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Assessing Pre-Literacy Behaviors in Infants and Toddlers: Psychometric Evaluation of the Infant Toddler Literacy Assessment (ITLA-3)

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ABSTRACT

Assessment of emerging literacy in young children is generally limited to either skill development in children over 3 years of age or the quality and context of young children's early literacy experiences. Although there has been promotion of their early literacy experiences, assessment of emerging pre-literacy behaviors in children younger than 3 years has yet to be organized into a single tool.

Preliminary work on the *Infant Toddler Literacy Assessment* (*ITLA)* has progressed through initial steps of scale development and shown promise as a criterion-based, standardized assessment for tracking children's pre-literacy behaviors and guiding practitioners in supporting development of those behaviors in populations that might otherwise show delays later-on. Previous analyses of data on 450+ children provided statistical support of a developmental sequence of *ITLA* exemplar behaviors, from easiest or earliest learned to later developed skills. Results of the present study showed the *ITLA-3* has moderate construct validity with the *PPVT™-IV* and demonstrates one overall construct of pre-literacy across its 15 exemplars and 105 behaviors. Evidence now exists to support use of *ITLA-3* by early childhood teachers to assess and guide the advancement of pre-literacy behaviors in infants and toddlers. Ongoing development of the *ITLA-3* is recommended for further standardization.

Key Words: infants, toddlers, development, assessment, criterion-referenced, emerging literacy

Assessing Pre-Literacy Behaviors in Infants and Toddlers: Psychometric Evaluation of the Infant Toddler Literacy Assessment (*ITLA-3*)

The importance of literacy behaviors in very young children is undisputed (Neuman & Dickinson, 2001). Robust evidence suggests that deficits in key literacy precursors are associated with later challenges in reading/writing, grade retention, special education referrals, and increased school dropout rates in later years (Duff, Reen, Plunkett, & Nation, 2015; Snow, Burns & Griffin, 1998). It has long been established that children with reading difficulties and academic delays in the early grades often demonstrated, long before they begin formal schooling, delays in speech, vocabulary, grammar skills and/or print awareness (Fey, Catts, & Larivee, 1995), as well as story grammar development and ability to infer meaning (Bishop & Adams, 1990), and poor phonological awareness such as rhyming, and sound identification, segmentation and blending (Adams, 1990; Catts, Fey, Tomblin & Zhang, 2002; Gillon, 2004; Longan, Burgess, Anthony, and Barker, 1998). The foundation for these skills is believed to be established early in children's early social-communicative interactions during the infant, toddler, and preschool years (Bornstein et al., 2014, Snow, Tabors, & Dickinson, 2001).

It is believed that most children under three years of age gain a substantial amount of knowledge about language and communicating social and cognitive messages during interactions with parents and primary care-providers and these experiences provide the foundation for development of their later language and literacy skills (Dodici, Draper & Peterson, 2003; Lawhon & Cobb, 2002). Although children may not typically be identified as having literacy problems until well into the later preschool and early elementary years,

there is a growing appreciation that young children may show early signs of delay that are related to environmental and/or biological factors. Young children, who lack literacy-rich home environments for example, and the opportunities for learning new vocabulary, conversational skills, and phonological and print awareness may be at risk for delays in pre-literacy skill development (Fenson et al., 2000; Hart & Risley, 1995).

Although much has been written regarding the conceptual basis of pre-literacy skills of preschool-age children (ages 3-5), less information is available regarding what infants and toddlers know and do that would be related to later literacy skills. Continued work needs to be done to broaden the conceptualization of pre-literacy development in infants and toddlers beyond vocabulary development, print- and letter-sound awareness (Neuman & Dickinson, 2001) and shared book-reading with adults. Identification of such emerging behaviors/skills could maximize successful early childhood programs for children at risk for later school success (Parlakian, 2004). Identifying delays through close monitoring of behaviors used in social-communicative, and play interactions with caring adults, as well as early engagement with print and rhymes and songs could allow for targeting functional play and communication behaviors in infants and toddlers that help prevent literacy-related delays/disabilities later in the children's schooling (Fricke, et al, 2013).

