

Influencia del **conflicto** cognitivo tipo Stroop y la **comisión de errores** en la **detección consciente** de estímulos en el umbral perceptivo

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cimcyC

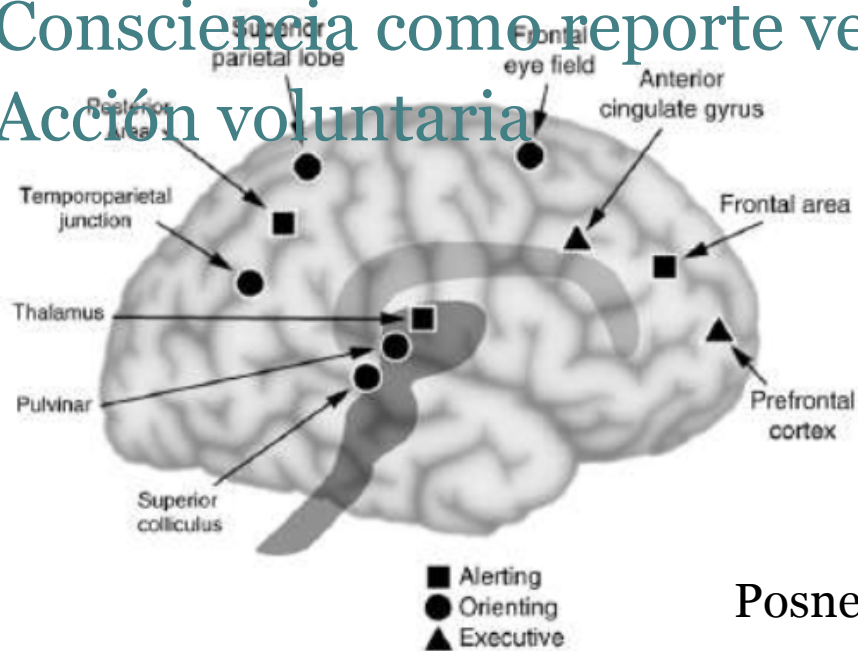
Atención y consciencia

- Definición compleja (van Boxtel et al., 2010)

- Atención selectiva, top-down
- Red de control ejecutivo
- Consciencia como reporte verbal
- Acción voluntaria

ATENCIÓN

CONSCIENCIA



Posner et al., 2006

Atención y consciencia

- Procesos diferenciados
 - No tienen por qué ocurrir de forma simultánea
 - Pueden manipularse mediante diferentes paradigmas

Table 1. A fourfold classification of conscious and unconscious percepts and behaviors^a

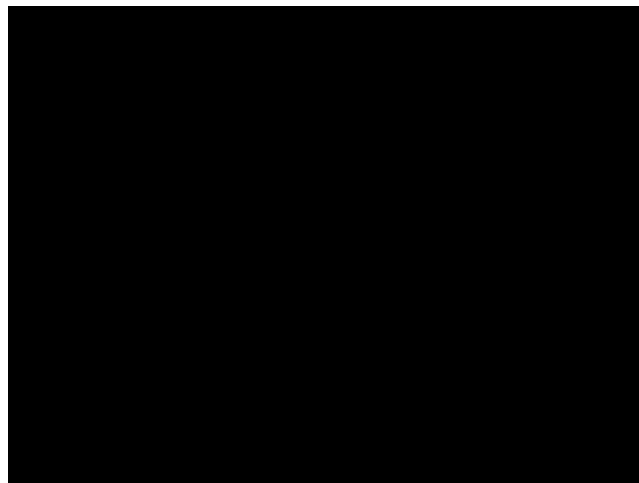
	Might not give rise to consciousness	Gives rise to consciousness
Top-down attention is not required	Formation of afterimages Rapid vision (<120 ms) Zombie behaviors	Pop-out in search Iconic memory Gist Animal and gender detection in dual tasks Partial reportability
Top-down attention is required	Priming Adaptation Visual search Thoughts	Working memory Detection and discrimination of unexpected and unfamiliar stimuli Full reportability

^aThis classification organizes conscious and unconscious percepts and behaviors into four, psychophysically defined, categories, depending on whether top-down attention is necessary and whether they necessarily give rise to phenomenal consciousness.

(Koch & Tsuchiya, 2006)

Atención y consciencia

- Estrecha relación
 - Atención → requisito para acceder a consciencia?
 - Ceguera atencional (Mack and Rock, 1998)
 - Ceguera al cambio (Rensink et al., 1997)
 - Parpadeo atencional (Raymond et al., 1992)
 - Ceguera inducida por la carga (Macdonald and Lavie, 2008)



Atención y consciencia

- Investigaciones previas

frontiers in
PSYCHOLOGY

REVIEW ARTICLE
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Attentional routes to conscious perception

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BRAIN RESEARCH

Research Report

The role of perceptual load in visual awareness

Nilli Lavie*

Department of Psychology, University College London, Gower Street, London WC1E 6BT, UK

Psychonomic Bulletin & Review
2007, 14 (1), 142-147

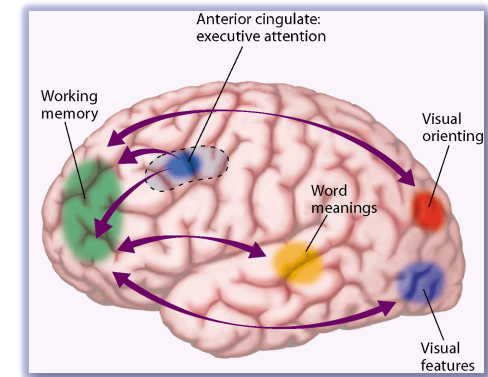
Executive working memory load induces inattentional blindness

DARYL FOUGNIE AND RENÉ MAROIS
Vanderbilt University, Nashville, Tennessee

¿Qué efecto tiene la manipulación del **control ejecutivo** en la percepción consciente?

Control ejecutivo

- Tipos de conflicto (Norman & Shallice, 1986)
 - Nuevo contexto
 - Situaciones complejas o peligrosas
 - Necesidad de planificación o toma de decisiones
 - **Inhibición de la respuesta automática**
 - **Detección y corrección de errores**



azul

amarillo

verde

Tarea Stroop (1935)

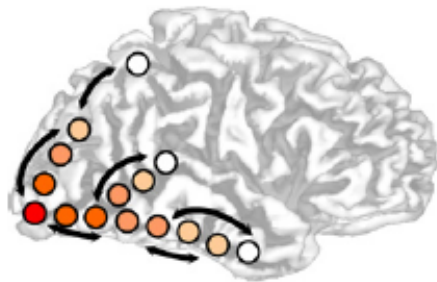
Hipótesis

Carga sistema ejecutivo

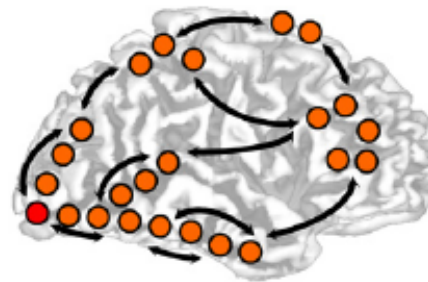
Interferencia percepción consciente
(simultánea)

Facilitación percepción consciente
(posterior)

A Feed-forward propagation
(subliminal processing)



Reverberating global neuronal workspace
(conscious access)



