Lezione n 16 del 25 Novembre 2020

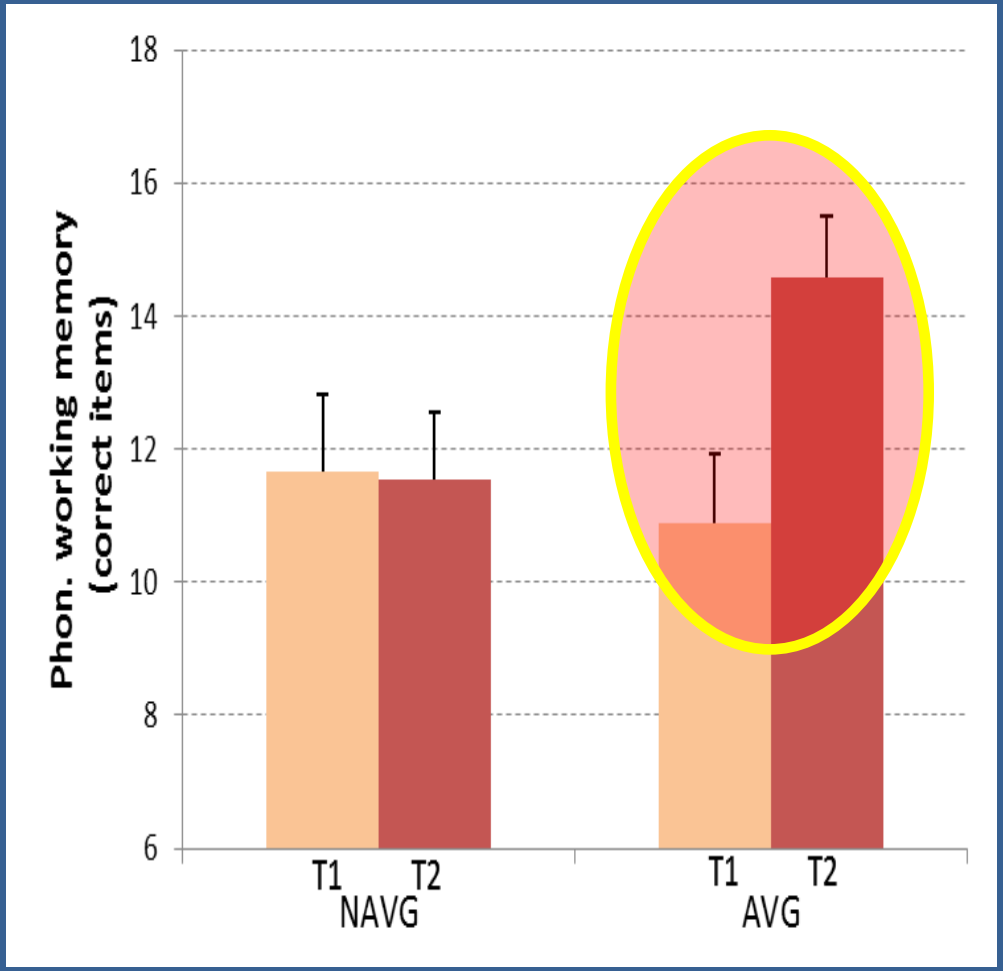
Nps svi e riabil

Effetto degli action video games nei bambini con dislessia

Visual, cross-modal attention and phonological working memory (Study 1 and 2)

MIGLIORARE la lettura nei bambini con **dislessia** **Riducendo** i loro **deficit attenzionali** (Studio 2)

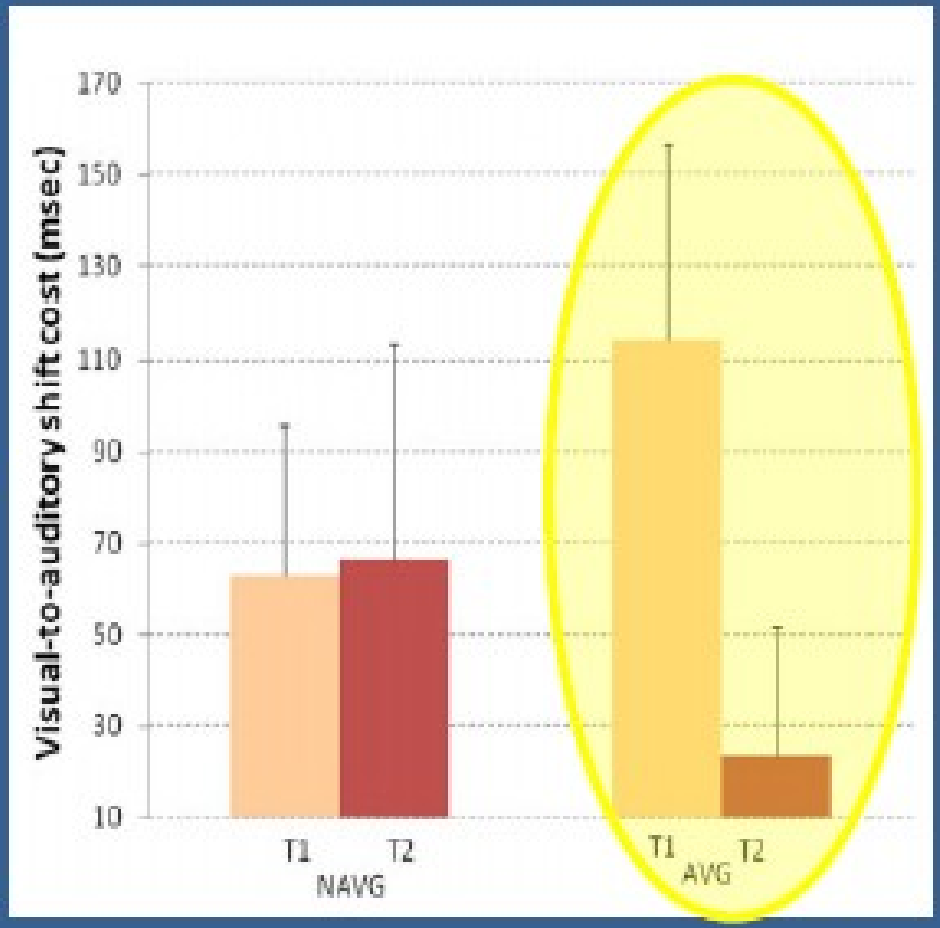
Memoria di lovoro fonologica

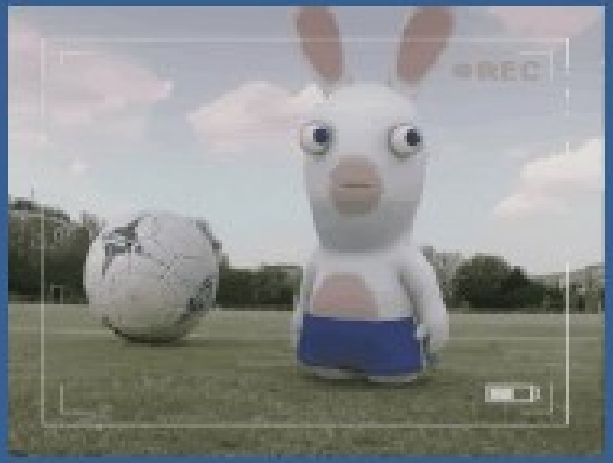


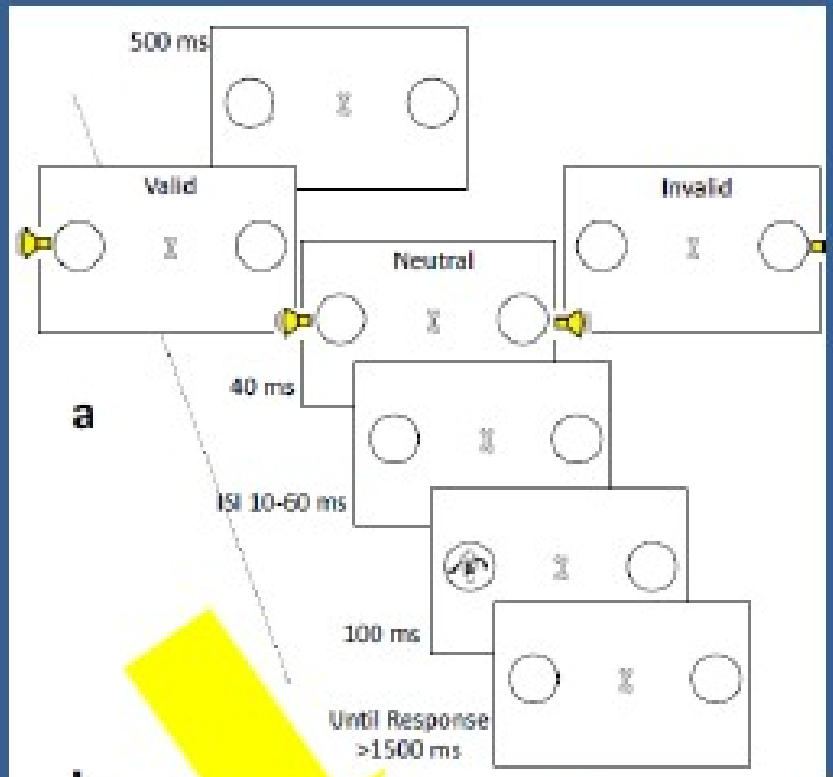
Visual, cross-modal attention and phonological working memory (Study 1 and 2)

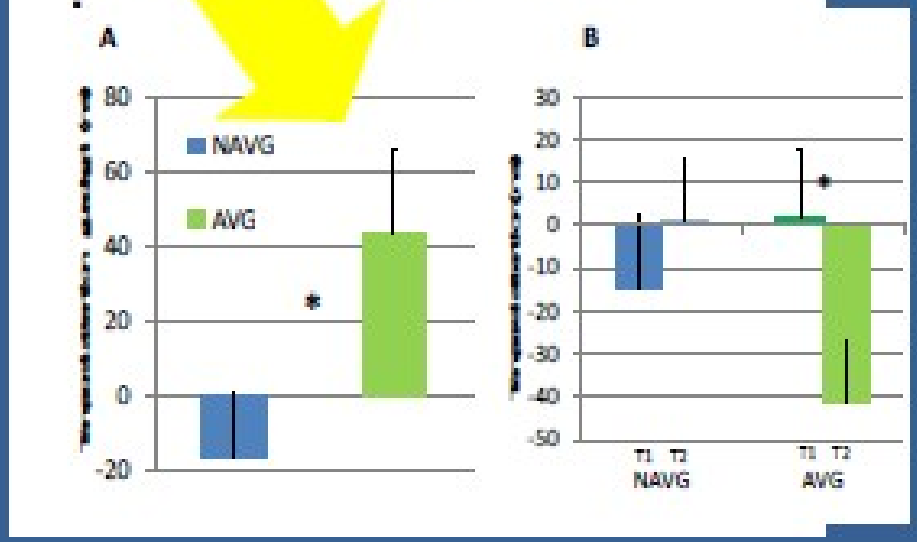
MIGLIORARE la lettura nei bambini con dislessia Riducendo i loro deficit attenzionali (Studio 2)

Attenzione cross-modale






500 ms
Valid
Invalid
Neutral
40 ms
a
ISI 10-60 ms
100 ms
Until Response
>1500 ms


A
B
NAVG
AVG
80
60
40
20
0
-20
30
20
10
0
-10
-20
-30
-40
-50
T1 T2
NAVG
T1 T2
AVG

Visual motion perception and pseudo-word repetition (Study 3)

MIGLIORARE la lettura in bambini con dislessia
Aumentando la percezione visiva del movimento
(Studio 3)

