

LearningWorks for Kids and the Development of the Executive Skills Questionnaire: Parent Version

LearningWorks for Kids

developed the Executive Skills Questionnaire: Parent (ESQ:P) to assess a broad range of executive-functioning difficulties that a parent may observe in his or her child.

This measure is based on Peg Dawson and Richard Guare's 11-category description of executive functioning.

LearningWorks for Kids has added a twelfth executive skill, called social thinking, to our Executive Skills Questionnaire as an addition to the Dawson and Guare skills. We have also developed an Executive Skills Questionnaire for teachers to supplement the parent version and are currently developing a self-report version for children.

It is important that LearningWorks for Kids identify a child's strengths and weaknesses in order to set goals for skill development and improvement. Our Executive Skills Questionnaires were based on the content of previous executive-skills measures and developed and refined using empirical data. The questionnaires have been effective in assessing a child's skills in several domains of executive functioning, including attention, inhibition, initiation, planning, flexibility, persistence, self-regulation, working memory, organization, metacognition, time



management/processing speed, and social thinking. By assessing a child's skills in these domains, LearningWorks for Kids can prescribe a series of recommendations to strengthen a child's executive-functioning skills and improve outcomes at home and school. Many of our recommendations focus on the use of digital technologies, while others are home- and school-based recommendations that do not utilize any type of technology.

In developing these new Executive Functioning Questionnaires LearningWorks for Kids utilized well-known resources in the field of cognitive development and executive functioning such as *Executive Skills in Children and Adolescents* by Peg Dawson and Richard Guare, *The Source for Development of Executive Functions* by Gail Richard and Jill Fahey, *Executive Function in Education* by Lynn Meltzer, and *No Mind Left Behind* by Adam Cox. We also reviewed items from scientifically developed measures such as the *Brown ADD Scales*, *BRIEF Scales*, *BASC-2 Scales*, and other measures of Attention-Deficit/Hyperactivity Disorder. We also included teachers' perspectives on item selection and phrasing during the early stages of questionnaire development. No questions or items from these resources were used in the exact format by LearningWorks for Kids, but rather were utilized as models for our development criteria. LearningWorks for Kids modeled a particular item on the Executive Skills Questionnaire if it met the following development criteria:

- The item fit the LearningWorks 12-category model of executive skills and weaknesses.
- The item could be utilized on the parent, teacher, and child Executive Skills Questionnaires to obtain information from all three sources.
- The item provided information that could inform intervention strategies to assist in the child's executive-skill development. In particular,

LearningWorks sought items that could prompt the use of interventions based in digital-technology strategies.

- The item could be employed in obtaining follow-up information through our online assessments.
- The item could capture variance with executive functions in order to measure a broad range of subset skills.
- The item, within statistical reason, was unique and independent (uncorrelated) from other items.

Once the ESQ:P was completed, it was reviewed by our team of professional psychologists and graduate students in psychology. In conjunction with other standardized measures of executive functioning, the questionnaire is currently provided to parents whose children are receiving services at South County Child and Family Consultants. A follow-up version of the questionnaire is also available for parents to fill out online.

As more patient data are being collected via the ESQ:P, the research team at South County Child and Family Consultants continues to analyze this measure to see what improvements can be made. **Test-Retest Reliability Analyses** have shown that the ESQ:P has strong test-retest reliability, which means that the consistency of the measure remains strong over time.

Therefore, if you were to complete the ESQ:P in regard to your son or daughter tomorrow and then again in one year, differences in the results would likely be due to true differences, rather than measurement error. **Correlation Analyses** have shown that the ESQ:P is a valid measure of executive functioning and comparable to other gold-standard measures of executive functioning. For example, our ESQ:P provides measures of the following domains that are comparable to those measured by the BRIEF and BASC: attention, inhibition, initiation, planning, persistence, flexibility, self-regulation, working memory, organization, metacognition, time management, and social thinking. Lastly, we have used

Factor Analyses to understand how individual items (questions) on the ESQ:P work together to measure domains of executive functioning. This analysis helps us to determine which questions should be added, omitted, or reworded so that each question is tailored to a specific domain. Although no measure is guaranteed to be perfect, we conduct these analyses and edit our measures accordingly to ensure that we are able to assess your child's executive functioning using the most accurate and concise measures possible.