Early Developmental Influences on Literacy-related Behaviors

Parent-child interaction. Research shows that the home environment in the early years is a strong predictor of later outcomes for children (Evans et al., 2013). Hart and Risley (1995) found that the frequency and emotional quality of parent-child interactions

in children's earliest years were correlated to family income and child development outcomes including language and later literacy skills. The children living in poverty often have poorer language skills at age 3 years and poorer school achievement (reading and spelling) in kindergarten through third grade than peers from more advantaged economic environments (DeTemple, 2001; Hart & Risley, 1995; Snow et al., 1998; Tomasello & Farr, 1986; Walker et al., 1994). Fewell and Deutscher (2004) describe the importance of the adult's input to hold the young child's interest for extended interactions (multiple turns and elaborations) that Dickinson and Tabors (2001) describe as critical to later literacy skills. Furthermore, Deckner et al., (2006) have shown a link between early parent-child interactions during shared book activities and later literacy for children as young as 2 years. The children's degree of active interest and the rate of maternal utterances in shared book reading were both predictive of the children's expressive language skills and later letter knowledge at age 42 months. The influence of parents' reading to their infants and toddlers is complex, as there are varied patterns in the relationships between parental book-reading behaviors and children's learning. Cline and Edwards (2013) found that the use of extra-textural talk during book reading was differentially related to child learning depending on the emotional quality provided during book reading, and the associations differed for families who spoke English versus Spanish as their home language. The strong role that family history (i.e., family risk for language or literacy difficulties in reading) and early vocabulary skills play in predicting reading problems (Duff, et al., 2015) further points to the complexity of the interplay of parent and child characteristics to the dynamics of parent-child interaction.

Role of care-providers. The importance of caregivers in promoting young children's literacy is also well documented. Young children develop literacy in a variety of ways including observation of adults' talk and use of print (Lyon, 1998; Purcell-Gates, 2004; Torr, 2019) and frequent interactions with caring adults, printed materials and writing utensils (Tabors, Roach, & Snow, 2001). Watching adults use print to gain information and use writing utensils to create messages provide young children with a socialization for literacy as communicative and functional (Purcell-Gates, 2004). Furthermore, several social interactions with infants/toddlers are believed to promote pre-literacy skills (Bowman, Donovan, & Burns, 2001; Katz, 2001; Lawhon & Cobb, 2002). These include extended, turn-taking activities with adults such as songs, finger plays, clapping, repetitive oral stories and rhymes. It also can include dialogic reading with its use of commenting, questions and elaborations to advance children's vocabulary and sense of story and decontextualized events. Finally, scribbling and writing in a pretend fashion (Emerson & Hall, 2018) and sharing pretend play with the simplest of gestures and familiar objects all help the infant/toddler learn the role of author and the value of script and audience in the simplest of communication acts (Bates, Bretherton, Snyder, Shore & Volterra, 1980).

Understanding how to promote infant-toddler pre-literacy skills in early childhood care settings is essential. Shared exploration of simple picture books and children's active participation in playful interactions with responsive adults can build children's awareness and skill with vocabulary, story grammar, print, and word/sound/letter/symbols and their meanings (Wasik et al., 2016; Zauche et al., 2016).

The opportunity to engage in one-to-one language-rich interactions is especially important for infants whose home environment does not include joint reading (Taylor et al. 2016), and/or many extended conversational exchanges with parents or other caregivers (Burchinal et al. 1996; Vernon-Feagans & Bratsch-Hines 2013).

Despite research demonstrating the importance of the caregiver role, there are concerns with the frequency and quality of literacy activities observed in the childcare setting, where many infants and toddlers spend much of their time. Torr (2019) found that in a three-hour block of observations of childcare center classrooms across 22 early childhood infant and toddler classrooms, there were limited opportunities for the infants and toddlers to participate in any shared reading activities with the adults. Torr (2019) found this lack of shared reading experiences was even found in high quality infant classrooms based on *Infant/Toddler Environment Rating Scale Revised Edition (ITERS-R): Listening and Talking Subscale* (Harms et al. 2006). These findings demonstrate a need for better understanding both pre-literacy skills to be fostered in infants and toddlers, and the strategies to promote these skills within best practices of care and education for this age group.