Cerebral Cortex Advance Access published October 6, 2015

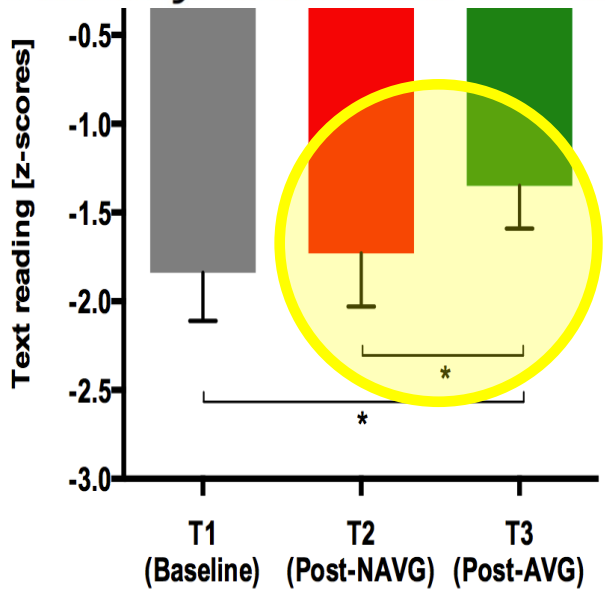
OXFORD

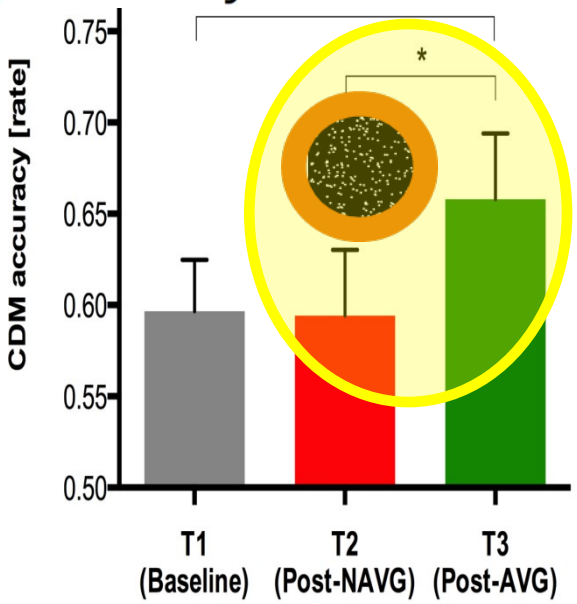
Cerebral Cortex, 2015, 1–14

doi: 10.1093/cercor/bhv206
Original Article

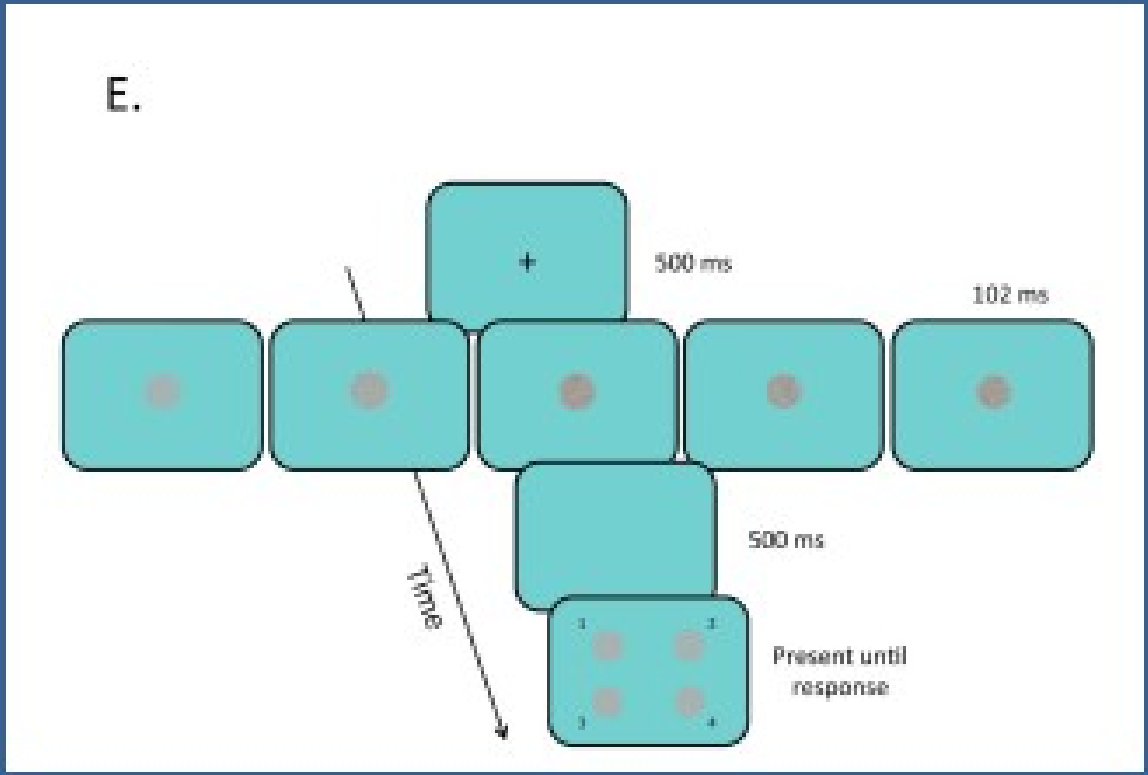
ORIGINAL ARTICLE

Multiple Causal Links Between Magnocellular–Dorsal Pathway Deficit and Developmental Dyslexia



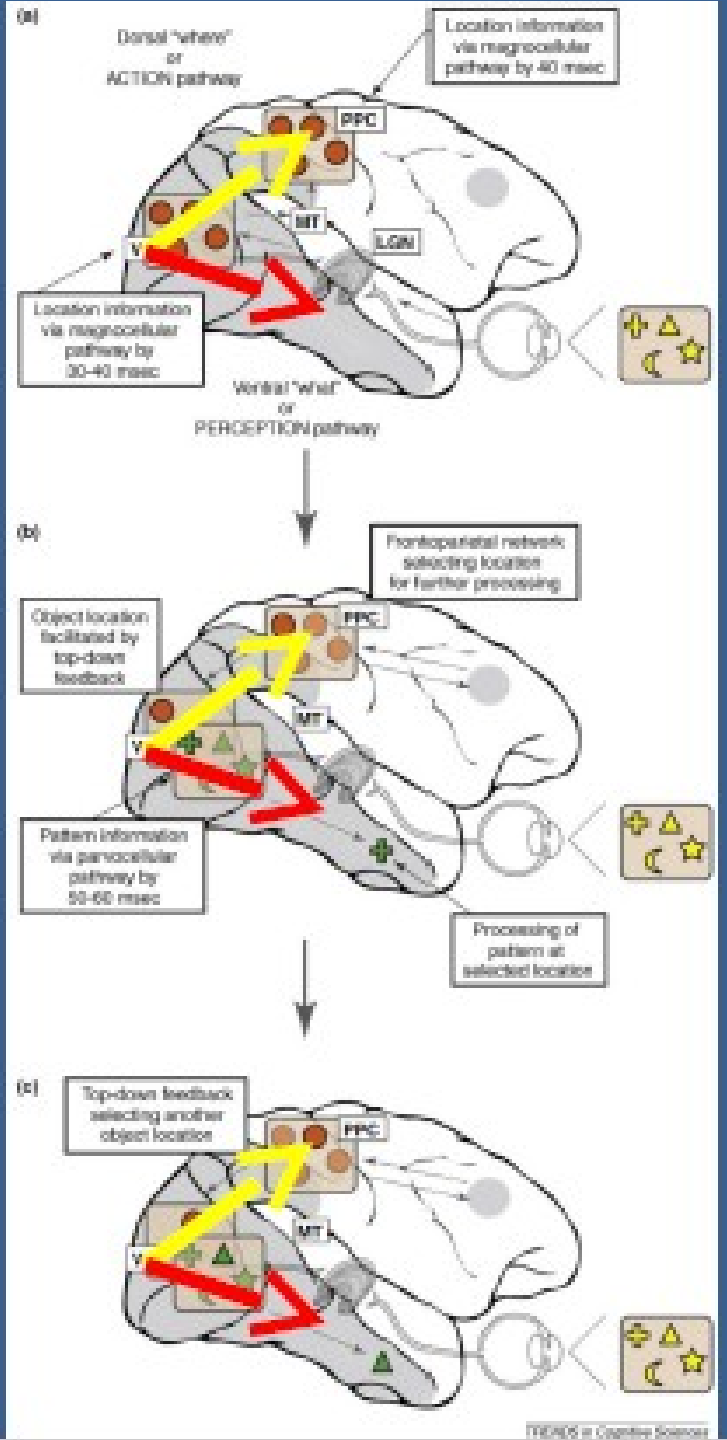


3. Video giochi d'azione: Circuito ventrale?



Resultati:

Nessun miglioramento nel compito ventrale (NAVG = t1 vs. t2 o AVG = t2 vs. t3).



Visual motion perception and pseudo-word repetition (Study 3)

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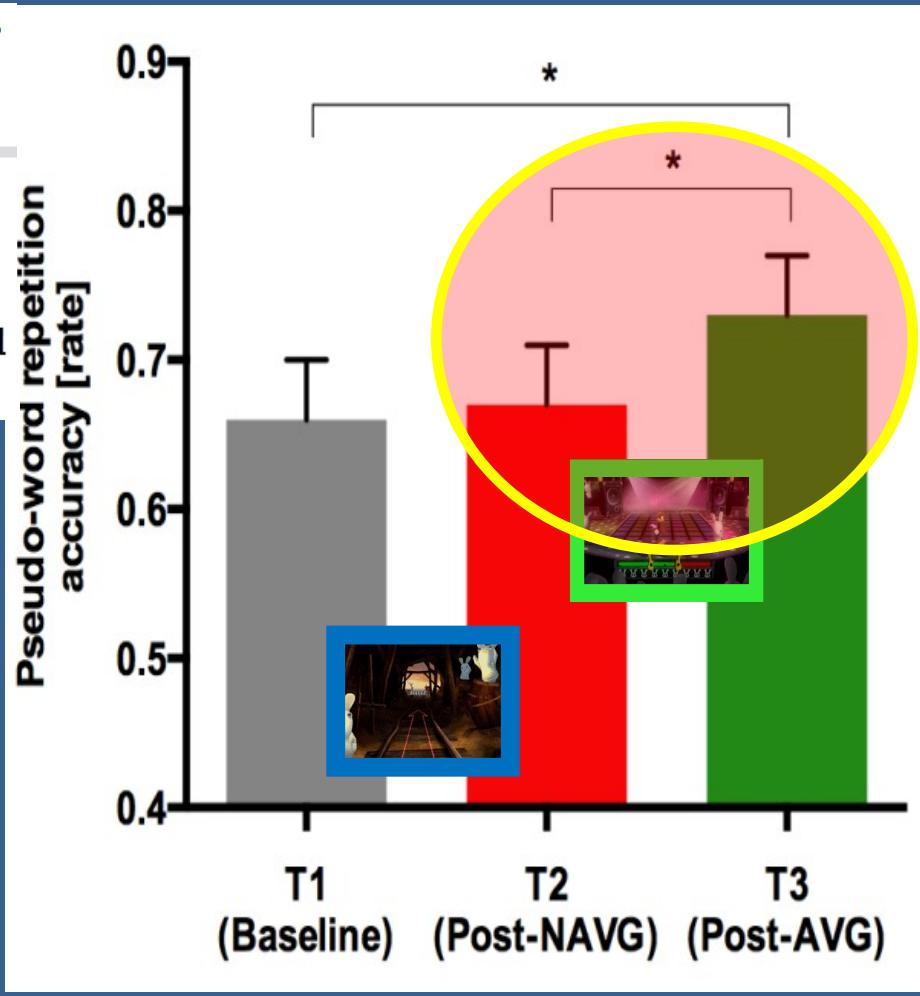
Original Article

ORIGINAL ARTICLE

Multiple Causal Links Between Magnocellular–Dorsal Pathway Deficit and Developmental Dyslexia

Un altro effetto multisensoriale mediato dal miglioramento del circuito dorsale!



