

Psychometrics:

- Beck, D. M., Schaefer, C., & Pang, K., & Carlson, S. M. (2011). Executive function in preschool children: Test-retest reliability. *Journal of Cognition and Development, 12*, 169-193.
- Carlson, S. M., Faja, S., & Beck, D. M. (2015). Incorporating early development into measurement approaches: The need for a continuum of measures across development. In J. A. Griffin, P. McCardle, & L. S. Freund (Eds.), *Executive function in preschool age children: Integrating measurement, neurodevelopment, and translational research* (pp. 45-64). Washington, DC: American Psychological Association.
- Carlson, S. M., & Harrod, J. (2013, April). Validation of the Executive Function Scale for Early Childhood. In J. Griffin (Chair), *Developing the Next Generation of Preschool Outcome Measures: The Interagency School Readiness Measurement Consortium*. Poster symposium presented at the biennial meeting of the Society for Research in Child Development. Seattle, WA.
- Doebel, S., & Zelazo, P. D. (2015). A meta-analysis of the Dimensional Change Card Sort: Implications for developmental theories and the measurement of executive function in children. *Developmental Review, 38*, 241-268.
- Meuwissen, A. S., et al. (2017). The psychometrics of the Minnesota Executive Function Scale. In P. Morris (Chair), *Strengthening the Measurement Toolbox: Development and Validation of Technology-based Executive Function and Cognitive Assessments*. Paper symposium presented at the biennial meeting of the Society for Research in Child Development. Austin, TX.

MEFS is correlated with academic skills:

- Chu, F. W., vanMarle, K., & Geary, D. C. (2013). Quantitative deficits of preschool children at risk for mathematical learning disability. *Frontiers in Psychology, 4*, 1-10.
- vanMarle, K., Chu, F. W., Li, Y., & Geary, D. C. (2014). Acuity of the approximate number system and preschoolers' quantitative development. *Developmental Science*. doi: 10.1111/desc.12143.
- Prager, E. O., Sera, M., & Carlson, S. M. (2016). Executive function and magnitude skills in preschool children. *Journal of Experimental Child Psychology, 147*, 126-139.
- Mazzocco, M. M., Chan, J. Y., & Bock, A. M. (2017). Early executive function and mathematics relations: Correlation does not ensure concordance. *Advances in Child Development and Behavior, 53*, 289-307. <https://doi.org/10.1016/bs.acdb.2017.05.001>
- Tamm, L., Loren, R. E. A., Peugh, J., & Ciesielski, H. A. (2020). The association of executive functioning with academic, behavior, and social performance ratings in children with ADHD. *Journal of Learning Disabilities* [online] 1-15. doi: 022219420961338

MEFS predicts academic achievement:

Hassinger-Das, B., Jordan, N. C., Glutting, J., Irwin, C., & Dyson, N., (2014). Domain-general mediators of the relation between kindergarten number sense and first-grade mathematics achievement. *Journal of Experimental Child Psychology*, 118, 78-92.

Kalstabakken, A.W., Desjardins, C.D., Anderson, J.E., Berghuis, K.J., Hillyer, C.K., Seiwert, M.J., Carlson, S.M., Zelazo, P.D., Masten, A.S. (2021). Executive function measures in early childhood screening: concurrent and predictive validity. *Early Childhood Research Quarterly*, 57, 144-155

Reflection Sciences Technical Report (2017). Prediction of admissions measures to kindergarten reading level. *Report to Marymount School (2014-2016)*.

Reflection Sciences Blog (2020). *MEFS in Preschool Predicts Third Grade Reading and Math Achievement on the Measures of Academic Progress (MAP)*. <https://reflectionsociences.com/pre-k-executive-function-predicts-3rd-grade-academic-achievement/>

Grenell, A., & Carlson, S. M. (2021). Individual differences in executive function and learning: The role of knowledge type and conflict with prior knowledge. *Journal of Experimental Child Psychology*.

MEFS performance is lower in at-risk populations (but not at floor):

Hostinar, C. E., Stellern, S. S., Schaefer, C. M., Carlson, S. M., & Gunnar, M. R. (2012). The impact of early life adversity on executive function in children adopted internationally from orphanages. *Proceedings of the National Academy of Sciences*, 109, 17208-17212.

Doom, J., Gunnar, M. R., Georgieff, M. K., Kroupina, M. G., Frenn, K., Fuglestad, A. J., & Carlson, S. M. (2014). Beyond stimulus deprivation: Iron deficiency and cognitive deficits in post-institutionalized children. *Child Development*, 85, 1805-1812. doi: 10.1111/cdev.12231

Fuglestad, A. J., Whitley, M. L., Carlson, S. M., Boys, C. J., Eckerle, J. K., Fink, B. A., & Wozniak, J. R. (2014). Executive functioning deficits in preschool children with Fetal Alcohol Spectrum Disorders. *Child Neuropsychology*. doi: 10.1080/09297049.2014.933792

Rockhold, M., Kruger, A., de Water, E., Lindgren, C., Sandness, K., Eckerle, J., Schumacher, M., Fink, B., Boys, C., Carlson, S. M., Fuglestad, A., Mattson, S., Jones, K., Riley, E., & Wozniak, J. (2020). Social functioning across development in children and adolescents with prenatal alcohol exposure. *Alcoholism: Clinical and Experimental Research*. Online DOI: [10.1111/acer.14538](https://doi.org/10.1111/acer.14538)

MEFS is related to smarter decision-making:

Lee, W. S. C., & Carlson, S. M. (2015). Knowing when to be “rational:” Economic decision-making and executive function in preschool children. *Child Development*. doi: 10.1111/cdev.12401

MEFS is related to greater understanding of feelings:

Martins, E. C., Osorio, A., Verissimo, M., & Martins, C., (2014). Emotion understanding in preschool children: The role of executive functions. *International Journal of Behavioral Development*. doi: 10.1177/0165025414556096.

