



## The Gesell Early Screener: An Overview

Gesell Institute of Child Development has been associated with understanding how children grow and learn since 1950. A pioneer in the field of child growth and development, Arnold Gesell, PhD, MD, theorized that behavior is a function of structure, and that humans develop in a patterned, predictable way. His pioneering research made notable use of the then new cinematographic technologies to document the developmental stages of over 10,000 children in terms of verbal, motor, social, emotional, and cognitive growth.

Dr. Gesell first developed an assessment of human development and published the widely acclaimed *The Mental Growth of the Pre-School Child: A Psychological Outline of Normal Development from Birth to the Sixth Year, Including a System of Developmental Diagnosis, Illustrated with Two Hundred Action Photographs* which included the Schedules of Human Development in 1925. The Gesell Schedules were used by many to understand how an infant develops during the early years of life through school age. The original Gesell assessment, known today as the Gesell Developmental Observation (GDO) was published with original data in 1925, and updated in 1940, 1965, 1979, and most recently in 2011 Gesell Developmental Observation-Revised (GDO-R).

The GDO Study which was undertaken to update the GDO produced data for each task in the Gesell Early Screener (GES). The GES is a new screening instrument to provide a quick look at a child's developmental capabilities to identify possible developmental delay or disability in four domains for children age 3-6.

### What is the Gesell Early Screener?

The Gesell Early Screener (GES) is a screening instrument that assists parents, educators, and other professionals to quickly determine a child's Performance Level Rating (Age Appropriate, Emerging, Concern) in four domains of development: Cognitive, Language, Motor and Social/Emotional/Adaptive skills. The GES can be reliably administered by persons with varying levels of experience in under 20 minutes. GES scores are used to flag children who may benefit from further diagnostic evaluation. The GES consists of an Examiner's Manual, a Child Recording Form (CRF-S) which includes the standardized script, a set of manipulatives and Teacher and Parent/Guardian Questionnaires. It is designed to be used with children from 3-6 years of age.

### How does the Gesell Early Screener differ from other instruments?

Unlike tests that assess and quantify I.Q., special needs, or specific academic performance skills, the Gesell Early Screener quickly measures a child’s developmental capabilities through direct observation of behavior on a set of eight specific tasks and two supplemental measures (TQ/PQ) to flag a child who may need further evaluation in one or more areas. A sampling of performance in four domains of development is evaluated and scores are compared with quantitative and qualitative rubrics of expected performance levels of typically developing age-matched peers. The GES is different from other instruments of its kind because it is backed not only by recent technical data, but by original Gesell theory of ages and stages.

**Why is developmental screening important?**

Children are individuals. Even those of the same chronological age differ remarkably from one another, each experiencing growth and development in a unique way and at an individualized pace. Developmental screening is the entry point for an integrated program of screening, assessment and intervention services. The Gesell Early Screener (GES), published in September 2011, is an important developmental screening instrument which requires no training, can be used reliably on a wide scale, and uses selected developmental tasks derived from the GDO-R. The GDO-R is a more in-depth instrument which evaluates a child’s process and product to determine Developmental Age and customize classroom instruction.

**What does the Gesell Early Screener measure?**

The Gesell Early Screener measures **cognitive** capacities such as short-term memory, numeracy, planning and organization of thoughts; **language** abilities such as expressing thoughts and needs, understanding conversational exchanges and understanding the use of words in their appropriate context; **motor** planning for small and large muscle groups including gait, balance and coordination; and **social, emotional and adaptive** functioning with adults and peers, as reported by parents and teachers. To use the auto-calculating version of the GES Strand Scoring Worksheet, [click here](#).

<b>GES Strands and Tasks Measured</b>			
<b>Cognitive Strand</b>	<ul style="list-style-type: none"> <li>• Hand-eye coordination</li> <li>• Short-term memory</li> <li>• Attention span</li> <li>• Visual/spatial perception</li> <li>• Pre-mathematical skills</li> <li>• Familiarity with numbers</li> </ul>	<b>Motor Strand</b>	<ul style="list-style-type: none"> <li>• Handedness</li> <li>• Fine motor skills</li> <li>• Large motor skills</li> <li>• Gait, coordination, balance</li> </ul>

<b>Language Strand</b>	<ul style="list-style-type: none"> <li>• Sentence structure</li> <li>• Semantics</li> <li>• Vocabulary</li> <li>• Ability to express self verbally</li> <li>• Ability to understand what is said</li> </ul>	<b>Social Behavior, Emotional Development and Adaptive Skills</b>	<ul style="list-style-type: none"> <li>• Social interaction with peers/adults</li> <li>• Self-regulation</li> <li>• Self-help skills</li> </ul>
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### What is the purpose of the Gesell Early Screener?