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+ aeu

+ a e u

Lettura e Affollamento visivo

L'uomo sta mangiando la pera. La bambina asciuga il bicchiere. Il ragazzo che sta inseguendo il cavallo è magro. La quercia si trova nel mezzo della città. Non solo il cane, ma anche il fiore è rosso. La bambina aveva lo zaino verde. La stella, dentro cui c'è il cerchio, è viola. Il ragazzo non ha né cappotto né sandali. La stella è

L'uomo sta mangiando la pera. La bambina asciuga il bicchiere. Il ragazzo che sta inseguendo il cavallo è magro. La quercia si trova nel mezzo della città. Non solo il cane, ma anche il fiore è rosso. La bambina aveva lo zaino verde. La stella, dentro cui c'è il cerchio,

SEE COMMENTARY

Extra-large letter spacing improves reading in dyslexia

Marco Zorzi[a,1,2], Chiara Barbiero[b,1], Andrea Facoetti[a,c,1], Isabella Lonciari[b], Marco Carrozzi[b], Marcella Montico[d], Laura Bravar[b], Florence George[e], Catherine Pech-Georgel[e], and Johannes C. Ziegler[f]

[a]Department of General Psychology and Center for Cognitive Science, University of Padova, 35131 Padua, Italy; [b]Child Neurology and Psychiatry Ward, Department of Pediatrics, Institute for Maternal and Child Health "Burlo Garofolo", 34137 Trieste, Italy; [c]Developmental Neuropsychological Unit, "E. Medea" Scientific Institute, 32842 Bosisio Parini (LC), Italy; [d]Epidemiology and Biostatistics Units, Institute for Maternal and Child Health "Burlo Garofolo", 34137 Trieste, Italy; [e]Centre de Références des Troubles d'apprentissages, Centre Hospitalier Universitaire Timone, 13385 Marseille, France; and [f]Laboratoire de Psychologie Cognitive, Aix-Marseille University and Centre National de la Recherche Scientifique, Fédération de Recherche 3C, Brain and Language Research Institute, 13331 Marseille, France

Edited by Michael Posner, University of Oregon, Eugene, OR, and approved April 23, 2012 (received for review April 4, 2012)

Spatial attention deficits in dyslexic children might impair their ability to focus on each successive letter in a visual word.

COMMENTARY

Helping dyslexic children attend to letters within visual word forms

Bruce D. McCandliss[1]

Department of Psychology and Human Development, Vanderbilt University, Nashville, TN 37203

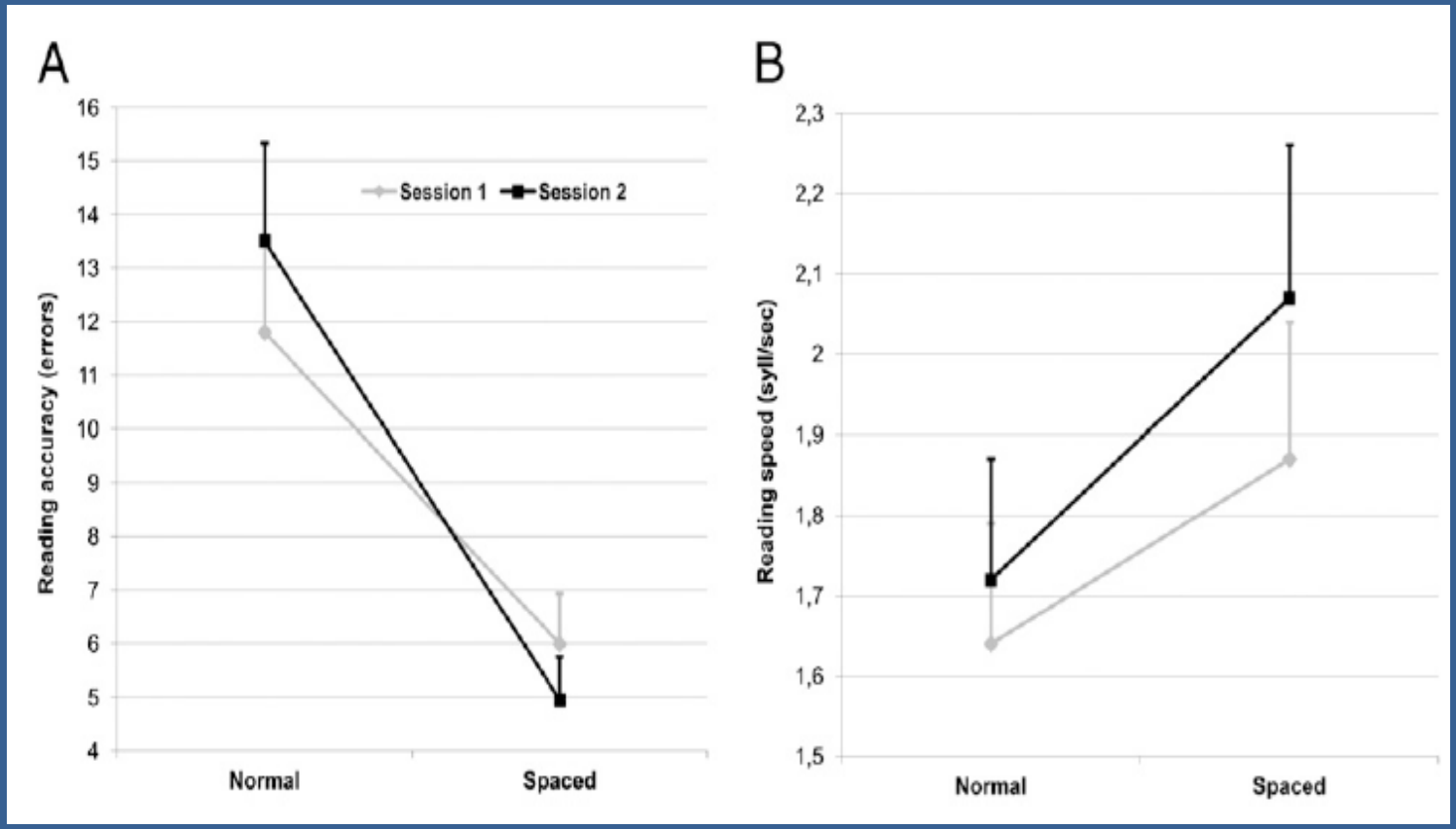
Learning to read visual words aloud requires a novel integration of two distinct neurocognitive systems:

metry may soon be changing. The study by Zorzi et al. (7) in PNAS provides a clear demonstration of an easily measured vi-

The letter-spacing effect in dyslexia apparently transcends geographical and linguistic boundaries, which is further

Effetto della spaziatura sull'accuratezza di lettura

Effetto della spaziatura sulla Velocità di lettura



Published in final edited form as:
Psychol Sci. 2007 January ; 18(1): 88–94. doi:10.1111/j.1467-9280.2007.01853.x.

Action-Video-Game Experience Alters the Spatial Resolution of Vision

C.S. Green and **D. Bavelier**
Department of Brain and Cognitive Sciences, University of Rochester

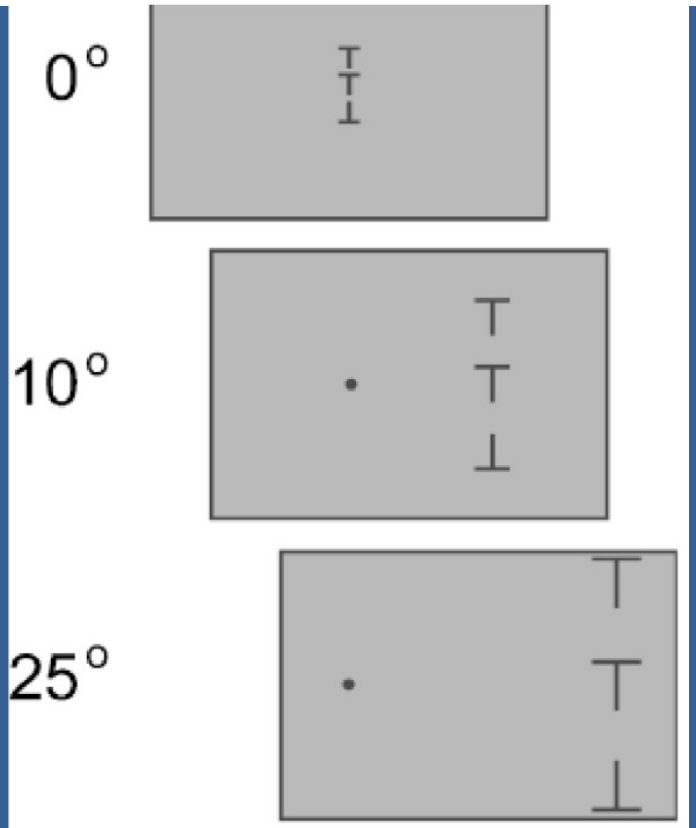
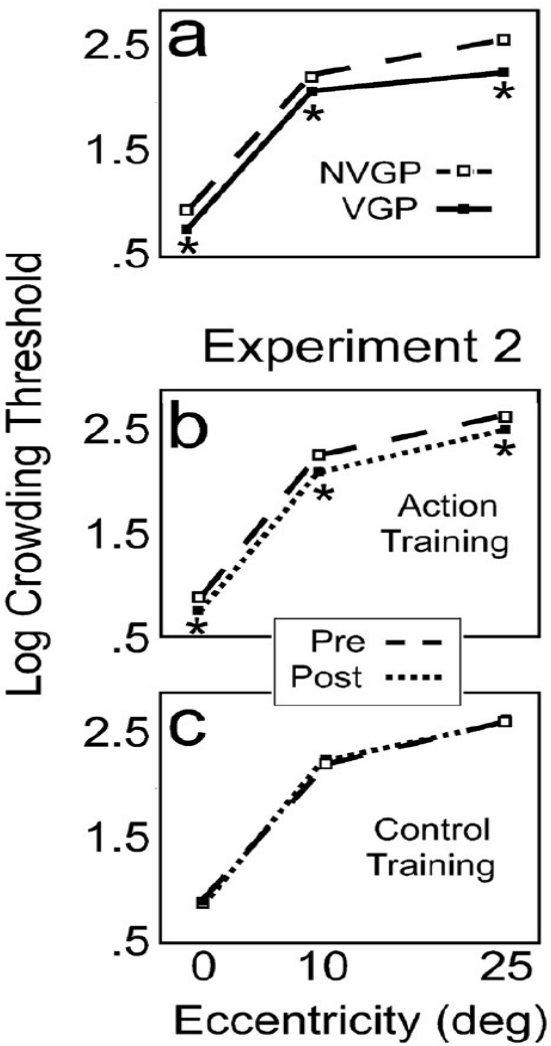
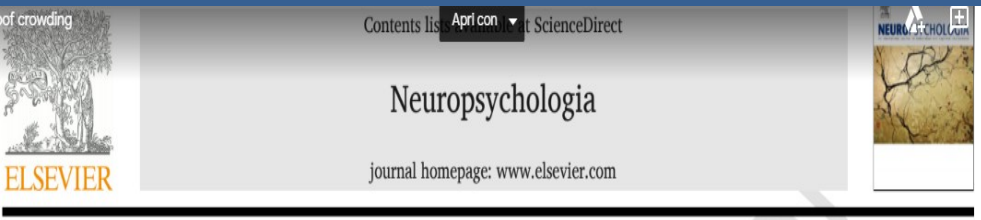


Fig. 1.
Illustration of the test stimuli. The stimuli consisted of three T shapes randomly oriented either right side up or upside down. The subject's task was to indicate the orientation of the center T. In separate blocks, three eccentricities were tested—0°, 10°, and 25°. The size of the Ts was set to be 1.5 times each individual subject's T-alone threshold at each eccentricity.



