

DATE: July 30, 2019

TO: Josh Brammer, Office of Information and Regulatory Affairs, Office of Management and Budget

FROM: Christine Fortunato, Office of Planning, Research, and Evaluation, Administration for Children and Families

RE: Request for non-substantive change to the National Survey of Child and Adolescent Well-being Third Cohort (NSCAW III): Data Collection (Phase II)

This memorandum requests approval for a non-substantive change to the information collection (IC) effort approved under OMB Control Number 0970-0202. The purpose of this request is to make the following changes to the 18-month follow-up data collection (Wave 2):

1. Expand the child age range for the Go/No-Go assessment¹ of executive functioning, and
2. Remove the Dimensional Change Card Sort Task.

Information about child executive functioning is *not* a new topic for this IC. The minor change requested would expand the age range of children administered the assessment from the age of 5 or older to 4 or older. Further, due to feasibility issues around implementation and costs, we are unable to administer the Dimensional Change Card Sort Task as planned.

Since this IC was approved in July 2017, additional resources on the assessment of executive function in young children are publicly available. Specifically, the *Executive Function Mapping Project Measures Compendium* (Bailey et al., 2018) provides a summary of available executive function assessments, appropriate age ranges, and research studies that have implemented the assessments. A review of *Compendium* indicated that the Go/No-Go assessment planned for Wave 2 could be administered to children as young as 3 years of age. Further, consultation with experts confirmed successful administration of the Go/No-Go assessment with children as young as 3 or 4-years old. Because 3-year-old children participating in NSCAW receive multiple, complex direct child assessments that require sustained attention and longer interview administration times, we have determined that starting at 4 years old for the Go/No-Go assessment would be most appropriate. See *Attachment 1* for a full list of literature reviewed in support of this request.

Overall, collecting executive function assessments from young children is intended to support a better understanding of attentional control and executive functioning in a vulnerable cohort of young children. Information on executive function is not currently available in national data collection efforts focused on child maltreatment and foster care placements and adoptions.

¹ In the Go/No-Go assessment, a child is asked to press a button whenever a target stimulus (e.g., circle) is shown, but to inhibit this response when a non-target stimulus (e.g., square) is shown. Response time and accuracy (commission and omission errors) are measured.

Expected Benefits

We expect the requested change to be advantageous in that it will allow for the examination of attentional control and executive function in a wider age range of children. Because NSCAW is a longitudinal study, child performance on this assessment could be examined as a predictor of longer-term outcomes, including academic achievement, school engagement, and delinquent behaviors. Collecting this information as part of this ongoing effort is highly relevant given the lack of nationally representative data on young child executive function, particularly in a vulnerable population.

Summary of Proposed Changes

The proposed change is restricted to the “Executive Functioning” (EF) module in the follow-up Child Interview. To expand the age range of children administered from 5 or older to 4 or older, we request the following revisions (additions and updates shown in red).

IF CHILD AGE IS 4 OR OLDER, ADMINISTER THE ~~TWO TESTS OF~~ EXECUTIVE FUNCTIONING: THE SHAPE GO-NOGO TASK ~~AND THEN THE~~ DIMENSIONAL CHANGE CARD SORT TASK

The Shape Go-NoGo task consists of a series of single shapes that “flash” on the laptop screen. The child is instructed to press a button on the laptop as quickly as possible for all shapes except a circle; the child tries not to press the key anytime the circle appears.

~~In the Dimensional Change Card Sort task, the child will be shown pictures on the laptop that vary along two dimensions (e.g., colored shapes such as yellow balls and blue trucks). The child will be asked to first match pictures according to one dimension (e.g., color), and then according to the other dimension (shape).~~

We do not anticipate any changes to the number of respondents in the IC approved under OMB Control Number 0970-0202 because the child cohort size for 5 years and older is lower than anticipated.

Attachment 1: Literature Reviewed in Support of this Request

- Archibald, S. J., & Kerns, K. A. (1999). Identification and description of new tests of executive functioning in children. *Child Neuropsychology*, 5(2), 115-129.
- Bailey, R., Barnes, S. P., Park, C., Sokolovic, N., & Jones, S. M. (2018). Executive Function Mapping Project Measures Compendium: A Resource for Selecting Measures Related to Executive Function and Other Regulation-related Skills in Early Childhood. OPRE Report # 2018-59, . Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Karalunas, S. L., Bierman, K. L., & Huang-Pollock, C. L. (2016). Test–retest reliability and measurement invariance of executive function tasks in young children with and without ADHD. *Journal of attention disorders*, 1087054715627488.
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- Simmonds, D. J., Pekar, J. J., & Mostofsky, S. H. (2008). Meta-analysis of Go/No-go tasks demonstrating that fMRI activation associated with response inhibition is task-dependent. *Neuropsychologia*, 46(1), 224-232.
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- Zhou, Q., Chen, S. H., & Main, A. (2012). Commonalities and differences in the research on children’s effortful control and executive function: A call for an integrated model of self-regulation. *Child development perspectives*, 6(2), 112-121.