

One

OVERVIEW OF THE BAYLEY-4

Vincent C. Alfonso, Joseph R. Engler, and Andrea D. Turner

Gonzaga University and Pearson Assessments

ASSESSING INFANT AND TODDLER DEVELOPMENT

It is important to have a context from which to understand the main focus of this volume, which, of course, is the *Bayley Scales of Infant and Toddler Development—Fourth Edition* (Bayley-4; Bayley & Aylward, 2019a). As such, we begin with a brief history of infant and toddler development by using several sources of information including Black and Matula (2000), Goodman (1990), and Kelley and Surbeck (2007). Additionally, Sattler (2018a) has a very useful summary of the historical milestones on intellectual and developmental assessment. The interested reader is encouraged to review these sources as well as others to gain a thorough understanding of the history of infant and toddler assessment. Next, we highlight the importance of infant and toddler assessment, state the purposes of early childhood assessment, and list the typical developmental domains assessed. Finally, we provide a summary list of nearly 200 infant and toddler assessments as a resource; that summary list is found in the Appendix.

BRIEF HISTORY OF INFANT AND TODDLER ASSESSMENT¹

Many practitioners, especially those new to the assessment of infants and toddlers, may believe practitioners have been assessing young children for a long time, yet the history of early childhood assessment including infants, toddlers, and preschoolers is only about 200 years old (Kelley & Surbeck, 2007). Influences on early childhood assessment include dozens of individuals, but a few in

Essentials of Bayley™-4 Assessment, First Edition. Vincent C. Alfonso, Joseph R. Engler and Andrea D. Turner.

© 2022 John Wiley & Sons, Inc. Published 2022 by John Wiley & Sons, Inc.

particular are worth mentioning. For example, the precursor to early childhood assessment and developmental psychology may be attributed to the naturalistic observations of Johann Heinrich Pestalozzi in the 18th century and G. Stanley Hall, who is regarded as the father of developmental psychology and was the first president of the American Psychological Association (APA; Black & Matula, 2000). In the latter part of the 19th century, Sir Francis Galton, a cousin to Charles Darwin, constructed “tests of memory, motor, and sensory functions to differentiate between high and low achievers” (Kelley & Surbeck, 2007, p. 4). As a result, Galton became known as the father of mental testing. Perhaps the most famous early contributor to the practice of early childhood assessment, especially the assessment of mental ability or intelligence, was Alfred Binet, who, with Theodore Simon, created the Binet–Simon Scale for measuring the intelligence of school children (Binet & Simon, 1905). It was translated into English from French by Henry Goddard (a student of G. Stanley Hall) who also believed in the importance of early diagnosis, systematic testing, and special placements for school-aged students who evidenced learning difficulties (Kelley & Surbeck, 2007). The Binet–Simon Scale became the template for most, if not all, intelligence and cognitive batteries to the present day.

The child study movement of the early 1900s, that saw a proliferation of funding, studies, and assessments of school-aged children focusing on intelligence, memory, perception, emotion, personality, and motivation, influenced early childhood psychologists to begin paying attention to infants, toddlers, and preschoolers (Black & Matula, 2000; Kelley & Surbeck, 2007). Among the most famous and influential early childhood (infant) psychologists was Arnold Gesell who was also a pediatrician by training. Some refer to him as the grandfather of infant assessment (Goodman, 1990). According to Black and Matula (2000), Gesell, who was greatly influenced by Charles Darwin, “compiled a schedule of tasks for *infants ages 4, 6, 9, 12, and 18 months of age and 2, 3, 4, and 5 years of age*” (Gesell, 1925a, p. 3). These Developmental Schedules continued to be used for decades in various circles, especially by medical personnel (Goodman, 1990), and influenced the first infant intelligence tests such as the *Cattell Infant Intelligence Scale* (Cattell, 1940), *Griffiths Mental Development Scale for Testing Babies from Birth to Two Years* (Griffiths, 1951), and *Bayley Scales of Infant Development* (Bayley, 1969). Black and Matula (2000) state, “These early assessments were designed to catalog an infant’s level of development at various ages and to establish normative data” (p. 4). They did not predict future functioning as many thought they would, which called into question their utility (Goodman, 1990).

In the past 50 years, several factors or variables influenced the importance of early childhood assessment as well as the proliferation of measures or instruments to accomplish the task of reliable and valid assessment. Perhaps the most salient

are the following, as cited in Black and Matula (2000): (a) many premature and medically challenged infants are surviving, which typically necessitates assessment, (b) infant assessments are needed to determine if infants are developing at an expected rate or evidencing a developmental delay, (c) whether young children meet the criteria for early intervention services, and (d) whether early intervention is effective in improving their rate of development. The next section of this chapter addresses directly the importance of infant and toddler assessment. We end this section with a brief discussion of two of the most influential educational initiatives in the history of the United States; namely, Head Start and early intervention (via public laws).

Head Start and its younger sibling, Early Head Start, are arguably the most successful early childhood programs of the past 57 and 25 years, respectively, especially when services they provide continue for years after children begin the programs. In short, these programs are designed to provide high-quality early childhood education and care that have a positive impact on young children's, especially those from low-income households, cognitive, language, and social development (Raines et al., 2020). The roots of Head Start² date back to 1965 when President Lyndon B. Johnson declared war on poverty. Drs. Robert Cooke and Edward Zigler were instrumental in launching Head Start, which established performance standards in 1975 and began offering full-day and full-year services in 1998. In 2007, the Improving Head Start for the School Readiness Act was reauthorized. Several provisions were included in this act to ensure the delivery of high-quality early childhood education and care. In the years that followed, additional changes were made to Head Start and Early Head Start including the Designation Renewal System and revised Program Performance Standards. The Head Start Program serves more than 1 million children and families each year and since 1965 has served more than 36 million children and families. It is administered by the Administration for Children and Families in the Department of Health and Human Services.

A series of public laws passed between 1975 and 2004 guaranteed all students (and children) a free and appropriate public education, or FAPE, and an Individualized Education Program, or IEP, for students identified with a disability that would address their specific educational needs (McBride et al., 2011). The first of these public laws, called The Education of the Handicapped Act (EHA), was passed in 1975, went into effect in 1977, and ensured special education and related services to students with disabilities between the ages of 5

DON'T FORGET 1.1

Two of the most influential educational initiatives in the history of the United States were Head Start and early intervention via public laws.

and 21 years. Effectively, the EHA, or Public Law [PL] 94-142, addressed the needs of school-aged students. In 1986 PL 99-457, the Education of the Handicapped Act Amendments, was passed and required states to provide FAPE to children with disabilities aged 3–5 years. PL 99-457 also included Part H, the Handicapped Infants and Toddlers Program, which “established incentives for states to develop services for infants and toddlers with special needs” (Nagle et al., 2020, p. 3). Typically, services could be rendered when an infant assessment revealed developmental delays in cognitive, physical, communication, social or emotional, and/or adaptive development (Black & Matula, 2000). Infants diagnosed with a physical or mental condition who had a high probability to result in developmental delay were also included.

In 1990, PL 101-476 renamed the original act (i.e., the EHA) the Individuals with Disabilities Education Act or IDEA and in 1991 PL 102-119 (Individuals with Disabilities Education Act Amendments of 1991) included developmental delay as a classification option for children with disabilities between the ages of 3 and 5 years. The IDEA was reauthorized in 1997 (PL 105-17) and extended the classification of developmental delay to the age of 9 years. Then in 2004, the IDEA was renamed the Individuals with Disabilities Education Improvement Act (IDEIA; PL 108-446). Part B, Section 619 of the IDEIA incorporated previous amendments ensuring free and appropriate special education services for preschoolers aged 3 to 5 years and continued to allow states to use developmental delay as a classification category for individuals up to the age of 9 years (Alfonso et al., in press; Raines et al., 2020). Again, areas of developmental delay included cognitive, communication, social or emotional, and/or adaptive domains. Part C of IDEIA continued to encourage states to develop and provide comprehensive early intervention services for infants and toddlers with disabilities and their families, emphasized providing care in the home and in community settings, and mandated family involvement in the evaluation and intervention process (Alfonso et al., in press; Raines et al., 2020).

According to Part C of IDEIA, young children (i.e., birth to age 3 years) eligible for early intervention services are those who demonstrate delays via a reliable and valid assessment, already have diagnosed conditions associated with future developmental delay, or are “at-risk” for a disability (Roberts & Kennert, 2018). IDEIA also emphasized transitional services from Part C to Part B programs for preschoolers as well as a focus on scientifically-based academic and behavioral interventions, including early literacy interventions. Part C also required family directed assessment and an Individualized Family Service Plan, or IFSP, to address resources, priorities, and concerns of the family as well as the identification of supports and services necessary to assist the family in meeting the developmental needs of their child (Alfonso et al., in press; Lipkin & Okamoto, 2015).

Finally, in 2015, PL 107-110 or the No Child Left Behind Act, which has its roots in the original Elementary and Secondary Education Act of 1965 (PL 89-10), was replaced by the Every Student Succeeds Act (ESSA; PL 114-95). The ESSA expanded access to high-quality early learning with the particular goal of reaching children who are disadvantaged or have high needs. It also includes funding to improve the coordination, quality, and access to early childhood education.

IMPORTANCE OF ASSESSING INFANT AND TODDLER DEVELOPMENT

There are few guarantees in life and perhaps even fewer facts or truths in psychology or education. However, in the past few decades research and myriad studies have demonstrated the benefits of early childhood education and early intervention (Alfonso, Ruby et al., 2020; Guralnick, 1997; Hughes & Quinn, 2020; Raines et al., 2020; Ramey & Ramey, 1998, 2004; Ramey et al., 2014; Redden et al., 2001, 1999; Schweinhart & Weikart, 1998; Trohanis, 2008; Zigler & Muenchow, 1992). Moreover, this fact or truth seems to resonate with individuals from all walks of life, political parties, and professions who engage in working with young children (e.g., Division for Early Childhood [DEC] of the Council for Exceptional Children, Division for Early Childhood, 2014; National Association for the Education of Young Children [NAEYC], National Association of School Psychologists, 2015; Public Laws 99-457, 101-476, 105-117, and 108-446).

The importance of early childhood education and early intervention, together with major advances in prenatal care, pediatric medicine, neuropsychology, and neuroimaging, have highlighted the need for reliable and valid assessment of infants and toddlers (e.g., Aylward, 2010, 2020; Brito et al., 2019; Kelley & Surbeck,

DON'T FORGET 1.2

The major purposes of infant and toddler assessment include screening, diagnosis and eligibility determination, individual program planning and monitoring, and program evaluation.

2007; McCloskey et al., 2020; Snow & Van Hemel, 2008). Many scholars, researchers, and organizations believe there are several purposes of infant and toddler assessment. For example, Nagle et al. (2020) integrated other sources such as NAEYC, DEC, and individual scholarly works to summarize the major purposes, which they state are the following: (a) screening, (b) diagnosis and eligibility determination, (c) individual program planning and monitoring, and (d) program evaluation.

Typical domains of development requiring assessment include cognitive abilities and processes, motor skills, speech and language skills, social-emotional behavior, and adaptive behavior (Alfonso et al., 2020; Alfonso, Engler et al., 2020; Bellman et al., 2013; Brassard & Boehm, 2007; NAEYC, 2020; National Research Council, 2008). Additional domains to assess include intrauterine (prenatal and perinatal), physical, parenting and parenting stress, and play. The last domain, play, is particularly important to assess as there is ample evidence regarding the benefits of play on the young child's developing brain, social interactions, and cognitive functioning (e.g., Kelly-Vance & Ryalls, 2020).

Indeed, the Bayley-4, the newest edition of the venerable Bayley Scales, may be used for the following purposes:

DON'T FORGET 1.3

The Bayley-4 provides information on a young child's cognitive, language, motor, social-emotional, and adaptive behavior functioning.

(a) to identify children with developmental delay, (b) research related to individual program planning and monitoring and program evaluation, and (c) to monitor a child's developmental progress. The first and third purposes are accomplished with the

Bayley-4 by assessing the young child's cognitive, language, motor, social-emotional, and adaptive behavior functioning.

INFANT AND TODDLER ASSESSMENTS

Black and Matula (2000) provided a brief overview of 11 infant developmental assessments and cautioned readers that the quality of normative data varied and that readers should review test manuals to determine the psychometric quality of these assessments as well as their suitability (qualitative characteristics) for young children. Here, in the Appendix, we provide a list of nearly 200 infant and toddler developmental assessments including screening instruments dating as far back as 1916 to the present time. It is clear that the sheer number of assessments available for young children has increased greatly, which is perhaps an indirect testament to the importance and growing practice of assessing young children. Indeed, according to Kelley and Surbeck (2007), "More than 200 assessment instruments were constructed and published in the years 1960–1980" (p. 14). These assessments cover a variety of developmental domains including those stated earlier (i.e., cognitive, motor, speech and language, social-emotional behavior, and adaptive behavior).

Space limitations preclude a discussion or even a brief description of these assessments. However, we refer readers to Tables 1.3 to 1.5 later in this chapter and to

Chapter 6 for criteria to evaluate infant and toddler assessments and our evaluation of the Bayley-4, respectively. These tables and text can assist new practitioners who are interested in reviewing and evaluating assessments used with young children. In addition, the readers may find Alfonso et al. (2018), Bracken et al. (1998), Brassard and Boehm (2007), Engler and Alfonso (2020), Floyd et al. (2015), Lidz (2002), Monsma et al. (2020), Mowder et al. (2009), Nuttall et al. (1999), and Terjesen and colleagues (Terjesen et al., 2019), to name a few, as useful scholarly works in their deliberations regarding selection of a psychometrically sound and suitable assessment of young children.

CAUTION 1.1

Given the variability regarding the psychometric soundness and suitability of assessments for young children, practitioners should review the quantitative and qualitative characteristics of the assessment before employing it.

HISTORY AND DEVELOPMENT OF THE BAYLEY SCALES

In the sections that follow, we provide a brief biography of Dr. Nancy Bayley as a tribute to her lifelong accomplishments and contributions to developmental psychology, young children and their families, and society as a whole. Next we discuss the first three Bayley Scales (Bayley, 1969, 1993, 2006) to give readers a sense of the timeline of these venerable scales as well as the improvements that took place from edition to edition. This section concludes with information regarding the development of the Bayley-4.

BRIEF BIOGRAPHY OF DR. NANCY BAYLEY³

It is not an understatement to claim that Dr. Nancy Bayley was one of the most prolific authors, test developers, and erudite developmental psychologists in the United States and perhaps the world. A review of Rapid Reference 1.1 demonstrates this clearly and, in fact, may underestimate her accomplishments and contributions. She is, without doubt, one of the few premier female test developers in psychology who was recognized in certain circles; however, her name and illustrious career are not known to many professionals who do not work with young children. Here we provide a brief biography of Dr. Bayley, highlighting her accomplishments and contributions, before exploring the history and development of the Bayley Scales, now of course in its 4th edition.

Dr. Bayley was the third of five children and was born on September 28, 1899 to Prudence Cooper and Frederick W. Bayley in Dalles, Oregon. She died from respiratory failure at 95 years of age in Carmel, California in 1994.

Rapid Reference 1.1

Summary of Dr. Bayley's Accomplishments and Contributions to Developmental Psychology

- Published *The California First Year Mental Scale* in 1933 and *The California Infant Scale of Motor Development* in 1936
- Published *Mental Growth During the First Three Years* in 1933
- Served as head of child development in the Laboratory of Psychology at the National Institute of Mental Health in Bethesda, Maryland, in 1954
- Served as president of the Society for Research in Child Development from 1961 to 1963
- Received the Distinguished Scientific Contribution Award of the American Psychological Association in 1966. She was the first woman to receive this honor.
- Published the Bayley Scales of Infant Development in 1969
- Received the G. Stanley Hall Award for distinguished contributions to developmental psychology in 1971 and the Gold Medal Award of the American Psychological Association in 1982
- Served as an examiner for the American Board of Professional Examiners in Professional Psychology
- Served as representative from the Division on Developmental Psychology to the Council of Representatives of the American Psychological Association
- Published more than 200 scholarly works
- Referenced 316 times between 1983 and 1991
- Contributed to research in the areas of growth and skeletal maturation, body build and androgyny, issues of measurement and methodology, and motor and mental development

Sources: Lipsitt and Eichorn (1990), Rosenblith (1992)

Although she was often sick as a child, she completed elementary and secondary school. Then she attended the University of Washington where she planned to study to be an English teacher. Rather than becoming an English teacher, she became interested in psychology after taking a course with E. B. Guthrie. Thereafter, she earned her bachelor's and master's degrees in psychology in 1922 and 1924, respectively. She served as a research assistant at the University's Gatzert Foundation for Child Welfare and her master's thesis involved the construction of performance tests for preschool children. Dr. Bayley continued her education at the University of Iowa where she earned her PhD in psychology and became greatly interested in studying young children, especially infants and toddlers. Her dissertation research involved studying children's fears using the galvanic skin response.

Although she taught at the University of Wyoming for two years, her strong interest in young children, motivation to conduct research, and clinical acumen led her to

the Institute for Child Welfare, which is now the Institute of Human Development. After an invitation from Harold E. Jones at the University of California, Berkeley in 1928 she quickly engaged in her first and still very impressive research project called the Berkeley Growth Study (Bayley & Schaefer, 1964). She married John R. Reid in 1929 whom she met at Berkeley. It was at the Institute for Human Development that Dr. Bayley worked on and published *The California First Year Mental Scale* and *The California Infant Scale of Motor Development* in 1933 and 1936, respectively, as well as *Mental Growth During the First Three Years* in 1933, a landmark publication in developmental psychology. The aforementioned scales would be the foundation of the *Bayley Scales of Infant Development* (BSID) published in 1969.

Dr. Bayley held professor posts at Berkeley, Stanford University, and the University of Maryland. In addition, she became chief of the section on Child Development at the National Institute of Mental Health (NIMH) in Bethesda, Maryland in 1954 where she worked on the National Collaborative Perinatal Project, a study of 50,000 children from birth to age eight years. The study examined neurological and psychological disorders, including cerebral palsy and intellectual disability. She held the chief position at the NIMH for 10 years while maintaining a research position at Berkeley and was an administrator of the Harold E. Jones Child Study Center of the Institute of Human Development. Dr. Bayley retired from the University of California, Berkeley in 1968 only to complete the BSID that quickly became the gold standard instrument for assessing young children's mental and motor functioning (Sattler, 2018b). In 1966, she was the first woman to receive the Distinguished Scientific Contribution Award from the APA. Two excellent sources of information regarding Dr. Bayley are Lipsitt and Eichorn (1990) and Rosenblith (1992). Finally, we had the opportunity to speak with Drs. James Gyurke, Larry Weiss, and Glen Aylward prior to writing this volume. They were instrumental in revising the Bayley Scales over the years and either interacted with or were very familiar with Dr. Bayley's works. Rapid Reference 1.2 has testimonials from them in a tribute to Dr. Bayley and the Bayley Scales.

Rapid Reference 1.2

Testimonials to Dr. Bayley and The Bayley Scales

- I met with her the night before she passed away and she was very frail. She had extraordinary powers of observation and normal child development. Dr. Bayley was a master clinician as she would sit for hours and observe children. At the time I worked on revising the original Bayley Scales, it was the most important work I did.

Dr. James Gyurke, Psychological Corporation

(Continued)

- Tests in the field had become very psychometric, but when going back in time, test authors were master practitioners such as Dr. Nancy Bayley. The clinician versus technician continues today and that is why we “begged” Dr. Glen Aylward to author the Bayley-4. We wanted a balance between a clinical tool while maintaining psychometric rigor. We needed the touch of a master clinician and respected scholar.

Dr. Larry Weiss, Pearson Clinical Assessment

- Dr. Bayley could obtain child information as they left the office! She was meticulous in all she did including her 20 pages of notes on selecting the size of the blocks for the test. “I am honored to be the author of the Bayley-4 and to carry on the tradition set forth by Nancy Bayley of providing the reference standard for infant and toddler assessment” (Aylward, 2020, p. xiii).

Dr. Glen Aylward, Author, Bayley-4

Sources: Aylward (2020); Drs. Gyrke, Weiss, and Aylward (personal communications, December 7, 10, 2020)

BAYLEY SCALES (BAYLEY, 1969, 1993, 2006)

Although the original BSID was published in 1969⁴, Dr. Bayley already had been involved working with and researching young children for more than 30 years! Effectively, the BSID was “a derivative of several theoretically eclectic scales of infant development and a broad cross-section of infant and child research” (Bayley, 2006, p. 1). According to Black and Matula (2000), the BSID had its foundation in *The California First-Year Mental Scale* (Bayley, 1933), *The California Preschool Mental Scale* (Jaffa, 1934), and *The California Infant Scale of Motor Development* (Bayley, 1936). The resultant BSID sampled the widest array of mental and motor abilities on a developmental assessment at the time, was theoretically eclectic, became the first large-scale standardized, norm-referenced assessment of these abilities, and included the Infant Behavior Record (IBR), which was based upon observations during the assessment and completed after testing (Aylward, 1997; Whatley, 1987).

The BSID assessed infants between the ages of 2 and 30 months of age via items that were “arranged in ordinal sequence of increasing difficulty, representing the maturation of abilities in cognitive and motor development” (Black & Matula, 2000, p. 10). Two standard scores were available on the BSID; namely, the Mental Development Index or MDI from the Mental Scale that assessed sensory-perceptual abilities, object constancy, memory, learning and problem-solving ability, communication and verbal skills, and early abstracting ability and the Psychomotor Development Index or PDI from the Motor Scale that assessed

gross and fine motor skills and control of the body (Whatley, 1987). These scores had a mean of 100 and standard deviation of 16. The IBR was used to describe the young child's behavior relative to same-aged children and focused on "the child's social orientation, emotional tone, object orientation, attention span, goal directedness, interest focus, energy, overall evaluation of the child's performance, and representativeness of test performance" (Whatley, 1987, p. 39). Select characteristics of the BSID including, but not limited to, names of scales, items per scale, administration time, strengths, and limitations are found in Table 1.1. Rapid Reference 1.3 lists comprehensive sources on the development of the various Bayley Scales.