Visual crowding and phonological working memory (Study 4 and 5)

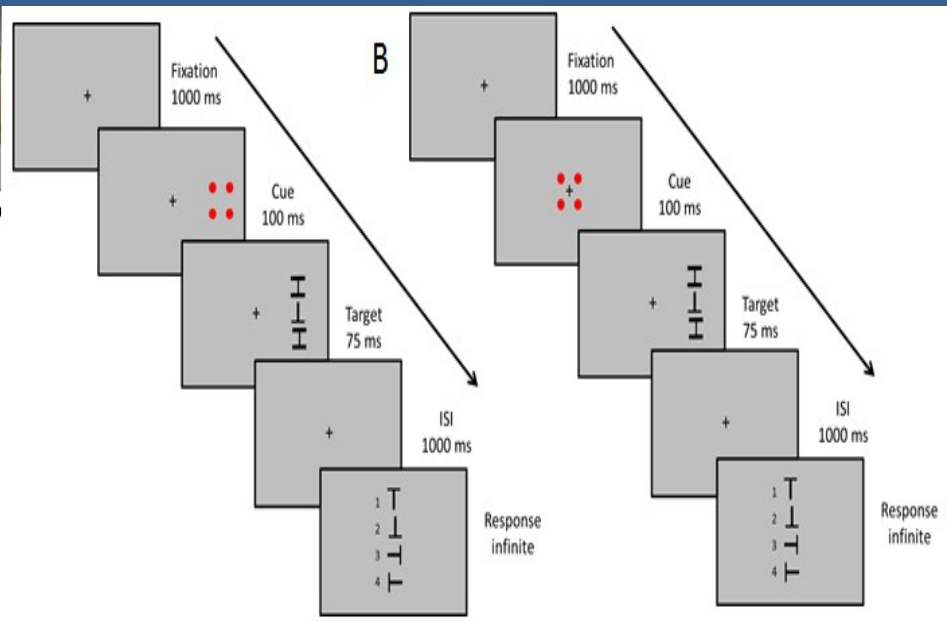
MIGLIORARE la lettura nei bambini con dislessia RIDUCENDO l'affollamento visivo (Studio 4)

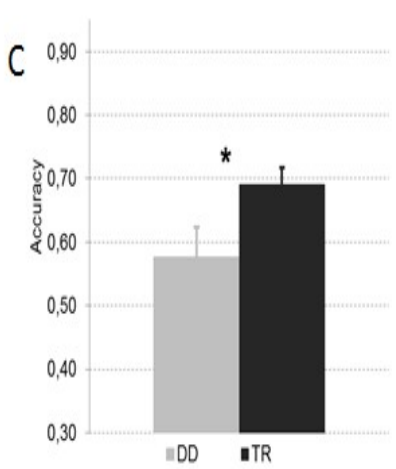


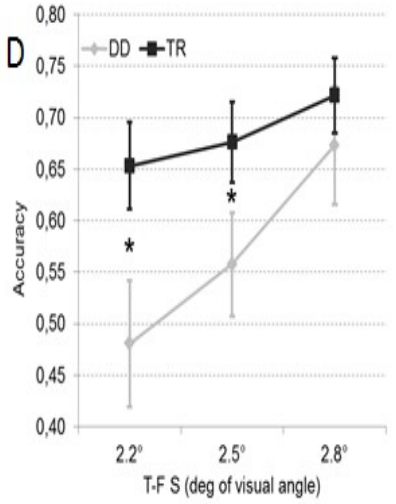
Is excessive visual crowding causally linked to developmental dyslexia?

Sara Bertoni [a, *], Sandro Franceschini [a, **], Luca Ronconi [b, c], Simone Gori [d], Andrea Facoetti [a]

de.co.ne lab unipd







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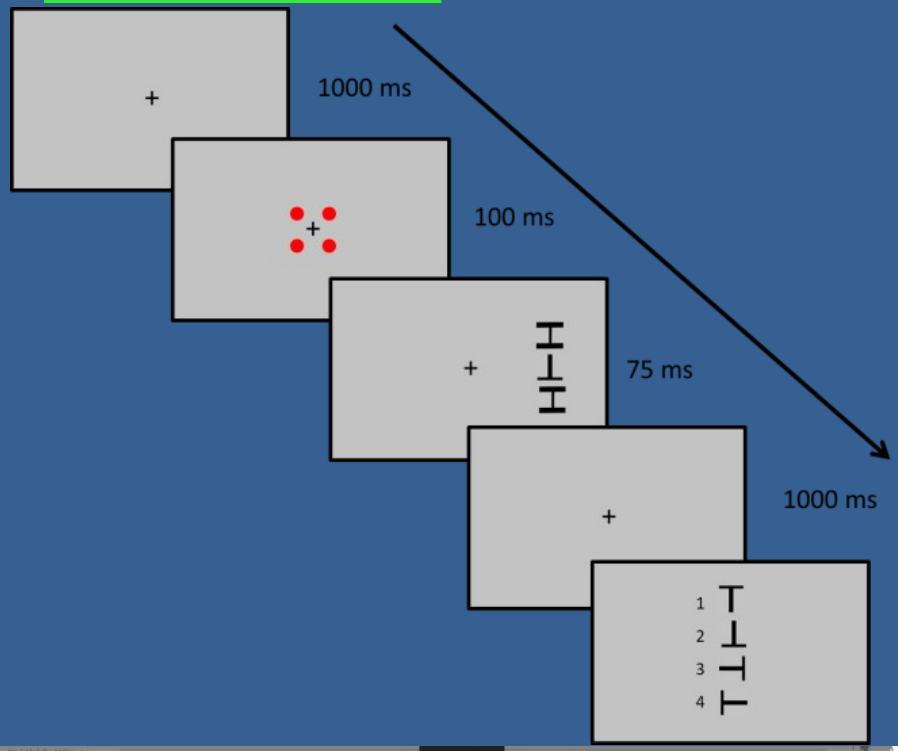

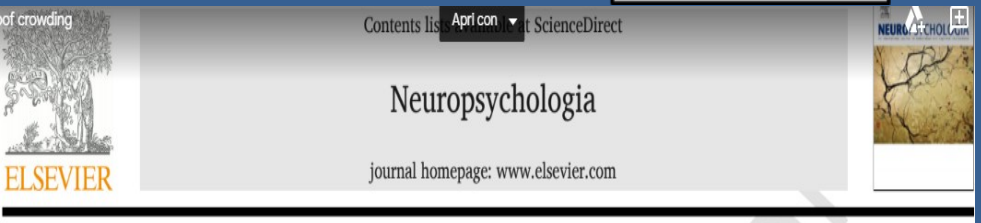

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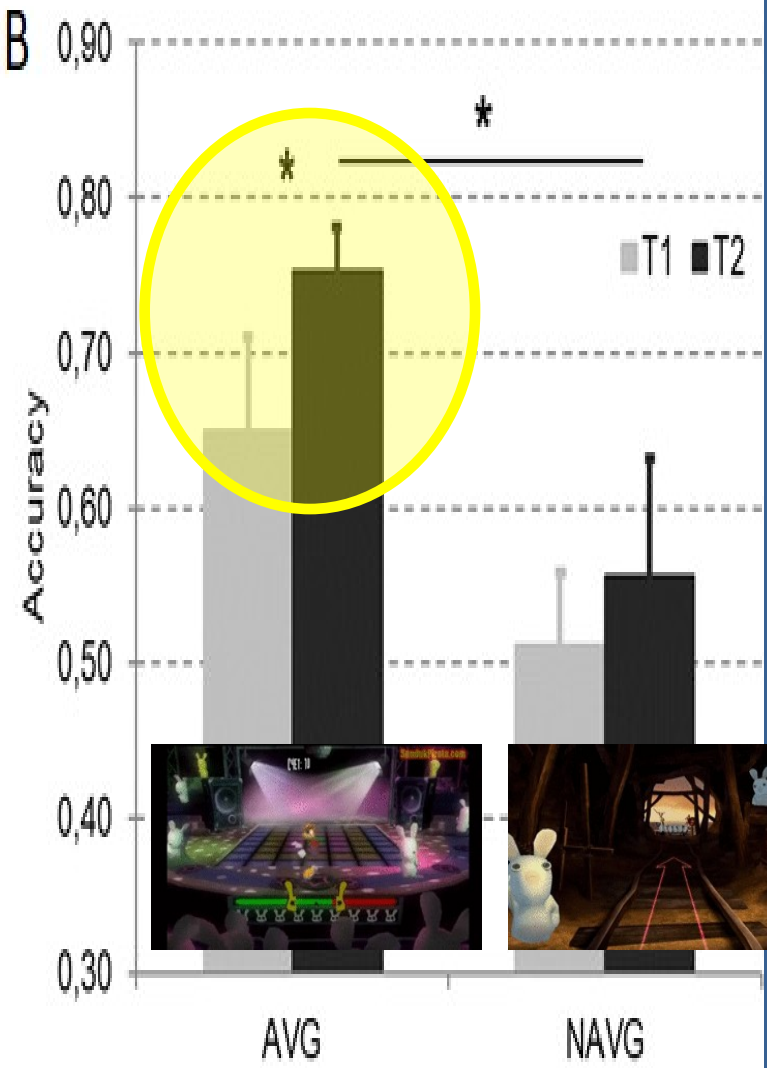
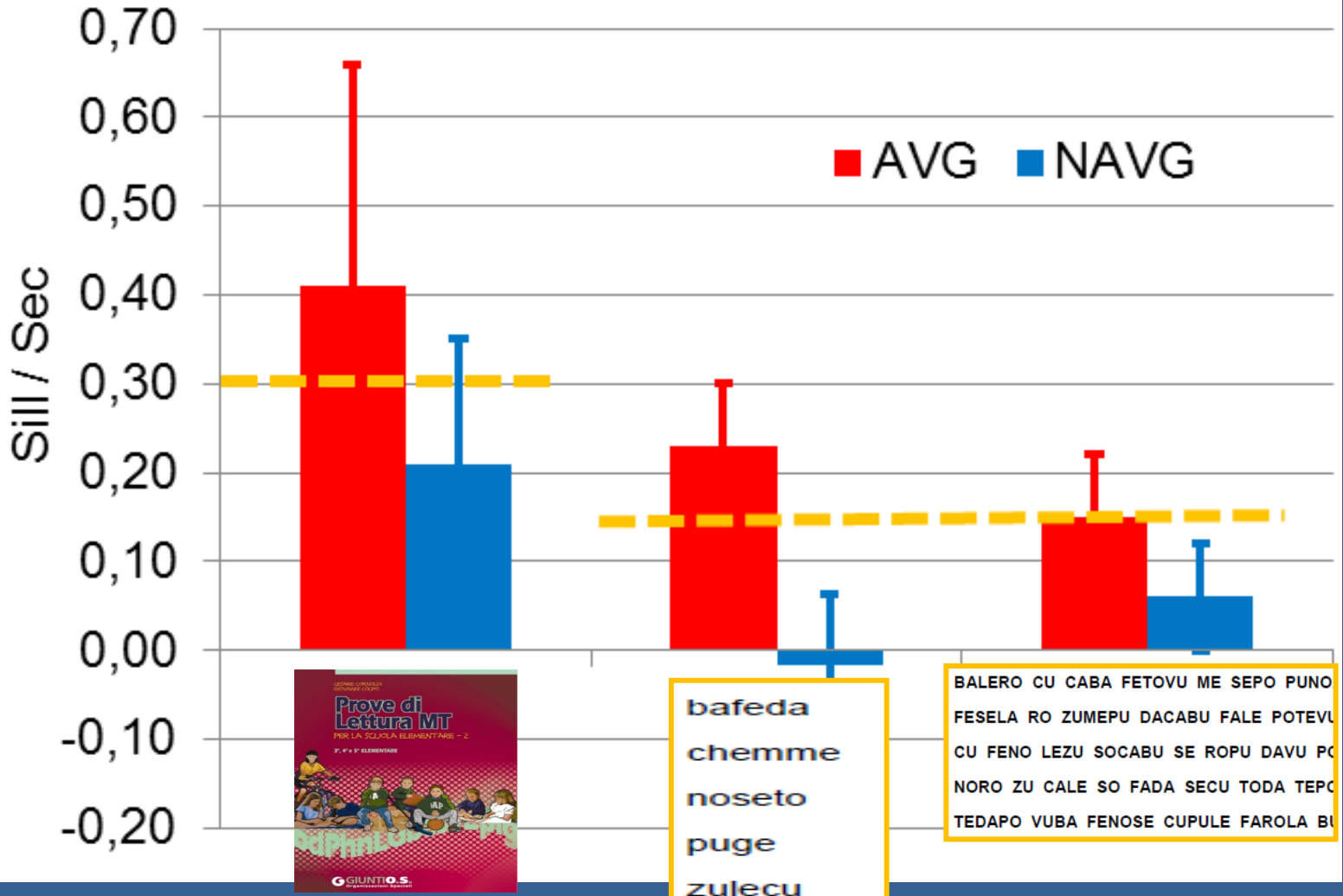
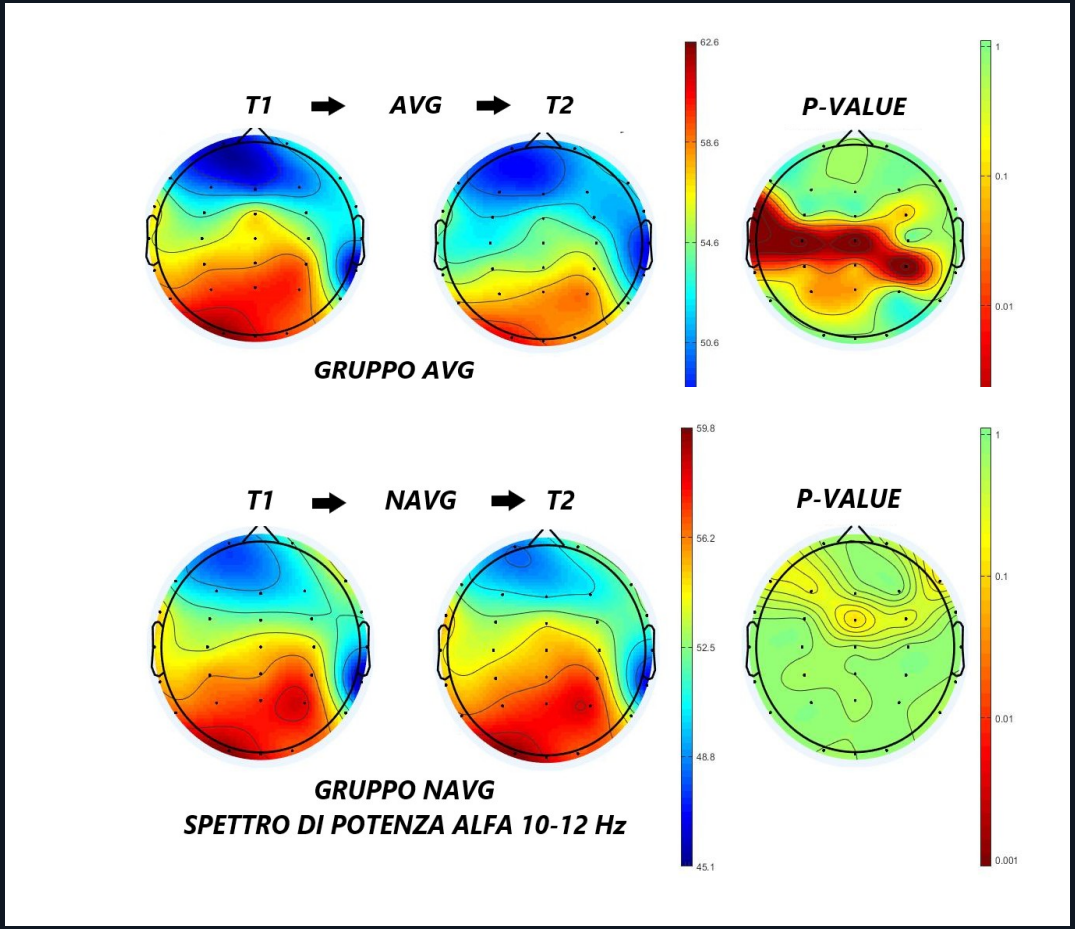


