**Musicality Measurement Scales in Childhood**

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| Scale Name | Child Age Range | Description of the Scale | Advantages | Disadvantages | Citation |
| Musical Child Questionnaire for Under-3s (MCQ\_U3) | 0 to 3 years | Shortened version of the MCQ adapted for infants and toddlers. Identifies four core components: Musical Communication, Enthusiasm and Motivation, Adaptive Expressiveness, and Musical Abilities. A 2-component model was also validated: Enthusiasm and Motivation, and Basic Musical Abilities. | Grounded in empirical adult conceptions of infant musicality; recognizes musicality as multifaceted, including affective and expressive dimensions; emphasizes early enthusiasm as a predictor of musical development. | Items adapted from adult-focused study may overlook uniquely infant expressions; cultural specificity; some behaviors may not apply across the full 0–3 range; not yet widely validated. | [Buren et al. (2021b)](https://www.frontiersin.org/articles/10.3389/fpsyg.2021.736833/full) |
| *Children’s Music-Related Behavior Questionnaire* (CMRBQ) | 3 to 5 years | A 69-item parent-report questionnaire designed to assess music-related behaviors in preschool-age children (3 to 5 years). Developed using early childhood music education literature and expert validation. It includes six scales: Singing and Tonal Engagement, Rhythm, Movement and Timbre, Musical Communication, Enthusiasm, and Musical Preferences. | Specifically developed for preschoolers; theory-driven and validated; covers a broad spectrum of musical behaviors including preferences and enthusiasm. | Limited to parent observation; may not fully capture spontaneous or situational behaviors; primarily descriptive rather than diagnostic. | [Valerio et al. (2012)](https://journals.sagepub.com/doi/full/10.1177/0022429412444450?casa_token=iyUu6IRZyYEAAAAA%3ABj6zBr9dQqkgNqficCswCm15TfO1MTfLE3_lSNpATgXWkBBGaOgHqtFYBHCjR1IktP7fRK3mJJY) |
| Music@Home Questionnaire | Infants (3–23 months) and Preschoolers (2–5.5 years) | A validated parent-report questionnaire assessing musical engagement in the home. The infant version (3–23 months) includes four subscales: Parental Beliefs, Child Engagement, Parent Initiation of Singing, and Parent Initiation of Music-Making. The preschool version (2–5.5 years) includes: Parental Beliefs, Child Engagement, Parent Initiation of Singing, and Breadth of Musical Exposure. | Validated across infant and preschool age groups; captures both child behavior and parental attitudes; adaptable for large-scale and longitudinal studies. | Dependent on parent perception; does not assess direct musical ability or differentiate developmental pathways. | [Politimou et al. (2018)](https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0193819) |
| Musical Child Questionnaire (MCQ) | 3 to 6 years | 49-item parent/teacher questionnaire assessing musical behavior across four components: musical communication, enthusiasm and motivation, analytical understanding, and musical abilities. Adapted from Hallam’s adult musicality scale. | Captures multiple dimensions of musical behavior; useful for both parents and teachers; grounded in existing validated adult scale. | Relies on subjective reporting; may be influenced by parent/teacher bias; lacks direct behavioral observation. | [Buren et al. (2020)](https://www.tandfonline.com/doi/full/10.1080/03004430.2020.1866566#d1e1986) |
| Montreal Battery of Evaluation of Musical Abilities (MBEMA) | 4 to 6 years | A standardized tool for evaluating musical abilities in children aged 4 to 6 years. It consists of 3 subtests: melody discrimination, rhythm discrimination, and memory recognition of musical sequences. Includes 60 trials and can be administered in about 15–20 minutes in an engaging, game-like format. | Validated and standardized; high reliability; suitable for group administration; adaptable to different languages and cultures; efficient to administer. | Focuses exclusively on perceptual musical skills (melody, rhythm, memory); does not assess expressive, emotional, or motor aspects of musicality; requires quiet and structured testing environment. | [Peretz et al. (2021)](https://www.psycharchives.org/en/item/454b00cc-c184-498d-8d3d-feda0d89788c) |
| Goldsmiths Musical Sophistication Index – Portuguese (Gold-MSI-P) | Adults (used for parents in child studies) | 38-item self-report assessing adult musicality through five dimensions: active engagement, perceptual abilities, musical training, singing abilities, and emotions. | Comprehensive, multidimensional measure; widely used and validated; useful for correlating parental musicality with child outcomes. | self-report bias possible. | [Müllensiefen et al. (2014)](https://www.gold.ac.uk/music-mind-brain/gold-msi/) |

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| Index of Productive Syntax (IPSyn) | 2 to 4 years | A language assessment tool that evaluates syntactic development in spontaneous speech samples. It scores 56 syntactic structures divided into four categories: noun phrases, verb phrases, questions/negations, and sentence structures. Requires a 100-utterance language sample. | Sensitive to developmental change; provides detailed insight into syntactic productivity; useful for naturalistic speech analysis. | Requires transcription and trained scoring; time-intensive; limited to English syntax; not standardized for diagnostic classification. | [Scarborough (1990)](https://www.cambridge.org/core/services/aop-cambridge-core/content/view/3471DCAF2ADB405AAA9BD6EE2573CA7E/S0142716400008262a.pdf/div-class-title-index-of-productive-syntax-div.pdf) |
| MacArthur-Bates Communicative Development Inventories (CDI) | 8 to 30 months | A standardized parent-report instrument assessing early communicative development. Includes two forms: Words and Gestures (8–18 months) and Words and Sentences (16–30 months). Captures vocabulary, gesture use, and emerging grammatical structures. | Widely used and validated; available in many languages; captures both expressive and receptive abilities; efficient for large-scale studies. | Relies on parental report; may miss pragmatic or context-specific aspects of language use; limited depth in syntactic development. | [Fenson et al. (1993/2010)](https://link.springer.com/rwe/10.1007/978-1-4419-1698-3_769) |
| Bayley Scales of Infant and Toddler Development, Third Edition (Bayley-III) | 1 to 42 months | A standardized developmental screening tool that assesses cognitive, language, and motor development in infants and toddlers. The screening test uses a subset of items from the full Bayley-III battery and is administered through playful, interactive tasks. | Quick and child-friendly administration (15–25 minutes); norm-referenced; widely used in early intervention and pediatric settings; supports early identification of developmental delays. | Requires trained administrators; limited detail compared to full Bayley-III; focuses on general development rather than detailed language use. | [Bayley, N. (2006)](https://psycnet.apa.org/doiLanding?doi=10.1037%2Ft14978-000) |