Dehaene et al., 2006

Paradigma experimental

Calibración E umbral perceptivo

+

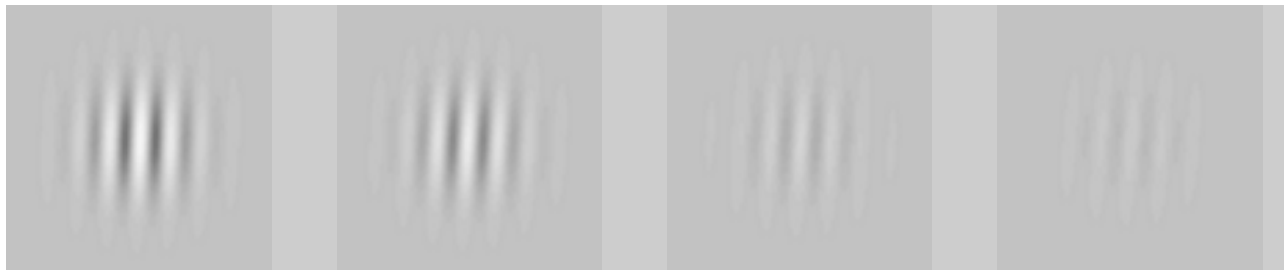
Tarea 1

+

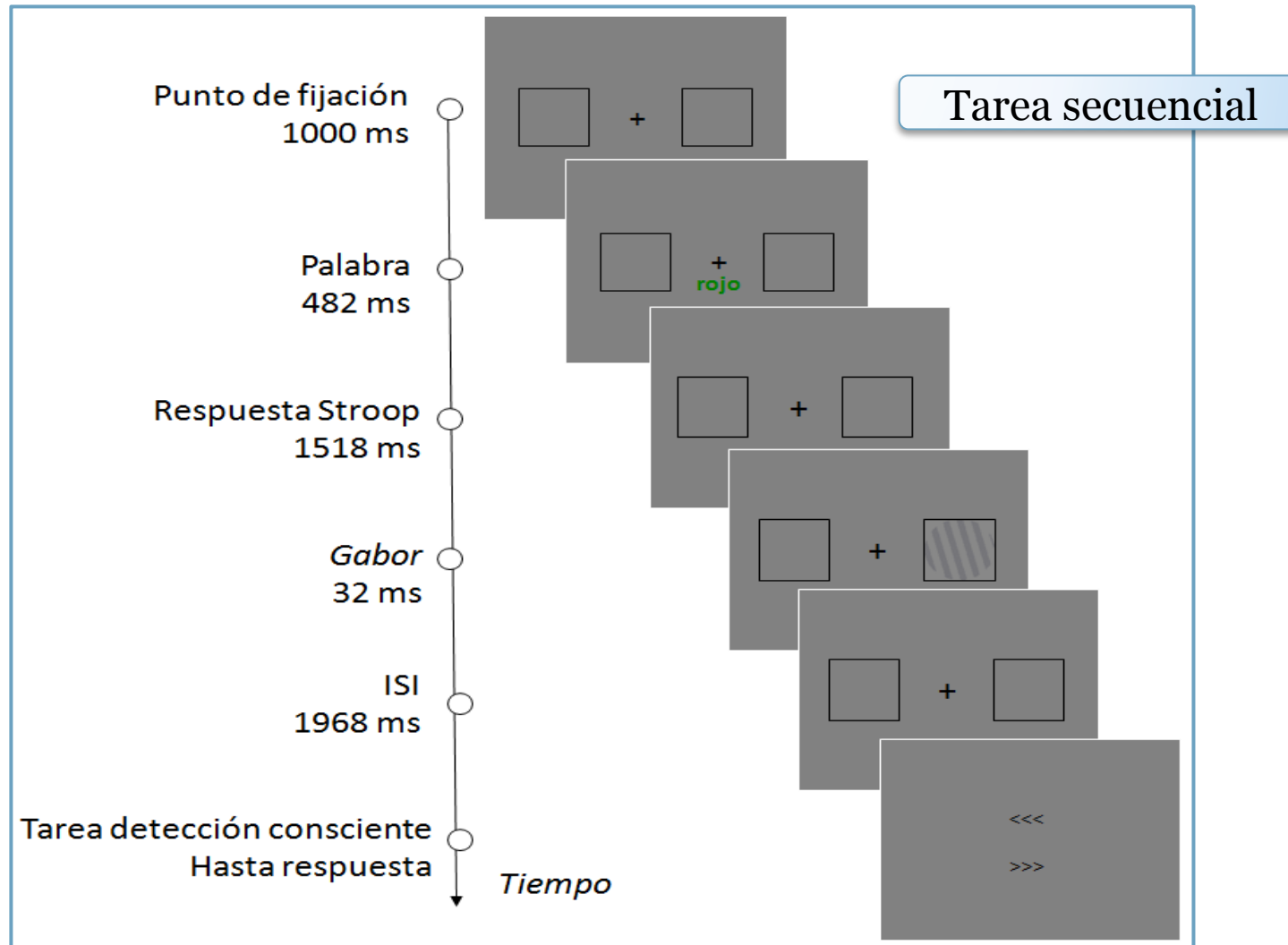
Tarea 2



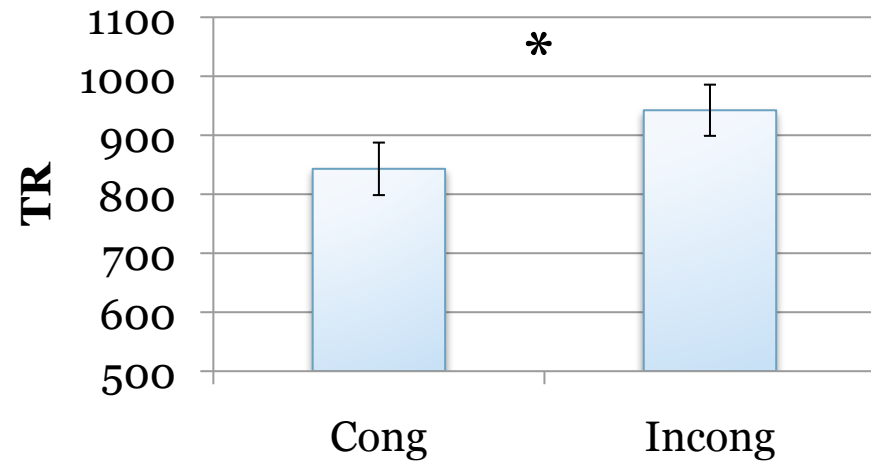
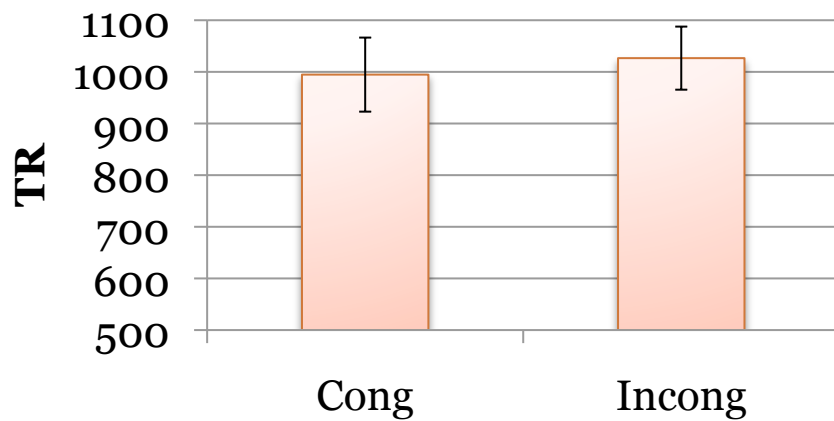
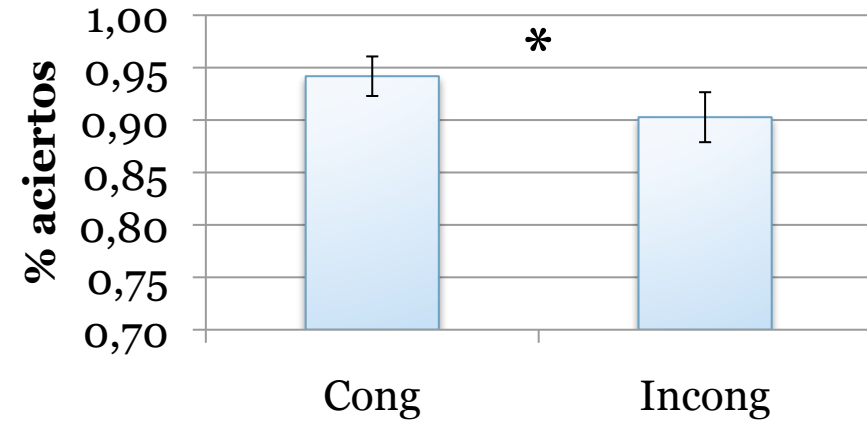
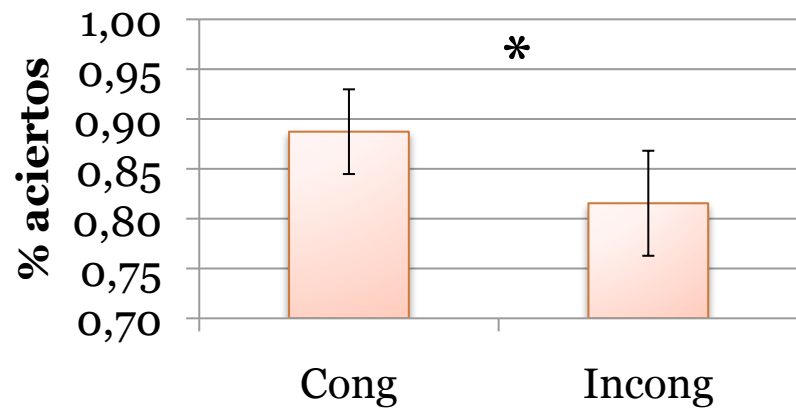
Manipulación del contraste del estímulo
Objetivo: Percepción 50%



Paradigma experimental



Exp 1: Tarea Stroop (efectos clásicos)