Reading improvements



Analisi dei risultati resting state EEG



Il confronto statistico ha mostrato un decremento nello spettro di potenza statisticamente significativo soltanto per il gruppo AVG tra T1 e T2 ($t(6)= 3.478$, $p= .013$; T1 $M= 9.53$, $DS= 3.03$; T2 $M= 7.02$, $DS= 4.31$), e nessun effetto significativo nella condizione di trattamento NAVG ($t(6)= .473$, $p= .653$; T1 $M= 6.74$, $DS= 3.02$; T2 $M= 6.22$, $DS= 4.39$).

Gli elettrodi risultati statisticamente significativi nella banda di frequenza alfa *upper* (10-12 Hz) sono stati identificati spazialmente a livello delle zone parietali, temporali sinistre e centrali: T3, C3, CZ, P3, PZ, CP3, CPZ, FT7, TP7.

Visual global perception (Study 4)

MIGLIORARE la lettura nei bambini con dislessia

Aumentando la **Percezione Globale** (Study 4)

e.g., compito di Navon

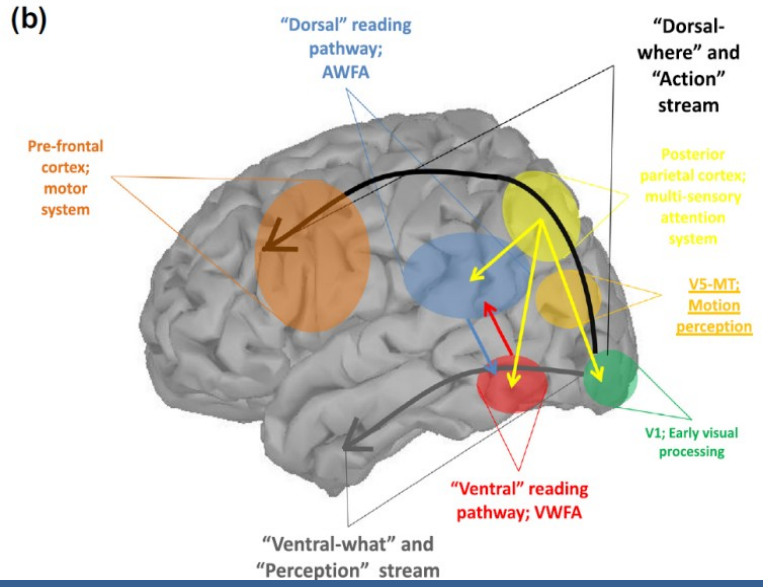
www.nature.com/scientificreports

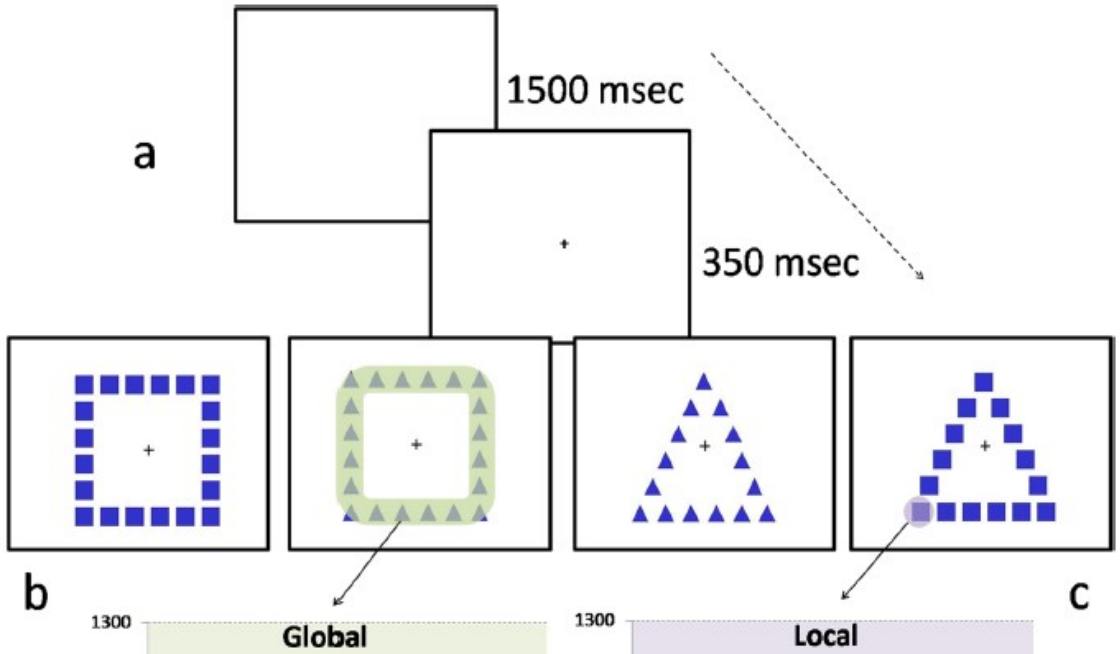
SCIENTIFIC REPORTS

OPEN

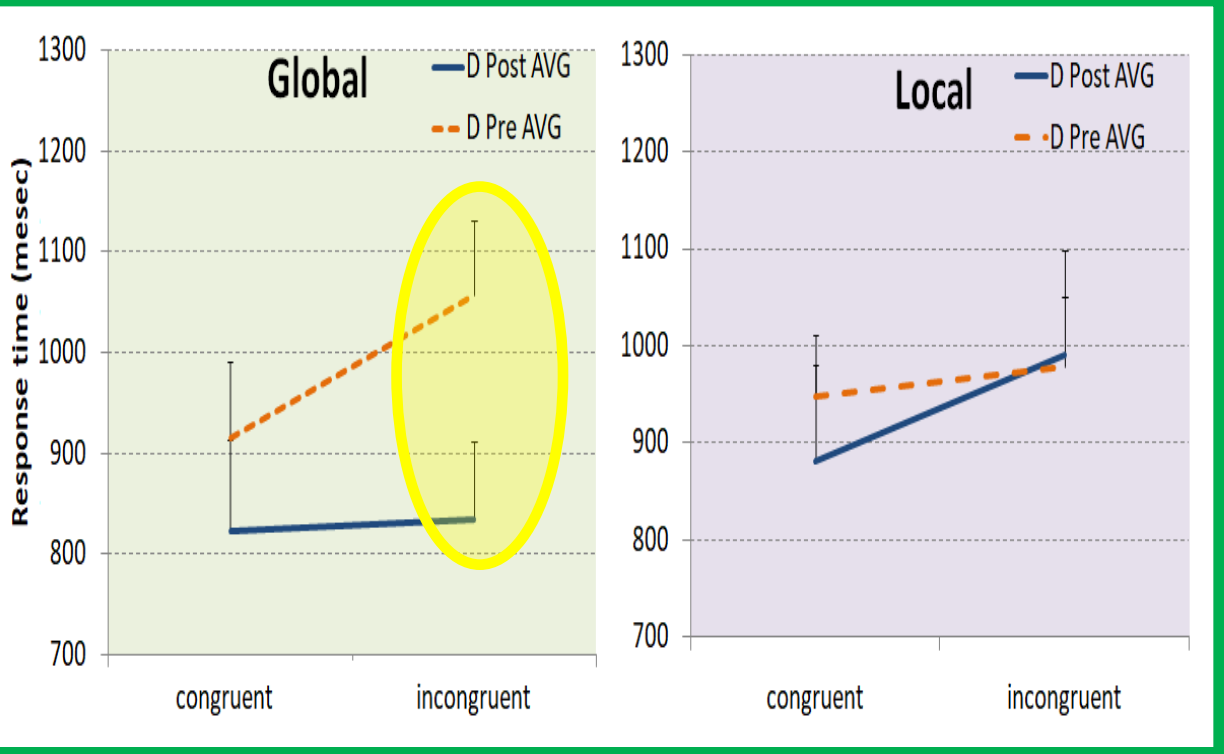
A different vision of dyslexia: Local precedence on global perception