As noted in Table 1.1, the BSID norms had become outdated, some test materials were no longer relevant, and research indicated a need for greater reliability and validity of the scales. Thus, the *Bayley Scales of Infant Development—Second Edition* (BSID-II; Bayley, 1993) "was designed to update the normative data, to expand the age range to 1 to 42 months, to incorporate research-based items that demonstrate predictive validity, to update the stimulus materials, to conduct reliability and validity studies, to report data from clinical populations of children, and to ensure a standardized assessment of children's mental and motor performance" (Black & Matula, 2000, p. 10) (see Table 1.1). The BSID-II standardization sample included 1,700 infants between 1 and 42 months of age with one hundred infants (50 females and 50 males) in each of 17 age groups. According to Black and Matula (2000), "The sample was stratified according to the 1988 update of the U.S. census by race/ethnicity, parent education and geographic region. To be included in the normative sample, infants had to be full term (36 to 42 weeks gestation) with birth weight appropriate for gestational age, have no significant medical complications, no disabilities, and not be receiving treatment or intervention for disabilities" (pp. 15–16).

The structure of the BSID-II was very similar to that of the BSID in that it included the Mental and Motor Scales that yielded an MDI and PDI, respectively. However, the standard deviation of these scales changed from 16 to 15, which was the standard deviation of many other developmental and cognitive batteries at the time and currently. The IBR became the Behavior Rating Scale or BRS and "was completely revised to increase the reliability of the Scale and to facilitate scoring and interpretation" (Bayley, 1993, p. 2). It is completed by the practitioner and includes information from the child's caregiver and observations by the practitioner (Anastasi & Urbina, 1997). Factors on the BRS included Attention/Arousal and Motor Quality for infants between 1 and 5 months and Orientation/Engagement, Emotional Regulation, and Motor Quality for infants between 6 and 42 months. Black and Matula (2000) indicated "raw scores are converted to percentiles for each factor within each age group. A total raw score

Table I.1 Select Characteristics of the Bayley Scales from 1969 to 2019

Characteristic	Bayley Scales of Infant Development (BSID)	Bayley Scales of Infant Development—Second Edition (BSID—II)	Bayley Scales of Infant and Toddler Development—Third Edition (Bayley—III)	Bayley Scales of Infant and Toddler Development—Fourth Edition (Bayley—4)
Author(s) and Year of Publication	Nancy Bayley (1969)	Nancy Bayley (1993)	Nancy Bayley (2006)	Nancy Bayley and Glen P. Aytlward (2019a)
Original and Revision Goals	<ul style="list-style-type: none"> – Developmental assessment versus an intelligence test – Provide an assessment of a child's current developmental status in comparison with normatively based expectations – Flexible administration format into a standardized procedure – Item administration was to be influenced by the child's age, temperament, and success rate – Use of a modified power sequence for item administration 	<ul style="list-style-type: none"> – Update the normative data – Expand age range from 1 to 42 months – Improve content coverage using research-based items with demonstrated predictive validity – Modernize items using materials that facilitate infection control, reduce gender and racial bias, and are attractive to young children – Conduct reliability and validity studies and explore the factor structure of the Mental and Motor Scales and the Behavior Rating Scale – Collect data on clinical populations of children 	<ul style="list-style-type: none"> – Update normative sample and clinical studies – Provide normative data from five scales - Cognitive, Language, Motor, Social-Emotional, and Adaptive – Updated reliability and validity studies – Modernize items such as playful, engaging toys and activities that encourage interaction – Provide greater content coverage – Optional training materials and software-based scoring assistant 	<ul style="list-style-type: none"> – Update normative sample and clinical studies – Simplify administration and reduce administration time – Improve content coverage – Improve clinical utility – Updated reliability and validity studies – Digital delivery, scoring, and reporting via Q-global – Updated content based on research and user feedback

Scales (Number of Items)	Mental (163)	Mental (178)	Cognitive (91)	Cognitive (81)
	Motor (81)	Motor (111)	Language (97)	Language (79)
	Infant Behavior Record (30)	Behavior Rating (30)	– Receptive Communication (49)	– Receptive Communication (42)
			– Expressive Communication (48)	– Expressive Communication (37)
			Motor (138)	Motor (104)
			– Fine Motor (66)	– Fine Motor (46)
			– Gross Motor (72)	– Gross Motor (58)
			Social-Emotional Scale (35)	Social-Emotional Scale (35)
			Adaptive Behavior (241)	Adaptive Behavior (120)
			– Conceptual – Communication (25)	– Communication
			– Conceptual – Functional Pre-Academics (23)	– Receptive (23)
			– Conceptual – Self-Direction (25)	– Communication
			– Practical – Community Use (22)	– Expressive (28)
			– Practical – Home Living (25)	– Daily Living Skills – Personal (30)
			– Practical – Health and Safety (24)	– Socialization – Interpersonal Relationships (20)
			– Practical – Self-Care (24)	– Socialization – Play and Leisure (19)
			– Social – Leisure (22)	
			– Social – Social (24)	
			– Motor (27)	

(Continued)

Table 1.1 (Continued)

Characteristic	BSID	BSID-II	Bayley-III	Bayley-4
Administration Time	45–60 minutes depending on child's age	30–60 minutes depending on child's age	50–90 minutes depending on child's age	30–70 minutes depending on child's age
Scores	<ul style="list-style-type: none"> – Mental Development Index (standard score) – Psychomotor Development Index (standard score) 	<ul style="list-style-type: none"> – Mental Development Index (standard score) – Psychomotor Development Index (standard score) – Percentile ranks – Developmental age equivalents 	<ul style="list-style-type: none"> – Scaled – Standard – Percentile ranks – Confidence intervals – Developmental age equivalents – Growth 	<ul style="list-style-type: none"> – Scaled – Standard – Percentile ranks – Confidence intervals – Developmental age equivalents – Growth scale values – Percent delay
Optional Digital Administration	None	None	None, but included software-based scoring and reporting assistant as well as a PDA administration tool	Yes, including Web-based administration, scoring, and reporting via Q-global
Included Caregiver Report	No	No	Yes	Yes
Theoretical Underpinnings	No particular theory; eclectic	No particular theory; eclectic	No particular theory; eclectic	Integrated neuro-environmental synthesis model of development

Included Children with Clinical Diagnoses in the Normative Sample	No	No	Yes	No, for the most part. However, 34 children with Down syndrome were included in the normative sample to increase the variance at the lower extreme of the normal distribution.
Included Guidance to Adjust for Prematurity	Yes	Yes	Yes	Yes
Included Accommodations and Modifications to Describe Adaptations to Testing Situations	No	Yes	Yes	Yes
Included Developmental Risk Indicators	No	No	Yes	Yes
Encouraged Parent/Caregiver to Be Included in the Testing Process	Qualified Yes	Qualified Yes	Yes	Yes

(Continued)

Table 1.1 (Continued)

Characteristic	BSID	BSID-II	Bayley-III	Bayley-4
Reported Major Strengths	<ul style="list-style-type: none"> - Sampled the widest array of mental and motor abilities on a developmental assessment at the time - Included the Infant Behavior Record to describe behavior during testing - Evidence for clinical utility and measurement integrity via test-retest reliability, item analyses, and standardization procedures - Videotapes for use in training examiners available through The Psychological Corporation, and training films rented from the Extension Media Center, University of California, Berkeley 	<ul style="list-style-type: none"> - Replacement of the Infant Behavior Rating form with the Behavior Rating Scale - Inclusion of circumscribed item sets - Excellent construct validity - Strong psychometric properties for the MDI and PDI - The use of facets attempts to provide information on Motor, Cognitive, Language, and Social Scales - Record forms included comprehensive information that facilitated learning how to administer items - Most materials were attractive, well-designed, safe, and appealing to young children - Supportive research on the reliability and validity of the BSID-II 	<ul style="list-style-type: none"> - Included two manuals, a more user-friendly stimulus book, bright, colorful, engaging materials, a less heavy test kit, and a separate and complete parent report - Made available a training video - Allowed for software-based scoring and reporting and a PDA administration tool - Item scoring was more straightforward and manageable and allows for more efficient calculation of the raw score - Provided norms at 10-day intervals for very young children and included growth scores - The majority of the stated goals of the revision process were attained - Included five scales and did a commendable job of separating the assessment of cognitive and language functioning - Factorial invariance across cultures - Useful in cognitive and language assessment of individuals with autism spectrum disorder - Several exemplary psychometric properties and research conducted during development and subsequently 	<ul style="list-style-type: none"> - Maintains the scales that are necessary for identifying and diagnosing developmental delays in young children - Inclusion of polytomous scoring - Incorporates caregivers in the assessment process by using Caregiver Questions - Several exemplary psychometric properties especially for the Cognitive, Language, and Motor Scales - Contains attractive materials with manipulatives that are engaging for young children, limited expressive and receptive language requirements on subtests not assessing language, and opportunities to teach tasks

<p>Reported Major Limitations</p>	<ul style="list-style-type: none"> - No circumscribed item sets - Basal and ceiling of 10 consecutive passes and failures, respectively - The factor structure varied across ages, but there is very limited predictability from 3 to 24 months - Limited predictive validity evidence and questionable sensitivity to identifying language delay - Low test-retest reliability, lack of interpretive guidance, and questionable subscores - Norms became outdated, yet no revision until 1993 	<ul style="list-style-type: none"> - Did not provide: separate scores for facets or domains, diagnostic information, or standard scores <50 - Use of item sets became confusing with infants who had atypical development - Did not provide information about the infant's skills in the five areas of development identified by IDEA 97 - Included weak coverage of the social facet—only three items beyond 4-month level - Did not include evidence of predictive validity - Did not provide guidelines for adaptation of the BSID-II for use in other languages or with infants from other cultures 	<ul style="list-style-type: none"> - Included some questionable psychometric properties such as reliability and floors at the youngest ages and norm shifts - No evidence provided to demonstrate predictive validity and accuracy or how intervention provision was improved as a result of administering the Bayley-III - No test-retest reliability data reported for the Social-Emotional Scale - No intercorrelations reported for factors - Some research questioned the Bayley-III's sensitivity to identifying developmental delay and severe disability 	<ul style="list-style-type: none"> - Test authors did not provide a confirmatory factor analysis to support the overall structure of the Bayley-4, but used the Bayley-III confirmatory factor analysis data - More limited to assessing young children at the lower level of functioning - Test-retest characteristics are questionable at best - Replacement materials are very expensive and cannot be purchased individually
-----------------------------------	--	--	---	--

(Continued)

Table 1.1 (Continued)

Characteristic	BSID	BSID-II	Bayley-III	Bayley-4
		<ul style="list-style-type: none"> - Minimal guidelines on using BSID-II to evaluate infants with disabilities - The test kit was very heavy and awkward to carry - There were no training materials or training criteria to ensure the test is administered appropriately - Some research questioned the validity of the mental and motor scales of the BSID-II 		

Sources: Albers and Grieve (2007); Alfonso, Engler et al. (this volume); Alfonso et al. (2005); Anastasi and Urbina (1997); Anderson and Burnett (2017); Anderson et al. (2010); Aylward (2013); Aylward and Zhu (2019c); Bayley (1969, 1993, 2006c); Bayley and Aylward (2019c); Black and Matula (2000); Bos (2013); Bradley-Johnson and Johnson (2007); Burns et al. (1992); Campbell et al. (1986); Cook et al. (1989); Crowe et al. (1987); Damarin (1979); Flanagan and Alfonso (1995); Gagnon and Nagle (2000); Gauthier et al. (1999); Glenn et al. (2001); Goldstein et al. (1995); Hack et al. (2005); Hua et al. (2019); Jary et al. (2013); Johnson et al. (2014); Leguire and Fellows (1990); Lennon et al. (2008); Lowe et al. (2012); Manandhar et al. (2016); Matula et al. (1997); McClain et al. (2000); Milne et al. (2012); Moore et al. (2012); Nellis and Gridley (1994); Pendergast et al. (2018); Provost et al. (2004); Rademeyer and Jacklin (2013); Ranjitkar et al. (2018); Robertson et al. (2010); Ross and Lawson (1997); Reuner et al. (2013); Sattler (2018b); Siegel et al. (1995); Snyder and Sheehan (1992); Tobin and Hoff (2007); Torras-Mañá et al. (2014, 2016); Velikos et al. (2015); Venn (2007); Vohr et al. (2012); Washington et al. (1998); Weiss et al. (2010); Whatley (1987).

Rapid Reference 1.3

Comprehensive Sources on the Various Bayley Scales

Bayley Scales of Infant Development (Bayley, 1969)

- Bayley, N. (1933). *The California First-Year Mental Scale*. Berkeley: University of California Press.
- Bayley, N. (1936). *The California Infant Scale of Motor Development*. Berkeley: University of California Press.
- Bayley, N. (1969). *The Bayley Scales of Infant Development: Manual*. Psychological Corporation.
- Damarin, F. (1979). Bayley Scales of Infant Development. In O. K. Buros (Ed.), *Eighth Mental Measurements Yearbook* (Vol. 1). Gryphon Press.
- Rhodes, L., Bayley, N., & Yow, B. C. (1984). *Supplement to the manual for the Bayley Scales of Infant Development*. San Antonio, TX: The Psychological Corporation.

Bayley Scales of Infant Development—Second Edition (Bayley, 1993)

- Bayley, N. (1993). *Bayley Scales of Infant Development (2nd ed.): Manual*. Psychological Corporation.
- Black, M. M., & Matula, K. (2000). *Essentials of Bayley Scales of Infant Development—II assessment*. Hoboken, NJ: John Wiley & Sons.
- Nellis, L., & Gridley, B. E. (1994). Review of the Bayley Scales of Infant Development (2nd ed.). *Journal of School Psychology*, 32, 201–209.

Bayley Scales of Infant and Toddler Development—Third Edition (Bayley, 2006a)

- Albers, C. A., & Grieve, A. J. (2007). Test Review: Bayley, N. (2006). Bayley Scales of Infant and Toddler Development – (3rd ed.). San Antonio, TX: Harcourt Assessment. *Journal of Psychoeducational Assessment*, 25(2), 180–190. <https://doi.org/10.1177/0734282906297199>
- Bayley, N. (2006a). *Bayley Scales of Infant and Toddler Development (3rd ed.)*. Pearson.
- Bayley, N. (2006b). *Bayley Scales of Infant Development (3rd ed.): Administration manual*. Pearson.
- Bayley, N. (2006c). *Bayley Scales of Infant Development (3rd ed): Technical manual*. Pearson.
- Tobin, R. M., & Hoff, K. E. (2007). [Test review of Bayley Scales of Infant and Toddler Development—Third Edition]. In K. F. Geisinger, R. A. Spies, J. F. Carlson, & B. S. Plake (Eds.), *The seventeenth mental measurements yearbook*. Retrieved from <http://marketplace.unl.edu/buros>
- Venn, J. J. (2007). [Test review of Bayley Scales of Infant and Toddler Development—Third Edition]. In K. F. Geisinger, R. A. Spies, J. F. Carlson, & B. S. Plake (Eds.), *The seventeenth mental measurements yearbook*. Retrieved from <http://marketplace.unl.edu/buros>

(Continued)

Weiss, L. G., Oakland, T., & Aylward, G. (2010). *Bayley-III clinical use and interpretation*. Academic Press.

Bayley Scales of Infant and Toddler Development—Fourth Edition (Bayley & Aylward, 2019a)

Aylward, G. P. (2020). *Bayley 4 clinical use and interpretation*. Academic Press.

Bayley, N., & Aylward, G. P. (2019b). *Bayley Scales of Infant and Toddler Development* (4th ed.): *Administration manual*. Pearson.

Bayley, N., & Aylward, G. P. (2019c). *Bayley Scales of Infant and Toddler Development* (4th ed.): *Technical manual*. Pearson.

Bayley, N., & Aylward, G. P. (2019d). *Bayley Scales of Infant and Toddler Development* (4th ed.): *Screening test manual*. Pearson.

can also be converted to a percentile by age group to provide an overall assessment of the infant’s behavior” (pp. 14–15).

The BSID–II Mental and Motor Scales included many items retained from the BSID, new Mental Scale items that measured perceptual development, problem solving, number concepts, language and personal/social development, and new Motor Scale items that measured quality of movement, sensory integration, and perceptual-motor integration (Bayley, 1993; Black & Matula, 2000). In addition, the BSID–II included item sets to address criticisms of the BSID basal and ceiling rules and confusion regarding where to begin the test (see Table 1.1). These item sets, which were arranged according to chronological age, included series of items that increased in difficulty. Although somewhat novel at the time and a welcome change from the BSID, item sets were criticized greatly (see Chapter 5, Black & Matula, 2000 and Table 1.1). Table 1.1 and Rapid Reference 1.3 provide additional information and comprehensive sources on the BSID–II, respectively.

Some 13 years later, the *Bayley Scales of Infant and Toddler Development—Third Edition* (Bayley–III; Bayley, 2006a) was published “to improve the quality and to enhance the utility of the instrument” (Bayley, 2006b, p. 1) and to assess the developmental functioning of infants and toddlers between 1 and 42 months. In many ways, the Bayley–III maintained the gold standard qualities of its predecessor, such as several exemplary psychometric properties, sampling of important young children’s abilities and processes, and attractive/appealing materials to engage young children. There were, however, several major changes or revisions to the BSID–II that are noteworthy. For example, the Bayley–III was comprised of five distinct scales including the traditional Mental (renamed Cognitive) and

Motor Scales, a Language Scale, a Social-Emotional Scale, and an Adaptive Behavior Scale. Including five distinct scales was done, in part, to be consistent with federal and professional standards as well as to provide practitioners with a greater or broader understanding of a young child's strengths and weaknesses (Pinon, 2010). The Social-Emotional Scale items were derived from the *Greenspan Social-Emotional Growth Chart: A Screening Questionnaire for Infants and Young Children* (Greenspan, 2004) and the Adaptive Behavior Scale was derived from the Parent/Primary Caregiver Form for ages 0–5 of the *Adaptive Behavior Assessment System* (2nd ed.) or ABAS–II (Harrison & Oakland, 2003). These latter two scales replaced the BRS on the BSID–II. A Behavior Observation Inventory was added to the Bayley–III to assess the child's behavior during testing and how it related to the child's behavior at home. The Bayley–III also included a Caregiver Report that highlighted the child's strengths and weaknesses, provided an explanation of what was measured, and listed suggestions to promote skill development (Pinon, 2010).

The MDI and PDI did not appear on the Bayley–III. In addition, the Language and Motor Scales were divided into subscales, namely, Receptive and Expressive Communication for the Language Scale and Fine and Gross Motor for the Motor Scale. The Cognitive Scale did not have subtests because it “assesses a uniform construct” (Pinon, 2010, p. 19) and items did not require a verbal response. The standardization sample for the Cognitive, Language, and Motor Scales of the Bayley–III included 1,700 children with 100 infants in each of 17 age groups (Bayley, 2006c). Stratification variables included age, sex, parent education level, race/ethnicity, and geographic region. Details regarding the standardization of the Social-Emotional Scale and Adaptive Behavior Scale are found in Bayley (2006c).

The Cognitive, Language, and Motor Scales as well as the domains of the ABAS–II had a mean of 100 and standard deviation of 15. Subscales of the Language and Motor Scales, skill areas of the Social-Emotional Scale, and the ABAS–II had a mean of 10 and standard deviation of 3. The Cognitive Scale also had a scaled score associated with it. Space limitations preclude detailed information regarding item development of the Bayley–III Cognitive, Language, and Motor Scales. However, it is noteworthy that 45 Mental Scale items were deleted, 22 Motor Scale items were deleted, 19 new items were added to the Cognitive Scale, 59 new items were added to the Language Scale, and 22 new items were added to the Motor Scale. Most of the other items on these three scales were either retained as they were on the BSID–II or modified. Item development for the Social-Emotional and Adaptive Behavior Scales is described in Bayley (2006c).

DON'T FORGET 1.4

The Bayley-III moved beyond the Mental and Motor Scales of the BSID and BSID-II by including a separate Language Scale, Social-Emotional Scale, and Adaptive Behavior Scale.

Finally, considerable effort was made to strengthen the psychometric qualities of the instrument, improve its clinical utility, simplify administration procedures, and update item administration and stimulus materials on the Bayley-III (Bayley, 2006b). Table 1.1 and Rapid Reference 1.3 provide additional information and comprehensive sources on the Bayley-

III, respectively.

BAYLEY-4 (BAYLEY & AYLWARD, 2019A)

In 2019, NCS Pearson published the Bayley-4 with Nancy Bayley and Glen P. Aylward as the authors of this long-awaited revision of the gold standard in the assessment of young children. Dr. Larry Weiss, former Vice President of Global Research and Development for Pearson Clinical Assessment, proudly tells the story of how he landed Dr. Glen P. Aylward as an author of the Bayley-4 and “the perfect person to assume the legacy of Nancy Bayley” (Aylward, 2020, p. xi). Indeed, Dr. Aylward had been working with children for decades, authored myriad publications, developed the *Bayley Infant Neurodevelopmental Screener* (BINS; Aylward, 1995), and contributed to the development of the BSID-II and Bayley-III (Aylward, 2020). He has been gracious to communicate with us to ensure that we provide a complete, meaningful, helpful, and honest volume on the Bayley-4.

In this section we cover the Bayley-4 revision goals, structure, and description of scales and subtests. In subsequent sections of this chapter we provide a summary of the quantitative and qualitative characteristics of the Bayley-4 as well as some final comments on this recently published instrument. Chapters 2 and 3 provide a thorough coverage of administration and scoring, respectively, while Chapter 4 covers interpretation, Chapter 5 addresses clinical applications, Chapter 6 discusses our evaluation of the Bayley-4, Chapter 7 includes several case examples and reports, and Chapter 8 discusses the Bayley-4 on Q-global.

Revision Goals

There were seven revision goals for the Bayley-4 and they are discussed in Bayley and Aylward (2019c). Rapid Reference 1.4 lists these goals and Chapter 6 provides our evaluation of how well the goals were met. Three of these goals warrant mention here. First, in our communications with Dr. Aylward, he said he was most proud of the polytomous scoring approach because it provides valuable

Rapid Reference 1.4

Revision Goals of the Bayley-4

- Maintain the basic qualities and format of the Bayley-III
- Develop a polytomous scoring approach to differentiate mastery, emergence, and absence of a skill
- Include caregivers in the evaluation process
- Reduce test time and simplify administration
- Improve content coverage of the subtests across ages
- Improve diagnostic sensitivity and clinical utility of the instrument
- Update the normative data

Source: Bayley and Aylward (2019c).

information regarding developmental delay versus deficit (G. P. Aylward, personal communication, December 10, 2020; Aylward, 2020). The second goal worthy of mention here is including caregivers in the evaluation process because not only do caregivers provide valuable information about what the child can and cannot do, but having them involved maintains the caregiver bond during a novel experience with unfamiliar adults.