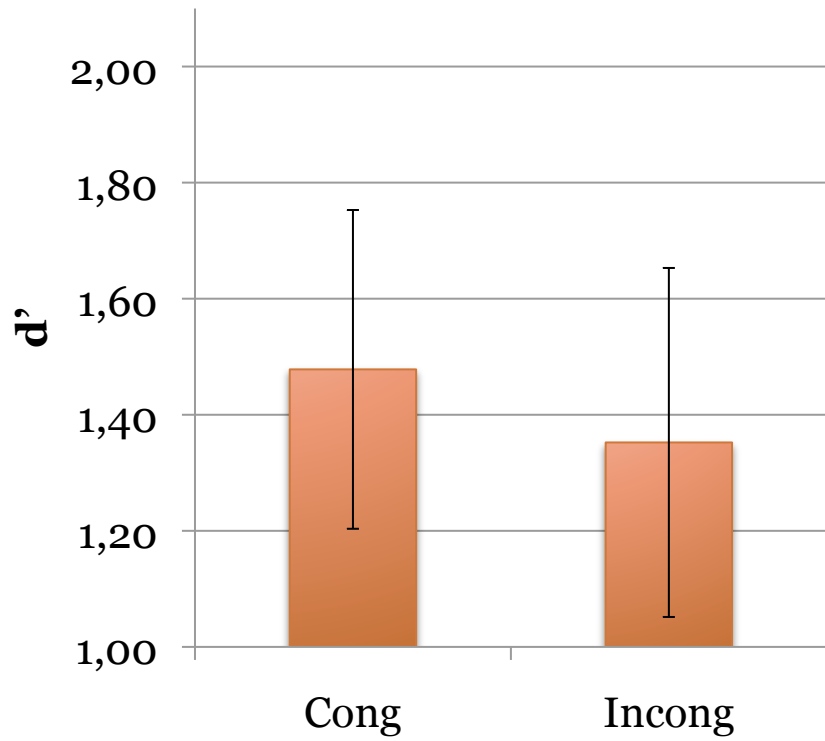


Concurrente

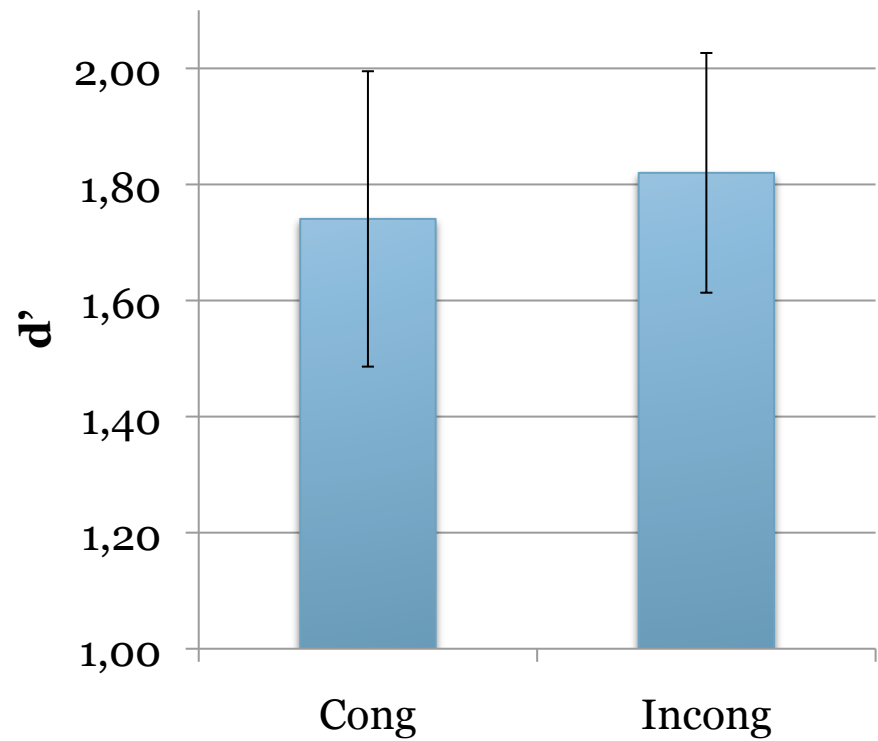
Secuencial

N = 10

Exp 1: Conflict



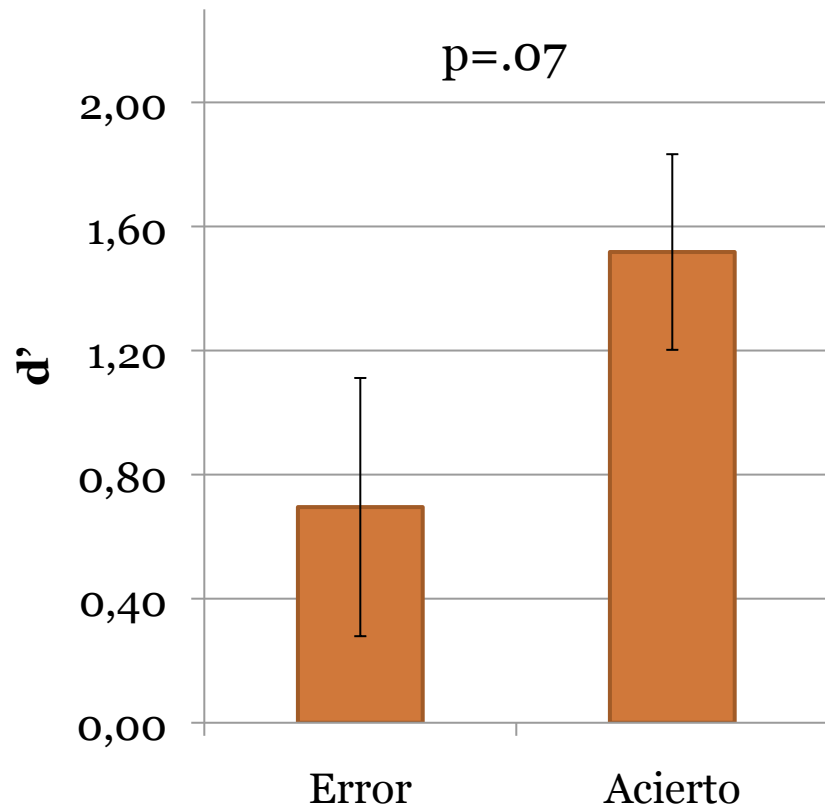
Concurrente



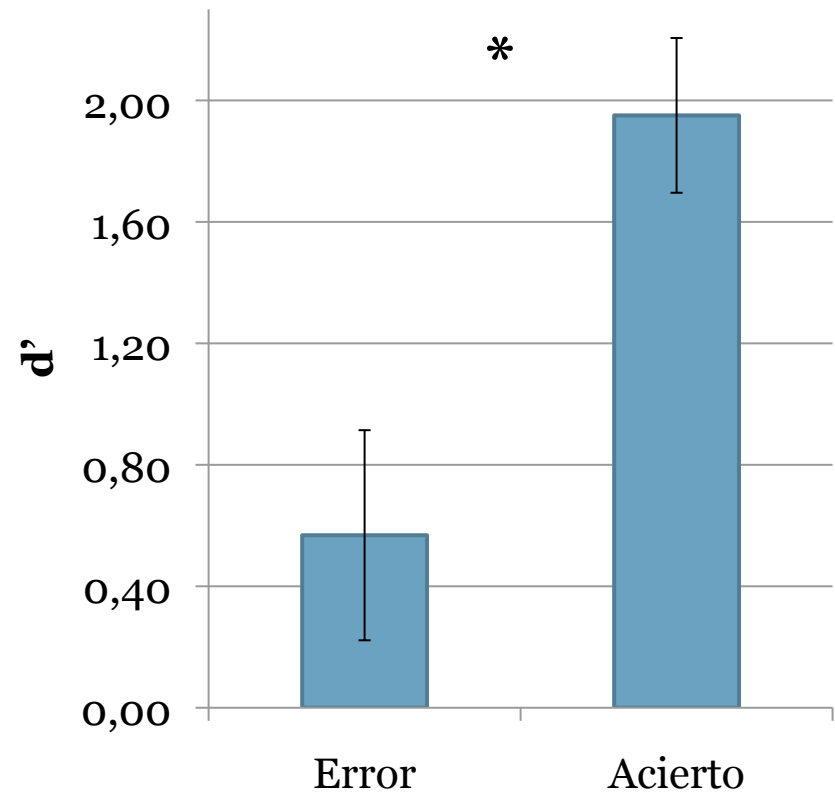
Secuencial