The primary purpose of the Gesell Early Screener is to observe a child's responses to a selected group of developmental and academic tasks to detect possible concern or delay, or the possible need for further evaluation in each of four strands, or domains of development:

- Cognitive Strand: Cubes, Copy Forms, Prepositions, One-to-One Correspondence, Conservation, Identifying Numbers
- Language Strand: Interview
- Motor Strand: Handedness, Pencil Grasp, Tiptoe, Balance, Hop, Skip, Throw, Catch
- Social/Emotional/Adaptive Strand: Teacher Questionnaire (TQ) and Parent/Guardian Questionnaire (PQ)

Qualitative rubrics and/or numerically derived scaled scores for each of the four strands assist the examiner to choose one of three Performance Level Ratings for each strand: Age Appropriate, Emerging, or Concern.

### What do teachers like about the Gesell Early Screener?

- Easy to administer in under 20 minutes
- Provides an accurate profile of each child's development and associated abilities across four domains of growth and development
- Provides Performance Level Ratings of (Age Appropriate, Emerging, or Concern) for each strand. Measures Social/Emotional/Adaptive development using Teacher and Parent/Guardian Questionnaires (consumables)
- Provides meaningful information to share with parents in a user-friendly format (Summary Profile Form)
- Standardized script is included in **bold** in the Child Recording Form

- Current psychometric data compiled in a *Technical Report*
- Meets the government mandates for initial screening of a child age 3-6
- Flags children who may need additional diagnostic evaluation

### What are the components of the Gesell Early Screener?

There are seven core components of the GES:

<b>GES Child Recording Form (CRF-S)</b>	The CRF-S contains all of the pages necessary for the examiner to record the child's responses to all screening tasks. Also, the CRF-S includes the Summary Profile Form, and TQ/PQ Recording Chart for scoring the Social/Emotional/Adaptive subscales.
<b>GES Summary Profile Form</b>	The Summary Profile Form provides a summary of a child's scores and is intended to facilitate communication between parents and teachers.
<b>GES Strand Scoring Worksheet (GES-SSW)</b>	The Strand Scoring Worksheet guides the examiner through the calculations necessary for strand scoring. A hardcopy is available in the Appendix of the Examiner's Manual, as well as an auto-calculating version here.
<b>Teacher Questionnaire (TQ)</b>	The TQ allows the teacher to record social, emotional and adaptive behavior observed in the classroom. For example, the TQ also documents how, where, and with whom the child plays most often.
<b>Parent/Guardian Questionnaire (PQ)</b>	The PQ collects information about the child's prenatal and early health history as well as important social, emotional, and adaptive behavior observed by the family and caregivers in the home.
<b>GES Examiner's Manual</b>	The Examiner's Manual contains information about the rationale, purpose, and development of the GES. It also provides specific information about the administration, scoring, and interpretation of all GES tasks.
<b>Manipulatives</b>	The GES kit includes 10 one-inch red cubes, a beanbag, a small jar with pellets, Copy Forms task cards, and Number card.

### What tasks are part of the Gesell Early Screener?

The GES consists of the following eight tasks and parent/teacher measures. Subsets of Numeracy and Identifying Numbers tasks are administered according to the child's age.

GES Tasks	
<ul style="list-style-type: none"> <li>• Cubes</li> <li>• Interview</li> <li>• Copy Forms</li> <li>• Prepositions</li> </ul>	<ul style="list-style-type: none"> <li>• Identifying Numbers</li> <li>• Numeracy               <ul style="list-style-type: none"> <li>○ <i>One-to-One Correspondence</i></li> <li>○ <i>Conservation</i></li> </ul> </li> <li>• Fine Motor/ Gross Motor</li> </ul>
<ul style="list-style-type: none"> <li>• Teacher Questionnaire</li> <li>• Parent/Guardian Questionnaire</li> </ul>	

### What does each task measure?

**Cubes:** This set of tasks provides information about horizontal and visual perception, fine motor coordination, attention span, pre-mathematical skills, short-term and visual memory, and spatial judgment.