The third revision goal worthy of mention is improving content coverage of the subtests across the ages. In short, the Bayley Scales have been atheoretical until the Bayley-4. The latest incarnation of the Bayley Scales, especially the Cognitive, Language, and Motor Scales, are based on an integrated neuro-environmental synthesis model of development explicated clearly and thoroughly in Aylward (2020). For example, Aylward discusses canalization, neuronal plasticity, epigenetics, components of the environment, and disruption and insult. We believe it is incumbent for users of the Bayley-4 to read Aylward's discussion as well as other sources to keep up-to-date with advances in neuroanatomy, neuropsychology, and the interplay of genetics and environmental influences.

Structure

The Bayley-4 has the same scales and subtests as the Bayley-III (i.e., Cognitive, Language [comprised of the Receptive and Expressive Communication subtests], Motor [comprised of the Fine and Gross Motor subtests], Social-Emotional, and Adaptive Behavior). The structure of the Bayley-4 is depicted in Figure 1.1. There are many abbreviations used throughout the Bayley-4 materials and thus they are included in Table 1.2.

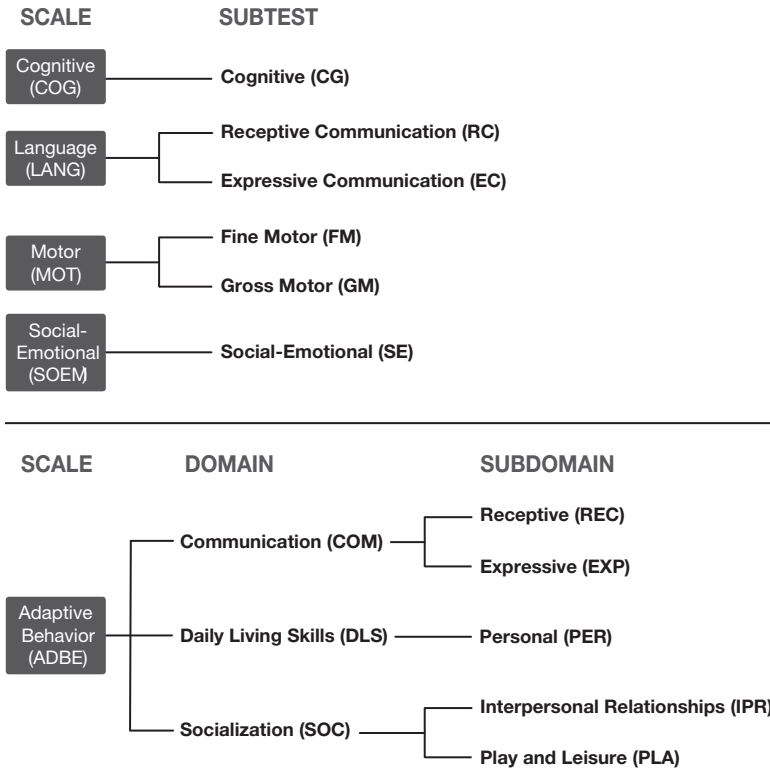


Figure 1.1 Bayley-4 Test Structure.

Note: From Bayley Scales of Infant and Toddler Development, Fourth Edition (Bayley™-4). Copyright © 2019 NCS Pearson, Inc. Reproduced with permission. All rights reserved.

CAUTION 1.2

Be mindful that the Bayley-4 Cognitive, Language, and Motor Scales were standardized together; the Social-Emotional and Adaptive Behavior Scales were standardized separately from the Cognitive, Language, and Motor Scales and from each other.

It is important to note that the Cognitive, Language, and Motor Scales were standardized together (see Table 1.4 and Chapter 6 for details) and are similar to the same-named scales on the Bayley-III. The Social-Emotional Scale was derived from the *Greenspan Social-Emotional Growth Chart: A Screening Questionnaire for Infants and Young Children* (Greenspan, 2004) and remains “unchanged from

the Bayley-III” (Bayley & Aylward, 2019c). The Adaptive Behavior Scale is no longer a derivative of the ABAS-II (Harrison & Oakland, 2003) as on the

Table 1.2 Bayley-4 Abbreviations

Scale		Scale	
subtest	Abbreviation	domain	Abbreviation
	Abbreviation	subdomain	Abbreviation
Cognitive	COG	Adaptive Behavior	ADBE
Cognitive	CG	Communication	COM
Language	LANG	Receptive	REC
Receptive Communication	RC	Expressive	EXP
Expressive Communication	EC	Daily living skills	DLS
Motor	MOT	Personal	PER
Fine motor	FM	Socialization	SOC
Gross motor	GM	Interpersonal Relationships	IPR
Social-Emotional	SOME	Play and Leisure	PLA
Social-Emotional	SE		
Score	Abbreviation		
Social-Emotional Sensory processing	SP		

Note: From Bayley Scales of Infant and Toddler Development, Fourth Edition (Bayley™-4). Copyright © 2019 NCS Pearson, Inc. Reproduced with permission. All rights reserved.

Bayley-III, but is a derivative of the *Vineland Adaptive Behavior Scales* (3rd ed.), *Comprehensive Parent/Caregiver Form* (Vineland-3; Sparrow et al., 2016).

Brief Description of the Scales, Subtests, Domains, Subdomains, Caregiver Report, and Behavior Observation Inventory

According to Bayley and Aylward (2019c), the Cognitive Scale of the Bayley-4 assesses various abilities and processes including “sensorimotor development, exploration and manipulation, object relatedness, concept formation, memory, precursors to executive function, and other cognitive processing aspects” (p. 4) such as counting, cardinality, and play via 81 items. This scale retained most items from the Bayley-III, but deleted 18 from that edition for a variety of reasons, such as items exhibiting high correlations or too complex to administer and

included 8 new items to provide greater discrimination at the lower end of functioning (Aylward, 2020). Additional details regarding the developmental nature and increasing complexity of items on the Cognitive Scale are found in Chapter 3 of Aylward (2020).

The Language Scale of the Bayley-4 assesses preverbal behaviors, vocabulary development, vocabulary related to morphological development, understanding of morphological markers, social referencing, and verbal comprehension via the 49-item Receptive Communication subtest. Fifteen items from the Bayley-III were deleted from the Bayley-4 because of difficulty scoring and redundancy among other reasons (Aylward, 2020), and two new items were added. In addition, six Cognitive Scale items were included on the Receptive Communication subtest. The Expressive Communication subtest of the Language Scale assesses vocalizations (e.g., cooing, babbling), gesturing, and speaking via 48 items. Thirteen items from the Bayley-III were deleted from the Bayley-4 and two new items were added. Although the Cognitive and Language Scales are separate on the Bayley-4, as they were on the Bayley-III, Aylward (2020) cautions practitioners that items on each scale are not independent. That is, some Cognitive Scale items involve language (especially receptive language skills) and some Language Scale items tap higher level cognitive functioning (such as learning and applying concepts). Indeed, these two scales are correlated across the ages at .72.

As stated earlier, the Motor Scale is comprised of the Fine and Gross motor subtests. The Fine Motor subtest is comprised of 46 items assessing or involving prehension, visual perception, perceptual-motor integration, motor planning, motor speed, distal maturation, cognition, and size of the infant's hands (Aylward, 2020; Bayley & Aylward, 2019c). Twenty-five items from the Bayley-III Fine Motor subtest were deleted from the Bayley-4 (Bayley & Aylward, 2019c) and five new items were added to the Fine Motor subtest "to lower test floors at specific ages" (Aylward, 2020, p. 53). The Gross Motor subtest is comprised of 58 items assessing or involving head control, trunk control, locomotion, motor planning, static positioning, dynamic movement, and neuro-developmental characteristics (Aylward, 2020; Bayley & Aylward, 2019c). According to Aylward (2020), gross motor functioning and "abilities are affected by the infant's size, weight, coordination, ability to deal with antigravity input, strength, and maturation" (p. 53). Twenty items from the Bayley-III Gross Motor subtest were deleted from the Bayley-4 and seven new items were added (Bayley & Aylward, 2019c) to tap primitive reflexes, protective reflexes, rolling from stomach to back, and jumping off the floor (Aylward, 2020). Although written about the Bayley-III Motor Scale, Case-Smith and Alexander (2010) provide one of the best treatises on fine and gross motor assessment and interpretation of infants and toddlers.

The Social-Emotional Scale of the Bayley-4 is comprised of 35 items that tap self-regulation and interest in the world, communication needs, engaging others and establishing relationships, using emotions in an interactive, purposeful manner, and using emotional signals or gestures to solve problems (Bayley & Aylward, 2019c; Greenspan, 2004). This scale or questionnaire is completed by the primary caregiver and provides information on a child's emotional milestones by age. For example, very young infants (0–5 months) typically begin to self-regulate, show increasing interest in the world, and engage in relationships. Infants between the ages of 6–14 months typically progress from using emotions in an interactive, purposeful manner to using emotional signals or gestures to communicate. Toddlers between the ages of 15 and 42 months progress from using emotional signals or gestures to solve problems, to using symbols or ideas to communicate intentions or feelings, to using symbols or ideas to communicate more than basic needs, and then to creating bridges between emotions and ideas (Greenspan, 2004).

The final scale on the Bayley-4 is the 120 item Adaptive Behavior Scale composed of select items and skill areas of the Vineland-3 and is completed by the primary caregiver. There are three domains on the Adaptive Behavior Scale including Communication, Daily Living Skills, and Socialization. These domains have subdomains including Receptive and Expressive (Communication), Personal (Daily Living Skills), and Interpersonal Relations and Play and Leisure (Socialization). According to Bayley and Aylward (2019c), “Fifty-one items were retained from the Receptive and Expressive subdomains to compose the Communication Domain item set, 30 items from the Personal subdomain compose the Daily Living Skills domain, and 39 items were retained from the Interpersonal Relationships and Play and Leisure subdomains for the Socialization domain” (p. 17). Interested readers are encouraged to see Bayley and Aylward (2019c) for details regarding item selection. The Adaptive Behavior Scale measures what a child does as well as what the child may be able to do (but does not necessarily do with any regularity). Aylward (2020) adds that “adaptive behavior reflects what the child typically does in daily interactions with the environment; if the toddler has the capacity to do a task but does not do it routinely, this behavior is not considered adaptive” (p. 62). Measurement of adaptive behavior (which is modifiable) is important for most young children, but is critical for young children suspected of intellectual disability (American Association on Intellectual and Developmental Disabilities, 2010; American Psychiatric Association, 2013; Brue & Wilmschurst, 2016).

As on the Bayley-III, the Cognitive, Language, Motor, and Social-Emotional Scales as well as the domains of the Adaptive Behavior Scale have a mean of 100 and standard deviation of 15. Subtests of the Language and Motor Scales and subdomains of the Adaptive Behavior Scale have a mean of 10 and standard

DON'T FORGET 1.5

The Cognitive, Language, Motor, and Social-Emotional Scales as well as the domains of the Adaptive Behavior Scale have a mean of 100 and standard deviation of 15. Subtests of the Language and Motor Scales and subdomains of the Adaptive Behavior Scale have a mean of 10 and standard deviation of 3. The Cognitive and Social-Emotional Scales also have scaled scores associated with them.

deviation of 3. The Cognitive and Social-Emotional Scales also have scaled scores associated with them. Interpretation of young children's performance and ratings by primary caregivers on the Bayley-4 is discussed in depth in Chapter 4, but is informed greatly by the quantitative and qualitative characteristics of the test, which are addressed next in summary form and in detail in Chapter 6.

As with the Bayley-III, the Bayley-4 includes a Caregiver Report (CR) and Behavior Observation Inventory (BOI).

The CR should be provided routinely

to the primary caregiver (Aylward, 2020). This report consists of information regarding the nature of the Bayley-4 and what it measures, a description of the child's test results, and activities for the caregiver to work on with the child. The BOI, found on the last page of the Bayley-4 Record Form, includes 13 items, characteristics, or behaviors on which the practitioner and parent or caregiver rate the child. However, the practitioner rates the child on behavior evidenced during testing and the parent or caregiver rates the child's everyday behavior. All 13 behaviors are rated as not at all typical (never or rarely), somewhat typical (some of the time), or typical (most of the time). An example behavior is *explores objects in the environment*. The practitioner rates the child's exploration during testing and the parent or caregiver rates the child's exploration on a daily basis. The CR and BOI are valuable tools for communicating test performance and behavior, respectively, with parents and other caregivers. Rapid Reference 1.5 provides basic information on the Bayley-4 and its publisher.

QUANTITATIVE CHARACTERISTICS OF THE BAYLEY-4

In this section we provide a summary of our evaluation of the quantitative characteristics of the Bayley-4 using Engler and Alfonso's (2020) criteria for evaluating the adequacy of the quantitative characteristics of early childhood measures. These criteria have been evolving for more than 25 years after Flanagan and Alfonso (1995) expanded upon Bracken's (1987) seminal work on the technical adequacy of preschool instruments. Table 1.3 includes the criteria we used to evaluate the standardization, reliability, floors and ceilings, item gradients, and validity of the Bayley-4.

Table 1.4 provides our evaluation of these quantitative characteristics. As can be seen in this table, many of the quantitative characteristics for the Cognitive,

Rapid Reference 1.5

Bayley Scales of Infant and Toddler Development (4th ed.)

Authors: Nancy Bayley, PhD and Glen P. Aylward, PhD, ABPP

Publication Date: September 2019

Scales: Cognitive, Language, Motor, Social-Emotional, and Adaptive Behavior

Age Range: 16 days to 42 months

Administration Time: 30 to 70 minutes (depending on the child's age)

Qualifications of Examiners: Qualification level B. Examiners should have training and experience in administering and interpreting standardized assessments with infants and toddlers. Typically, examiners have training at the masters or doctoral level and supervised experience, in accordance with guidelines from the American Psychological Association, the American Educational Research Association, and the National Council on Measurement in Education. For more information on Pearson's qualification policies please click on the following link: Qualification Policy or <https://www.pearsonassessments.com/professional-assessments/ordering/how-toorder/qualifications/qualifications-policy.html>.

Publisher: Pearson

Phone: +1 (800) 627-7271

Fax: +1 (800) 232-1223

PearsonAssessments.com

Price: Complete Kit (Digital) \$1,050.70; Complete Kit \$1,168.50

To learn more please visit PearsonAssessments.com/Bayley4

Language, and Motor Scales of the Bayley-4 were rated good or adequate. For example, we rated the recency of the normative data, item gradients, and validity evidence of these scales as good. In addition, we rated the scale floors and ceilings as adequate. Our ratings of the Social-Emotional Scale varied greatly from good to inadequate, with many quantitative characteristics rated inadequate. For example, recency of normative data and item gradients were rated good whereas all test-retest reliability characteristics were rated inadequate because no data were reported in Greenspan (2004). Finally, our ratings of the quantitative characteristics of the Adaptive Behavior Scale were somewhat lower in general. For example, most characteristics were rated adequate or inadequate including sub-domain floors and ceilings and test-retest reliability.

Table 1.3 Criteria for Evaluating the Adequacy of the Quantitative Characteristics of Early Childhood Measures

Quantitative Characteristic	Criteria	Evaluative Classification
Standardization ^a		
Size of normative group and number of participants	200 persons per each one-year interval and at least at each age/grade interval, 2000 persons overall 100 persons per each one-year interval and at least 1,000 persons overall Neither criterion above is met	Good Adequate Inadequate
Recency of normative data	Collected in 2012 or later Collected between 2002 and 2011 Collected in 2001 or earlier	Good Adequate Inadequate
Age divisions of norm tables	One to two months Three to four months Greater than four months	Good Adequate Inadequate
Match of the demographic characteristics of the normative group to the U.S. population (e.g., gender, race) with SES included	Normative group represents the U.S. population on five or more important demographic variables Normative group represents the U.S. population on three or four important demographic variables with SES included Neither criterion is met	Good Adequate Inadequate

Reliability			
Internal consistency reliability coefficient (subtests and composites)	Greater than or equal to .90 ($\geq .90$) .80 to .89 Less than .80 ($< .80$)	Good Adequate Inadequate	
Test–retest reliability coefficient (composites only)	Greater than or equal to .90 ($\geq .90$) .80 to .89 Less than .80 ($< .80$)	Good Adequate Inadequate	
Test–retest reliability coefficient (tests only)	Greater than or equal to .80 ($\geq .80$) Less than .80 ($< .80$)	Adequate Inadequate	
Test–retest sample size and representativeness of test–retest sample	Sample contains at least 100 participants and represents the U.S. population on at least five or more demographic variables Sample contains at least 50 participants and represents the U.S. population on three or four demographic variables Neither criterion is met	Good Adequate Inadequate	

(Continued)

Table 1.3 (Continued)

Quantitative Characteristic	Criteria	Evaluative Classification
Age range of the test-retest sample	<p>Spans no more than a 1-year interval</p> <p>Spans no more than 2 years</p> <p>Spans more than 2 years or extends beyond the preschool age range (i.e., 2–5 years), regardless of interval size</p>	<p>Good</p> <p>Adequate</p> <p>Inadequate</p>
Length of test–retest interval ^b	<p>Interval ≤ 3 months</p> <p>Interval > 3 and ≤ 6 months</p> <p>Interval > 6 months</p>	<p>Good</p> <p>Adequate</p> <p>Inadequate</p>
Test Floors Subtests ^c	<p>Raw score of 1 is associated with a standard score greater than 2 standard deviations below the normative mean</p> <p>Raw score of 1 is associated with a standard score less than or equal to 2 standard deviations below the normative mean</p>	<p>Adequate</p> <p>Inadequate</p>
Composites ^d	<p>Composite standard score greater than 2 standard deviations below the normative mean</p> <p>Composite standard score less than or equal to 2 standard deviations below the normative mean</p>	<p>Adequate</p> <p>Inadequate</p>

Ceilings Subtests ^e	Highest raw score obtained is associate with a standard score greater than 2 standard deviations above the normative mean	Adequate
	Highest raw score is associated with a standard score less than or equal to 2 standard deviations above the normative mean	Inadequate
Composites ^f	Composite standard score greater than 2 standard deviations above the normative mean	Adequate
	Composite standard score less than or equal to 2 standard deviations above the normative mean	Inadequate
Item gradients ^g Item gradient violations	No item gradient violations occur <i>or</i> all item gradient violations are between 2 and 3 standard deviations below the normative mean <i>or</i> the total number of violations is < 5% across the age range of the test	Good
	All item gradient violations occur between 1 and 3 standard deviations below the normative mean <i>or</i> the total number of violations is $\geq 5\% \leq 15\%$ across the age range of the test	Adequate
	All or any portion of item gradient violations occur between the mean and 1 standard deviation below the normative mean <i>or</i> the total number of violations is > 15% across the age range of the test	Inadequate

(Continued)

Table 1.3 (Continued)

Quantitative Characteristic	Criteria	Evaluative Classification
Validity ^h Presence and quality of specific forms of validity evidences	5 or 6 forms of validity evidence and the authors' evaluation of available data 4 forms of validity evidence and the authors' evaluation of available data < 4 forms of validity evidence and the authors' evaluation of available data	Good Adequate Inadequate

^aAn overall rating is obtained as follows: Good = All Goods; Adequate = Goods and Adequates; Inadequate = Goods and/or Adequates, and Inadequates.

^bThe criteria presented here regarding the length of the test–retest interval differ from traditional criteria used with school-age children because young children’s abilities change rapidly.

^cAssuming a scale having a mean of 100 and a standard deviation of 15, a raw score of 1 that is associated with a standard score of ≤ 69 would constitute an adequate floor.

^dFloors are calculated based on the aggregate of the subtest raw scores that comprise the composites, where one item per subtest is scored correctly.

^eAssuming a scale having a mean of 100 and a standard deviation of 15, the highest raw score possible is associated with a standard score ≥ 131 would constitute an adequate ceiling.

^fCeilings are calculated based on the aggregate of the subtest raw scores that comprise the composites, where all items in a subtest are scored correctly.

^gAn item gradient is defined as the increase in standard score points associated with a one-point increase in raw score values. An item gradient violation occurs when a one-point increase in raw score points is associated with a standard score increase of greater than one third of a standard deviation (Bracken, 1987).¹⁷The standards for validity in the 2014 publication *Standards for Educational and Psychological Testing* differ from those in the 1999 publication of the same name. Most notably, in the 2014 publication there is one overarching standard or guiding principle for validity with 25 standards subsumed under three clusters. The third cluster, namely, Specific Forms of Validity Evidence, has 15 of the 25 standards subsumed under 6 forms of validity evidence. These six forms of validity evidence are akin to the five sources of validity evidence found in the 1999 publication and in earlier versions of this table. Ratings of “Good” or “Adequate” were made only when the available validity evidence was reviewed positively by the authors and corroborated by other reviews in the extant literature. Note: From Psychoeducational Assessment of Preschool Children (5th ed.), Copyright © 2020 Taylor and Francis Group LLC. Reproduced with permission of The Licensor through PLSclear.

Note: From Psychoeducational Assessment of Preschool Children (5th ed.), Copyright © 2020 Taylor and Francis Group LLC. Reproduced with permission of The Licensor through PLSclear.

Chapter 6 provides a detailed explanation for our ratings, a summary of the Bayley-4 quantitative strengths and limitations, and recommendations for future research. Overall, the Bayley-4 Cognitive, Language, and Motor Scales are psychometrically sound and maintain the strong reputation of previous Bayley Scales. Given the weak psychometric

rigor of the Social-Emotional Scale, practitioners should not make any diagnostic decisions based on ratings of young children's social-emotional functioning. The Adaptive Behavior Scale is sound, for the most part, but practitioners should be informed of its limitations when interpreting young children's performance.

CAUTION 1.3

Given the limited psychometric rigor of the Social-Emotional Scale, practitioners should not make any diagnostic decisions based on ratings of young children's social-emotional functioning.

