



The Gesell Developmental Observation: An Overview

The Gesell Institute of Human 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, Ph.D., M.D., theorized that behavior is a function of structure, and that humans develop in a patterned, predictable way. As evidenced by systematic, detailed studies of more than 10,000 children, each developmental age has characteristic patterns of mental and physical organization, social and emotional behavior, and play interests and activities.

The Gesell Institute greatly respects individuality and the importance of the interaction between organism and environment, yet clinical observations have shown that developmental sequences are relatively consistent from child to child, evolving more or less spontaneously and inevitably in normal surroundings, with basic uniformity. The formulation of the Gesell Developmental Observation, based on the work of Dr. Gesell, has enabled a child's behaviors to be observed, recorded, and matched with these normative patterns to ascertain his or her developmental age.

What is the Gesell Developmental Observation?

The Gesell Developmental Observation (GDO) is a comprehensive developmental screening tool that assists parents, educators, and other professionals in understanding characteristics of child behavior in relation to typical growth patterns. Gesell tools have been used as standard measures for child growth and development since the introduction of the initial scales in 1925. Long used by pediatricians and recently revised and updated, Gesell materials and training focus on direct observation to measure a child's neuro-motor, language, and cognitive development. The comprehensive GDO is designed to be used with children from 2½ to 9 years of age.

A trained examiner conducts this standardized procedure by observing and recording a child's behavioral responses and comparing them with age related norms. In addition to direct responses to the various tasks, the examiner also considers the child's processes, organization, method, overt behaviors, and verbalization, in order to determine his or her overall developmental stage, relative to his or her chronological age. Additionally, it reveals the child's individual rate of growth and consistency in the total growth process.

How does the Gesell Developmental Observation differ from other tools?

Unlike tests that assess and quantify I.Q., special needs, or specific academic performance skills, the Gesell tool measures a child's behavior through direct observation. A sampling of behaviors from various areas of development are observed and matched with normative patterns of behavior established for each developmental level. Gesell Developmental Age helps educators and parents to know where a child is in relation to typical growth patterns. There are no right or wrong answers on the GDO, since it is concerned with the individual child's response in relation to the developmental continuum. The child-friendly tasks are specifically designed to allow the child to feel successful within his or her developmental level.

Additionally, the Gesell Institute offers comprehensive professional training and technical assistance not offered with any similar instrument. Not only do educators who attend Gesell workshops learn how to use the tool to determine the developmental age of their students, but a critical component of the training includes an in-depth understanding of child behavior and the process of growth and learning. Participants acquire new skills in observing and interpreting child behaviors and understanding the unique ways in which individual children respond to curricular demands.

What does the Gesell Developmental Observation measure?

The comprehensive GDO tool measures the following critical areas of development, also monitoring the *process* a child uses while responding to the various tasks.

Physical/Neurological Growth

- Fine motor skills
- Eye-hand coordination
- Visual tracking and integration
- Large motor skills

Language Skills

- Sentence structure
- Semantics
- Vocabulary
- Ability to express self verbally
- Verbal classification skills

Adaptive Behaviors

- Thinking
- Memory
- Perception
- Attention to task
- Ability to follow directions
- Short term visual and auditory memory
- Cognitive-perceptual patterning
- Organizational skills
- Logical mathematical thinking skills
- Application of what is learned

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. Recognizing where individual children are in the developmental growth process, and understanding their behavior and changing abilities and capacities over time helps parents, educators, and other professionals better meet their needs at home, in school, and in the community. Additionally, developmental screening can highlight areas of concern and often provide the first indications for follow up diagnostic assessment.

What is the purpose of the Gesell Developmental Observation?

The primary purpose of Gesell Developmental Observation is to observe a child's overall behavior in order to identify where he or she is functioning along the continuous progression of human growth and development. It provides a developmental age that may be equal to, older, or younger than his or her chronological age. This helps in understanding the child's overall growth pattern and the integrity of the growth process over time.

Knowing the process and products that are typical of growth and development provides educators with a wealth of information. Gesell tools and training provide professionals with observational skills integral in a developmentally appropriate classroom, where knowledge of developmental growth patterns serves as the foundation of teaching. Observations that reveal atypical patterns of behavior provide timely indications of the need for further evaluation.

What's more, parents who understand and respect developmental stages and behaviors can set more appropriate and realistic expectations for their children. Appropriate experiences that match developmental each give children the best opportunities to learn well without excessive stress, both in the classroom and at home. While nothing is known that can speed up a child's overall development, creating enriching activities that are developmentally appropriate help children to grow more fully at their current developmental level.