MEFS is related to parenting quality:

Distefano, R., Galinsky, E., McClelland, M. M., Zelazo, P. D., & Carlson, S. M. (2018). Autonomy supportive parenting and associations with child and parent executive function. *Journal of Applied Developmental Psychology*, 58, 77-85. <https://doi.org/10.1016/j.appdev.2018.04.007>

Meuwissen, A. S., & Carlson, S. M. (2015). Fathers matter: The role of father parenting in preschool children's executive function. *Journal of Experimental Child Psychology*, 140, 1-15.

Meuwissen, A. S., & Carlson, S. M. (2018). The role of father parenting in child school readiness: A longitudinal follow-up. *Journal of Family Psychology*. doi: [10.1037/fam0000418](https://doi.org/10.1037/fam0000418)

Meuwissen, A. S., & Carlson, S. M. (2019). An experimental study of the effects of autonomy support on preschoolers' self-regulation. *Journal of Applied Developmental Psychology*. <https://doi.org/10.1016/j.appdev.2018.10.001>

Almutairi, S. M. (2019). The role of parenting factors in accelerating or hindering the development of EF in preschool children. Doctoral dissertation, Miami University, Oxford, OH. http://rave.ohiolink.edu/etdc/view?acc_num=miami1554984908299487

MEFS is sensitive to EF interventions and SEL curricula:

White, R. E., & Carlson, S. M. (2015). What would Batman do? Social psychological distance improves executive function performance in young children. *Developmental Science*, doi: 10.1111/desc.12314.

Schubert, E. C. (2016). *Examining moderators of response to executive function reflection training: Initial skill and socioeconomic status*. Doctoral dissertation, University of MN, Minneapolis, MN.

Prager, E. O. (2016). *Executive function and early numeracy in preschoolers: Can training help?* Doctoral dissertation, University of MN, Minneapolis, MN.

Zelazo, P. D., Forston, J. L., Masten, A. S., & Carlson, S. M. (2018). Mindfulness plus reflection training: Effects on executive function in early childhood. *Frontiers in Psychology*, 9:208. doi: 10.3389/fpsyg.2018.00208

Grenell, A., Prager, E. O., Schaefer, C., White, R., Kross, E., Duckworth, A. L., & Carlson, S. M. (2018). Individual differences in the effectiveness of self-distancing for young children's emotion regulation. *British Journal of Developmental Psychology*, 37, 84-100. <http://dx.doi.org/10.1111/bjdp.12259>

Anderson, K. L., Weimer, M., & Fuhs, M. W. (2020). Teacher fidelity to Conscious Discipline and children's executive function skills. *Early Childhood Research Quarterly*, 51, 14-25. doi: [10.1016/j.ecresq.2019.08.003](https://doi.org/10.1016/j.ecresq.2019.08.003)

MEFS performance is linked to brain function:

Perone, S., Palanisamy, J., & Carlson, S. M. (2018). Age-related change in brain rhythms from early to middle childhood: Links to executive function. *Developmental Science*. doi: 10.1111/desc.12691

Other publications citing the MEFS:

Ackerman, D. J., & Friedman-Krauss, A. H. (2017). Preschoolers' executive function: Importance, contributors, research needs and assessment options. *ETS Research Report Series*, 2017(1), 1–24.

Ernst, J. & Burcak, F. (2019). Young children's contributions to sustainability: The influence of nature play on curiosity, executive function skills, creative thinking, and resilience. *Sustainability*, 11, 4212.

Gaete, J., Sanchez, M., Nejaz, L., & Otegui, M. (2019). Mental health prevention in preschool children: Study protocol for a feasibility and acceptability randomized control trial of a culturally adapted version of the I Can Problem Solve (ICPS) program in Chile. *Trials*, 20, 158.

Howell, B. R., Styner, M. A., Gao, W., Yap, P., Wang, L., Baluyot, K....Elison, J. T. (2019). The UNC/UMN Baby Connectome Project (BCP): An overview of the study design and protocol development. *NeuroImage*, 185, 891-905. <https://doi.org/10.1016/j.neuroimage.2018.03.049>

McCoy, D. C. (2019). Measuring young children's executive function and self-regulation in classrooms and other real-world settings. *Clinical Child and Family Psychology Review*, 22, 63-74. <https://doi.org/10.1007/s10567-019-00285-1>

Zamzow, J., & Ernst, J. (2020). Supporting school readiness naturally: Exploring executive function growth in nature preschoolers. *International Journal of Early Childhood Environmental Education*, 7(2).