N = 10

Exp 1: Errores



Concurrente



Secuencial

N = 10

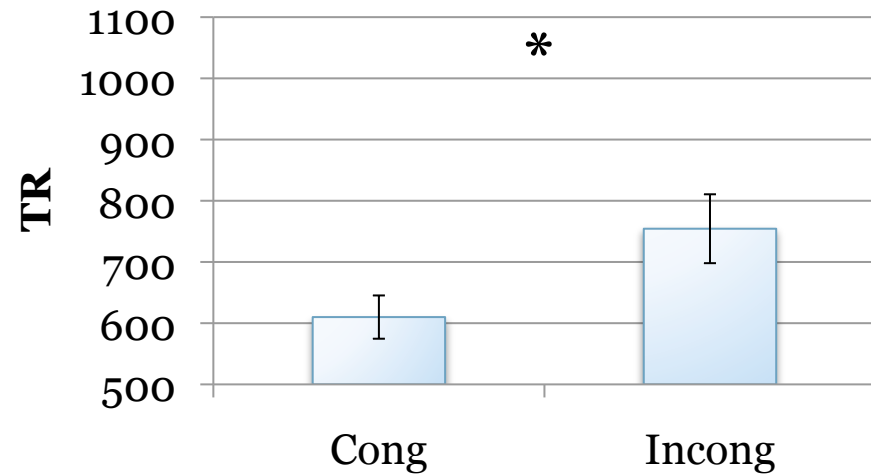
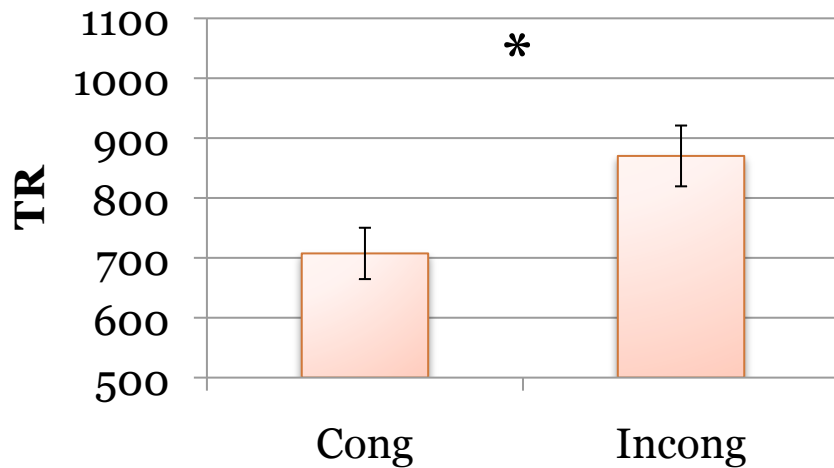
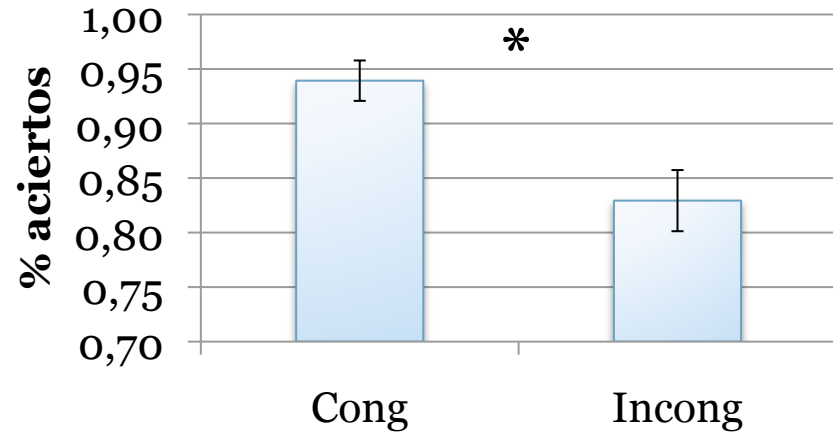
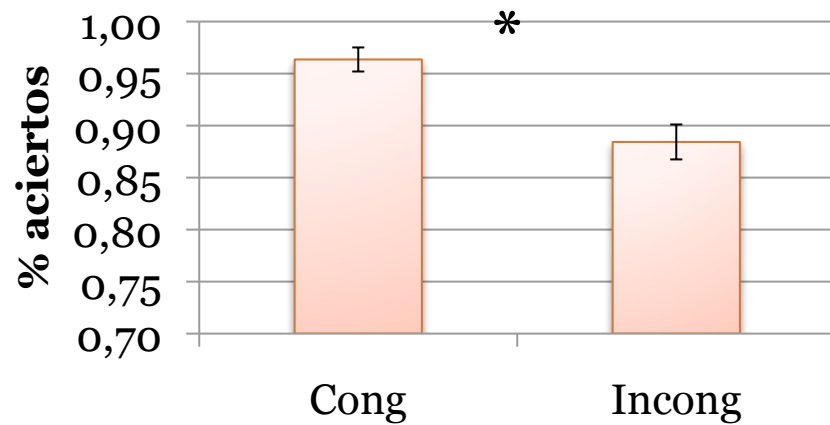
Diseño exp 2