**Interview:** Answers to the series of questions in this section reveal a child's speech and language skills, as well as the ability to recall everyday experiences. Responses provide a glimpse of the child's cognitive organizational skills, ability to stay on task, and ability to follow directions.

**Copy Forms:** This set of tasks examines a child's competence in integrating visual information with motor abilities, visual tracking skills, and discrimination abilities. Skills needed in the various forms are associated with handwriting, reading comprehension, and ability to recognize and recall letters and numbers.

**Prepositions:** This task assesses the child's understanding of specific prepositional phrases and his/her ability to apply them to a corresponding action.

**Identifying Numbers:** This task requires children to identify random numerals 1-12 by name. This task is dependent upon prior knowledge.

**Numeracy:** This task consists of two measures: One-to-One Correspondence and Conservation. The child is asked to count a set of 4 items, using one-to-one correspondence, and then to tell how many there are in the set altogether (conservation). The second set of 10 items is presented to older children ( $\geq 4^6$ ) for both one-to-one and conservation.

**Fine and Gross Motor:** Fine motor skills are observed through the Cubes and Copy Forms task and through pencil grasp. Gross motor skills offer additional information concerning large

motor skills, balance, gait and coordination as the child walks on tiptoe, balances on one foot, hops, skips, throws, and catches.

**Social Behavior, Emotional Development and Adaptive Skills:** These measures of social and emotional growth assess a child's interactions with peers and adults, ability to self-regulate, and self-help skills.

### **Is the Gesell Early Screener reliable and valid?**

The GDO was the focus of a nationwide study in 2008-2010 to collect technical data for children 3-6 years of age on all 20 GDO tasks plus Overt Behavior, and Social/Emotional/Adaptive measures. This included collecting data using revised language on some tasks, and data on newly developed teacher and parent questionnaires which reflects current assessment practice on parent involvement and social and emotional areas of development. All items for each of the GDO tasks were administered to all children, whenever practical, using a standardized administration. In this way, scientific trends for mastery of items were documented as all children were given an opportunity to try each item in a task, even if the task was developmentally above or below developmental expectations based on their chronological age.

The Gesell Early Screener (GES) is made up of select items and tasks used in the GDO Study. Century Analytics was contracted to conduct further analyses to determine the specific items and tasks for inclusion in the GES. The task selection process was based on the following criteria:

1. The screener must be able to be administered in 20 minutes or less. Consequently, not all GDO tasks were included.
2. The set of screener tasks must reliably identify a child's current development in four domains (Cognitive, Language, Motor, and Social/Emotional/Adaptive).
3. Screener tasks must accurately identify a child's current development with similar reliability as its corresponding strand of larger tasks. Tasks which demonstrated the highest correlations with the rest of the strand were considered for the GES.
4. The tasks must be easy to administer with objective scoring. Objective scoring increases the reliability of the GES results between examiners.
5. Screener tasks must be able to be administered by individuals with varying levels of experience and ability. Any task which required specialized interpretation training was not included.

The complete GDO-R *Technical Report* and the complete GES *Technical Report* are both available upon request.

### **What constitutes *inappropriate* use of the Gesell Early Screener?**

- Gesell Institute is specifically opposed to the practice of excluding children from school programs on the basis of any assessment or screening tool. All children deserve the right to and opportunity for appropriate educational experiences during the early years.
- The Gesell Early Screener, or any *single* instrument, should never be used as the sole determinant of a child's placement in school. In making educational decisions for a child, multiple assessments, including parent observations, teacher observations, medical history, and a portfolio of a child's work should be included.
- Gesell materials should never be used for academic tracking, labeling or high-stakes assessment. The GES does not discriminate on the basis of language, race, ethnicity, or economic status.
- In order to obtain results which are reliable and valid, the GES must be administered in its entirety for the age band for which the tasks were designed. This includes the use of the two complementary measures, the TQ and the PQ. Any partial or incomplete use of the GES is unreliable, cannot provide comprehensive results and is not endorsed by Gesell Institute.
- Gesell materials are not intended to be used to identify possible special needs children. The GES can identify if a child may be at risk for developmental delay, but cannot identify nor diagnose any disease or condition of disability. However, Performance Level Ratings of *Concern* on any of the strands of the Gesell Early Screener may stand out as being a signal of an area to monitor for periodic re-screening or for referral for specialized evaluation.

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please visit our website at [www.gesellinstitute.org](http://www.gesellinstitute.org).*