The Need for an Assessment of Infant-Toddler Literacy Behaviors

Generally, the assessment of pre-literacy behaviors in young children is limited to either skill development in children over 3 years of age (Clay,1993; Kaminski & Good, 1998; Notari-Syverson et al., 1998) or the quality of children's literacy experiences/environments (Breit-Smith et al., 2010; Dynia et al., 2014; LaParo et al., 2012; Marvin & Ogden, 2002; Umek et al., 2005). The overarching goal of scale

development and validation is to measure observable human behaviors that cannot be assessed using one variable or item (DeVellis, 2016). Assessment of emerging pre-literacy experiences or skill in children younger than 3 years has yet to be organized into a single tool.

Normative data for specific behaviors related to very young children's early social-linguistic abilities for turn-taking and predicting routine patterns in stories, songs, and rhymes are minimal (Sinclair & Golan, 2002). Although normative data exist for preschool-age children's pre-literacy skills and the key communicative and linguistic behaviors associated with them, less is known about the infant-toddlers' abilities related to rhymes and social games, print and book awareness, and their earliest social-literate language, and how these vary for children in families of diverse income, education, and primary language and culture as represented today in the United States. It is believed that these pre-literacy behaviors are best assessed by observing young children in natural interactions as they are less conducive to direct-testing procedures.

Greenspan and Meisels (1996) identified a set of 10 principles for assessment of young children that included one addressing the need to measure children's strengths and competence. Specifically, the authors stated: "The assessment process should identify the child's current competencies and strengths, as well as the competencies that will constitute developmental progression in a continuous growth model of development" (p. 17). The Recommended Practices from the Council for Exceptional Children's Division for Early Childhood (DEC, 2014) also calls for strengths-based assessment and acquisition of data from "systematic ongoing assessment to identify learning targets, plan

activities, and monitor the child's progress" (A9,p. 8) These recommended practices for work with children with possible or identified delays or disabilities also call for "….methods, including observation and interviews, to gather assessment information from multiple sources, including the child's family and other significant individuals in the child's life." (A6, p. 8) and "….obtain[ing] information about the child's skills in daily activities, routines, and environments such as home, center, and community." (A7, p.8) Furthermore, parents and care-providers have been found to be reliable and valid reporters of infant/toddler early development (Diamond & Squires, 1993; Glascoe,1999; Pulsifer et al., 1994; Squires & Bricker, 2009) and emerging literacy skills in preschool-age children (Boudreau, 2005; Cabell et al., 2009). An infant-toddler pre-literacy assessment that is designed to reflect these assessment principles and practices could not only provide valid insight into what the children currently demonstrate as pre-literacy behaviors, but also guide practitioners toward developmentally appropriate targets for support and intervention that can be addressed in enjoyable, everyday learning opportunities and interactions with parents and familiar adult care providers. Such a tool could also provide those engaged in program evaluation with information that sensitively documents children's change over time as a result of enrollment in early intervention programs.

ITLA Development and Pilot Data

Preliminary work on the Infant Toddler Literacy Assessment (*ITLA)* has progressed through the initial steps of DeVellis's (2016) scale development model and resulted in (1) establishment of the intended constructs, (2) development of an initial item bank, (3)

development of the scale format, and (4) item bank review by experts.

To address both face and content validity, three university faculty with expertise in early childhood education and developmental psychology generated 80 possible *ITLA* behaviors and suggested sequential placement across 14 exemplars (e.g.*, takes turns in social games; interacts with print; aware of how stories are structured*) with six of the behaviors in each increasing in perceived difficulty per exemplar. These behaviors were assigned by consensus to one of three pre-literacy conceptual categories (i.e., rhymes and sounds, print/book awareness, and social/literate communication). This experimental scale was used as one assessment of baseline abilities and developmental change over two years as part of an NIH-funded study of school readiness focused on parent engagement with infants/toddlers enrolled in Early Head Start and teen parent programs. An analysis of intervention effectiveness for a subset of 41 children with developmental delays in this study revealed significant changes in *ITLA* scores for the treatment compared to control group of children (Kuhn & Marvin, 2013), suggesting the tool's sensitivity to noting change in pre-literacy behaviors over time. Furthermore, preliminary analyses of the *ITLA*'s repeated use on all 180 children in the study over the two-year period, suggested seven exemplars and their sets of behaviors held promise for reflecting a developmental sequence (Jackson, Marvin & Taylor, 2012).