- Inducir mayor conflicto
 - Aumento proporción ensayos **congruentes**

1º Exp	2º Exp
Cong-Incong	Cong-Incong
50%-50%	75%-25%

- **Incongruentes** + infrecuentes

Exp 2: Tarea Stroop (efectos clásicos)

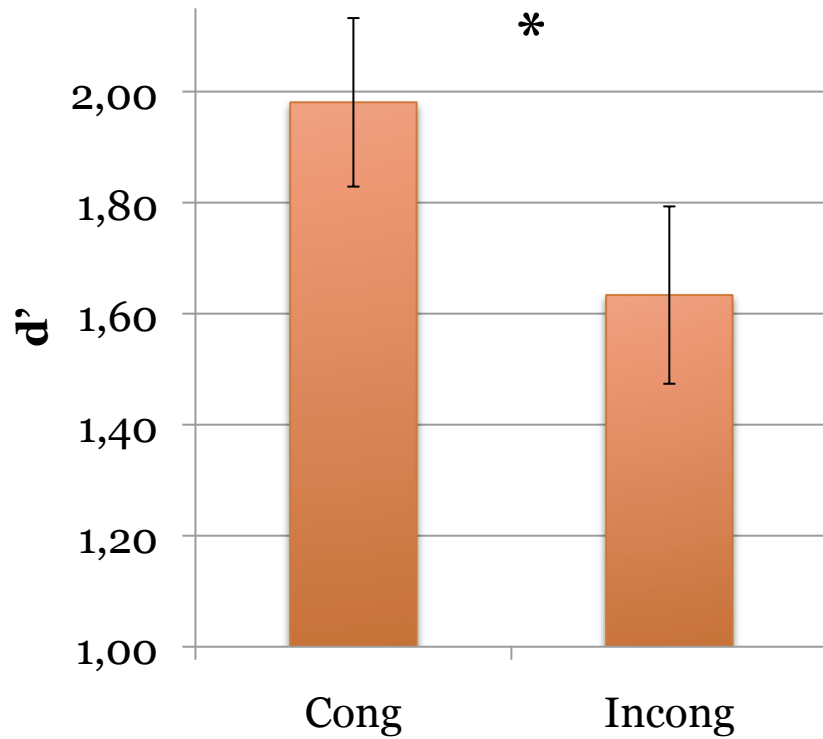


Concurrente

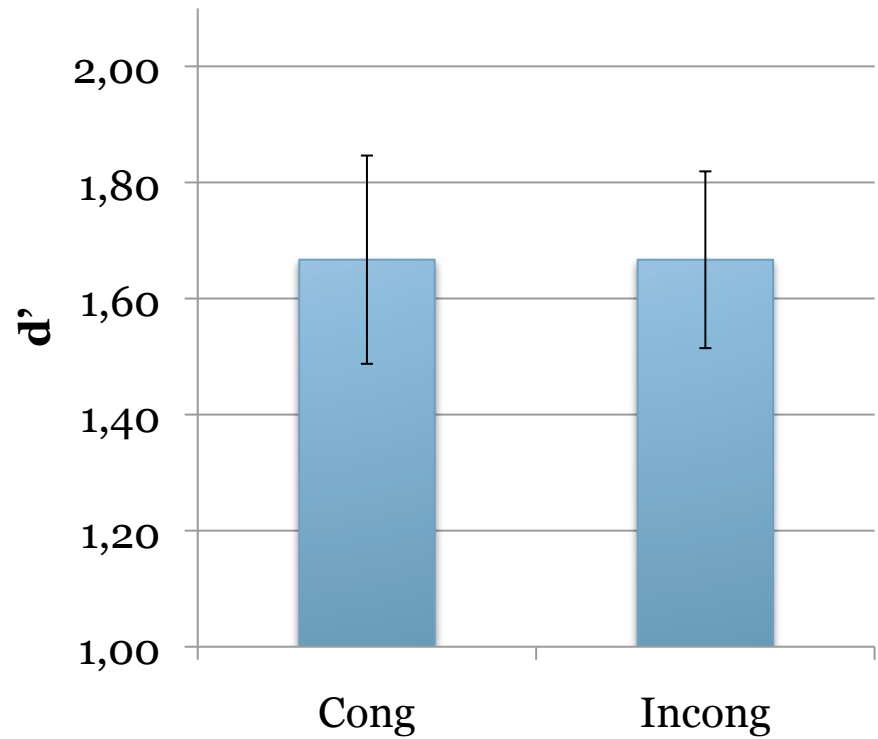