Sandro Franceschini[1,2], Sara Bertoni[1], Tiziana Gianesini[3], Simone Gori[4] & Andrea Facoetti



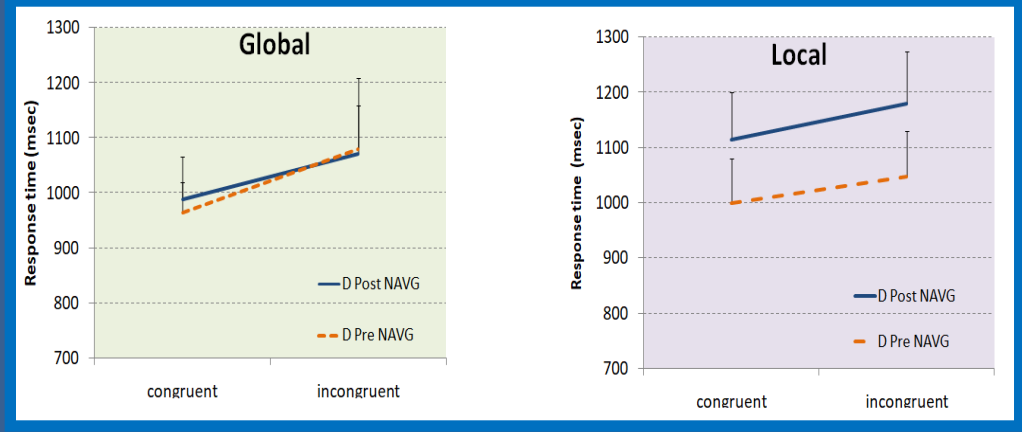


AVG

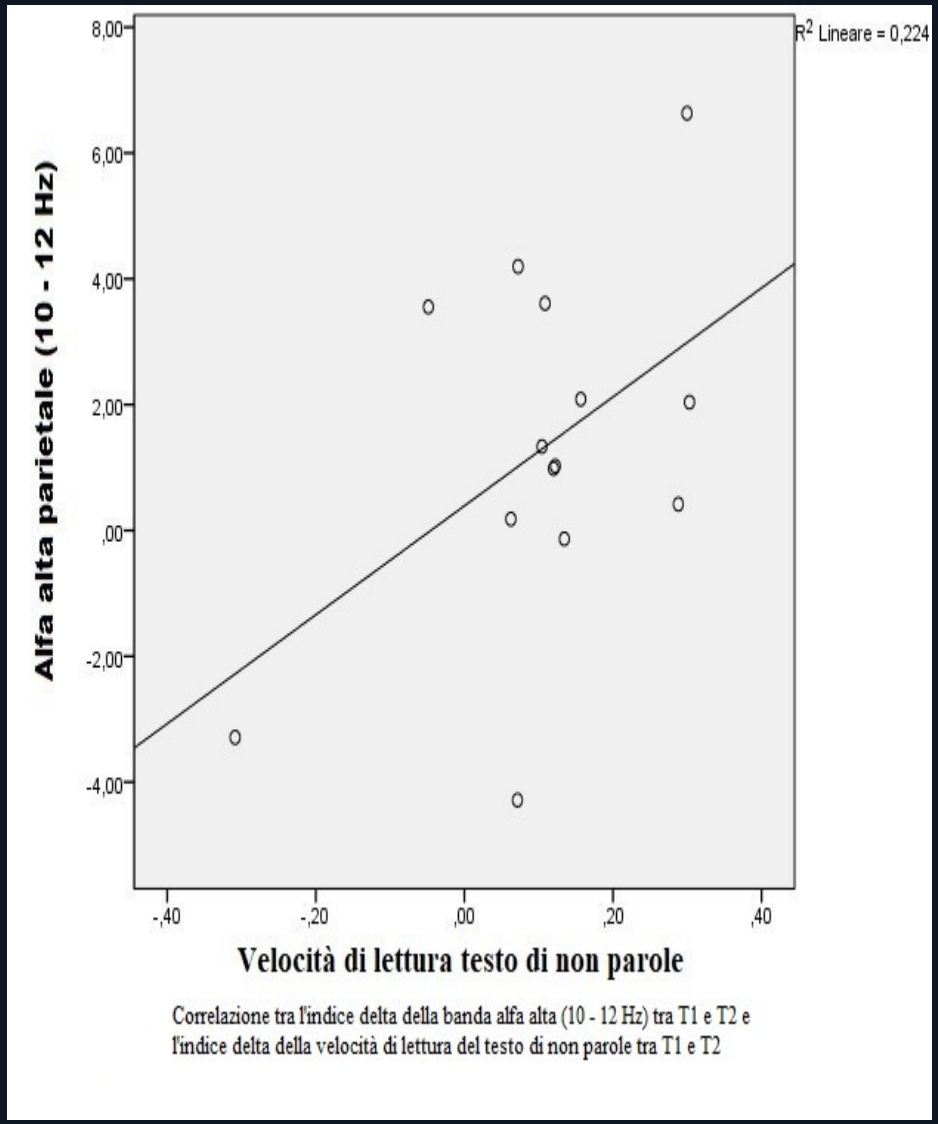


Visual global perception (Study 4)

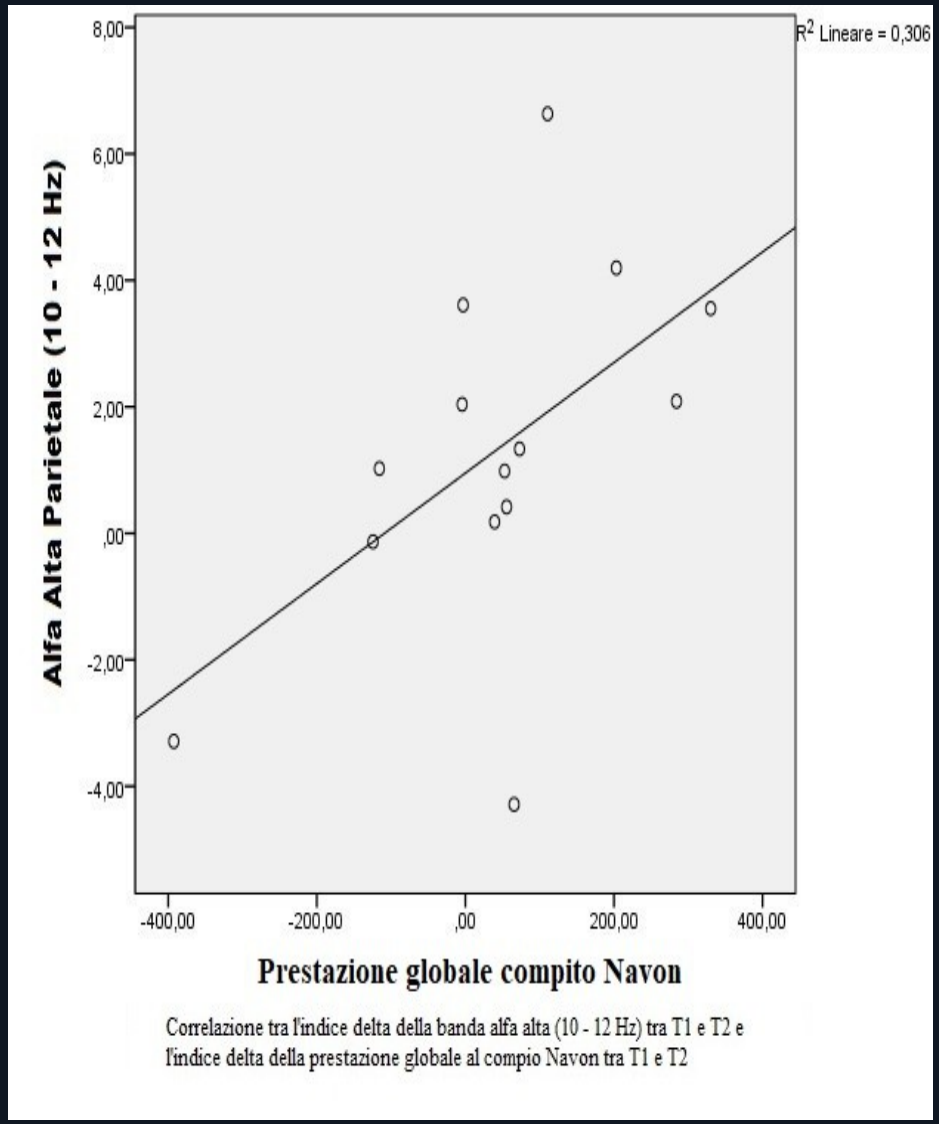
NAVG



Analisi dei risultati correlazionali

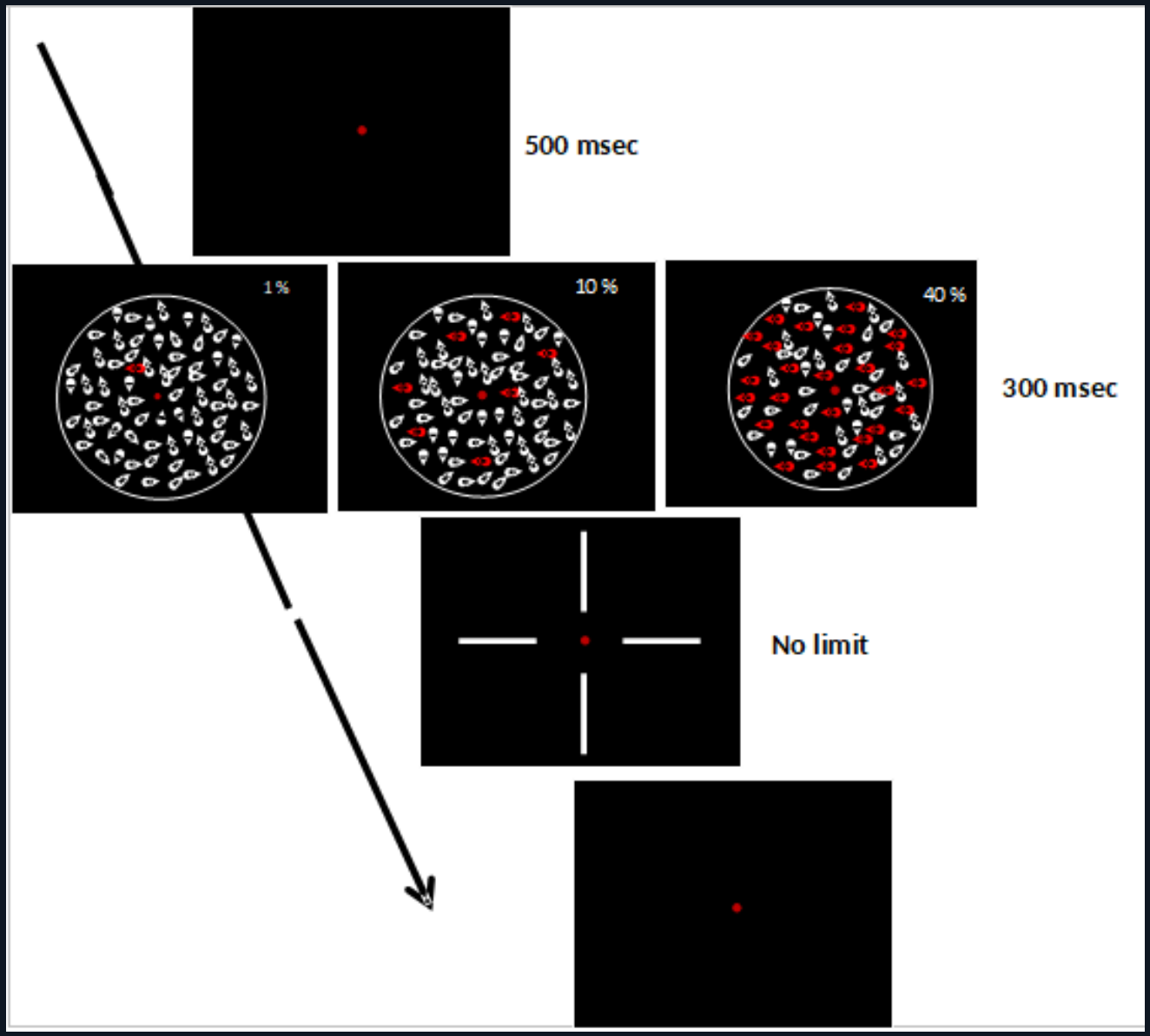


Correlazione tra l'indice delta della banda alfa alta (10 - 12 Hz) tra T1 e T2 e l'indice delta della velocità di lettura del testo di non parole tra T1 e T2

