaga de Moura Junior