QUALITATIVE CHARACTERISTICS OF THE BAYLEY-4

In some respects the qualitative characteristics of an instrument designed to assess young children's development are more important than the quantitative characteristics because it is incumbent upon the clinician to engage the young child for an extended period of time in order to obtain reliable and valid test performance results. Bracken and Theodore (2020) discusses at length the challenges of assessing and testing young children. For example, they state that young children, by their very nature, are distracted, impulsive, have limited attention spans, and do not communicate well, making it difficult to obtain reliable and valid results. In addition, the inexperienced practitioner may express anxiety, doubt, and lack of confidence in the testing environment that may unduly have a negative effect on the young child's performance. Thus, it is critical that early childhood instruments are attractive, engaging, appealing, and easy to administer to young children. As a result the practitioner, young child, and caregiver can be relatively confident that test results reflect what the young child can and cannot do (i.e., validity).

Engler and Alfonso (2020) described several qualitative characteristics of early childhood measures such as attractiveness of test materials, efficient administration procedures, and suitability of test directions for young children and applied them to preschool cognitive tests. Here, we review those characteristics as they apply to the Bayley-4 and determine whether the Bayley-4 Cognitive, Language, and Motor Scales meet the "criteria." We did not review the Social-Emotional and Adaptive Behavior Scales as the qualitative characteristics were not readily applicable.

Our review and evaluation of the qualitative characteristics indicated that the Bayley-4 Cognitive, Language, and Motor Scales met the "criteria" for 7 of the 10 characteristics (see Table 1.5). For example, these scales incorporate attractive test materials, efficient administration procedures, and limited language demands

Table 1.4 Evaluation of the Quantitative Characteristics of the Bayley-4

Bayley-4 Scale					
Standardization	Cognitive	Language	Motor	Social-Emotional	Adaptive Behavior
Normative Group	Adequate	Adequate	Adequate	Inadequate	Inadequate
Recency of Normative Data	Good	Good	Good	Good	Good
Age Divisions of Normative Tables	Adequate to Good	Adequate to Good	Adequate to Good	Inadequate to Good	Inadequate to Good
Match of Demographic Data to U.S. Population	Adequate	Adequate	Adequate	Adequate	Adequate
Reliability					
Internal Consistency (Scales and Subtests or Domains and Subdomains)	Good	Inadequate to Good	Adequate to Good	Inadequate to Good	Adequate to Good
Test-Retest Reliability (Scales or Domains)	Adequate	Adequate	Inadequate to Adequate	Inadequate	Inadequate to Adequate
Test-Retest Reliability (Subtests or Subdomains)	Not applicable	Inadequate to Adequate	Inadequate to Adequate	Not applicable	Inadequate to Adequate

Test–Retest Sample Size/Representativeness of Sample	Good	Good	Good	Inadequate	Inadequate	Adequate
Age Range of Sample Length of Interval	Inadequate	Inadequate	Inadequate	Inadequate	Inadequate	Inadequate
Floors	Good	Good	Good	Good	Good	Good
Substrats or Subdomains	Not applicable	Inadequate to Adequate	Inadequate to Adequate	Inadequate to Adequate	Not applicable	Inadequate to Adequate
Scales or Domains	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate
Ceilings						
Substrats or Subdomains	Not applicable	Inadequate to Adequate	Inadequate to Adequate	Inadequate to Adequate	Not applicable	Inadequate to Adequate
Scales or Domains	Adequate	Adequate	Adequate	Adequate	Inadequate to Adequate	Adequate
Item Gradient						
Violations	Good	Good	Good	Good	Good	Good
Validity						
Presence and Quality of Evidence	Good	Good	Good	Good	Inadequate	Adequate

Note: Ratings are based upon the criteria set forth in Table 1.2.

Table 1.5 Evaluation of the Qualitative Characteristics of the Bayley-4

Qualitative Characteristic	Bayley-4 Scale				
	Cognitive	Language	Motor	Social-Emotional	Adaptive Behavior
<i>Attractive Test Materials (e.g., manipulatives, colorful test materials)</i>	✓	✓	✓	N/A	N/A
<i>Efficient Administration Procedures (e.g., alternates verbal/nonverbal subtests, begins tasks with stimulating task)</i>	✓	✓	✓	N/A	N/A
<i>Limited Expressive Language Requirement Unless Assessing Language (e.g., majority of tasks require one- or two-word response, and/or gestures)</i>	✓	✓	✓	N/A	N/A
<i>Incorporates Nonverbal Score(s) Unless Assessing Language</i>				N/A	N/A
<i>Limited Receptive Language Requirements Unless Assessing Language</i>	✓	✓	✓	N/A	N/A
<i>Directions are Suitable for Young Children</i>	✓	✓	✓	N/A	N/A
<i>Includes Opportunities to “Teach Task” (e.g., uses sample items, includes multiple trials, provides demonstrations)</i>	✓	✓	✓	N/A	N/A
<i>Includes Alternative Stopping Rules</i>	✓	✓	✓	N/A	N/A
<i>Translation or Adaptation Available in Other Languages</i>				N/A	N/A
<i>Appropriate Degree of Language Demands and Cultural Loading</i>				N/A	N/A

Note. A checkmark indicates that the authors deemed this qualitative characteristic as being met. Certain qualitative characteristics are more subjective in nature than other characteristics; therefore, readers are encouraged to review early childhood measures independently using the above criteria. N/A = not applicable because these scales are rating scales responded to by the child’s caregiver. They are not administered directly to children and are included here for completeness.

unless language is assessed directly. Conversely, these scales are not available in other languages and there are no data on cultural loadings of items or tasks. Chapter 6 provides a detailed explanation for our ratings and a summary of the Bayley-4 qualitative strengths and limitations.

SUMMARY OF BAYLEY-4 OVERVIEW

In the first sections of this chapter we provided information on the history and importance of infant and toddler assessment as well as a rather long list of infant and toddler instruments for the interested reader. Then, via a brief biography of Dr. Nancy Bayley, we attempted to give readers a sense of what she contributed to developmental psychology, the assessment of infants and toddlers, and psychology in general. We also attempted to provide readers with an understanding of the history and development of all editions of the Bayley Scales, concluding with the Bayley-4. Finally, we reviewed and offered our evaluation of the quantitative and qualitative characteristics of the Bayley-4.

TEST YOURSELF

1. **Infant and toddler assessment has been a practice for about how many years?**
 - a) 200
 - b) 300
 - c) 400
 - d) 500
2. **Two of the most influential educational initiatives in the history of the United States were:**
 - a) Universal prekindergarten and special education
 - b) Head Start and special education
 - c) General education and special education
 - d) Head Start and early intervention
3. **The major purposes of infant and toddler assessment are the following except:**
 - a) Screening
 - b) Determining career interests
 - c) Individual program planning and monitoring
 - d) Diagnosing and eligibility determination
4. **The Bayley-4 may be used for the following except:**
 - a) Assessing young children's current developmental functioning
 - b) Progress monitoring
 - c) Providing parents with helpful information regarding their young children
 - d) Predicting future cognitive functioning

- 5. The original Bayley Scales of Infant Development set the standard for infant assessment because it:**
- Sampled the widest array of mental and motor abilities on a developmental assessment at the time
 - Included a large standardization sample
 - Included the Infant Behavior Record to describe behavior during testing
 - All of the above
- 6. All editions of the Bayley Scales included the following except:**
- Hundreds of items
 - Many appealing stimuli
 - Polytomous scoring
 - Impressive quantitative characteristics
- 7. The following statements are true regarding the Bayley-4 Cognitive Scale except:**
- It is based on the Cattell-Horn-Carroll Theory of Cognitive Abilities
 - It is comprised of 81 items
 - It has items that tap sensorimotor development, exploration and manipulation, object relatedness, among other skills
 - For the most part, it does not involve verbal responses from the child
- 8. Quantitative characteristics of early childhood assessments include all of the following except:**
- Reliability
 - Attractive test materials
 - Floors and ceilings
 - Item gradients
- 9. Qualitative characteristics of early childhood assessments include the following:**
- Attractive test materials
 - Opportunities to teach the task
 - Limited language demands unless assessing language
 - All of the above
- 10. The Bayley-4 has exemplary quantitative and qualitative characteristics except for which of the following:**
- Reliability of the Cognitive, Language, and Motor Scales
 - Item gradients of all scales
 - Test-retest reliability characteristics of the Social-Emotional Scale
 - Validity of the Cognitive, Language, and Motor Scales

Answers: 1. (a); 2. (d); 3. (b); 4. (d); 5. (d); 6. (c); 7. (a); 8. (b); 9. (d); 10. (c).

REFERENCES

- Achenbach, T. (1997). *Caregiver-Teacher Report Form: Manual*. Achenbach System of Empirically Based Assessment.
- Achenbach, T., & Rescorla, L. (2000). *Achenbach System of Empirically Based Assessment, Preschool Module: Manual*. Achenbach System of Empirically Based Assessment.
- Albers, C. A., & Grieve, A. J. (2007). Test Review: Bayley, N. (2006). Bayley Scales of Infant and Toddler Development (3rd ed.). San Antonio, TX: Harcourt Assessment. *Journal of Psychoeducational Assessment*, 25(2), 180–190. Retrieved from <https://doi.org/10.1177/0734282906297199>
- Alfonso, V. C., Bracken, B. A., & Nagle, R. J. (Eds.) (2020). *Psychoeducational assessment of preschool children* (5th ed.). Routledge. Retrieved from <https://doi.org/10.4324/9780429054099>
- Alfonso, V. C., Engler, J. R., & Lepore, J. C. C. (2020). Assessing and evaluating young children: Developmental domains and methods. In V. C. Alfonso & G. J. DuPaul (Eds.), *Healthy development in young children: Evidence-based interventions for early education* (pp. 13–44). American Psychological Association. Retrieved from <https://doi.org/10.1037/0000197-002>
- Alfonso, V. C., Engler, J. R., & Stavrou, E. (in press). Assessment of preschoolers and school readiness. In L. A. Theodore, B. A. Bracken, & M. A. Bray (Eds.), *School psychology desk reference*. Oxford University Press.
- Alfonso, V. C., Ruby, S., Wissel, A. M., & Davari, J. (2020). School psychologists in early childhood settings. In F. C. Worrell, T. L. Hughes, & D. D. Dixon (Eds.), *The Cambridge handbook of applied school psychology* (pp. 579–597). Cambridge University Press.
- Alfonso, V. C., Russo, P. M., Fortugno, D. A., & Rader, D. E. (2005). Critical review of the Bayley Scales of Infant Development (2nd ed.): Implications for assessing young children with developmental delays. *The School Psychologist*, 59(2), 67–73.
- Alfonso, V. C., Shanock, A., Muldoon, D., Benway, N., & Oades-Sese, G. (2018). *Psychometric integrity of preschool speech/language tests: Implications for diagnosis and progress monitoring of treatment*. [Poster presentation]. Association for Psychological Science, San Francisco, California, United States.
- Alpern, G. D. (2020). *Developmental Profile* (4th ed.). Western Psychological Services.
- Alpern, G. D., Boll, T. J., & Shearer, M. (1986). *The Developmental Profile II: Manual*. Western Psychological Services.

- Alpern, G. D., Boll, T. J., & Shearer, M. (2007). *Developmental Profile* (3rd ed.). Western Psychological Services.
- Als, H., Tronick, E., Lester, B. M., & Brazelton, T. B. (1977). The Brazelton Neonatal Behavioral Assessment Scale (BNBAS). *Journal of Abnormal Child Psychology*, 5(3), 215–231. Retrieved from <https://doi.org/10.1007/BF00913693>
- American Association on Intellectual and Developmental Disabilities. (2010). *Intellectual and Developmental Disabilities*, 48(4), 307–309. Retrieved from <https://doi.org/10.1352/1934-9556-48.4.307>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Retrieved from <https://doi.org/10.1176/appi.books.9780890425596>
- Ammer, J. J., & Bangs, T. E. (2000). *Birth to Three Assessment and Intervention System* (2nd ed.). Pro-Ed.
- Anastasi, A., & Urbina, S. (1997). *Psychological testing* (7th ed.). Prentice Hall/Pearson Education.
- Anderson, P. J., & Burnett, A. (2017). Assessing developmental delay in early childhood – concerns with the Bayley–III scales. *The Clinical Neuropsychologist*, 31(2), 371–381. Retrieved from <https://doi.org/10.1080/13854046.2016.1216518>
- Anderson, P. J., De Luca, C. R., Hutchinson, E., Roberts, G., Doyle, L. W., & Victorian Infant Collaborative Group. (2010). Underestimation of developmental delay by the new Bayley–III Scale. *Archives of Pediatrics & Adolescent Medicine*, 164(4), 352–356. Retrieved from <https://doi.org/10.1001/archpediatrics.2010.20>
- Apfel, N. H., & Provence, S. (2001). *Infant-Toddler and Family Instrument*. Brookes Publishing Company.
- Aylward, G. P. (1995). *Bayley Infant Neurodevelopmental Screener*. Psychological Corporation.
- Aylward, G. P. (1997). Conceptual issues in developmental screening and assessment. *Journal of Developmental and Behavioral Pediatrics*, 18(5), 340–349. Retrieved from <https://doi.org/10.1097/00004703-199710000-00010>
- Aylward, G. P. (2010). Methodological considerations in neurodevelopmental outcome studies of infants born prematurely. In C. Nosarti, R. Murray, & M. Hack, *Neurodevelopmental outcomes of preterm birth from childhood to adult life* (pp. 164–175). Cambridge University Press. Retrieved from <https://doi.org/10.1017/CBO9780511712166>
- Aylward, G. P. (2013). Continuing issues with the Bayley–III: Where to go from here. *Journal of Developmental and Behavioral Pediatrics*, 34(9), 697–701.

- Aylward, G. P. (2020). *Bayley-4 clinical use and interpretation*. Academic Press.
- Aylward, G. P., & Zhu, J. J. (2019). *The Bayley Scales: Clarification for clinicians and researchers*. NCS Pearson. Retrieved from <https://www.pearsonassessments.com/content/dam/school/global/clinical/us/assets/Bayley-4/Bayley-4-technical-report.pdf>
- Bangs, T. E. (1986). *Birth to Three Assessment and Intervention System*. Riverside Publishing.
- Bankson, N. W. (1990). *Bankson Language Screening Test* (2nd ed.). Pro-Ed.
- Baron-Cohen, S., Allen, J., & Gillberg, C. (1992). Can autism be detected at 18 months? The needle, the haystack, and the CHAT. *The British Journal of Psychiatry: The Journal of Mental Science*, 161, 839–843. Retrieved from <https://doi.org/10.1192/bjp.161.6.839>
- Bayley, N. (1933). *The California First-Year Mental Scale*. University of California Press.
- Bayley, N. (1936). *The California Infant Scale of Motor Development*. University of California Press.
- Bayley, N. (1969). *The Bayley Scales of Infant Development: Manual*. Psychological Corporation.
- Bayley, N. (1993). *Bayley Scales of Infant Development* (2nd ed.): *Manual*. Psychological Corporation.
- Bayley, N. (2006a). *Bayley Scales of Infant and Toddler Development* (3rd ed.). Pearson.
- Bayley, N. (2006b). *Bayley Scales of Infant Development* (3rd ed.): *Administration manual*. Pearson.
- Bayley, N. (2006c). *Bayley Scales of Infant Development* (3rd ed.): *Technical manual*. Pearson.
- Bayley, N., & Aylward, G. P. (2019a). *Bayley Scales of Infant and Toddler Development* (4th ed.). Pearson.
- Bayley, N., & Aylward, G. P. (2019b). *Bayley Scales of Infant and Toddler Development* (4th ed.): *Administration manual*. Pearson.
- Bayley, N., & Aylward, G. P. (2019c). *Bayley Scales of Infant and Toddler Development* (4th ed.): *Technical manual*. Pearson.
- Bayley, N., & Aylward, G. P. (2019d). *Bayley Scales of Infant and Toddler Development* (4th ed.): *Screening test manual*. Pearson.
- Bayley, N., & Schaefer, E. S. (1964). Correlations of maternal and child behaviors with the development of mental abilities. *Monographs of the Society for Research in Child Development*, 29(6), 97. Retrieved from <https://doi.org/10.2307/1165805>

- Beery, K. E. (1989). *Developmental Test of Visual-Motor Integration* (3rd rev.). Modern Curriculum Press.
- Beery, K. E., Buktenica, N. A., & Beery, N. A. (2010). *Beery-Buktenica Developmental Test of Visual-Motor Integration* (6th ed.): *Manual*. Pearson.
- Behar, L., & Stringfield, S. (1974). *Preschool Behavior Questionnaire: Scale and Manual*. Learning Institute of North Carolina.
- Bellman, M., Byrne, O., & Sege, R. (2013). Developmental assessment of children. *British Medical Journal*, *346*. <https://doi.org/10.1136/bmj.e8687>
- Binet, A., & Simon, T. (1905). New methods for the diagnosis of the intellectual level of subnormals. In H. H. Goddard (Ed.), *Development of intelligence in children (The Binet-Simon Scale)*. Williams & Wilkins.
- Black, M., & Matula, K. (2000). *Essentials of Bayley Scales of Infant Development-II assessment*. John Wiley & Sons.
- Blank, M., Rose, S. A., & Berlin, L. J. (2003). *Preschool Language Assessment Instrument* (2nd ed.): *Examiner's manual*. Pro-Ed.
- Boehm, A. E. (2001). *Boehm Test of Basic Concepts Preschool: Examiner's manual*. Pearson.
- Bos, A. F. (2013). Bayley–II or Bayley–III: What do the scores tell us? *Developmental Medicine & Child Neurology*, *55*(11), 978–979. Retrieved from <https://doi.org/doi:10.1111/dmcn.12234>
- Bracken, B. A. (1987). Limitations of preschool instruments and standards for minimal levels of technical adequacy. *Journal of Psychoeducational Assessment*, *5*(4), 313–326. Retrieved from <https://doi.org/10.1177/073428298700500402>
- Bracken, B. A. (1984). *Bracken Basic Concept Scale: Examiner's manual*. Psychological Corporation.
- Bracken, B. A. (1998). *Bracken Basic Concept Scale, Revised*. Psychological Corporation.
- Bracken, B. A. (2006a). *Bracken Basic Concept Scale* (3rd ed.), *Receptive: Examiner's manual*. Pearson.
- Bracken, B. A. (2006b). *Bracken Basic Concept Scale, Expressive: Examiner's manual*. Pearson.
- Bracken, B. A. (2007). *Bracken School Readiness Assessment* (3rd ed.): *Manual*. Pearson.
- Bracken, B. A., Keith, L. K., & Walker, K. C. (1998). Assessment of preschool behavior and social-emotional functioning: A review of thirteen third-party instruments. *Journal of Psychoeducational Assessment*, *16*(2), 153–169. <https://doi.org/10.1177/073428299801600204>

- Bracken, B. A., & Theodore, L. A. (2020). Observation of preschool children's assessment-related behaviors. In V. C. Alfonso, B. A. Bracken, & R. J. Nagle (Eds.), *Psychoeducational Assessment of Preschool Children* (5th ed., pp. 32–54). Routledge.
- Bradley-Johnson, S., & Johnson, C. M. (2001). *Cognitive Abilities Scale* (2nd ed.). Pro-Ed.
- Bradley-Johnson, S., & Johnson, C. M. (2007). Infant and toddler cognitive assessment. In B. A. Bracken & R. J. Nagle (Eds.), *Psychoeducational assessment of preschool children* (4th ed., pp. 325–357). Lawrence Erlbaum Associates Publishers.
- Bradley-Johnson, S., Johnson, C. M., Connard, P., Arick, J. R., & Krug, D. A. (2018). *Assessment for Persons Profoundly or Severely Impaired* (2nd ed.): *Examiner's manual*. Western Psychological Services.
- Brassard, M. R., & Boehm, A. E. (2007). Assessment of emotional development and behavior problems. In *Preschool assessment: Principles and practices* (pp. 508–576). Guilford Press.
- Bricker, D., Capt, B., & Pretti-Frontczak, K. (2002). *Assessment, Evaluation, and Programming System for Infants and Children* (2nd ed.). Brookes Publishing.
- Brigance, A. (1990). *Brigance Early Preschool Screen*. Curriculum Associates.
- Brigance, A. (1992). *Brigance K & 1 Screen*, (3rd ed.). Curriculum Associates.
- Brigance, A. (1985). *Brigance Preschool Screen*. Curriculum Associates.
- Brigance, A., & French, B. (2013). *Brigance Early Childhood Screens III: Technical manual*. Curriculum Associates.
- Briggs-Gowan, M. J., & Carter, A. S. (1998). *Infant-Toddler Social & Emotional Assessment, Revised*. Yale University and the University of Massachusetts, Boston.
- Briggs-Gowan, M. J., Carter, A. S., Irwin, J. R., Wachtel, K., & Cicchetti, D. V. (2004). The Brief Infant-Toddler Social and Emotional Assessment: Screening for social-emotional problems and delays in competence. *Journal of Pediatric Psychology*, 29(2), 143–155. Retrieved from <https://doi.org/10.1093/jpepsy/jsh017>
- Brito, N. H., Fifer, W. P., Amso, D., Barr, R., Bell, M. A., Calkins, S., Flynn, A., Montgomery-Downs, H. E., Oakes, L. M., Richards, J. E., Samuelson, L. M., & Colombo, J. (2019). Beyond the Bayley: Neurocognitive assessments of development during infancy and toddlerhood. *Developmental Neuropsychology*, 44(2), 220–247. Retrieved from <https://doi.org/10.1080/87565641.2018.1564310>
- Brown, T. E. (1996). *Brown Attention-Deficit Disorder Scales*. Pearson.
- Brown, T. E. (2001). *Brown Attention-Deficit Disorder Scales* (2nd ed.). Pearson.
- Brown, T. E. (2018). *Brown Attention-Deficit Disorder Scales* (3rd ed.). Pearson.