Given at regular intervals, the GDO can monitor a child's growth over time, allowing teachers and parents to better understand a child's individual growth pattern. Repeated observations assist in tracking a child's level of consistency on the developmental continuum and provide the opportunity to document any inconsistencies that might interfere with a child's learning, or which might point to further evaluation in a certain area of development.

Why do teachers like the Gesell Developmental Observation?

- It is easy to use
- It is child friendly and fun
- It guarantees successful completion by every child
- It reveals unique and distinguishing characteristics about a child's behavior
- It measures specific cognitive skills
- It provides an accurate picture of developmental levels and associated abilities
- It links assessment outcomes to curriculum activities
- It provides meaningful information to parents

What are the components of the Gesell Developmental Observation?

The GDO consists of the following tasks, subsets of which are administered according to the child's age. Because the tool includes preschool, kindergarten, and school age tasks, examiners have the flexibility to add tasks when more information about any particular child is needed.

- Cubes
- Copy Forms
- Incomplete Man
- Interview
- Writing Names and Numbers
- Form Board
- Color Forms
- Visual I
- Visual III
- Digit Repetition
- Action Agents
- Comprehension
- Prepositions
- Computation
- Right and Left
- Animals and Interests
- Large Motor Abilities

What does each task measure?

Cubes: This set of tasks provides information about horizontal and visual perception, fine motor coordination, attention span, and spatial judgment. Skills in the various tasks are associated with handwriting, reading comprehension, ability to recognize and recall letters and numbers.

Initial 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 follow directions.

Paper and Pencil/Copy Forms: This set of tasks examines a child's competence in integrating visual information with motor abilities, visual tracking skills and discrimination abilities. The size, shape, and organization of the products indicate maturity in fine motor ability, organizational skills, awareness of detail, visual perceptions, ability to execute angles, and overall eye-hand coordination.

Incomplete Man: This task measures manual skill, perceptual awareness, and spontaneous task completion.

Animals and Interests: Responses provide information about a child's level of expressive and receptive language, retrieval skills and cognitive organization processes. Recall, ability to conceptualize, attention to task, and classification skills are also observed.

Visual I: This visual discrimination test demands understanding of right to left orientation, and the ability to sustain, to find one's place repeatedly, and to carry out directions. This area relates to pre-reading and reading readiness activities.

Visual III: This task observes a child's short term visual memory and may help to provide indicators of academic performance in the areas of spelling, reading, comprehension, and handwriting.

Right/Left: This is a developmental item used to check children's spatial orientation.

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

Digit Repetition: This task measures auditory and short term memory.

Comprehension Questions: A child's performance in this area measures cognitive processes related to problem solving, personal experience, and knowledge and understanding of specific words and phrases.

Color Forms: This test measures visual discrimination.

Action Agents: Language comprehension skills are measured on this item. This is one of the most difficult tasks for children, and one of the most important ones for examiners to observe. It requires a long attention span, ability to focus, to sustain, and stay on task.

Three-Hole Form Board: This item uses puzzle like materials to measure a child's visual discrimination, depth perception, and spatial perceptual accuracy.

Pellets: This fine-motor task determines eye-hand coordination skills.

Motor: These activities offer additional information related to a child's physical interpretation of mental processes, reflected in fine motor skills, hand-eye coordination, visual perception, and large motor skills.

Is the Gesell Developmental Observation reliable and valid?

The GDO has been shown to be reliable and valid with regard to agreement in scoring, internal consistency, and test-retest stability. Several independent research studies have been conducted since the 1970s, each time showing consistency in reliability and validity measures. The Gesell Institute is currently in the process of developing an overview of these independent studies and discussion have been underway for some time in regard to more large-scale studies examining the developmental norms and measures of reliability and validity. Initial pretests strongly support the reliability and validity of the instrument when it is administered and utilized in the recommended and appropriate manner.

What constitutes inappropriate use of the Gesell Developmental Observation?

The 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 Developmental Observation, 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 factors, including parent information, teacher observations, medical history, and a portfolio of a child's work should be included.

Gesell materials should never be used for academic tracking or high stakes assessment.

Parents should always have the final say regarding their child's schooling. The Gesell Observation is intended to give a developmental understanding of the whole child so that parents can make an informed decision.

Gesell materials are not intended to be used as a screening tool to identify possible special needs children. However, there are some responses that stand out as being signals of areas to monitor. Gesell materials measure developmental maturity within normal ranges.

Only trained and experienced Gesell examiners can adequately utilize the detailed observational data for which Gesell Developmental Observations were intended.

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