



Evidencia científica que respalda la relación

## ACTIVIDAD FÍSICA-CEREBRO

### Explicaciones (formato vídeo) de reconocidos profesionales:

- **Prof. Jesús C. Guillén** “Cómo el ejercicio físico mejora el cerebro”  
<https://www.youtube.com/watch?v=tEivFtLGMwQ>
- **Dr. John J. Ratey** “Cómo el ejercicio puede cambiar nuestras escuelas”  
<https://www.youtube.com/watch?v=hBSVZdTQmDs>
- **Jose Ramón Gamo** “¿Qué es Neurodidáctica?”  
<https://www.youtube.com/watch?v=Rskg1pB9TLM>
- **Paul Zientarski** “¿Quieres niños más sanos e inteligentes?”  
<https://www.youtube.com/watch?v=V81cO8xyMaI>
- **Dr. Francisco B. Ortega** “Actividad física y su relación con la salud y el cerebro”  
(a partir de 07:54)  
<https://www.youtube.com/watch?v=2IdDvFbm7qc>
- **Dr. Sandrine Thuret** “Puedes crear nuevas células cerebrales”  
[https://www.ted.com/talks/sandrine\\_thuret\\_you\\_can\\_grow\\_new\\_brain\\_cells\\_here\\_s\\_how?language=es](https://www.ted.com/talks/sandrine_thuret_you_can_grow_new_brain_cells_here_s_how?language=es)
- **Antonio Ruiz** “Como 59 minutos de actividad física pueden cambiar el mundo”  
<https://www.youtube.com/watch?v=Hxymg8zO6E>
- **Dr. Pascual Leone** “El ejercicio físico es muy importante para el cerebro”  
<https://www.youtube.com/watch?v=uXtOY5b4qwA>

### Artículos (opinión de profesionales) desde la Neurociencia:

- **Blog Escuela con Cerebro** “¿Puede el ejercicio físico mejorar el rendimiento académico?” \*EL MEJOR RESUMEN\*  
<https://escuelaconcerebro.wordpress.com/2015/03/15/puede-el-ejercicio-fisico-mejorar-el-rendimiento-academico/>
- **Dr. Ignacio Morgado** “Claves desde la Neurociencia para mejorar el aprendizaje”  
[http://elpais.com/elpais/2015/10/29/ciencia/1446135253\\_593995.html](http://elpais.com/elpais/2015/10/29/ciencia/1446135253_593995.html)
- **Dr. Francisco Mora**

Conferencia en Universidad de Granada: ¿Qué es Neuroeducación? (a partir 32:40)

<https://www.youtube.com/watch?v=fAK1WMeQoBg&t=9s>

“Hay que acabar con las clases de 50’ “

[http://economia.elpais.com/economia/2017/02/17/actualidad/1487331225\\_284546.html](http://economia.elpais.com/economia/2017/02/17/actualidad/1487331225_284546.html)

“El cerebro solo aprende si hay emoción”

<http://www.educaciontrespuntocero.com/entrevistas/francisco-mora-el-cerebro-solo-aprende-si-hay-emocion/33224.html>

- **El caso de la Escuela Naverville Central High School**

[http://iphionline.org/pdf/P.E.\\_Case\\_Study\\_Naperville.pdf](http://iphionline.org/pdf/P.E._Case_Study_Naperville.pdf)