- Brue, A. W., & Wilmshurst, L. (2016). *Essentials of intellectual disability assessment and identification*. John Wiley & Sons.
- Bruinicks, R. H., Woodcock, R. W., Weatherman, R. F., & Hill, B. K. (1984). *Scales of Independent Behavior*. DLM Teaching Resources.
- Bruininks, R. K., Woodcock, R. W., Weatherman, R. F., & Hill, B. K. (1996). *Scales of Independent Behavior, Revised*. Riverside Publishing.
- Burns, W. J., Burns, K. A., & Kabacoff, R. I. (1992). Item and factor analyses of the Bayley Scales of Infant Development. *Advances in Infancy Research, 7*, 199–214.
- Bzoch, K. R., & League, R. (1991). *Receptive-Expressive Emergent Language Scale: Examiner's manual*. Pro-Ed.
- Bzoch, K. R., League, R., & Brown, V. L. (2003). *Receptive-Expressive Emergent Language Test (3rd ed.): Examiner's manual*. Pro-Ed.
- Bzoch, K. R., League, R., & Brown, V. L. (2020). *Receptive-Expressive Emergent Language Test (4th ed.): Examiner's manual*. Pro-Ed.
- California Institute for Mental Health. (2000). Mental Health Screening Tool (MHST 0-5). Retrieved from https://www.cibhs.org/sites/main/files/file-attachments/screeningtool5-adult_1.pdf
- Campbell, S. K., Siegel, E., Parr, C. A., & Ramey, C. T. (1986). Evidence for the need to renorm the Bayley Scales of Infant Development based on the performance of a population-based sample of 12-month-old infants. *Topics in Early Childhood Special Education, 6*(2), 83–96. Retrieved from <https://doi.org/10.1177/027112148600600208>
- Capute, A. J., & Accardo, P. J. (1996). *Clinical Adaptive Test/Clinical Linguistic Auditory Milestone scale*. Brookes Publishing.
- Carey, W. B., McDevitt, S. C., Fullard, W., Medoff-Cooper, B., & Hegvik, R. L. (2007). *Carey Temperament Scales: Manual*. Behavioral-Developmental Initiatives.
- Carrow-Woolfolk, E. (1974). *Carrow Elicited Language Inventory*. Learning Concepts.
- Carrow-Woolfolk, E. (1985). *Test for Auditory Comprehension of Language, Revised: Examiner's manual*. DLM Teaching Resources.
- Carrow-Woolfolk, E. (2011). *Oral and Written Language Scales (2nd ed.): Manual*. Pearson.
- Carter, A. S., & Briggs-Gowan, M. (2004). *The Infant-Toddler and Brief Infant Toddler Social Emotional Assessment*. Psychological Corporation.
- Case-Smith, J., & Alexander, H. (2010). The Bayley-III motor scale. In L. G. Weiss, T. Oakland, & G. P. Aylward (Eds.), *Bayley-III clinical use and*

- interpretation* (pp. 77–146). Elsevier. Retrieved from <https://doi.org/10.1016/b978-0-12-374177-6.10004-2>
- Cattell, P. (1940). *Cattell Infant Intelligence Scale*. Psychological Corporation.
- Centers for Disease Control and Prevention. (2019). *Child development positive parenting tips*|CDC. U.S. Department of Health and Human Services. Retrieved from <https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/index.html>
- Conners, C. K. (2009). *Conners Early Childhood: Manual*. Multi-Health Systems.
- Constantino, J. N., & Gruber, C. P. (2012). *Social Responsiveness Scale* (2nd ed.). Western Psychological Services.
- Cook, M. J., Holder-Brown, L., Johnson, L. J., & Kilgo, J. L. (1989). An examination of the stability of the Bayley Scales of Infant Development with high-risk infants. *Journal of Early Intervention, 13*(1), 45–49. Retrieved from <https://doi.org/10.1177/105381518901300106>
- Crowe, T. K., Deitz, J. C., & Bennett, F. C. (1987). The relationship between the Bayley Scales of Infant Development and preschool gross motor and cognitive performance. *The American Journal of Occupational Therapy, 41*(6), 374–378. Retrieved from <https://doi.org/10.5014/ajot.41.6.374>
- Crumrine, L., & Lonegan, H. (1999). *Pre-Literacy Skills Screening*. Pro-Ed.
- Damarin, F. (1979). Bayley Scales of Infant Development. In O. K. Buros (Ed.), *Eighth Mental Measurements Yearbook* (Vol. 1). Gryphon Press.
- DeGangi, G., Poisson, S., Sickel, R., & Wiener, A. S. (1995). *Infant-Toddler Symptom Checklist*. Pearson.
- Division for Early Childhood. (2014). DEC recommended practices in early intervention/early childhood special education 2014. <http://www.dec-sp.ed.org/recommendedpractices>
- Dunn, D. D. (2018). *Peabody Picture Vocabulary Test* (5th ed.). Pearson.
- Dykes, M. K., & Mruzek, D. W. (2012). *Developmental Assessment for Individuals with Severe Disabilities* (3rd ed.): *Examiner's manual*. Pro-Ed.
- Early Childhood Learning and Knowledge Center (ECLKC). (2019). *Head start timeline*. U.S. Department of Health & Human Services. Retrieved from <https://eclkc.ohs.acf.hhs.gov/about-us/article/head-start-timeline>
- Ehrler, D. J., & McGhee, R. L. (2008). *Primary Test of Nonverbal Intelligence: Examiner's manual*. Western Psychological Services.
- Elementary and Secondary Education Act, 20 U.S.C. 2701 *et seq.* (1965). <https://www2.ed.gov/about/offices/list/oii/nonpublic/esearchauth.pdf>
- Elliott, C. D. (1990). *Differential Ability Scales*. Psychological Corporation.
- Elliott, C. D. (2007). *Differential Ability Scales* (2nd ed.): *Manual*. Pearson.
- Emde, R. N., Wolf, D. P., & Oppenheim, D. (2003). *MacArthur Story Stem Battery*. Oxford University Press.

- Engler, J. R., & Alfonso, V. C. (2020). Cognitive assessment of preschool children. In V. C. Alfonso, B. B. Bracken, & R. J. Nagle (Eds.), *Psychoeducational assessment of preschool children* (5th ed., pp. 226–249). Routledge. Retrieved from <https://doi.org/10.4324/9780429054099>
- Every Student Succeeds Act, 20 U.S.C. § 6301 (2015). <https://www.congress.gov/bill/114th-congress/senate-bill/1177>
- Eyberg, S., & Pincus, D. (1999). *Eyberg Child Behavior Inventory & Sutter-Eyberg Student Behavior Inventory, Revised: Manual*. Psychological Assessment Resources.
- Fantuzzo, J. W., Coolahan, K. C., Mendez, J. L., McDermott, P. A., & Sutton-Smith, B. (1998). *Penn Interactive Peer Play Scale*. Elsevier Science (Firm).
- Fewell, R., & Langley, M. B. (1984). *Developmental Activities Screening Inventory* (2nd ed.). Pro-Ed.
- Finello, K. M., & Poulsen, M. K. (2018). *Behavioral Assessment of Baby's Emotional and Social Style*. WestEd.
- Flanagan, D. P., & Alfonso, V. C. (1995). A critical review of the technical characteristics of new and recently revised intelligence tests for preschool children. *Journal of Psychoeducational Assessment*, 13(1), 66–90. Retrieved from <https://doi.org/10.1177/073428299501300105>
- Floyd, R. G., Shands, E. I., Alfonso, V. C., Phillips, J. F., Autry, B. K., Mosteller, J. A., Skinner, M., & Irby, S. (2015). A systematic review and psychometric evaluation of adaptive behavior scales and recommendations for practice. *Journal of Applied School Psychology*, 31(1), 83–113. Retrieved from <https://doi.org/10.1080/15377903.2014.979384>
- Fluharty, N. B. (2000). *Fluharty Preschool Speech and Language Screening Test* (2nd ed.): *Examiner's manual*. Pro-Ed.
- Folio, M. R., & Fewell, R. R. (2000). *Peabody Developmental Motor Scales* (2nd ed.): *Manual*. Pearson.
- Foster, R., Giddan, J. J., & Stark, J. (1973). *Assessment of Children's Language Comprehension: Manual*. Consulting Psychologists Press.
- Frankenburg, W. K., & Dodds, J. B. (1967). The Denver Developmental Screening Test. *The Journal of Pediatrics*, 71(2), 181–191. Retrieved from [https://doi.org/10.1016/S0022-3476\(67\)80070-2](https://doi.org/10.1016/S0022-3476(67)80070-2)
- Frankenburg, W. K., Doods, J., Archer, P., & Bresnick, B. (1990). *Denver Developmental Screening* (2nd ed.): *Manual*. Denver Developmental Materials.
- Frankenburg, W. K., Fandel, A., Sciarillo, W., & Burgess, D. (1981). The newly abbreviated and revised Denver Developmental Screening Test. *Journal of Pediatrics*, 99, 995–999.
- Frankenburg, W. K., Goldstein, A. D., & Camp, B. W. (1971). The revised Denver Developmental Screening Test: Its accuracy as a screening instrument.

- The Journal of Pediatrics*, 79(6), 988–995. Retrieved from [https://doi.org/10.1016/s0022-3476\(71\)80195-6](https://doi.org/10.1016/s0022-3476(71)80195-6)
- Fudala, J. B., & Reynolds, W. M. (1986). *Arizona Articulation Proficiency Scale Manual and Picture Test Cards*. Western Psychological Services.
- Gadow, K., & Sprafkin, J. (1997). *ADHD Symptom Checklist-4: Manual*. Checkmate Plus.
- Gadow, K. D., & Sprafkin, J. (2000). *Early Childhood Inventory* (3rd ed.). Prentice Hall.
- Gadow, K. D., & Sprafkin, J. (2010). *Early Childhood Inventory* (4th ed.). Checkmate Plus.
- Gadow, K. D., & Sprafkin, J. (2014). *Early Childhood Inventory* (5th ed.). Checkmate Plus.
- Gagnon, S. G., & Nagle, R. J. (2000). Comparison of the revised and original versions of the Bayley Scales of Infant Development. *School Psychology International*, 21(3), 293–305. <https://doi.org/10.1177/0143034300213006>
- Gardner, M. F. (1985). *Receptive One-Word Picture Vocabulary Test*. Academic Therapy Publications.
- Gardner, M. F. (1990). *Expressive One-Word Picture Vocabulary Test, Revised*. Academic Therapy Publication.
- Gardner, M. F. (1995). *Test of Visual Motor Skills Revised: Manual*. Psychological and Educational Publications.
- Gauthier, S. M., Bauer, C. R., Messinger, D. S., & Closius, J. M. (1999). The Bayley Scales of Infant Development-II: Where to start? *Journal of Developmental and Behavioral Pediatrics*, 20(2), 75–79. Retrieved from <https://doi.org/10.1097/00004703-199904000-00001>
- Geffner, D., & Goldman, R. (2010). *Auditory Skills Assessment: Manual*. Pearson.
- Gesell, A. (1925a). *The Mental Growth of the Preschool Child*. Macmillan.
- Gesell, A. (1925b). *Gesell developmental schedules*. Stoelting.
- Gesell, A., & Amatruda, C. (1941). *Gesell Developmental Schedules*. Psychological Corporation.
- Gilliam, J. E. (2001). *Gilliam Asperger's Disorder Scale: Examiner's manual*. Western Psychological Services.
- Gilliam, J. E. (2005). *Gilliam Autism Rating Scale* (2nd ed.): *Examiner's manual*. Pro-Ed.
- Ginsburg, H. P., & Baroody, A. J. (2003). *Test of Early Mathematics Ability* (3rd ed.): *Examiner's manual*. Pro-Ed.
- Glascoc, F. P. (2002). The Brigance Infant and Toddler Screen: Standardization and validation. *Journal of Developmental and Behavioral Pediatrics: JDBP*,

- 23(3), 145–150. Retrieved from <https://doi.org/10.1097/00004703-200206000-00003>
- Glascoe, F. P. (2012). *Parents' Evaluation of Developmental Status*. PEDStest.com.
- Glenn, S., Dayus, B., Cunningham, C., & Horgan, M. (2001). Mastery motivation in children with Down syndrome. *Down Syndrome: Research & Practice*, 7(2), 52–59. Retrieved from <https://doi.org/10.3104/reports.114>
- Goldman, R., & Fristoe, M. (2000). *Goldman-Fristoe Test of Articulation* (2nd ed.): *Manual*. Pearson.
- Goldstein, D. J., Fogle, E. E., Wieber, J. L., & O'Shea, T. M. (1995). Comparison of the Bayley Scales of Infant Development (2nd ed.) and the Bayley Scales of Infant Development with premature infants. *Journal of Psychoeducational Assessment*, 13(4), 391–396. Retrieved from <https://doi.org/10.1177/073428299501300406>
- Good, R. H., & Kaminski, R. A. (Eds.). (2002). *Dynamic Indicators of Basic Early Literacy Skills* (6th ed.). Institute for the Development of Educational Achievement.
- Goodman, J. F. (1990). Infant intelligence: Do we, can we, should we assess it? In C. R. Reynolds & R. W. Kamphaus (Eds.), *Handbook of psychological and Educational Assessment* (pp. 183–204). Guilford Press.
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38(5), 581–586. Retrieved from <https://doi.org/10.1111/j.1469-7610.1997.tb01545.x>
- Greenspan, S. I. (2004). *Greenspan Social-Emotional Growth Chart: A Screening Questionnaire for Infants and Young Children: Manual*. Psychological Corporation.
- Greenspan, S. I., DeGangi, G. A., & Wieder, S. (2001). *The Functional Emotional Assessment Scale*. Interdisciplinary Council on Developmental and Learning Disorders.
- Gresham, F. M., & Elliot, S. N. (1990). *Social Skills Rating System: Manual*. American Guidance Service.
- Gresham, F. M., & Elliot, S. N. (2008). *Social Skills Improvement System Rating Scales: Manual*. Pearson.
- Griffiths, R. (1951). *The Griffiths Mental Development Scale for Testing Babies from Birth to Two Years*. Child Development Research Centre.
- Griffiths, R. (1967). *Griffiths Mental Developmental Scale*. University of London Press.
- Guralnick, M. J. (Ed.) (1997). *The effectiveness of early intervention*. Brookes.

- Hack, M., Taylor, H. G., Drotar, D., Schluchter, M., Cartar, L., Wilson-Costello, D., Klein, N., Friedman, H., Mercuri-Minich, N., & Morrow, M. (2005). Poor predictive validity of the Bayley Scales of Infant Development for cognitive function of extremely low birth weight children at school age. *Pediatrics, 116*(2), 333–341. Retrieved from <https://doi.org/10.1542/peds.2005-0173>
- Hammill, D., & Bryant, B. (1991). *Detroit Test of Learning Aptitude—Primary* (2nd ed.). Pro-Ed.
- Hammill, D., & Bryant, B. (2005). *Detroit Test of Learning Aptitude—Primary* (3rd ed.): *Examiner's manual*. Pro-Ed.
- Harrison, P., Kaufman, A., Kaufman, N., Bruininks, R., Rynders, J., Ilmer, S., Sparrow, S., & Cicchetti, D. (1990). *Early Screening Profiles: Manual*. Pearson.
- Harrison, P. L., & Oakland, T. (2000). *Adaptive Behavior Assessment System*. Psychological Corporation.
- Harrison, P. L., & Oakland, T. (2003). *Adaptive Behavior Assessment System* (2nd ed.). Psychological Corporation.
- Harrison, P. L., & Oakland, T. (2015). *Adaptive Behavior Assessment System* (3rd ed.): *Manual*. Pearson.
- Hedrick, D. L., Prather, E. M., & Tobin, A. R. (1975). *Sequenced Inventory of Communication Development, Revised*. Western Psychological Services.
- Hedrick, D. L., Prather, E. M., & Tobin, A. R. (1984). *Sequenced Inventory of Communication Development*. University of Washington Press.
- High/Scope Educational Research Foundation. (2003). *Preschool Child Observation Record* (2nd ed.). High/Scope Press.
- Hiskey, M. S. (1966). *Hiskey-Nebraska Test of Learning Aptitude*. Union College Press.
- Hoover, H. D., Hieronymous, A. N., Frisbie, D. A., & Dunbar, S. B. (1996). *Iowa Test of Basic Skills: Administration manual*. Riverside.
- Howes, C., & Matheson, C. C. (1992). *Revised Peer Play Scale*. American Psychological Association.
- Hresko, W., Reid, D. K., & Hammill, D. D. (1991). *Test of Early Language Development* (2nd ed.). Pro-Ed.
- Hresko, W. P., Reid, D. K., & Hammill, D. D. (1999). *Test of Early Language Development* (3rd ed.): *Manual*. Pearson.
- Hresko, W. P., Reid, D. K., & Hammill, D. D. (2018). *Test of Early Language Development* (4th ed.): *Manual*. Pro-Ed.
- Hua, J., Li, Y., Ye, K., Ma, Y., Lin, S., Gu, G., & Du, W. (2019). The reliability and validity of Bayley–III cognitive scale in China's male and female children.

- Early Human Development*, 129, 71–78. Retrieved from <https://doi.org/10.1016/j.earlhumdev.2019.01.01>
- Huer, M. B., & Miller, L. (2011). *Test of Early Communication and Emerging Language: Examiner's manual*. Pro-Ed.
- Hughes, T. L., & Quinn, C. V. (2020). Working with young children living in stressful environments. In V. C. Alfonso & G. J. DuPaul (Eds.), *Healthy development in young children: Evidence-based interventions for early education* (pp. 297–315). American Psychological Association. Retrieved from <https://doi.org/10.1037/0>
- Ilg, F. L., & Ames, L. B. (1972). *Gesell School Readiness Test*. Harper & Row.
- Individuals with Disabilities Education Improvement Act, Pub. L. 108–446, 118 Stat. 2647 (2004).
- Ireton, H. (1988). *Preschool Developmental Inventory: Manual*. Behavior Science System.
- Ireton, H. (1992). *Child Development Inventories: Manual*. Behavior Science Systems.
- Ireton, H. (1994). *Infant Development Inventory*. Behavior Science Systems.
- Ireton, H. (2006). *Infant Developmental Inventory: Manual*. Behavior Science Systems.
- Jaffa, A. S. (1934). *The California Preschool Mental Scale, Form A*. University of California Press.
- Jary, S., Whitelaw, A., Walløe, L., & Thoresen, M. (2013). Comparison of Bayley-2 and Bayley-3 scores at 18 months in term infants following neonatal encephalopathy and therapeutic hypothermia. *Developmental Medicine and Child Neurology*, 55(11), 1053–1059. Retrieved from <https://doi.org/10.1111/dmcn.12208>
- Jensen, S. L. (2012). *Early Functional Communication Profile: Manual*. Western Psychological Services.
- Johnson, S., Moore, T., & Marlow, N. (2014). Using the Bayley–III to assess neurodevelopmental delay: Which cut-off should be used? *Pediatric Research*, 75(5), 670–674. <https://doi.org/10.1038/pr.2014.10>
- Kaufman, A. S., & Kaufman, N. L. (1983). *Kaufman Assessment Battery for Children: Interpretive manual*. American Guidance Service.
- Kaufman, A. S., & Kaufman, N. L. (1993). *Kaufman Survey of Early Academic and Language Skills: Manual*. Pearson.
- Kaufman, A. S., & Kaufman, N. L. (2004). *Kaufman Assessment Battery for Children* (2nd ed.): *Manual*. Pearson.
- Kaufman, A. S., & Kaufman, N. L. (2018). *Kaufman Assessment Battery for Children* (2nd ed., Normative Update): *Manual*. Pearson.
- Kaufman, N. L. (1995). *Kaufman Speech Praxis Test for Children: Manual*. Wayne State University Press.

- Kelley, M. F., & Surbeck, E. (2007). History of preschool assessment. In B. A. Bracken & R. Nagle (Eds.), *Psychoeducational assessment of preschool children* (4th ed., pp. 3–28). Lawrence Erlbaum Associates Publishers.
- Kelly-Vance, L., & Ryalls, B. O. (2020). Play-based approaches to preschool assessment. In V. C. Alfonso, B. B. Bracken, & R. J. Nagle (Eds.), *Psychoeducational assessment of preschool children* (5th ed.). Routledge. Retrieved from <https://doi.org/10.4324/9780429054099>
- Knobloch, H., Stevens, F., & Malone, A. S. (1980). *Gesell Developmental Schedules*. Harper and Row.
- Korkman, M., Kirk, U., & Kemp, S. (1998). *NEPSY: Manual*. Pearson.
- Korkman, M., Kirk, U., & Kemp, S. (2007). *NEPSY* (2nd ed.): *Manual*. Pearson.
- Krug, D. A., Arick, J. R., & Almond, P. (1993). *Autism Screening Instrument for Educational Planning* (2nd ed.): *Manual*. Pro-Ed.
- LaFreniere, P. J., & Dumas, J. E. (1995). *Social Competence and Behavior Evaluation Preschool Edition: Examiner's manual*. Western Psychological Services.
- Lambert, N. M., Windmiller, M., Tharinger, D., & Cole, L. (1981). *AAMD Adaptive Behavior Scale School Edition: Manual*. Publishers Test Service.
- Langley, M. B., Fewell, R., & Maddox, T. (2010). *Cognitive Assessment of Young Children: Examiner's manual*. Pro-Ed.
- LeBuffé, P. A., & Naglieri, J. A. (1999). *The Devereux Early Childhood Assessment*. Kaplan Press.
- LeBuffé, P. A., & Naglieri, J. A. (2002). *Devereux Early Childhood Assessment Clinical Form*. Kaplan Press.
- Lee, L. L. (1971). *Northwestern Syntax Screening Test*. University Press.
- Leguire, L. E., & Fellows, R. R. (1990). Time to renorm the Bayley. *Review: Rehabilitation and Education for Blindness and Visual Impairment*, 22(1), 7–12.
- Lennon, E. M., Gardner, J. M., Karmel, B. Z., & Flory, M. J. (2008). Bayley Scales of Infant Development. In J. B. Benson & M. M. Haith (Eds.), *Language, memory, and cognition in infancy and early childhood* (pp. 37–48). Academic Press.
- Lewis, N. P., & Khan, L. M. (2002). *Khan-Lewis Phonological Analysis* (2nd ed.). *Manual*. Pearson.
- Lidz, C. S. (2002). *Early childhood assessment*. John Wiley & Sons.
- Linder, T. (2008). *Transdisciplinary Play-Based Assessment, Second Edition: Manual*. Brookes Publishing.
- Lipkin, P. H., & Okamoto, J. K. (2015). The Individuals with Disabilities Education Act (IDEA) for children with special educational needs. *Pediatrics*, 136(6), e1650 - e1662. <https://doi.org/10.1542/peds.2015-34>.