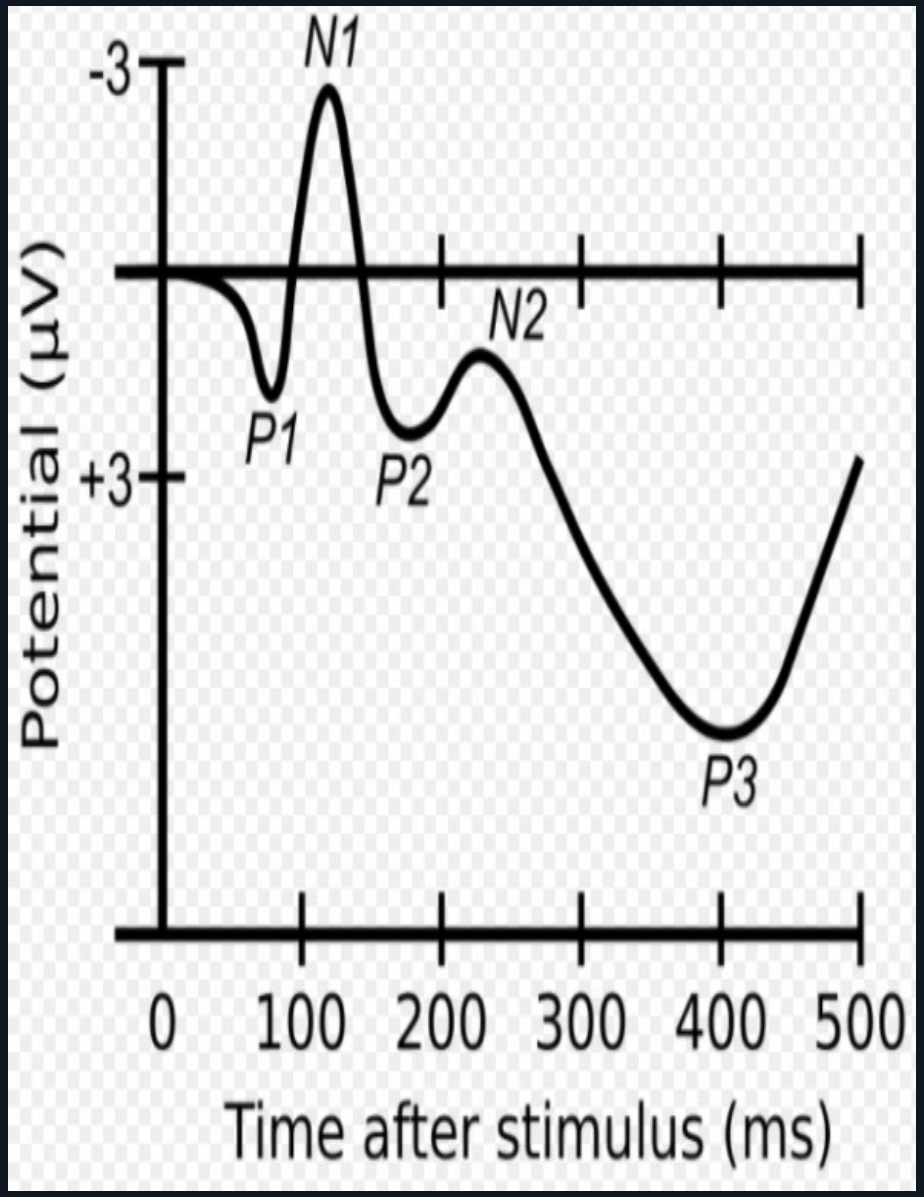


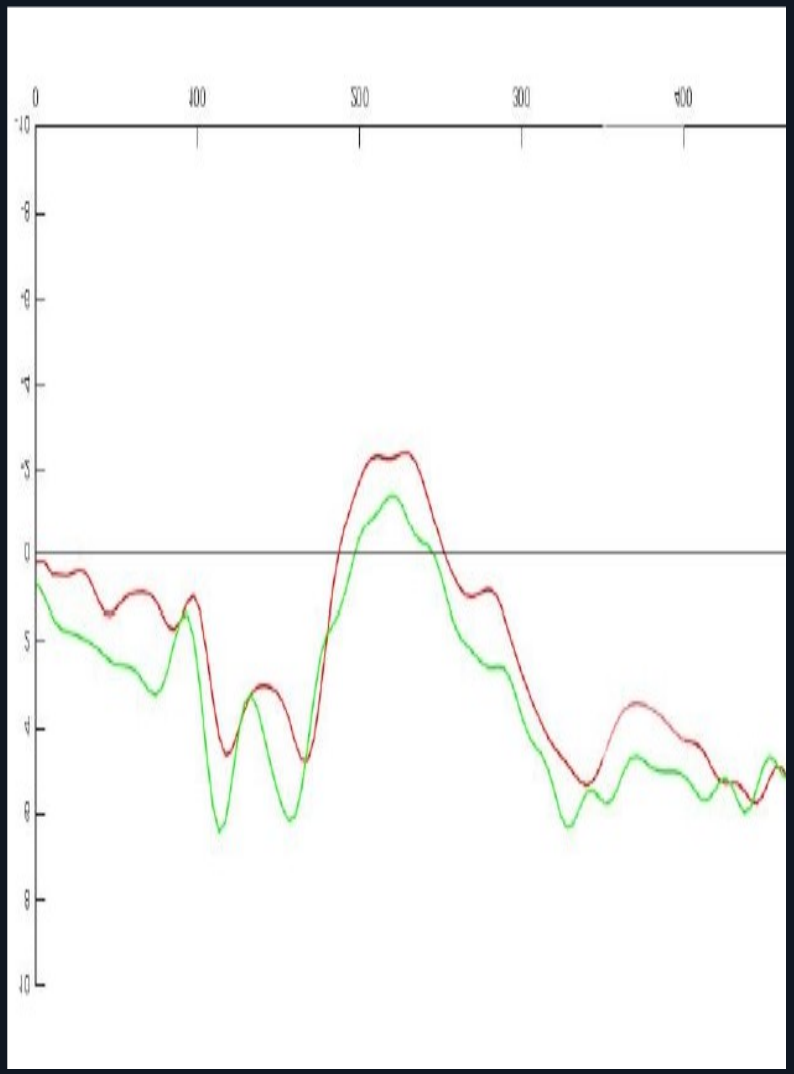
Correlazione tra l'indice delta della banda alfa alta (10 - 12 Hz) tra T1 e T2 e l'indice delta della prestazione globale al compio Navon tra T1 e T2

ERP N200 nel Motion (40%)