- **Presentación Paul Zientarski**

<https://www.fitness.gov/pdfs/learning-is-a-moving-experience.pdf>

- **Active Bodies, Active Brains by Dr. Lindsay Shaw (brillante)**

<http://www.tbf.org/tbf/56/hphe/~/media/9F65205447F542A294378AE5DEA1BBCF.pdf>

### **Investigaciones Científicas:**

- ✓ **Actividad Física y Rendimiento Académico/ Activación Cognitiva/Memoria**

#### **ARTÍCULOS**

- 1) [https://www.researchgate.net/publication/24266858\\_The\\_effect\\_of\\_acute\\_treadmill\\_walking\\_on\\_cognitive\\_control\\_and\\_academic\\_achievement\\_in\\_preadolescent\\_children](https://www.researchgate.net/publication/24266858_The_effect_of_acute_treadmill_walking_on_cognitive_control_and_academic_achievement_in_preadolescent_children)
- 2) [https://www.researchgate.net/publication/7481314\\_Aerobic\\_Fitness\\_and\\_Neurocognitive\\_Function\\_in\\_Healthy\\_Preadolescent\\_Children](https://www.researchgate.net/publication/7481314_Aerobic_Fitness_and_Neurocognitive_Function_in_Healthy_Preadolescent_Children)
- 3) [https://www.researchgate.net/publication/49798765\\_Classroom-based\\_physical\\_activity\\_cognition\\_and\\_academic\\_achievement](https://www.researchgate.net/publication/49798765_Classroom-based_physical_activity_cognition_and_academic_achievement)
- 4) [https://www.researchgate.net/publication/297754564\\_Moderate-to-Vigorous\\_Physical\\_Activity\\_Indices\\_of\\_Cognitive\\_Control\\_and\\_Academic\\_Achievement\\_in\\_Preadolescents](https://www.researchgate.net/publication/297754564_Moderate-to-Vigorous_Physical_Activity_Indices_of_Cognitive_Control_and_Academic_Achievement_in_Preadolescents)
- 5) [https://www.researchgate.net/publication/284718378\\_Longitudinal\\_Relationship\\_Between\\_Cardiorespiratory\\_Fitness\\_and\\_Academic\\_Achievement](https://www.researchgate.net/publication/284718378_Longitudinal_Relationship_Between_Cardiorespiratory_Fitness_and_Academic_Achievement)
- 6) [https://www.researchgate.net/publication/51612627\\_The\\_effects\\_of\\_an\\_afterschool\\_physical\\_activity\\_program\\_on\\_working\\_memory\\_in\\_preadolescent\\_children](https://www.researchgate.net/publication/51612627_The_effects_of_an_afterschool_physical_activity_program_on_working_memory_in_preadolescent_children)
- 7) [https://www.researchgate.net/publication/45827358\\_A\\_neuroimaging\\_investigation\\_of\\_the\\_association\\_between\\_aerobic\\_fitness\\_hippocampal\\_volume\\_and\\_memory\\_performance\\_in\\_preadolescent\\_children](https://www.researchgate.net/publication/45827358_A_neuroimaging_investigation_of_the_association_between_aerobic_fitness_hippocampal_volume_and_memory_performance_in_preadolescent_children) (RM)
- 8) [https://www.researchgate.net/publication/236043773\\_The\\_effects\\_of\\_physical\\_activity\\_on\\_functional\\_MRImaging\\_associated\\_with\\_cognitive\\_control\\_in\\_children\\_A\\_randomized\\_controlled\\_intervention](https://www.researchgate.net/publication/236043773_The_effects_of_physical_activity_on_functional_MRImaging_associated_with_cognitive_control_in_children_A_randomized_controlled_intervention) (RM)

#### **REVISIONES SISTEMÁTICAS**

- 1)[https://www.researchgate.net/publication/303319383\\_Physical\\_Activity\\_Fitness\\_Cognitive\\_Function\\_and\\_Academic\\_Achievement\\_in\\_Children\\_A\\_Systematic\\_Review](https://www.researchgate.net/publication/303319383_Physical_Activity_Fitness_Cognitive_Function_and_Academic_Achievement_in_Children_A_Systematic_Review)
- 2)[https://www.researchgate.net/publication/286372316\\_The\\_Effects\\_of\\_Physical\\_Activity\\_and\\_Physical\\_Fitness\\_on\\_Children%27s\\_Achievement\\_and\\_Cognitive\\_Outcomes\\_A\\_Meta-Analysis](https://www.researchgate.net/publication/286372316_The_Effects_of_Physical_Activity_and_Physical_Fitness_on_Children%27s_Achievement_and_Cognitive_Outcomes_A_Meta-Analysis)
- 3)[https://www.researchgate.net/publication/51976743\\_Physical\\_Activity\\_and\\_Performance\\_at\\_School\\_A\\_Systematic\\_Review\\_of\\_the\\_Literature\\_Including\\_a\\_Methodological\\_Quality\\_Assessment](https://www.researchgate.net/publication/51976743_Physical_Activity_and_Performance_at_School_A_Systematic_Review_of_the_Literature_Including_a_Methodological_Quality_Assessment)
- 4)[https://www.researchgate.net/publication/308946845\\_Physical\\_fitness\\_and\\_academic\\_performance\\_in\\_youth\\_A\\_systematic\\_review](https://www.researchgate.net/publication/308946845_Physical_fitness_and_academic_performance_in_youth_A_systematic_review)

- ✓ **Actividad Física y Atención/Autocontrol/Comportamiento**

- 1)[https://www.researchgate.net/publication/266325275\\_Effects\\_of\\_the\\_FITKids\\_Randomized\\_Controlled\\_Trial\\_on\\_Executive\\_Control\\_and\\_Brain\\_Function](https://www.researchgate.net/publication/266325275_Effects_of_the_FITKids_Randomized_Controlled_Trial_on_Executive_Control_and_Brain_Function) (RM)
- 2)[https://www.researchgate.net/publication/227608731\\_A\\_30-Minute\\_Physical\\_Education\\_Program\\_Improves\\_Students%27\\_Executive\\_Attention](https://www.researchgate.net/publication/227608731_A_30-Minute_Physical_Education_Program_Improves_Students%27_Executive_Attention)
- 3)[https://www.researchgate.net/publication/281166732\\_Implementing\\_classroom\\_physical\\_activity\\_breaks\\_Associations\\_with\\_student\\_physical\\_activity\\_and\\_classroom\\_behavior](https://www.researchgate.net/publication/281166732_Implementing_classroom_physical_activity_breaks_Associations_with_student_physical_activity_and_classroom_behavior)