- Lippke, B., Dickey, S., Selmar, J., & Soder, A. (1997). *Photo Articulation Test, Third Edition: Manual*. Pro-Ed.
- Lipsitt, L. P. & Eichorn, D. H. (1990). Nancy Bayley (1899 –). In A. N. O'Connell & N. F. Russo (Eds.), *Women in psychology: A bio-bibliographic sourcebook*. Greenwood Press.
- Lord, C., Rutter, M., DiLavore, P. C., Risi, S., Gotham, K., Bishop, S. L., Luyster, R. J., & Guthrie, W. (2012). *Autism Diagnostic Observation Schedule* (2nd ed.): *Manual*. Pearson.
- Lowe, J. R., Erickson, S. J., Schrader, R., & Duncan, A. F. (2012). Comparison of the Bayley II mental developmental index and the Bayley III cognitive scale: Are we measuring the same thing? *Acta Paediatrica*, *101*(2), 55–58. Retrieved from <https://doi.org/10.1111/j.1651-2227.2011.02517.x>
- Lowe, M., & Costello, A. J. (1988). *Symbolic Play Test* (2nd ed.). GL Assessment.
- Manandhar, S. R., Dulal, S., Manandhar, D. S., Saville, N., & Prost, A. (2016). Acceptability and reliability of the Bayley Scales of Infant Development III cognitive and motor scales among children in Makwanpur. *Journal of Nepal Health Research Council*, *14*(32), 47–50.
- Marcott, A. (2009). *Evaluating Acquired Skills in Communication* (3rd ed.): *Examiner's manual*. Pro-Ed.
- Mardell, C. M., & Goldenberg, D. S. (2011). *Developmental Indicators for the Assessment of Learning* (4th ed.): *Manual*. Pearson.
- Mardell-Czudnowski, C. D., & Goldenberg, D. S. (1983). *Developmental Indicators for the Assessment of Learning, Revised*. Childcraft Education.
- Mardell-Czudnowski, C., & Goldenberg, D. S. (1990). *Developmental Indicators of the Assessment of Learning, Revised*. American Guidance Service.
- Mardell-Czudnowski, C., & Goldenberg, D. S. (1998). *Developmental Indicators for the Assessment of Learning* (3rd ed.). American Guidance Services.
- Martin, N. A. (2010). *Test of Visual-Motor Skills* (3rd ed.): *Manual*. Western Psychological Services.
- Martin, R. P. (1988). *The Temperament Assessment Battery for Children*. Clinical Psychology Publishing.
- Matula, K., Gyurke, J. S., & Aylward, G. P. (1997). Bayley Scales-II. *Journal of Developmental and Behavioral Pediatrics*, *18*(2), 112–113. Retrieved from <https://doi.org/10.1097/00004703-199704000-00008>
- McBride, G., Dumont, R., & Willis, J. O. (2011). *Essentials of IDEA for assessment professionals*. John Wiley & Sons.
- McCarney, S. B., & Arthaud, T. J. (2004). *Attention Deficit Disorders Evaluation Scale* (3rd ed.). Howthorne Educational Services. Retrieved from https://www.silvereye.com.au/documents/sample_pages/prod3308.pdf

- McCarthy, D. (1972). *The McCarthy Scales of Children's Abilities*. Psychological Corporation.
- McClain, C., Provost, B., & Crowe, T. K. (2000). Motor development of two-year-old typically developing Native American children on the Bayley Scales of Infant Development II motor scale. *Pediatric Physical Therapy, 12*(3), 108–113.
- McCloskey, G., Petry, B., McIntosh, L., Kelly, J., & Filacheck, J. (2020). Neuropsychological assessment of preschool children. In V. C. Alfonso, B. B. Bracken, & R. J. Nagle (Eds.), *Psychoeducational assessment of preschool children* (5th ed., pp. 375–398). Routledge. Retrieved from <https://doi.org/10.4324/9780429054099>
- McConaughy, S. H., & Achenbach, T. M. (2004). *Test Observation Form (TOF): Manual*. University of Vermont, Research Center for Children, Youth, & Families.
- McGhee, R. L., Ehrlert, D. J., & DiSimoni, F. (2007). *Token Test for Children* (2nd ed.): *Examiner's manual*. Pro-Ed.
- McGuire, J., & Richman, N. (1988). *Preschool Behavior Checklist*. Academic Therapy Publications.
- Meadow, K. P. (1983). *Meadow/Kendall Social-Emotional Assessment Inventories for Deaf and Hearing: Revised manual*. Pre-College Programs.
- Meisels, S. J., Jablon, J. R., Marsden, D. B., Dichtelmiller, M. L., & Dorfman, A. B. (2001). *The Work Sampling System* (4th ed.). Pearson Early Learning.
- Meisels, S. J., & Marsden, D. B. (2019). *Early Screening Inventory* (3rd ed.). Pearson.
- Meisels, S. J., Marsden, D. B., Dombro, A. M., Weston, D. R., & Jewkes, A. M. (2003). *The Ounce Scale: Manual*. Pearson.
- Meisels, S. J., Marsden, D. B., Wiske, M. S., & Henderson, L. W. (1997). *The Early Screening Inventory Revised*. Pearson.
- Merrell, K. W. (1994). *Preschool and Kindergarten Behavior Scales: Manual*. Clinical Psychology Publishing.
- Merrell, K. W. (2003). *Preschool and Kindergarten Behavior Scales* (2nd ed.): *Examiner's manual*. Pro-Ed.
- Milani-Comparetti, A., & Gidoni, E. (1967). Routine developmental examination in normal and retarded children. *Developmental Medicine & Child Neurology, 9*(5), 631–638. Retrieved from <https://doi.org/10.1111/j.1469-8749.1967.tb02335.x>
- Miller, L. J. (1988). *Miller Assessment for Preschoolers*. Western Psychological Services.
- Miller, L. J. (1993). *FirstSTEP: Screening Test for Evaluating Preschoolers*. Pearson.
- Milne, S., McDonald, J., & Comino, E. J. (2012). The use of the Bayley Scales of Infant and Toddler Development III with clinical populations: A preliminary

- exploration. *Physical & Occupational Therapy in Pediatrics*, 32(1), 24–33. Retrieved from <https://doi.org/10.3109/01942638.2011.592572>
- Monsma, E. V., Miedema, S. T., Brian, A. S., & Williams, H. G. (2020). Assessment of gross motor development in preschool children. In V. C. Alfonso, B. B. Bracken, & R. J. Nagle (Eds.), *Psychoeducational assessment of preschool children* (5th ed., pp. 283–319). Routledge.
- Moore, T., Johnson, S., Haider, S., Hennessy, E., & Marlow, N. (2012). Relationship between test scores using the second and third editions of the Bayley Scales in extremely preterm children. *The Journal of Pediatrics*, 160(4), 553–558. Retrieved from <https://doi.org/10.1016/j.jpeds.2011.09.047>
- Mowder, B. A., Rubinson, F., & Yasik, A. E. (Eds.). (2009). *Evidence-based practice in infant and early childhood psychology*. John Wiley & Sons.
- Mullen, E. M. (1995). *Mullen Scales of Early Learning, AGS Edition*. American Guidance Service.
- Nagle, R. J., Gagnon, S. G., & Kidder-Ashley, P. (2020). Issues in preschool assessment. In V. C. Alfonso, B. B. Bracken, & R. J. Nagle (Eds.), *Psychoeducational assessment of preschool children* (5th ed., pp. 3–31). Routledge.
- National Association for the Education of Young Children. (2020). Retrieved from <http://www.naeyc.org>
- National Association of School Psychologists. (2015). *Early childhood services: Promoting positive outcomes for young children [Position statement]*.
- National Research Council. (2008). *Early childhood assessment: Why, what, and how*. The National Academies Press. Retrieved from <https://doi.org/10.17226/12446>
- Nehring, A. D., Nehring, E. F., Bruni, J. R., & Randolph, P. L. (1992). *Learning Accomplishment Profile-Diagnostic Standardized Assessment*. Kaplan Press.
- Neisworth, J. T., Bagnato, S. J., Salvia, J., & Hunt, F. M. (1999). *Temperament and Atypical Behavior Scale: Manual*. Brookes Publishing.
- Nellis, L., & Gridley, B. E. (1994). Review of the Bayley Scales of Infant Development (2nd ed.). *Journal of School Psychology*, 32(2), 201–209. [https://doi.org/10.1016/0022-4405\(94\)90011-6](https://doi.org/10.1016/0022-4405(94)90011-6)
- Newborg, J. (1984). *Battelle Developmental Inventory*. Riverside Publishing.
- Newborg, J. (2004). *Battelle Developmental Inventory* (2nd ed.). Riverside Publishing.
- Newborg, J. (2020). *Battelle Developmental Inventory* (3rd ed.). Riverside Insights.
- Nihira, K., Foster, R., Shellhaas, M., & Leland, H. (1974). *AAMD Adaptive Behavior Scale*. American Association on Mental Deficiency.
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 101, 115 Stat. 1425 (2002). <https://www.govinfo.gov/content/pkg/PLAW-107publ110/pdf/PLAW-107publ110.pdf>

- Nurss, J. R., & McGauvran, M. E. (1995). *Metropolitan Readiness Test* (6th ed.). Harcourt Brace.
- Nuttall, E. V. E., Romero, I. E., & Kalesnik, J. E. (1999). *Assessing and screening preschoolers: Psychological and educational dimensions*. Allyn & Bacon.
- Office of Head Start. (2019). *History of Head Start*. U.S. Department of Health & Human Services. <https://www.acf.hhs.gov/ohs/about/history-head-start>
- Ostrov, J. M. (2005). *Early Childhood Play Project: Observational coding manual*. Department of Psychology.
- Parham, L. D., & Ecker, C. (2010). *Sensory Processing Measure—Preschool: Manual*. Western Psychological Services.
- Pendergast, K. (1969). *Photo Articulation Test*. International Printers.
- Pendergast, L. L., Schaefer, B. A., Murray-Kolb, L. E., Svensen, E., Shrestha, R., Rasheed, M. A., Scharf, R. J., Kosek, M., Vasquez, A. O., Maphula, A., Costa, H., Rasmussen, Z. A., Yousafzai, A., Tofail, F., Seidman, J. C., & Network Investigators, M. A. L.-E. D. (2018). Assessing development across cultures: Invariance of the Bayley—III Scales across seven international MAL-ED sites. *School Psychology Quarterly*, *33*(4), 604–614. Retrieved from <https://doi.org/10.1037/spq0000264>
- Pinon (2010). Theoretical background and structure of the Bayley Scales of Infant Development (3rd ed.). In L. G. Weiss, T. Oakland, & G. P. Aylward (Eds.), *Bayley—III clinical use and interpretation* (pp. 1–28). Academic Press.
- Provence, S., Erikson, J., Vater, S., Pruet, K., Rosinia, J., & Palmeri, S. (2016). *Infant-Toddler Developmental Assessment* (2nd ed.): *Manual*. Pro-Ed.
- Provost, B., Heimerl, S., McClain, C., Kim, N. H., Lopez, B. R., & Kodituwakku, P. (2004). Concurrent validity of the Bayley Scales of Infant Development II Motor Scale and the Peabody Developmental Motor Scales-2 in children with developmental delays. *Pediatric Physical Therapy*, *16*(3), 149–156. Retrieved from <https://doi.org/10.1097/01.PEP.0000136005.41585.FE>
- Rademeyer, V., & Jacklin, L. (2013). A study to evaluate the performance of black South African urban infants on the Bayley Scales of Infant Development III. *South African Journal of Child Health*, *7*(2), 54–59.
- Raines, T. C., Malone, C. M., Beidleman, L. M., & Bowman, N. (2020). National policies and laws affecting children's health and education. In V. C. Alfonso & G. J. DuPaul (Eds.), *Healthy development in young children: Evidence-based interventions for early education* (pp. 319–336). American Psychological Association. Retrieved from <https://doi.org/10.1037/0000197-016>
- Ramey, C. T., & Ramey, S. L. (1998). Prevention of intellectual disabilities: Early interventions to improve cognitive development. *Preventive Medicine*, *27*(2), 224–232. <https://doi.org/10.1006/pmed.1998.0279>

- Ramey, C. T., & Ramey, S. L. (2004). Early learning and school readiness: Can early intervention make a difference? *Merrill-Palmer Quarterly*, *50*(4), 471–491. Retrieved from <https://doi.org/10.1353/mpq.2004.0034>
- Ramey, C. T., Sparling, J. J., & Ramey, S. L. (2014). Interventions for students from impoverished environments. In J. T. Mascolo, V. C. Alfonso, & D. P. Flanagan (Eds.), *Essentials of planning, selecting and tailoring interventions for unique learners* (pp. 415–448). John Wiley & Sons.
- Ranjitkar, S., Kvestad, I., Strand, T. A., Ulak, M., Shrestha, M., Chandyo, R. K., Shrestha, L., & Hysing, M. (2018). Acceptability and reliability of the Bayley Scales of Infant and Toddler Development-III among children in Bhaktapur, Nepal. *Frontiers in Psychology*, *9*, 1265. Retrieved from <https://doi.org/10.3389/fpsyg.2018.01265>.
- Redden, S. C., Forness, S. R., Ramey, S. L., Ramey, C. T., Brezausek, C. M., & Kavale, K. A. (2001). Children at risk: Effects of a four-year Head Start transition program on special education identification. *Journal of Child and Family Studies*, *10*(2), 255–270. Retrieved from <https://doi.org/10.1023/A:1016659710619>
- Redden, S. C., Forness, S. R., Ramey, S. L., Ramey, C. T., Zima, B. T., Brezausek, C. M., & Kavale, K. A. (1999). Head Start children at third grade: Preliminary special education identification and placement of children with emotional, learning, and related disabilities. *Journal of Child and Family Studies*, *8*(3), 285–303. Retrieved from <https://doi.org/10.1023/A:1022063228843>
- Reid, D. M., Hresko, W. P., Hammill, D. D., & Wiltshire, S. (1991). *Test of Early Reading Ability: Deaf or Hard of Hearing*. Pro-Ed.
- Reid, D. M., Hresko, W. P., Hammill, D. D., & Wiltshire, S. (2001). *Test of Early Reading Ability* (3rd ed.). Pro-Ed.
- Reuner, G., Fields, A. C., Wittke, A., Löprrich, M., & Pietz, J. (2013). Comparison of the developmental tests Bayley-III and Bayley-II in 7-month-old infants born preterm. *European Journal of Pediatrics*, *172*(3), 393–400. Retrieved from <https://doi.org/10.1007/s00431-012-1902-6>
- Reuter, J. R., Katoff, L., & Gruber, C. (2000). *Kent Inventory of Developmental Skills*. Western Psychological Services.
- Reynell, J., & Gruber, C. (1990). *Reynell Developmental Language Scales: Manual*. Western Psychological Services.
- Reynell, J., & Zinkin, P. (1979). *Reynell-Zinkin Scales: Developmental Scales for Young Visually Handicapped Children: Manual*. NFER Publishing Company.
- Reynolds, C. R., & Kamphaus, R. W. (1992). *Behavior Assessment System for Children*. American Guidance Service.

- Reynolds, C. R., & Kamphaus, R. W. (2004). *Behavior Assessment System for Children* (2nd ed.). Pearson.
- Reynolds, C. R., & Kamphaus, R. W. (2007a). *BASC-2 Behavioral and Emotional Screening System: Manual*. Pearson.
- Reynolds, C. R., & Kamphaus, R. W. (2007b). *Test of Irregular Word Reading Efficiency: Professional manual*. Psychological Assessment Resources.
- Reynolds, C. R., & Kamphaus, R. W. (2015a). *BASC-3 Behavioral and Emotional Screening System: Manual*. Pearson.
- Reynolds, C. R., & Kamphaus, R. W. (2015b). *Behavior Assessment System for Children* (3rd ed.). Pearson.
- Rhodes, L., Bayley, N., & Yow, B. C. (1984). *Supplement to the manual for the Bayley Scales of Infant Development*. The Psychological Corporation.
- Riley, G., & Bakker, K. (2009). *Stuttering Severity Instrument* (4th ed.): *Examiner's manual*. Pro-Ed.
- Roberts, H., & Kennert, B. (2018). Primer on special education. In H. Needelman & B. Jackson (Eds.), *Follow-up for NICU graduates*. Springer. Retrieved from https://doi.org/10.1007/978-3-319-73275-6_16
- Robertson, C. M., Hendson, L., Biggs, W. S., & Acton, B. V. (2010). Application of the Flynn effect for the Bayley III Scales. *Archives of Pediatrics & Adolescent Medicine*, *164*(11), 1072–1073. Retrieved from <https://doi.org/10.1001/archpediatrics.2010.199>
- Robins, D. L., Fein, D., & Barton, M. L. (1999). *Modified Checklist for Autism in Toddlers*. Self-Published.
- Roid, G. H. (2005). *Stanford–Binet Intelligence Scales* (5th ed.): *Technical manual*. Pro-Ed.
- Roid, G. H., & Miller, L. J. (1997). *Leiter International Performance Scale Revised: Examiner's manual*. Stoelting.
- Roid, G. H., & Miller, L. J. (2013). *Leiter International Performance Scale* (3rd ed.). Stoelting.
- Roid, G. H., & Sampers, J. L. (2004). *Merrill-Palmer Revised: Manual*. Western Psychological Services.
- Rosenblith, J. F. (1992). A singular career: Nancy Bayley. *Developmental Psychology*, *28*(5), 747–758. <https://doi.org/10.1037/0012-1649.28.5.747>
- Ross, G., & Lawson, K. (1997). Using the Bayley-II: Unresolved issues in assessing the development of prematurely born children. *Journal of Developmental and Behavioral Pediatrics*, *18*(2), 109–111. Retrieved from <https://doi.org/10.1097/00004703-199704000-00007>
- Rutter, M., Bailey, A., & Lord, C. (2003). *Social Communication Questionnaire*. Western Psychological Services.

- Rutter, M., LeCouteur, A., & Lord, C. (2003). *Autism Diagnostic Interview Revised: Manual*. Pearson.
- Sattler, J. M. (2018a). *Assessment of children: Cognitive foundations and applications* (6th ed.). Author.
- Sattler, J. M. (2018b). *Resource guide to accompany assessment of children: Cognitive foundations and applications* (6th ed.). Author.
- Schafer, D. S., & Moersch, M. S. (1981). *Developmental Programming for Infants and Young Children*. University of Michigan Press.
- Schopler, E., Bourgondien, M. E., Wellman, G. J., & Love, S. R. (2010). *Childhood Autism Rating Scale* (2nd ed.): *Manual*. Pearson.
- Schopler, E., Lansing, M., Reichler, R., & Marcus, L. (2005). *Psychoeducational Profile* (3rd ed.): *Manual*. Pro-Ed.
- Schopler, E., Reichler, R., & Renner, B. (1988). *The Childhood Autism Rating Scale*. Western Psychological Services.
- Schrank, F. A., McGrew, K. S., Mather, N., & Woodcock, R. W. (2014). *Woodcock-Johnson IV*. Riverside Publishing.
- Schweinhart, L. J., & Weikart, D. P. (1998). Why curriculum matters in early childhood education. *Educational Leadership*, 55(6), 57.
- Secord, W., & Donohue, J. S. (2013). *Clinical Assessment of Articulation and Phonology* (2nd ed.): *Examiner's manual*. Pro-Ed.
- Siegel, B. (2004). *Pervasive Developmental Disorders Screening Test* (2nd ed.). Psychological Corporation/Harcourt Assessment.
- Siegel, L. S., Cooper, D. C., Fitzhardinge, P. M., & Ash, A. J. (1995). The use of the Mental Development Index of the Bayley Scale to diagnose language delay in 2-year-old high risk infants. *Infant Behavior & Development*, 18(4), 483–486. Retrieved from [https://doi.org/10.1016/0163-6383\(95\)90037-3](https://doi.org/10.1016/0163-6383(95)90037-3)
- Simeonsson, R. J. (1979). *Carolina Record of Individual Behavior*. Carolina Institute for Research on Early Education of the Handicapped.
- Smith, A. J., & Johnson, R. E. (1977). *Smith-Johnson Nonverbal Performance Scale*. Western Psychological Services.
- Snow, C. E., & Van Hemel, S. B. (2008). *Early childhood assessment: Why, what, and how*. The National Academies Press.
- Snyder, S., & Sheehan, R. (1992). Rasch analysis of the Standardization data of the Bayley Mental Scale of Infant Development. *Diagnostique*, 17(3), 185–194. Retrieved from <https://doi.org/10.1177/153450849201700303>
- Sparrow, S. S., Balla, D. A., & Cicchetti, D. V. (1984). *Vineland Adaptive Behavior Scales*. American Guidance Service.
- Sparrow, S. S., Balla, D. A., & Cicchetti, D. V. (1998). *Vineland Social-Emotional Early Childhood Scales*. American Guidance Service.