Subsequently the authors made modifications and additions to the *ITLA* exemplars and behaviors based on analyses suggesting a low age relevance for some behaviors. The revised tool (*ITLA-R*) was used as part of a program evaluation study by the first author to offer directors and staff of childcare programs both formative as well as

summative data related to their work with infants and toddlers from high-risk families. The *ITLA-R* helped document the sequence and age appropriateness of behaviors for now 16 exemplars of pre-literacy-related behaviors in young children across the three same conceptual categories of communication and social-literate language (six items), print/book awareness (five items) and early knowledge associated with songs, rhymes and social games (five items). Each exemplar was scaled on a 6-point (inferred age groups) nominal rubric that described behaviors that reflected developmental increments of pre-literacy. Since the *ITLA-R* was designed to be completed by a familiar care-provider, it lent itself for the program evaluation study with childcare providers.

The preliminary data from the sample of 242 children provided insight into the potential utility of and need for further development and evaluation of the *ITLA-R*. A Rasch analysis (Rasch, 1960) was used to test difficulty of each exemplar behavior. Unidimensionality was tested with infit mean squares. Age bands were established every 6 months from 0-36 months. Age-expected functioning was estimated using mean age within each of the bands and matched to item difficulty metric (logits) to establish upper-age boundary of each behavior. All the behavioral exemplars showed evidence that they were indeed arranged in a developmental sequence as intended. Younger children demonstrated behaviors at the lower end of each exemplar set, and older children demonstrated increasingly higher-positioned behaviors per exemplar**.** The results of the Rasch analyses found that the scale provided a progression of pre-literacy skills that represent a growth model of development (Jackson et al., 2012).

Although the *ITLA-R* had promise as a standardized normed assessment for tracking children's developmental progress toward functional literacy, the scale had a possible ceiling effect and had a few age bands that needed additional behaviors identified. As a result, a panel of six local experts expanded on the number of behaviors per exemplar from one per age group to three per age group, across now seven age groups (6 months to 42 months), resulting in a set of 345 behaviors over the same three conceptual categories. A panel of 10 local seasoned infant/toddler practitioners and two national experts in early development and literacy skills were then charged with rank-ordering the randomized behaviors by either developmental sequence or ease of understanding, which resulted in a consensus of one priority behavior per age band, per exemplar, per category. The revised *ITLA-3*, with its three conceptual categories, can be found in Appendices A and B, for English and Spanish versions, respectively. The next task to complete the assessment development was to determine whether the revised set of 15 exemplars and 105 behaviors in an *ITLA-3* would reflect three separate or one unilateral construct and to further assess its concurrent validity. Furthermore, development of standardized scores for use in summative assessment for program evaluation purposes was needed.

Method

Participants. Participants were recruited from six community childcare and five Early Head Start centers in two urban communities in the Midwest. In each of these settings, classroom teachers were trained on the recruitment processes. Teachers who served children between the ages of six and forty-four months were responsible for

recruiting children for the study who were enrolled in their classrooms. Teachers provided families with written materials about the study and reviewed the IRB consent with each family to determine their interest in participating in the study. All procedures were approved by the Institutional Review Board at both affiliated universities. In total, 312 infants and toddlers participated in the study. Infants and toddlers were on average 26.7 months old (SD=9.85 months; range 6 to 44 months). The children were primarily male (52%). The majority of the children's race was white (55.2%) with 35.6% reported as being Hispanic. The majority (97.4%) of the families had one member who spoke English, however, approximately a third (37.0%) also spoke another language. Spanish (19.0%) was the most frequently reported language other than English. Only 3.3% of the children were identified as having a disability. A total of 30.7% of the parents reported that they qualified for state support. The teachers who completed the assessment all were employed as an infant or toddler teacher in a center-based program. The majority (71.9%) of the teachers had a two- or four-year degree. The teachers had worked at their current employment for an average of 3.39 years (SD=4.52; with a range from >1 to 27 years). 59.8% of those with a college degree had a major in early childhood with 94.7% haven taken infant coursework.

