



Executive Functions at the start of kindergarten: are they good predictors of academic performance at the end of year one? A longitudinal study / *Las Funciones Ejecutivas al inicio de kínder, ¿son buenas predictoras del desempeño académico al finalizar primer grado?: un estudio longitudinal*

Ricardo Rosas, Victoria Espinoza, Marion Garolera, and Pedro San-Martín

Centro de Desarrollo de Tecnologías de Inclusión (Inclusive Technologies Development Centre, CEDETi-UC), Pontificia Universidad Católica de Chile

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Abstract: We assessed Executive Functions (Working Memory, Inhibitory Control and Cognitive Flexibility) in 109 children at the start and end of kindergarten, and evaluated the predictive value of these measures on performance in mathematics and language skills in those children at the end of year one (12 and 18 months after the initial Executive Functions evaluation). Our results show that an overall composite score for Executive Functions is able to predict the overall academic performance of students at the end of year one by between 15 and 23% using the evaluations at the various times the Executive Functions were measured. By establishing relationships between the different Executive Functions components and performance, only some of their components remained predictive: Working Memory, Inhibitory Control and the global measure of Executive Functions. When analysing the predictive power of Executive Functions of the various areas of learning, we saw that the overall composite score of Executive Functions explained between 14 and 10% of the domain of reading, and 19 and 9% in the domain of mathematics.

Keywords: Executive Functions; academic performance; preschool; year one

Resumen: Se evaluó a 109 niños a principios y finales de kínder, en medidas de Funciones Ejecutivas (Memoria de Trabajo, Control Inhibitorio y Flexibilidad Cognitiva), y se evaluó el valor predictivo de estas medidas sobre el desempeño en matemáticas y lenguaje a finales de primer grado (12 y 18 meses después de las evaluaciones de Funciones Ejecutivas). Nuestros resultados muestran que un compuesto global de Funciones Ejecutivas logra predecir el desempeño académico general de los estudiantes a fines de primer grado entre un 15% y un 23% por las evaluaciones en los

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Authors' Address / *Correspondencia con los autores:* Ricardo Rosas, Centro de Desarrollo de Tecnologías de Inclusión (CEDETi-UC), Escuela de Psicología, Facultad de Ciencias Sociales, Pontificia Universidad Católica de Chile, Vicuña Mackenna 4860. Macul. Santiago, Chile. E-mail: rrosas@uc.cl