- Sparrow, S. S., Balla, D. A., & Cicchetti, D. V. (2005). *Vineland Adaptive Behavior Scales* (2nd ed.). Pearson.
- Sparrow, S. S., Cicchetti, D. V., & Saulnier, C. A. (2016). *Vineland Adaptive Behavior Scales* (3rd ed.): *Manual*. Pearson.
- Squires, J., & Bricker, D. (1995). *Ages & Stages Questionnaires*. Brookes Publishing.
- Squires, J., & Bricker, D. (2009). *Ages & Stages Questionnaires* (3rd ed.). Brookes Publishing.
- Squires, J., Bricker, D., & Twombly, E. (2002). *Ages and Stages Questionnaire: Social-Emotional*. Brookes Publishing.
- Squires, J., Bricker, D., & Twombly, E. (2015). *Ages and Stages Questionnaires: Social-Emotional* (2nd ed.). Brookes Publishing.
- Squires, J., Potter, L., & Bricker, D. (1999). *Ages and Stages Questionnaires* (2nd ed.). Brookes Publishing.
- Stillman, R. (1978). *The Callier-Azusa Scale*. South Central Regional Center for Services to Deaf-Blind Children and Callier Center for Communication Disorders.
- Stone, W. L., Coonrod, E. E., & Ousley, O. Y. (2000). Screening Tool for Autism Two-Year-Olds (STAT): Development and preliminary data. *Journal of Autism and Developmental Disorders*, *30*(6), 607–612. Retrieved from <https://doi.org/10.1023/A:1005647629002>
- Stone, W. L., & Hogan, K. L. (1993). A structured parent interview for identifying young children with autism. *Journal of Autism and Developmental Disorders*, *23*(4), 639–652. Retrieved from <https://doi.org/10.1007/BF01046106>
- Sundberg, M. L. (2014). *Verbal Behavior Milestones Assessment and Placement Program* (2nd ed.). AVB Press.
- Terjesen, M. D., Scitutto, M. J., & O'Brien, C. (2019). Behavior rating scales and the assessment of ADHD in early childhood: A review of psychometric properties and scale features. *Perspectives on Early Childhood Psychology and Education*, *4*(1), 5–38.
- Terman, L. M. (1916). *The measurement of intelligence: An explanation of and a complete guide for the use of the Stanford revision and extension of the Binet-Simon Intelligence Scale*. Houghton Mifflin.
- Terman, L. M., & Merrill, M. A. (1937). *Measuring intelligence*. Houghton Mifflin.
- Terman, L. M., & Merrill, M. A. (1960). *Stanford-Binet Intelligence Scale: Manual for the Third Revision Form L-M*. Houghton Mifflin.
- Terman, L. M., & Merrill, M. A. (1973). *Stanford-Binet Intelligence Scale: Manual for the Third Revision Form L-M, 1973 norms edition*. Houghton Mifflin.
- Thorndike, R. L., Hagen, E. P., & Sattler, J. M. (1986). *Stanford-Binet Intelligence Scale* (4th ed.). Riverside Publishing.

- Tobin, R. M., & Hoff, K. E. (2007). Test review of Bayley Scales of Infant and Toddler Development. In K. F. Geisinger, R. A. Spies, J. F. Carlson, & B. S. Plake (Eds.), *The seventeenth mental measurements yearbook (3rd ed.)*. Retrieved from <http://marketplace.unl.edu/buros>
- Torras-Mañá, M., Gómez-Morales, A., González-Gimeno, I., Fornieles-Deu, A., & Brun-Gasca, C. (2016). Assessment of cognition and language in the early diagnosis of autism spectrum disorder: Usefulness of the Bayley Scales of Infant and Toddler Development (3rd ed.). *Journal of Intellectual Disability Research, 60*(5), 502–511. Retrieved from <https://doi.org/10.1111/jir.12291>
- Torras-Mañá, M., Guillamón-Valenzuela, M., Ramírez-Mallafre, A., Brun-Gasca, C., & Fornieles-Deu, A. (2014). Usefulness of the Bayley Scales of Infant and Toddler Development, Third Edition in the early diagnosis of language disorder. *Psicothema, 26*(3), 349–356. Retrieved from <https://doi.org/10.7334/psicothema2014.29>
- Trohanis, P. L. (2008). Progress in providing services to young children with special needs and their families: An overview to and update on the implementation of the Individuals with Disabilities Education Act (IDEA). *Journal of Early Intervention, 30*(2), 140–151. Retrieved from <https://doi.org/10.1177/1053815107312050>
- Ulrich, D. A. (2000). *Test of Gross Motor Development (2nd ed.): Examiner's manual*. Western Psychological Services.
- Uzgirir, I. C., & Hunt, J. M. (1975). *Infant Psychological Developmental Scale*. University of Illinois Press.
- Velikos, K., Soubasi, V., Michalettou, I., Sarafidis, K., Nakas, C., Papadopoulou, V., Zafeiriou, D., & Drossou, V. (2015). Bayley–III Scales at 12 months of corrected age in preterm infants: Patterns of developmental performance and correlations to environmental and biological influences. *Research in Developmental Disabilities, 45–46*, 110–119. Retrieved from <https://doi.org/10.1016/j.ridd.2015.07.014>
- Venn, J. J. (2007). Test review of Bayley Scales of Infant and Toddler Development—Third Edition. In K. F. Geisinger, R. A. Spies, J. F. Carlson, & B. S. Plake (Eds.), *The seventeenth mental measurements yearbook*. Buros Institute of Mental Measurements. Retrieved from <http://marketplace.unl.edu/buros>
- Vohr, B. R., Stephens, B. E., Higgins, R. D., Bann, C. M., Hintz, S. R., Das, A., Newman, J. E., Peralta-Carcelen, M., Yolton, K., Dusick, A. M., Evans, P. W., Goldstein, R. F., Ehrenkranz, R. A., Pappas, A., Adams-Chapman, I., Wilson-Costello, D. E., Bauer, C. R., Bodnar, A., Heyne, R. J., Vaucher, Y. E., Dillard, R. G., Acarregui, M. J., McGowan, E. C., Myers, G. J., Fuller, J., & Eunice Kennedy Shriver National Institute of Child Health and Human

- Development Neonatal Research Network. (2012). Are outcomes of extremely preterm infants improving? Impact of Bayley assessment on outcomes. *The Journal of Pediatrics*, *161*(2), 222–228. Retrieved from <https://doi.org/10.1016/j.jpeds.2012.01.057>
- Voress, J. K., Maddox, T., & Hammill, D. D. (2012). *Developmental Assessment of Young Children* (2nd ed.). Pearson.
- Vort Corporation (1999). *Hawaii Early Learning Profiles, Strands Preschool Version*. Author.
- Wagner, R. K., Torgesen, J. K., & Rashotte, C. A. (1999). *Test of Early Language Development* (3rd ed.). Western Psychological Services.
- Walker, H. M., Severson, H. H., & Feil, E. G. (1995). *The Early Screening Project*. Sopris West.
- Washington, K., Scott, D. T., Johnson, K. A., Wendel, S., & Hay, A. E. (1998). The Bayley Scales of Infant Development-II and children with developmental delays: A clinical perspective. *Journal of Developmental and Behavioral Pediatrics*, *19*(5), 346–349. Retrieved from <https://doi.org/10.1097/00004703-199810000-00005>
- Wechsler, D. (1967). *Wechsler Preschool and Primary Scales of Intelligence*. Psychological Corporation.
- Wechsler, D. (1989). *Wechsler Preschool and Primary Scale of Intelligence, Revised*. Psychological Corporation.
- Wechsler, D. (2002). *Wechsler Preschool and Primary Scale of Intelligence* (3rd ed.). Psychological Corporation.
- Wechsler, D. (2012). *Wechsler Preschool and Primary Scale of Intelligence* (4th ed.). Psychological Corporation.
- Weiss, L. G., Oakland, T., & Aylward, G. (2010). *Bayley-III clinical use and interpretation*. Academic Press.
- Werner, E., & Kresheck, J. (1983). *Structured Photographic Expressive Language Test: Preschool*. Janelle Publications.
- Westby, C. E. (1991). A scale for assessing children's pretend play. In C. E. Schaefer, K. Gitlin, A. Sandgrund, & C. Schaefer (Eds.), *Play diagnosis and assessment* (pp. 131–161). John Wiley & Sons.
- Westby, C. E. (2000). A scale for assessing children's play. In K. Gitlin-Weiner, A. Sandgrund, & C. Schaefer (Eds.), *Play diagnosis and assessment* (pp. 15–57). John Wiley & Sons.
- Wetherby, A. M., & Prizant, B. M. (2002). *Communication and Symbolic Behavior Scales: Developmental Profile*. Brookes Publishing.
- Whatley, J. L. (1987). Bayley Scales of Infant Development. In D. J. Keyser & R. C. Sweetland (Eds.), *Test critiques* (Vol. 6, pp. 38–47). Test Corporation of America.

- Wiig, E. H., Secord, W. A., & Semel, E. M. (1992). *Clinical Evaluation of Language Fundamentals, Preschool*. Psychological Corporation.
- Wiig, E., Secord, W. A., & Semel, E. M. (2004). *Clinical Evaluation of Language Fundamentals, Preschool* (2nd ed.). Harcourt Assessment.
- Wiig, E. H., Secord, W. A., & Semel, E. (2020). . *Clinical Evaluation of Language Fundamentals, Preschool* (3rd ed.): *Manual*. Psychological Corporation.
- Williams, K. T. (2007). *Expressive Vocabulary Test (2nd ed.): Manual*. Pearson.
- Wirt, R. D., Lachar, D., Klinedinst, J. E., Seat, P. D., & Broen, W. E. (1977). *Multidimensional evaluation of child personality: A manual for the Personality Inventory for Children*. Western Psychological Services.
- Wong, V., Hui, L. H., Lee, W. C., Leung, L. S., Ho, P. K., Lau, W. L., Fung, C. W., & Chung, B. (2004). A modified screening tool for autism (Checklist for Autism in Toddlers [CHAT-23]) for Chinese children. *Pediatrics*, *114*(2), e166–e176. Retrieved from <https://doi.org/10.1542/peds.114.2.e166>
- Woodcock, R. W., & Johnson, M. B. (1977). *Woodcock-Johnson Psychoeducational Battery*. Teaching Resources Corporation.
- Woodcock, R. W., & Johnson, M. B. (1989). *Woodcock-Johnson Psychoeducational Battery, Revised*. Riverside.
- Woodcock, R. W., McGrew, K. S., & Mather, N. (2001). *Woodcock-Johnson III*. Riverside.
- Zeitlin, S. (1985). *Coping Inventory: A Measure of Adaptive Behavior*. Scholastic Testing Service.
- Zeitlin, S., Williamson, G. G., & Szczepanski, M. (1988). *Early Coping Inventory*. Scholastic Testing Service.
- Zigler, E. F., & Muenchow, S. (1992). *Head Start: The inside story of America's most successful educational experiment*. Basic Books.
- Zimmerman, I. R., Steiner, V. G., & Pond, R. E. (2011). *Preschool Language Scales* (5th ed.): *Manual*. Pearson.

Appendix

INFANT AND TODDLER ASSESSMENTS INCLUDING SCREENING ASSESSMENTS

Summary of Infant and Toddler Assessments Including Screening Assessments.

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
American Association on Mental Deficiency Adaptive Behavior Scale	Nihira, Foster, Shellhaus, and Leland (1974)	3–69 years	Mental, Emotional, Adaptive Behavior, and Developmental Disabilities
American Association on Mental Deficiency Adaptive Behavior Scale, School Edition	Lambert, Windmiller, Tharinger, and Cole (1981)	3 years, 3 months–17 years 2, months	Mental, Emotional, Adaptive Behavior, and Developmental Disabilities
Achenbach System of Empirically Based Assessment Preschool	Achenbach and Rescorla (2000)	1½–5 years	Competencies, Strengths, Adaptive Functioning, Behavioral, Emotional, and Social Problems
Adaptive Behavior Assessment System	Harrison and Oakland (2015, 2003, 2000)	Birth–89 years, 11 months	Adaptive Skills
Attention Deficit Hyperactivity Disorder Symptom Checklist*	Gadow and Sprafkin (1997)	3–18 years	Peer Conflict, Stimulant Side Effects, ADHD (Inattentive Type, Hyperactive–Impulsive Type, and Combined Type), Oppositional Defiant Disorder

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Ages and Stages Questionnaires–3rd Edition (ASQ-3)	ASQ:SE & ASQ:SE-2 – Squires, Bricker, and Twombly (2015, 2002)	ASQ-3: 1–66 months ASQ:SE-2: 1–72 months	ASQ-3: Communication, Motor (Gross & Fine), Problem Solving, and Personal-Social Skills.
Ages and Stages Questionnaires Social-Emotional– 2nd Edition (ASQ:SE-2)	ASQ & ASQ-3 – Squires and Bricker (2009, 1995)	ASQ:SE: 42–53 months	ASQ:SE-2: Autonomy, Compliance, Adaptive Functioning, Self-Regulation, Affect, Interaction, and Social-Communication.
Ages and Stages Questionnaires, Social-Emotional (ASQ-SE)	ASQ 2nd Edition – Squires, Potter, and Bricker (1999)	ASQ 2nd Edition: 4–60 months	ASQ:SE: Self-Regulation, Compliance, Communication, Adaptive Behavior, Autonomy, Affect, and Interaction
Ages and Stages Questionnaires (ASQ)–2nd Edition		ASQ: Birth–48 months	ASQ 2nd Edition: Communication, Motor (Gross & Fine), Problem Solving, and Personal-Social
Arizona Articulation Proficiency Scale*	Fudala and Reynolds (1986)	1 year, 6 months–13 years, 11 months	Articulation
Assessment for Persons Profoundly or Severely Impaired Edition*	Bradley-Johnson, Johnson, Connard, Arick, and Krug (2018)	0–24 months	Alertness, Preferences, Problem-Solving Prerequisites, Communication, and Social-Emotional
Assessment of Children's Language Comprehension*	Foster, Giddan, and Stark (1973)	3–6 years, 5 months	Language
Assessment, Evaluation, and Programming System for Infants and Children*	Bricker, Capt, and Pretti-Frontczak (2002)	Birth–6 years	Motor (Gross & Fine), Adaptive, Cognitive, Social Communication, Social Bibliography

Attention Deficit Disorders Evaluation Scale*	McCarney and Arthaud (2004)	Home version, 3–19 years	ADHD (Inattentive Type, Hyperactive–Impulsive Type, and Combined Type)
Auditory Skills Assessment	Geffner and Goldman (2010)	3 years, 6 months–6 years, 11 months	Speech Discrimination, Phonological Awareness, and Non-speech Processing
Autism Diagnostic Interview*	Rutter, LeCouteur, and Lord (2003)	Mental age of 18 months or higher	Communication, Social Development and Play, Repetitive and Restrictive Behaviors, and General Behavior
Autism Diagnostic Observation Schedule*	Lord, Rutter, DiLavore, Risi, Gotham, Bishop, Luyster, and Guthrie (2012)	12 months to adult	Communication and Social Interaction
Autism Screening Instrument for Educational Planning*	Krug, Arick, and Almond (1993)	18 months–adult	Autism Behavior Checklist, Sample of Vocal Behavior, Interaction Assessment, Educational Assessment, and Prognosis of Learning Rate
Bankson Language Screening Test*	Bankson (1990)	3–7 years	Psycholinguistic Skills
Battelle Developmental Inventory	Newborg (2020, 2004, 1984)	Birth–8 years	2004, 1984 – Cognitive, Personal-Social, Adaptive, Motor, and Communication. 2020 – Cognitive, Adaptive, Communication, Social-Emotional, and Motor
Bayley Infant Neurodevelopmental Screener	Aylward (1995)	3–24 months	Neurological, Receptive, and Expressive Functions, Processing, and Mental Activity

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Bayley Scales of Infant and Toddler Development – 4 th Edition (Bayley-4) and Bayley-4 Screener	Bayley and Aylward (2019a) Bayley (2006, 1993, 1969)	BSID-II: Bayley-III & Bayley-4: 1–42 months	Bayley III, Bayley-4, and Bayley-4 Screener: Cognitive, Language (Receptive & Expressive), Motor (Gross & Fine), Social-Emotional, Adaptive Behavior
Bayley Scales of Infant and Toddler Development – 3 rd Edition (Bayley-III)		BSID: 2–30 months	BSID & BSID-II: Mental, Motor, and Behavior
Bayley Scales of Infant Development (BSID)			
Behavior Assessment System for Children (BASC)	Reynolds and Kamphaus (2015b, 2004, 1992)	2–21 years, 11 months	Behavior
Beery-Buktenica Developmental Test of Visual-Motor Integration *	Beery, Buktenica, and Beery (2010)	Full form: 2–100 years: Short form: 2–7 years	Visual-Motor Integration
Behavioral Assessment of Baby's Emotional and Social Style	Finello and Poulsen (2018)	Birth–3 years	Social-Emotional
[BASC-2] and [BASC-3] Behavioral and Emotional Screening System	Reynolds and Kamphaus (2015a, 2007a)	3–18 years	Behavior and Emotional Strengths and Weaknesses
Birth to Three Assessment and Intervention System–2nd Edition	Ammer and Bangs (2000)	Birth–3 years	Language Comprehension, Language Expression, Nonverbal Thinking, Social/Personal Development, and Motor Development
Birth to Three Assessment and Intervention System	Bangs (1986)		
Boehm Test of Basic Concepts Preschool Edition*	Boehm (2001)	3–5 years, 11 months	Basic Relationship Concepts of Size, Direction, Position, Time, Quantity, Classification, and General

Bracken Basic Concept Scale (3rd ed.), Receptive and Bracken Basic Concept Scale, Expressive	Bracken (2006a,b) Bracken (1998) Bracken (1984)	3 years–6 years 11 months 2 years, 6 months–7 years, 11 months 2 years, 4 months–7 years, 11 months	Language Skills and School Readiness
Bracken Basic Concept Scale Revised Bracken Basic Concept Scale	Bracken (2007)	2 years, 6 months–7 years, 11 months	Colors, Letters, Numbers/Counting, Sizes, Comparisons, and Shapes
Bracken School Readiness Assessment*	Als, Tronick, Lester, and Brazelton (1977)	Birth–1 month	Habituation, Orientation, Motor Performance, Range of State, State Regulation, Autonomic Regulation, and Abnormal Reflexes.
Brown Attention-Deficit Disorder Scales	Brown (2018, 2001, 1996)	3–18 years	Executive Functioning
Brigance Screens	Brigance and French (2013) Glascoe (2002) Brigance (1992, 1990, 1985)	Birth–5 years	Language (Receptive & Expressive), Motor (Gross & Fine), Academics/Pre-Academics, Self-Help, Social-Emotional Skills
Brief Infant/Toddler Social Emotional Assessment*	Briggs-Gowan, Irwin, Wachtel, Carter, and Cicchetti (2004)	12–36 months	Identify Social-Emotional/Behavioral Problems and Delays in Competence
Callier-Azusa Scale*	Stillman (1978)	Birth–8 years	Motor, Perceptual, Cognitive, Social, Communication and Language Development, and Daily Living Skills

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Caregiver-Teacher Report Form	Achenbach (1997)	1 year, 6 months-5 years	Behavior and Emotional Problems
Carey Temperament Scales*	Carey, McDevitt, Medoff-Cooper, Fullard, and Hegvik (2007)	1 month-the end of the 12th year	Temperament (Activity, Biological Regularity, Adaptability, Approach, Intensity, Mood, Persistence, Distractibility, Sensory Threshold)
Carolina Record of Individual Behavior*	Simeonsson (1979)	Birth-6 years	Sensorimotor
Carrow Elicited Language Inventory	Carrow-Woolfolk (1974)	3-7 years, 11 months	Language Skills
Cattell Infant Intelligence Scale	Cattell (1940)	2-30 months	Cognitive
Checklist for Autism in Toddlers	Baron-Cohen, Allen, and Gleeberg (1992)	18 months (with late rescreening(s) as necessary)	Gaze monitoring, Pretend Play, Proto-declarative Pointing
Checklist for Autism in Toddlers	Wong, Hui, Lee, Leung, Ho, Lau, Fung, and Chung (2004)	Mental ages 18-24 months	Gaze monitoring, Pretend Play, Proto-declarative Pointing
Child Development Inventories*	Ireton (1992)	15 months-6 years	Social, Self-Help, Motor (Gross & Fine), Expressive Language, Language Comprehension, Letters, and Numbers
Childhood Autism Rating Scale	Schopler, Bourgoodien, Wellman, and Love (2010) Schopler, Reichler, and Renner (1988)	2 years and older	Adaptive Skills, Social and Emotional Functioning

Clinical Assessment of Articulation and Phonology*	Secord and Donohue (2013)	2 years, 6 months–11 years, 11 months	Articulation and Phonology
Cognitive Assessment of Young Children	Langley, Fewell, and Maddox (2010)	2 months–5 years, 11 months	Fine Motor Coordination and Planning, Communication and Play, Memory, Reasoning, Perceptual Development, Processing, Classification and Organization, Concept Development, and Practical Knowledge
Cognitive Abilities Scale*	Bradley-Johnson and Johnson (2001)	3 months–3 years, 11 months	Cognitive
Communication and Symbolic Behavior Scales Developmental Profile	Wetherby and Prizant (2002)	Functional communication age of 6–24 months (chronological age from about 6 months to 6 years)	Communication and Language
Conners Early Childhood	Conners (2009)	2–6 years	Attention and Hyperactivity
Coping Inventory: A Measure of Adaptive Behavior	Zeitlin (1985)	3–16 years	Adaptive Behavior
Clinical Adaptive Test/Clinical Linguistic Auditory Milestone Scale*	Capute and Accardo (1996)	Birth–36 months	Language, Problem Solving, and Visual-Motor Skills.
Clinical Evaluation of Language Fundamentals Preschool	Wiig, Secord, and Semel (2020, 2004, 1992)	3–6 years, 11 months	Language Skills

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Denver Developmental Screening Test	Frankenburg, Dodds, Archer, and Bresnick (1990) Frankenburg, Fandel, Sciarillo, and Burgess (1981) Frankenburg, Goldstein, and Camp (1971) Frankenburg and Dodds (1967)	Birth–6 years	Gross Motor, Language, Fine Motor-Adaptive, Personal-Social, and Behavior.
Detroit Tests of Learning Aptitude – Primary*	Hammill and Bryant (2005, 1991)	3–9 years	Cognitive, Language, Attention, and Motor Abilities
Developmental Activities Screening Inventory*	Fewell and Langley (1984)	Birth–5 years	Perceptual, Motor, and Cognitive Skills
Developmental Assessment for Individuals with Severe Disabilities*	Dykes and Mruzek (2012)	6 months–adulthood	Sensory-Motor, Language, Social-Emotional, Activities, and Academics
Developmental Assessment of Young Children*	Vores, Maddoc, and Hammill (2012)	Birth–5 years	Cognitive, Communication, Social-Emotional Development, Physical Development, and Adaptive Behavior
Developmental Indicators for the Assessment of Learning	Mardell and Goldenberg (2011) Mardell-Czudnowski and Goldenberg (1998, 1990, 1983)	2 years, 6 months–5 years, 11 months	Visual, Motor, Quantitative Concepts, Language, Self-Help, Personal Information, and Social-Emotional Skills