Measures. The *ITLA-3* (2016) is a criterion-reference-based assessment that measures young children's early language and pre-literacy skills. It is intended for use with children aged 6 to 42 months. Building on the *ITLA-R*, the *ITLA-3* is comprised of 15 pre-literacy related exemplars, each to be rated on a 1 to 7 scale that represents a continuum of behaviors with increasing complexity; a 7 is associated with the most

advanced behavior in the series. The total scale represents pre-literacy behaviors across 15 exemplars and 105 behaviors and the age span of 1 to 42 months. The *ITLA-3* is a teacher-completed assessment based on repeated observations of a child. It can include direct administration if a teacher has not observed a behavior during a three-week period.

The Peabody Picture Vocabulary Test™ Fourth Edition (*PPVT™-IV*) is an individually administered, norm-referenced instrument that assesses receptive vocabulary for individuals aged 2 years 6 months through 90 years and older. *PPVT™-IV* split-half reliabilities are good to excellent, ranging from .89 to .97 for the age groups. Test-retest stability was calculated based on the data from 340 examinees who were administered the same form of *PPVT™-IV* twice. Approximately half of the sample took Form A, and half of the sample took Form B. The test-retest correlations range from .92 to .96, indicating that *PPVT™-IV* performance is highly stable over time. *PPVT™-IV* addresses validity based on test content, correlations with other tests, and studies with special populations. The *PPVT™-IV* normative sample is representative of the English-speaking U.S. population of individuals ages 2 years 6 months to 81 years and older (U.S. Census, 2004).

Procedures. As part of the assessment process, each parent completed a survey regarding the demographic information related to their child. The primary classroom teacher completed the *ITLA-3* based on their observations of the child during the previous three weeks and direct assessment as needed; teachers were to assign a rating associated with the exemplar most like if not exactly matching behaviors they had witnessed in the child. They also completed a survey describing their work experience.

The materials were available in English and Spanish. For a convenience subset of 75 children who were in one of the Early Head Start programs, the *PPVT™-IV* was completed by the program's outside evaluation team. These data were available for that program's evaluation as well as for this study.

Statistical Approach. Data were analyzed using SPSS Statistics for Windows, Version 26.0, (IBM, 2019). Tests of reliability were used to establish consistency across the items. Cronbach's (1951) coefficient alpha provides a measure of internal consistency, indicating how well the items covary. To examine the concurrent validity of the *ITLA*-3 a Pearson correlation was used to determine whether the *ITLA-3* scores were associated with the *PPVT™-IV* with the subset of the sample. Concurrent validity considers whether scores on the test are associated with the criterion, and the Pearson correlation provides a measure of the standardized covariance (Thorndike & Thorndike-Christ, 2010).

Standardization. The adjusted mean scores and the observed standard deviation (per age band) were used to transform the reported *ITLA-3* total scores into z-scores. Following the z-score transformation, the scores were transformed into standard scores (z-score*15+100). Transformed scores were in a standard score metric with a mean of 100 and standard deviation of 15.

Factor Analysis. Principal Components Factor Analysis (PCA) with varimax rotation was conducted on the 15 exemplars for two reasons: 1) to determine if the three categories were distinct subscales or if the scale was unidimensional 2) to provide evidence on the validity and reliability of the enhanced *ITLA-3* scales.