N = 14

Secuencial

Exp 2: Conflict



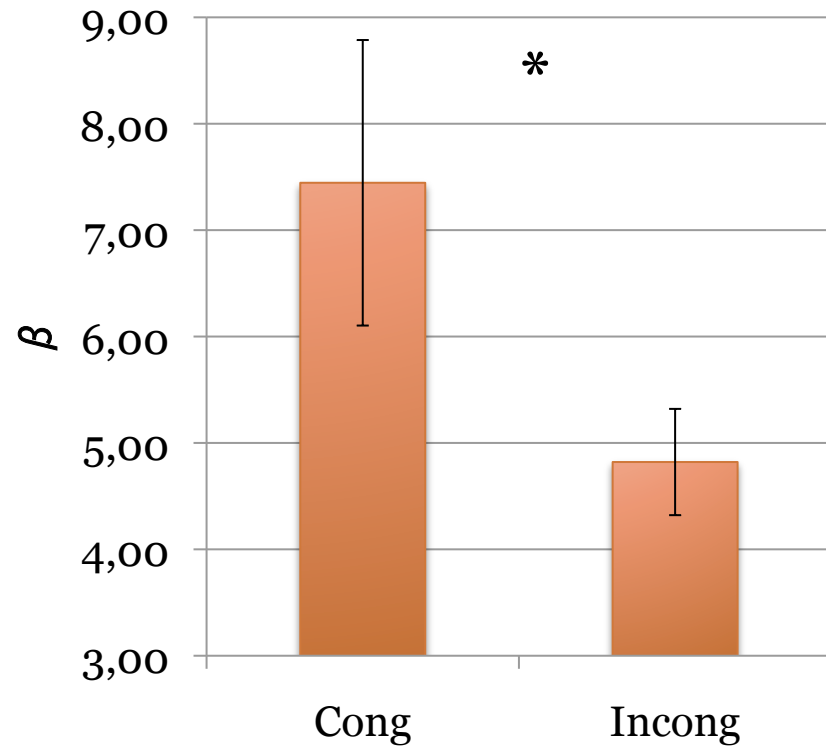
Concurrente



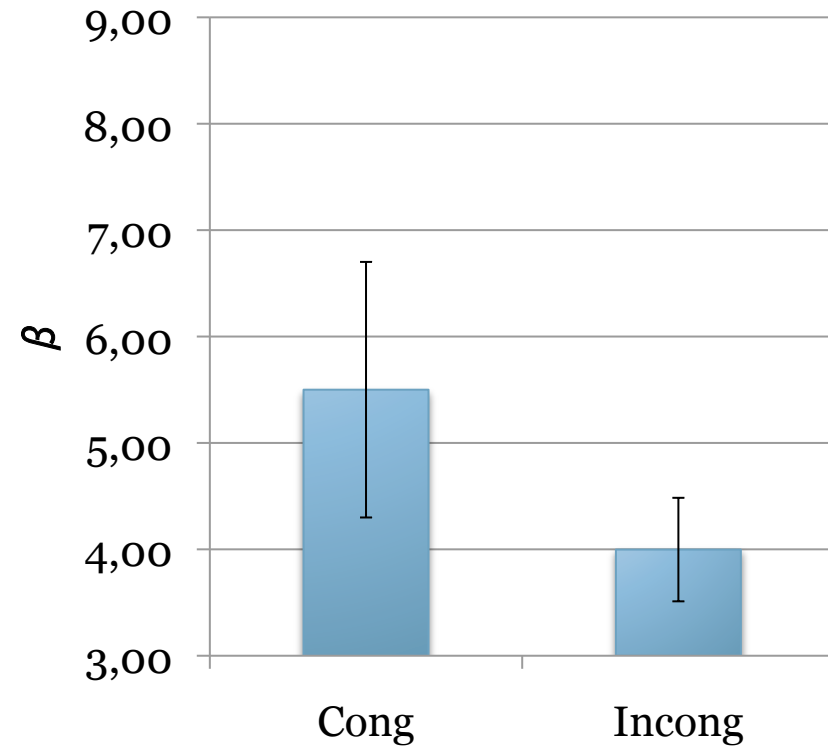
Secuencial

N = 14

Exp 2: Conflict



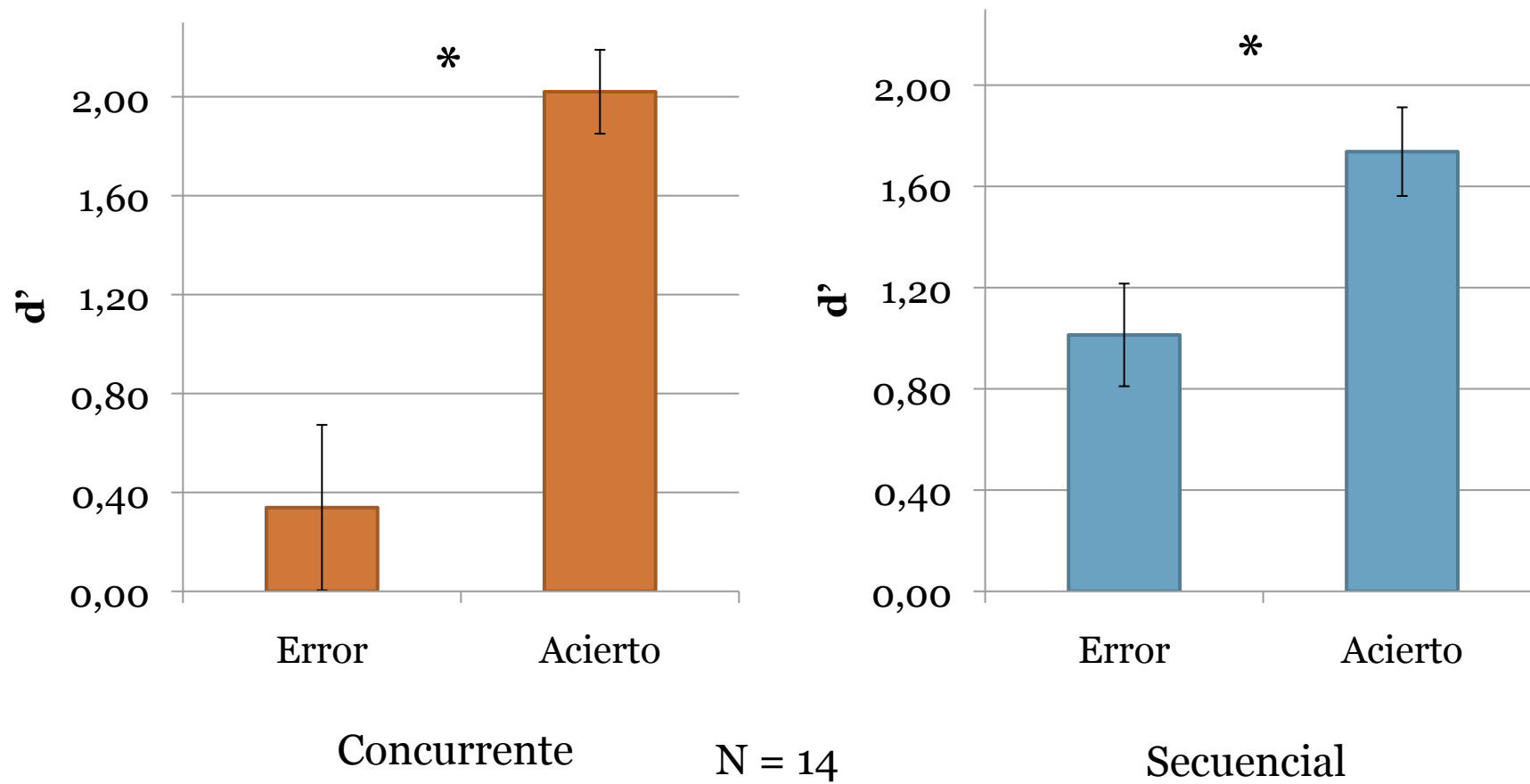
Concurrente



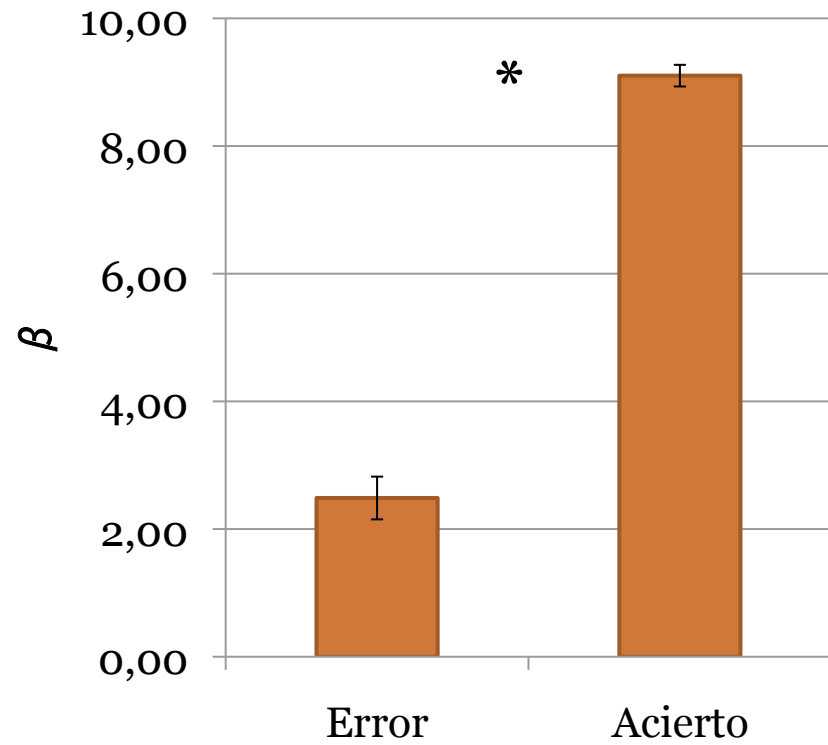
Secuencial