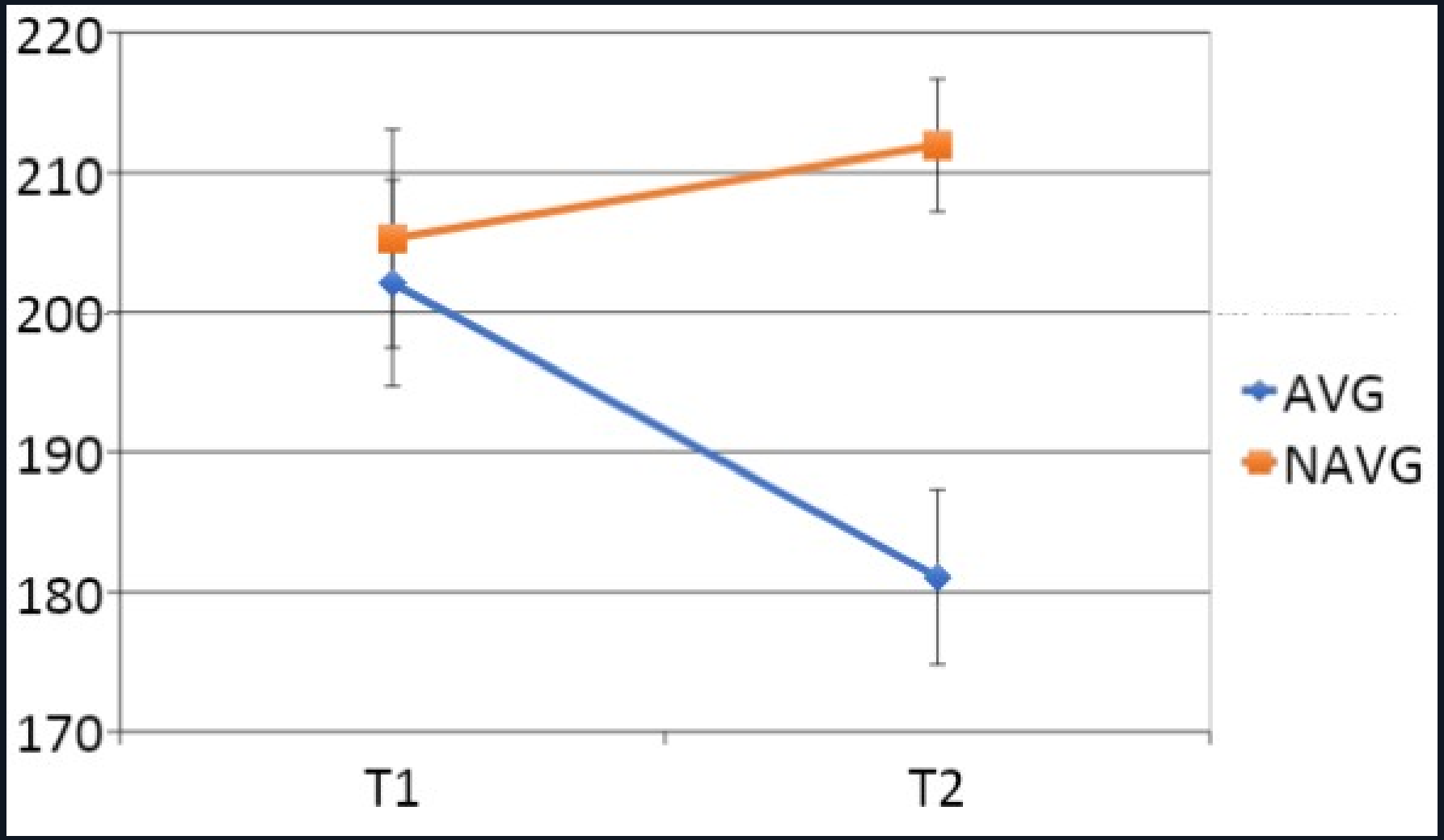


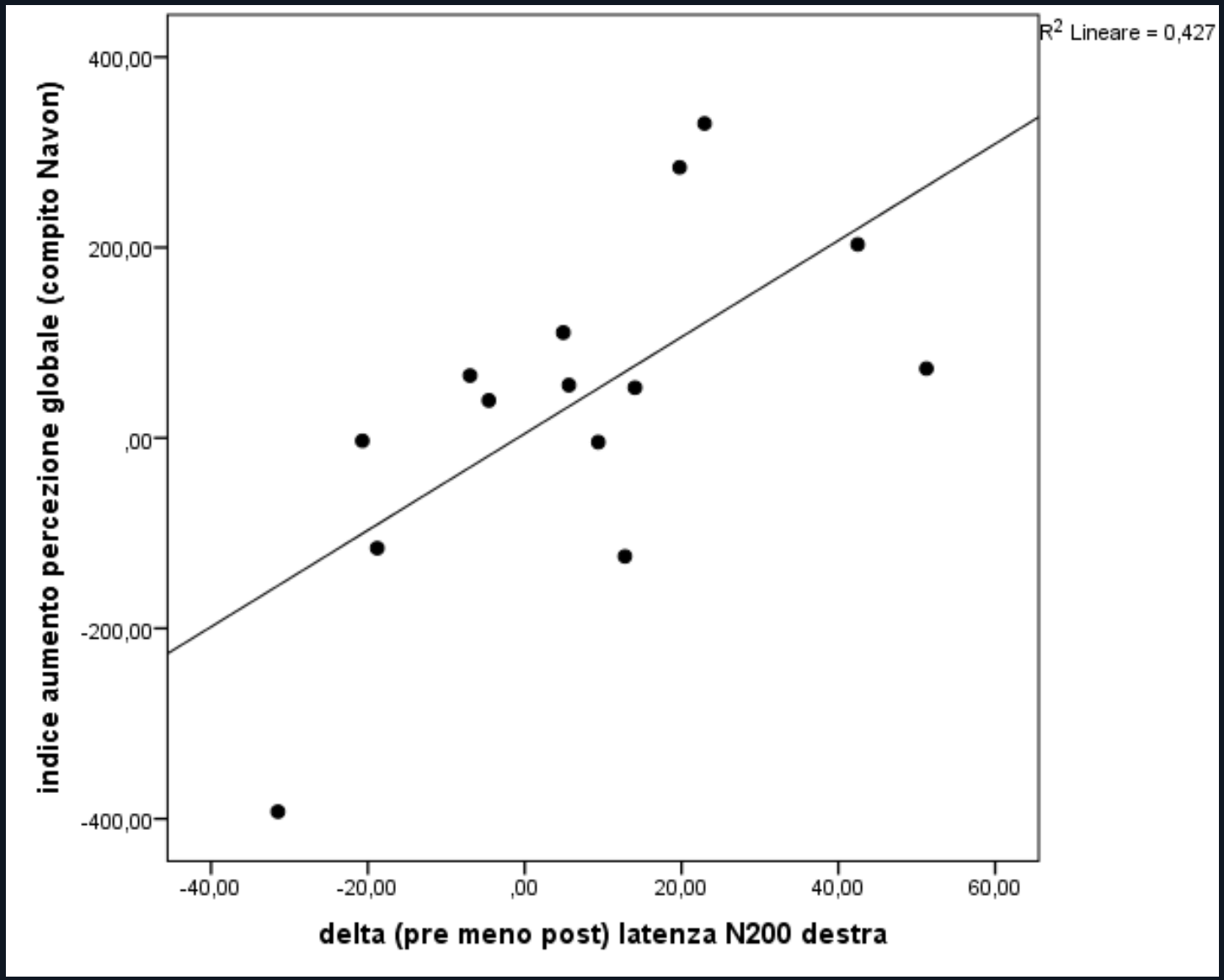
ERP Motion AVG Pre=red Post=green



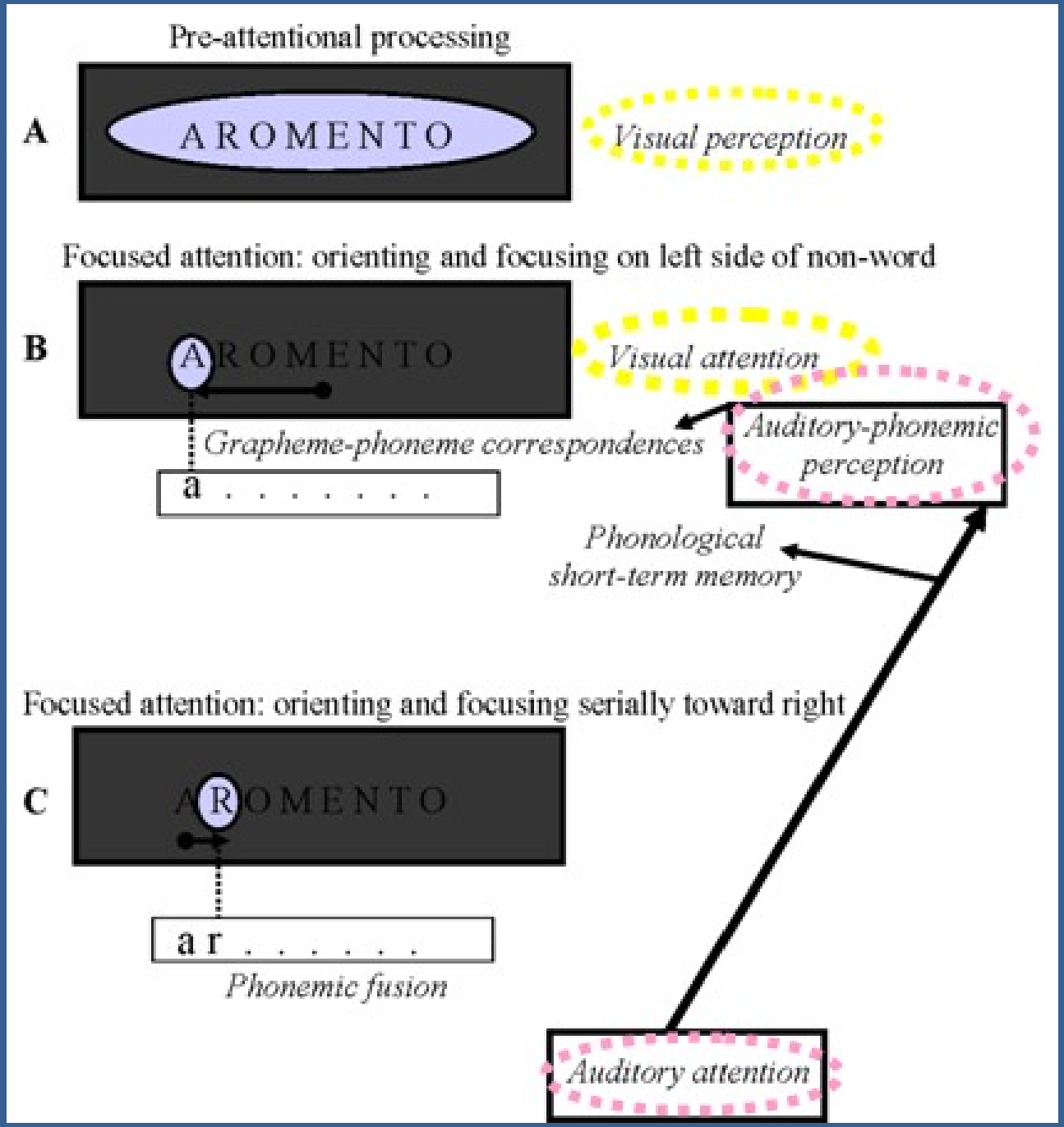


Latenza N200 Motion: AVG vs NAVG



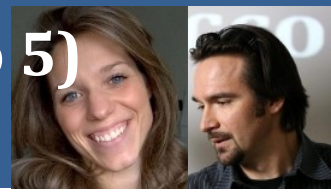

R^2 Lineare = 0,427
400,00
200,00
,00
-200,00
-400,00
indice aumento percezione globale (compito Navon)
-40,00
-20,00
,00
20,00
40,00
60,00
delta (pre meno post) latenza N200 destra

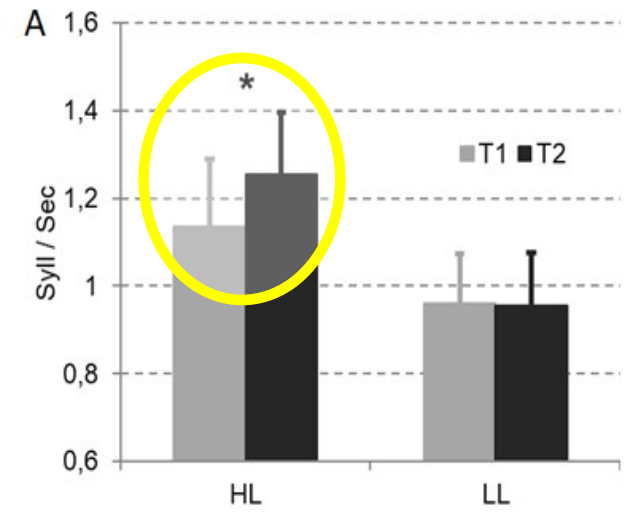
Perché l'attenzione visiva e uditiva sono importanti x imparare a leggere?

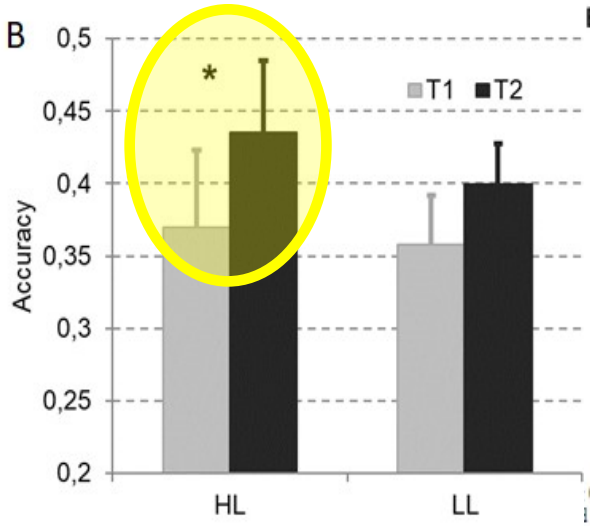


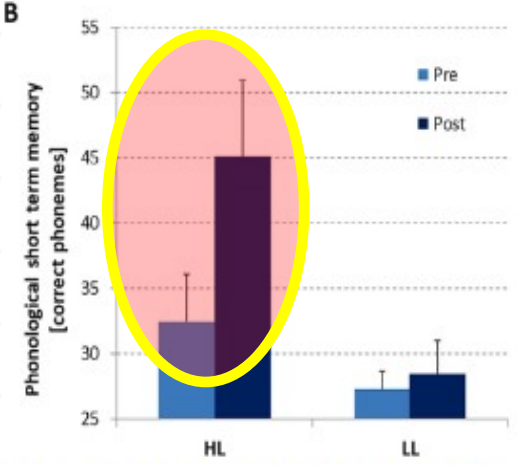
Visual crowding and phonological working memory (Study 4 and 5)

Fantastico! Noi mettiamo i bambini con dislessia davanti ad un video gioco d'azione e avremo risolto la dislessia! (Studio 5)









(LL) players are represented before (pre-) and after (post-) the training. Panel B: The per-
LL groups. Error bars represent SEM.

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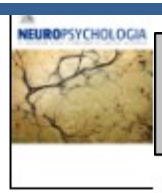

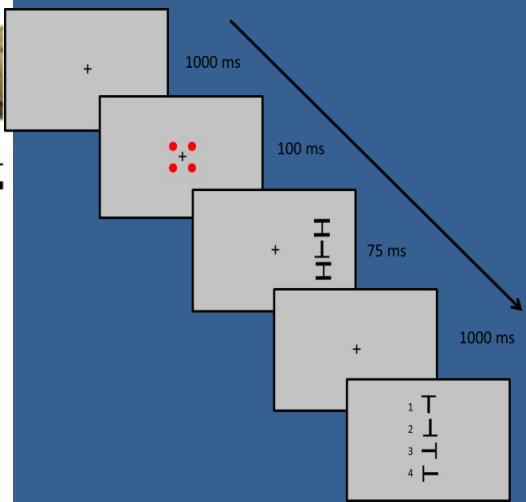

Improving action video games abilities increases the phonological decoding speed and phonological short-term memory in children with developmental dyslexia

Franceschini Sandro, Bertoni Sara

Developmental and Cognitive Neuroscience Lab, Department of General Psychology, University of Padua, Padova 35131, Italy