

# Development and Validation of an Executive Functions Package and Determination of Its Effectiveness on Communication Skills and Self-Care in Adolescents Aged 14–20 Years with Developmental Intellectual Disability

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## Editor

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## 1. Round 1

### 1.1. Reviewer 1

Reviewer:

The Abstract mentions the use of the Emotion Regulation Questionnaire; however, emotional self-regulation is not consistently reported as a primary dependent variable in the Results section. Please reconcile this inconsistency or clarify whether emotional self-regulation was analyzed as an auxiliary or intermediary construct.

In the paragraph beginning “One of the most influential cognitive constructs linked to adaptive functioning is executive function (EF)”, the manuscript would benefit from a more precise operational definition of EF tailored to adolescents with developmental intellectual disability, rather than relying primarily on general population descriptions.

The statement “executive dysfunction has been identified as a key cognitive mechanism underlying these communication challenges” implies causality. Please consider rephrasing to reflect associational evidence, unless causal pathways are explicitly tested in the current design.

The pooled effect size of 0.16 is interpreted as “large” according to Cohen’s criteria. This appears inconsistent with standard conventions. Please recheck the effect size classification and revise the interpretation accordingly.

While funnel plots are presented, the manuscript would benefit from a brief explanation of visual symmetry criteria and how subjective judgment was minimized when concluding the absence of publication bias.

In Table 5, several codes appear semantically overlapping (e.g., planning, time management, organization). Please clarify the axial coding logic used to distinguish these constructs and provide an example of code merging or exclusion.

The content validity assessment relies on 10 experts. While acceptable, please discuss potential limitations of panel size and whether inter-expert agreement (e.g., kappa) was examined beyond CVR/CVI.

The demographic paragraph reports age ranges extending to 21 years, whereas the study title specifies ages 14–20. Please resolve this discrepancy and clarify eligibility criteria enforcement.

In Table 9, please report assumption diagnostics results numerically (e.g., Levene’s test statistics) rather than descriptively, in line with APA quantitative reporting standards.

Authors revised the manuscript and uploaded the document.

### 1.2. *Reviewer 2*

Reviewer:

While several gaps are mentioned, the novelty of combining systematic package development, meta-analysis, and experimental validation is not sufficiently foregrounded. Please explicitly articulate how this integration advances the existing literature beyond prior EF intervention studies.

In the Study Design and Participants section, both purposive sampling and convenience sampling are reported. Please clarify which sampling strategy applies to which phase, and justify its appropriateness with respect to internal and external validity.

The sentence “randomly assigned to experimental and control groups” lacks detail. Please specify the randomization method (e.g., simple randomization, block randomization) and indicate whether allocation concealment was implemented.

The Communication Skills Questionnaire was standardized in 1997. Please justify its continued suitability for adolescents aged 14–20 with DID and clarify whether any cultural or cognitive adaptations were made for the present sample.

The description of the NSAB is extensive but lacks clear scoring interpretation for the self-care subscale used in this study. Please specify score ranges, normative benchmarks, and how clinical significance was determined.

The inclusion of a meta-analysis within an intervention development study is innovative but unconventional. Please provide a clear methodological justification for embedding a meta-analysis and explain how its findings directly informed the structure of the training package.

Authors revised the manuscript and uploaded the document.

## 2. Revised

Editor’s decision: Accepted.

Editor in Chief’s decision: Accepted.