N = 14

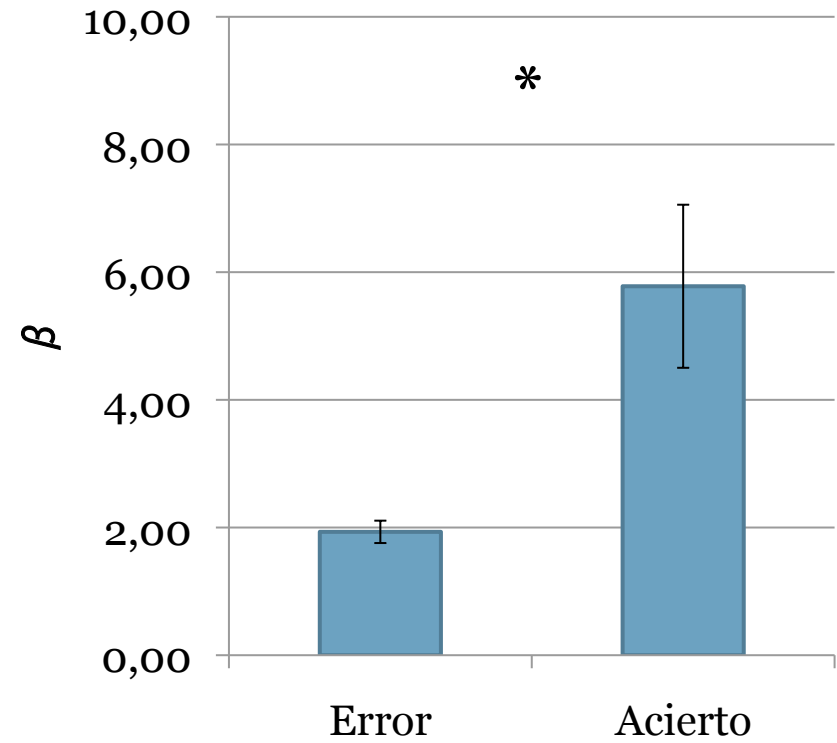
Exp 2: Errores



Exp 2: Errores



Concurrente N = 14



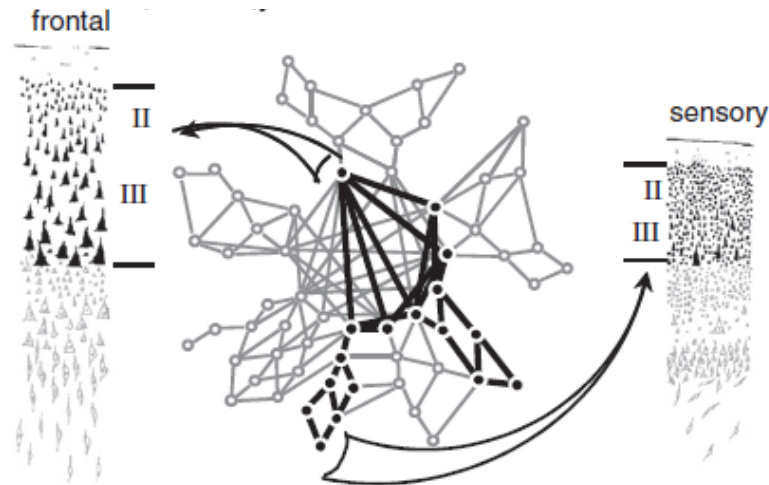
Secuencial

Conclusión

- Detección de conflicto → Perjudica la percepción consciente



Procesos diferenciados que se modulan entre sí