Developmental Programming for Infants and Young Children*	Schafer and Moersch (1981)	0–36 months	Visual-Fine Motor Development
Developmental Profile*	Alpern (2020) Alpern, Boll, and Shearer (2007, 1986)	Birth–21 years, 11 months DP-II – Birth–9 years, 5 months	Physical, Adaptive Behavior, Social-Emotional, Cognitive, and Communication
Developmental Test of Visual Motor Integration* (3rd rev.)	Beery (1989)	2–15 years	Visual-Motor
Devereux Early Childhood Assessment—Clinical Form	LeBuffe and Naglieri (2002, 1999)	2–5 years, 11 months	Initiative, Self-Control, and Attachment
Differential Ability Scales	Elliott (2007, 1990)	2 years, 6 months–17 years, 11 months	Cognitive Abilities
Dynamic Indicators of Basic Early Literacy Education*	Good and Kaminski (2002)	Grades K–3	Initial Sound Fluency, Letter Naming Fluency, Phoneme Segmentation Fluency, Nonsense Word Fluency, Oral Reading Fluency, Oral Retelling Fluency, Word Use Fluency
Early Childhood Inventory*	Gadow and Sprafkin (2014, 2010, 2000)	3–5 years	Emotional and Behavior Disorders
Early Coping Inventory	Zeitlin, Williamson, and Szczepanski (1988)	4–36 months	Sensorimotor Organization, Reactive Behaviors, Self-Initiated Behaviors

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Early Functional Communication Profile	Jensen (2012)	2–10 years	Joint Attention, Social Interaction, Communicative Intent, Social Interaction
Early Screening Inventory	Meisels and Marsden (2019)	ESL-P: 3–4 years, 5 months	Visual Motor/Adaptive, Language and Cognition, and Gross Motor Skills.
Early Screening Inventory–Kindergarten (ESI-K)	Meisels, Marsden, Wiske, and Henderson (1997)	ESL-K: 4 years, 6 months–5 years, 11 months	
Early Screening Inventory–Preschool (ESI-P)		ESL-R: 3–6 years; Preschool version 3–4½ years	
Early Screening Inventory–Revised (ESI-R)			
Early Screening Project	Walker, Seversen, and Feil (1995)	3–5 years	Social-Emotional
Early Screening Profiles	Harrison, A. Kaufman, N. Kaufman, Bruiminks, Rynders, Imer, Sparrow, and Cicchetti (1990)	2–6 years, 11 months	Cognitive/Language Profile, Motor Profile, Self-Help/Social Profile, Articulation Survey, Home Survey and Health History Survey, and Behavior Survey
Expressive One-Word Picture Vocabulary Test*	Gardner (1990)	2 years, 11 months–11 years, 11 months	Vocabulary, Auditory Processing, and Auditory Visual-Verbal Association

Expressive Vocabulary Test*	Williams (2007)	2 years, 6 months–90+ years	Vocabulary Acquisition
Evaluating Acquired Skills in Communication*	Marcott (2009)	3 months–6 years	Prelinguistic Skills, Semantics, Syntax, Morphology, Pragmatics
Eyberg Child Behavior Inventory and the Sutter-Eyberg Student Behavior Inventory	Eyberg and Pincus (1999)	2–16 years	Conduct
First STEP: Screening Test for Evaluating Preschoolers	Miller (1993)	2 years, 9 months–6 years, 2 months	Cognition, Communication, Motor, Social-Emotional, Adaptive Behavior
Fluharty Preschool Speech and Language Screening Test*	Fluharty (2000)	3–6 years, 11 months	Articulation and Language (Receptive, Expressive, and Composite)
Functional Emotional Assessment Scale	Greenspan, DeGangi, and Wieder (2001)	7 months–48 months	Emotional Functioning
Gesell Developmental Schedules	Knobloch, Stevens, and Malone (1980) Gesell and Amatruda (1941) Gesell (1925b)	Revised: 1 week–36 months Original: 4–60 months	Adaptive, Motor (Gross & Fine), Language, and Personal-Social
Gesell School Readiness Test	Ilg and Ames (1972)	2 years, 6 months–6 years, 11 months	Adaptive and Language Development

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Gilliam Asperger's Disorder Scale	Gilliam (2001)	3–22 years	Social Interaction, Restricted Patterns, Cognitive Patterns, and Pragmatic Skills.
Gilliam Autism Rating Scale*	Gilliam (2005)	3–22 years	Stereotyped Behaviors, Communication, and Social Interaction
Goldman-Fristoe Test of Articulation*	Goldman and Fristoe (2000)	2–21 years	Consonant Phonemes
Greenspan Social-Emotional Growth Chart	Greenspan (2004)	Birth–42 months	Social -Emotional
Griffiths Developmental Scale*	Griffiths (1967)	1–60 months	Locomotor, Hearing and Speech, Eye and Hand Coordination, Performance, Practical Reasoning, and Personal-Social
Hawaii Early Learning Profiles, Strands Preschool Version	Vort Corporation (1999)	3–6 years	Attachment, Separation, Autonomy
Hiskey-Nebraska Test of Learning Aptitude	Hiskey (1966)	3–16 years, 6 months	Visual Attention, Memory, Classification, Spatial Reasoning, and Eye-Hand Coordination
Howes Peer Play Scale	Howes and Matheson (1992)	Toddler–59 months	Parallel Play, Parallel Aware Play, Simple Social Play, Complementary and Reciprocal Play, and Complex Social Pretend Play
Infant Development Inventory	Ireton (2006, 1994)	Birth–18 months	Cognitive, Language Motor, Social-Emotional Skills, and Adaptive functioning

Infant Psychological Development Scale	Uzgiris and Hunt (1975)	2 weeks–2 years	Object Permanence, Use of Objects as Means, Learning and Foresight, Development of Schemata, Development of an Understanding of Causality, Conception of Objects in Space, Vocal Imitation, and Gestural Imitation
Infant-Toddler and Family Instrument	Apfel and Provence (2001)	6–36 months	Motor (Gross & Fine) Social-Emotional, Language, Coping, and Self-Help
Infant-Toddler Developmental Assessment*	Provence, Erikson, Vater, Palmeri, Pruett, and Rosinia (2016)	Birth–36 months	Motor (Gross & Fine), Relationship to Inanimate Objects/Cognition, Language/Communication, Self-Help/Adaptive, Relationship to Persons, Emotions and Feeling States, and Coping Behavior
Infant-Toddler Social and Emotional Assessment; Brief Infant-Toddler Social and Emotional Assessment	Carter and Briggs-Gowan (2004); Briggs-Gowan and Carter (1998)	12–36 months	Social-Emotional
Infant-Toddler Symptom Checklist	DeGangi, Poisson, Sichel, and Wiener (1995)	7–30 months	Self-Regulation, Attention, Sleep, Eating/Feeding, Dressing, Bathing and Touch, Movement, Listening and Language, Looking and Sight, and Attachment/Emotional Functioning

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Iowa Tests of Basic Skills*	Hoover, Hieronymous, Frisbie, and Dunba (1996)	Grades K–8	Cognitive and Language Development
Kaufman Assessment Battery for Children	Kaufman and Kaufman (2018, 2004, 1983)	3–18 years	Cognitive Abilities
Kaufman Speech Praxis Test for Children*	Kaufman (1995)	24–72 months	Speech and Language
Kaufman Survey of Early Academic and Language Skills	Kaufman and Kaufman (1993)	3–6 years, 11 months	Language Skills, Pre-Academic Skills, and Articulation
Kent Inventory of Developmental Skills*	Reuter, Katoff, and Gruber (2000)	Birth–15 months or up to age 6 when severe developmental disabilities are present	Cognitive, Motor, Communication, Self-Help, and Social Skills
Khan-Lewis Phonological Analysis*	Lewis and Khan (2002)	2–21 years, 11 months	Reduction Processes, Place and Manner Processes, and Voicing Processes
Learning Accomplishment Profile-Diagnostic Standardized Assessment	Nehring, A., Nehring, E. Bruni, and Randolph (1992)	30–72 months	Fine Motor Manipulation, Fine Motor Writing, Cognitive Matching, Cognitive Counting, Language Naming, Language Comprehension, Gross Motor Body Movement, and Gross Motor Object Movement

Letter International Performance Scale*	Roid and Miller (2013, 1997)	2–20 years, 11 months	Reasoning, Visualization, Memory, and Attention
MacArthur Story Stem Battery	Emde, Wolf, and Oppenheim (2003)	3–7 years	Attachment, Response to Authority, Response to Family Conflict, Response to Getting Caught Doing a Transgression, and Separation Anxiety
McCarthy Scales of Children's Abilities	McCarthy (1972)	2 years, 6 months–8 years, 6 months	Cognitive and Motor Behaviors
Meadow/Kendall Social-Emotional Assessment Inventories for Deaf and Hearing-Impaired Students Preschool Form	Meadow (1983)	3–6 years, 11 months	Communication
Mental Health Screening Tool	California Institute for Mental Health (2000)	Birth–5 years	Social-Emotional
Merrill-Palmer–Revised Scales of Development*	Roid and Sampers (2004)	1 month–6 years, 6 months	Cognitive, Language, Motor (Fine & Gross), Social-Emotional, Self-Help, and Adaptive Skills
Metropolitan Readiness Test*	Nurss and McGaurvan (1995)	Pre-K–Grade 1	Basic and Advanced Language and Mathematics Skills
Milani-Comparetti Neurodevelopmental Screening Examination*	Milani-Comparetti and Gidono (1967)	Birth–24 months	Neuromotor Function
Miller Assessment for Preschoolers*	Miller (1988)	2 years, 9 months–5 years, 8 months	Motor, Language, and Cognition
Modified Checklist for Autism in Toddlers*	Robbins, Fein, Barton, and Green (1999)	16–30 months	Proto-declarative Pointing, Gaze Monitoring, and Pretend Play

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Mullen Scales of Early Learning: AGS Edition	Mullen (1995)	Birth–68 months	Gross Motor (birth to 33 months only), Fine Motor, Visual Reception, Receptive Language, and Expressive Language
NEPSY	Korkman, Kirk, and Kemp (2007, 1998)	3–16 years, 11 months	Executive Functioning/Attention, Language, Memory/Learning, Sensorimotor Functioning, Visuospatial Processing, and Social Perception
Northwestern Syntax Screening Test*	Lee (1971)	3–7 years, 11 months	Identify Language Deficiencies
Oral and Written Language Scales*	Carrow-Woolfolk (2011)	3–21 years, 11 months	Lexical/Semantics, Syntax, Pragmatics, Supralinguistics
Ostrov Early Childhood Play Project Observation System	Ostrov (2005)	36 months–6 years	Aggressive Behavior and Play Behavior
Parent Interview for Autism*	Stone and Hogan (1993)	Preschool level and below	Communication, Language, Social Relating, Affective Responses, Sensory, Motor, Play, and Behavior Skills, and Need for Sameness
Parents' Evaluations of Developmental Status*	Glascoc (2012)	Birth–8 years	Language, Motor, Self-Help, Early Academic Skills, and Behavior and Social-Emotional/Mental Health
Peabody Developmental Motor Scales*	Folio and Fewell (2000)	Birth–5 years	Reflexes, Stationary, Locomotion, Object Manipulation, Grasping, and Visual-Motor Integration

Peabody Picture Vocabulary Test*	Dunn (2018)	2 years, 6 months–90+ years	Receptive and Expressive Vocabulary Acquisition
Penn Interactive Peer Play Scale	Fantuzzo, Coolahan, Mendez, McDermott, and Suttron-Smith (1998)	Preschool Children	Play Interaction, Play Disruption, and Play Disconnection
Personality Inventory for Children*	Wirt, Lachar, Klinedinst, Seat, and Broen (1977)	3–16 years	Social-Emotional Adjustment
Pervasive Developmental Disorders Screening Test*	Siegel (2004)	12–48 months	Behavior Development
Photo Articulation Test*	Pendergast (1969)	3–12 years	Speech Analysis
Photo Articulation Test	Lippke, Dickey, Selmar, and Soder (1997)	3–8 years, 11 months	Speech Analysis
Preschool and Kindergarten Behavior Scales	Merrell (2003, 1994)	3–6 years	Social Skills and Problem Behavior (Externalizing & Internalizing)
Preschool Behavior Checklist	McGuire and Richman (1988)	2–5 years, 11 months	Behavior and Emotional Difficulties
Preschool Behavior Questionnaire	Behar and Stringfield (1974)	3–6 years	Emotional Problems
Preschool Child Observation Record*	HighScope Educational Research Foundation (2003)	2½–6 years	Initiative, Social Relations, Creative Representation, Movement and Music, Language and Literacy, and Mathematics and Science

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Preschool Developmental Inventory *	Ireton (1988)	3–5 years, 5 months	Language, Motor Self-Help, Personal, and Social
Preschool Language Assessment Instrument*	Blank, Rose, and Berlin (2003)	3–5 years, 11 months	Matching, Analysis, Reordering, Reasoning, Receptive Mode, and Expressive Mode
Preschool Language Scale *	Zimmerman, Stelner, and Pond (2011)	Birth–7 years, 11 months	Total Language, Auditory Comprehension, Expressive Communication
Pre-Literacy Skills Screening	Crumrine and Longan (1999)	3–5 years, 11 months	Letter Knowledge and Phonological Awareness
Primary Test of Nonverbal Intelligence	Ehrler and McGhee (2008)	3–9 years, 11 months	Cognitive Skills
Psychoeducational Profile: TEACCH Individualized Psychoeducational Assessment for Children with Autism Spectrum Disorders *	Schopler, Lansing, Reichler, and Marcus (2005)	2–7 years, 6 months, or children functioning within this age range	Education Planning and ASD Diagnosis
Receptive One-Word Picture Vocabulary Test*	Gardner (1985)	2–11 years, 11 months	Receptive and Expressive Vocabulary Skills
Receptive Expressive Emergent Language Test*	Bzoch, League, and Brown (2020, 2003) Bzoch and League (1991)	Birth–3 years	Receptive and Expressive Language

Reynell Developmental Language Scales *	Reynell and Gruber (1990)	1–6 years	Expressive Language and Verbal Comprehension
Reynell-Zinkin Scales*	Reynell and Zinkin (1979)	Birth–4 years	Social Adaptation, Sensorimotor, Exploration of Environment, Response to Sound/Verbal Comprehension, Expressive Language and Nonverbal Communication
Scales of Independent Behavior	Bruininks, Woodcock, Weatherman, and Hill (1996, 1984)	Birth–80+ years	Motor, Social/Communication, Personal Independence, and Community
Screening Tool for Autism in Two-Year-Olds	Stone, Coonrod, and Ousley (2000)	24–35 months	Play, Imitation, Directing Attention, and (not scored) Response to Requests
Sensory Processing Measure Preschool*	Parham and Ecker (2010)	2–5 years	Social Participation, Vision, Hearing, Touch, Body Awareness, Balance and Motion, Planning and Ideas, and Total Sensory Systems
Sequenced Inventory of Communication Development	Hedrick, Prather, and Tobin (1984, 1975)	4–48 months	Communication Skills (Receptive and Expressive)
Smith–Johnson Nonverbal Performance Scale	Smith and Johnson (1977)	2–4 years	Cognitive Skills
Social Communication Questionnaire*	Rutter, Bailey, and Lord (2003)	4 months–0 years; minimum mental age of 2 months–0 years	Social Development and Play, Communication, and Repetitive and Restrictive Behavior

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Social Competence and Behavior Evaluation Preschool*	LaFreniere and Dumas (1995)	30–76 months	Social Skills
Social Responsiveness Scale	Constantino and Gruber (2012)	2 years, 6 months–18 years	Social (Awareness, Cognition, Communication, Motivation), Restricted Interests and Repetitive Behavior
Social Skills Improvement System Rating Scales	Gresham and Elliot (2008)	3–18 years	Communication, Engagement, Bullying, and Autism Spectrum
Social Skills Rating System	Gresham and Elliot (1990)	3–18 years	Social Skills, Problem Behavior (Externalizing & Internalizing), Hyperactivity, and Academic Competence
Stanford-Binet Intelligence Scale(s)	Roid (2005) Thorndike, Hagen, and Sattler (1986) Terman and Merrill (1973, 1960, 1937) Terman (1916)	2–90 years 2–24 years 1 year, 6 months – 18 years 3–14 years	Cognitive Abilities
Strengths and Difficulties Questionnaire	Goodman (1997)	3–16 years	Emotional Symptoms, Conduct Problems, Hyperactivity/Inattention, Peer Relationship Problems, and Prosocial Behavior
Structured Photographic Expressive Language Test*	Werner and Krescheck (1983)	3–5 years, 11 months	Diagnose Language Impairment
Stuttering Severity Instrument*	Riley and Bakker (2009)	2–10 years and older	Speech Development

Symbolic Play Scale	Westby (2000, 1991)	8 months–5 years (and older children with learning problems)	Decontextualization, Thematic Content, Organization, Self-Other Relations, and Language
Symbolic Play Test*	Lowe and Costello (1988)	12–36 months	Cognitive and Expressive Language
Temperament and Atypical Behavior Scale	Neisworth, Bagnato, Salvia, and Hunt (1999)	11–71 months	Atypical Self-Regulatory Behavior
Test for Auditory Comprehension of Language*	Carrow-Woolfolk (1985)	3–10 years	Receptive Spoken Vocabulary, Grammar, and Syntax
Test Observation Form	McConaughy and Achenbach (2004)	2–18 years	Behavior, Affect, and Test-Taking Style During Testing Sessions
Test of Early Communication and Emerging Language	Huer and Miller (2011)	2 weeks–24 months or older if the child has moderate to severe language delays	Receptive and Expressive Language
Test of Early Language Development*	Hresko, Reid, and Hammill (2018, 1999, 1991)	3–7 years, 11 months 2–7 years, 11 months	Language

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Test of Early Mathematics Ability*	Ginsburg and Baroody (2003)	3–8 years, 11 months	Numbering Skills, Number-Comparison Facility, Numeral Literacy, Mastery of Number Facts, Calculation Skills, and Understanding of Concepts
Test of Early Reading Ability–Deaf or Hard of Hearing	Reid, Hresko, Hammill, and Wiltshire (1991)	3–13 years, 11 months	Early Reading
Test of Early Reading Ability*	Reid, Hresko, Hammill, and Wiltshire (2001)	3 years, 6 months–8 years, 6 months	Alphabet, Conventions, and Meaning
Test of Gross Motor Development*	Ulrich (2000)	3 years–10 years, 11 months	Gross Motor Skill Development
Test of Irregular Word Reading Efficiency*	Reynolds and Kamphaus (2007b)	3–9½ years	Reading Comprehension
Test of Visual-Motor Skills	Gardner (1995)	2–13 years	Visual-Motor Integration
Test of Visual-Motor Skills	Martin (2010)	3–90 years	Visual Perception, Motor Planning, and/or Execution
The Ounce Scale	Meisels, Marsden, Dombro, Weston, and Jewkes (2003)	Birth–3½ years	Personal Connections, Feelings About Self, Relationships with Other Children, Understanding and Communication, Exploration and Problem Solving, and Movement and Coordination

The Temperament Assessment Battery for Children	Martin (1988)	3–7 years	Activity, Adaptability, Approach/Withdrawal, Emotional Intensity, Distractibility, and Persistence
Token Test for Children*	McGhee, Ehrler, and DiSimoni (2007)	3–12 years, 11 months	Receptive Language
Transdisciplinary Play-Based Assessment*	Linder (2008)	Infancy–6 years	Cognitive Abilities, Social-Emotional Functioning, Communication and Language Skills, and Sensory-Motor Development
Verbal Behavior Milestones Assessment and Placement Program*	Sundberg (2014)	Birth–48 months	Language and Social Skills
Vineland Adaptive Behavior Scales	Sparrow, Balla, and Cicchetti (2005, 1984) Sparrow, Cicchetti, and Saulnier (2016)	Birth–19 years	Communication, Daily Living Skills, Socialization, and Motor Skills
Vineland Social-Emotional Early Childhood Scales	Sparrow, Balla, and Cicchetti (1998)	Birth–72 months	Social and Emotional Functioning
Wechsler Preschool and Primary Scale of Intelligence (WPPSI)	Wechsler (2012, 2002, 1989, 1967)	WPPSI I-III: 2 years, 6 months–7 years, 3 months WPPSI-IV: 2 years, 6 months–7 years, 7 months	Cognitive Ability

(Continued)

Assessment Name	Author(s) (Year of Publication)	Age Range	Developmental Domains or Areas Assessed
Woodcock-Johnson	Schrank, McGrew, and Mather (2014) Woodcock, McGrew, and Mather (2001) Woodcock and Johnson (1989, 1977)	2–90 years 3–80 years (1977)	Academic Achievement, Oral Language, Scholastic Aptitude, and Overall Cognitive Skills
Work Sampling System*	Meisels, Jablon, Dichtelmiller, Dorfman, and Marsden (2001)	Grades Pre-K – 6	Art and Fine Motor, Movement and Gross Motor, Concept and Number, Language and Literacy, and Personal and Social Development

Note: Although many assessments and screening assessments have been revised one or more times, we did not write “revised” or “2nd edition,” for example, for ease of reading unless required for clarity * = There are multiple editions of this assessment, but space limitations precluded listing all of them except for some of the most popular assessments (e.g., WPPSI).

NOTES

- 1 The Centers for Disease Control and Prevention consider infants to be between 0 and 12 months, toddlers to be between 12 and 36 months, and preschoolers between 36 and 60 months. Retrieved from: <https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/index.html>.
- 2 Retrieved from: <https://www.acf.hhs.gov/ohs/about/history-head-start> and <https://eclkc.ohs.acf.hhs.gov/about-us/article/head-start-timeline>.
- 3 Sources for this section include the following: <https://www.pearsonassessments.com/professional-assessments/products/authors/bayley-nancy.html>; <https://psychology.jrank.org/pages/65/Nancy-Bayley.html>; <http://psychology.iresearchnet.com/developmental-psychology/history-of-developmental-psychology/nancy-bayley>; <https://psychology.jrank.org/pages/65/Nancy-Bayley.html>.
- 4 “An unpublished 1958 version of the BSID covered the first 15 months of life and was employed in a research program sponsored by the National Institute of Neurological Diseases and Blindness” (Whatley, 1987, p. 38).