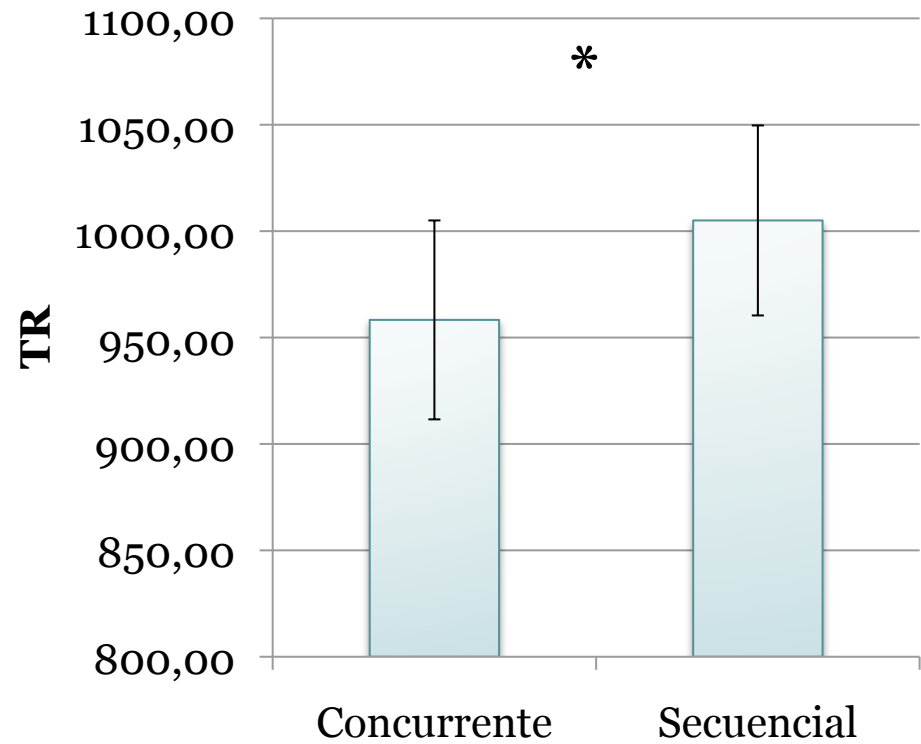
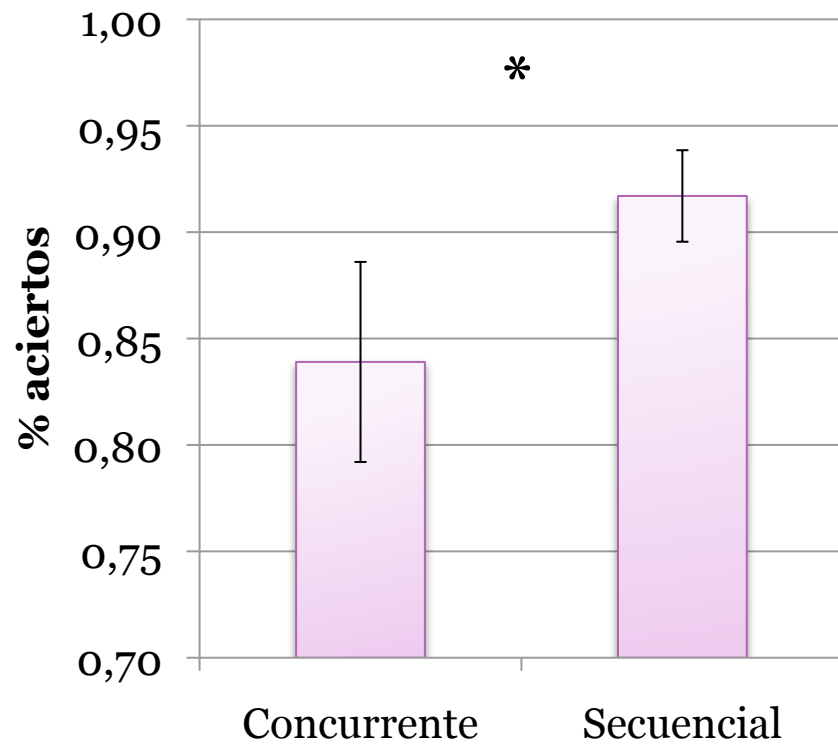


Dehaene, Kerszberg & Changeux 1998

Gracias por su atención

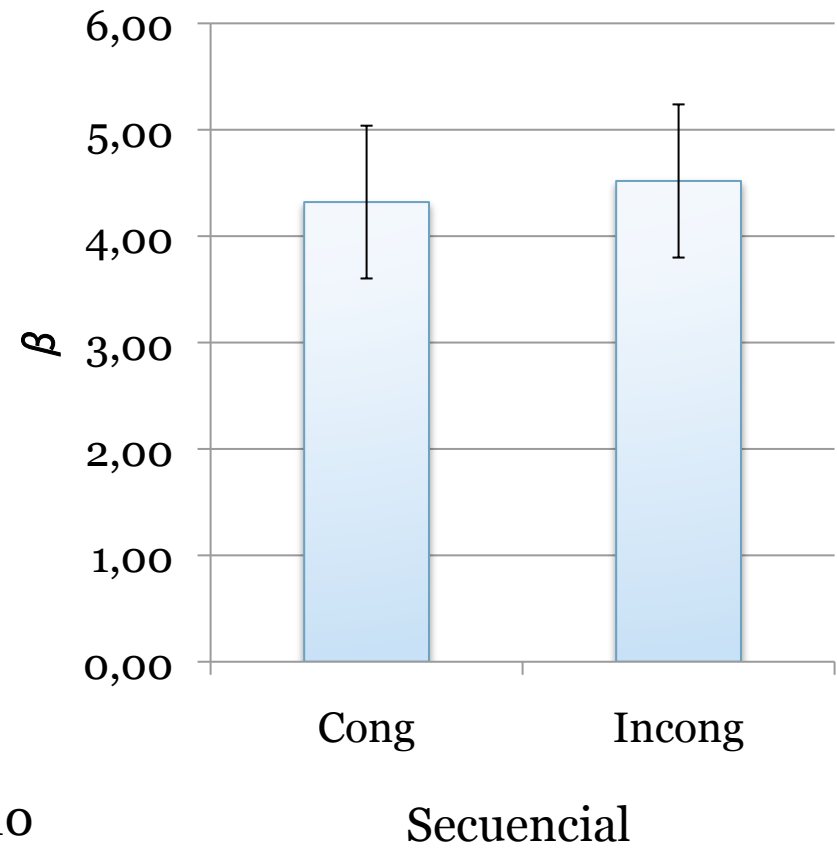
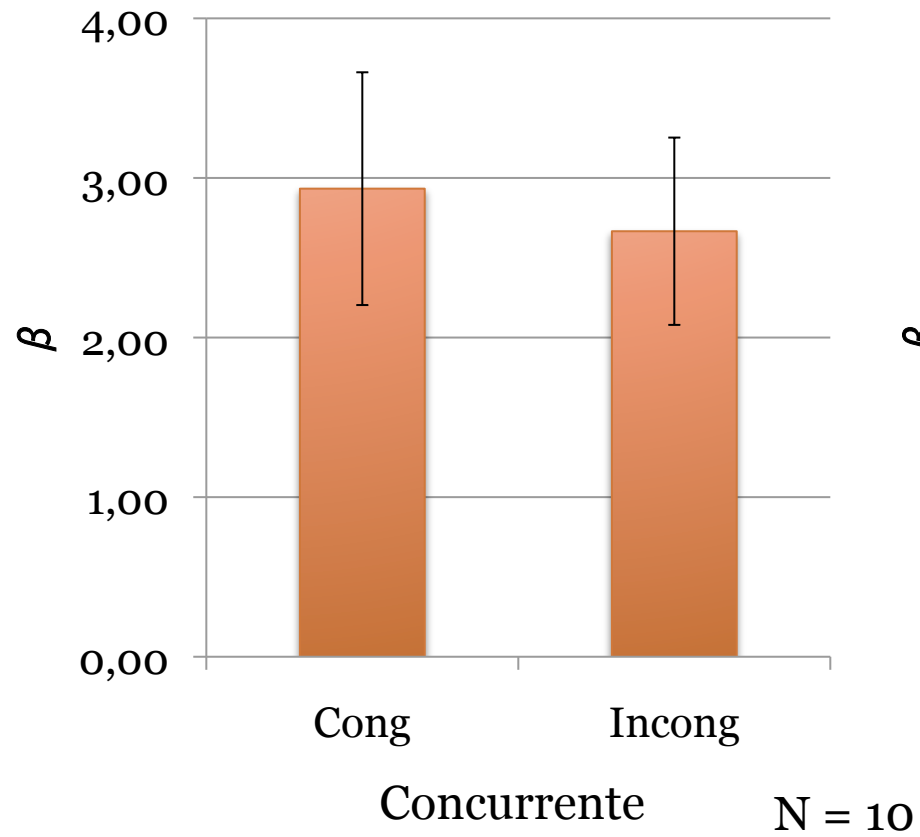


Exp 1: Efecto de tarea



N = 10

Exp 1: Conflicto



Exp 1: Errores