Results

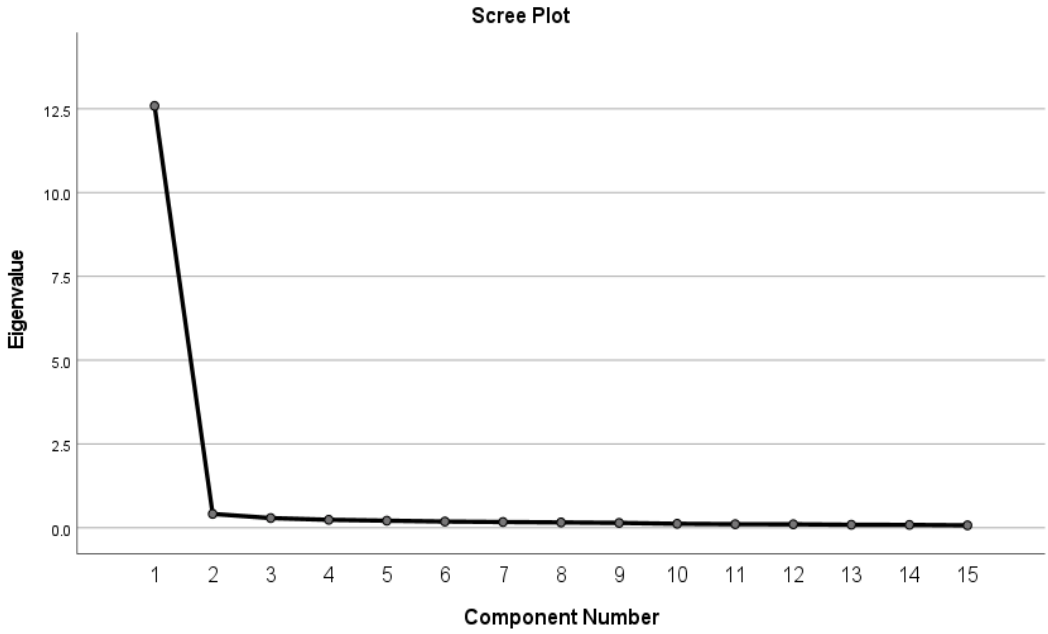
Reliability. Cronbach's alpha levels above .7 are recommended in scale development, with larger correlations indicative of higher internal consistency across items (Nunnally, 1978). Internal consistency of the *ITLA-3* was α=.986, providing evidence that all the items are highly intercorrelated.

Concurrent Validity. Results of the analyses using the Pearson correlation revealed a moderate association between the *ITLA-3* and the *PPVT™-IV*, (r (75) = .463), p<.001), providing evidence of concurrent validity.

Principal Component Factor Analyses. A PCA was performed using the Maximum Likelihood method of extraction. Bartlett's test of sphericity and Kaiser-Meyer-Olkin (KMO) were conducted prior to the PCA. Bartlett's test of sphericity was significant (c^2 (105) = 6824.39, p<0.001), indicating that PCA was an appropriate approach for use with the data set. The KMO indicated that the strength of relationships among the variables was high (KMO=.98), further confirming the use of PCA. The scree plot in Figure 1 indicates only one factor was extracted from the analysis, so the solution was not rotated. The factor was robust, with a high eigenvalue of 12.59 and it accounted for 83.9% of the total variance, providing further support for a one-factor solution (Cattell, 1996). All exemplars for the three conceptual categories on the *ITLA-3* in truth reflected one single construct of pre-literacy, further supporting the instrument's content and construct validity.

Figure 1

Scree Plot based on Principal Components Factor Analysis (PCA)



Discussion

Literacy skills of young children have a significant bearing on their long-term success in school, with early deficits predicting reading challenges in early grade school years. Although there are several developmental assessments available to broadly examine young children's development, few provide detailed review of infant and toddler pre-literacy skills. This study was part of a series designed to develop an infant-toddler pre-literacy assessment, (i.e., *ITLA-3*) that could support early childhood providers' curriculum planning for young children and administrative program evaluations. The assessment was designed to provide a developmental sequence of exemplars for three conceptual categories of pre-literacy including 1) communication and social-literate language, 2) print/book awareness, and 3) songs rhymes and social games. The previous and current analyses all support the use of the *ITLA-3* for these purposes.

The *ITLA-3* reflects the key preliteracy behaviors based on available literature and expert input. Previous studies have determined statistical support of a developmental sequence of the exemplar behaviors. The *ITLA-3* shows developmental sequence of items and exemplars in each proposed category from easiest or earliest learned to later developed skills. In addition, the field test analyses of the instrument provided psychometric evidence supporting the content and concurrent validity of the *ITLA-3* as a measure of pre-literacy skills. It has moderate construct validity with the *PPVT™-IV* and demonstrates one overall construct of pre-literacy across its 15 exemplars. Furthermore, the *ITLA-3* meets the DEC call for strength-based assessments that can be completed based on information collected in naturalized settings. It provides a framework that encourages care-providers to identify young children's pre-literacy abilities and strengths by gathering data across multiple sources, classroom observations, direct administration, and/or as needed, parent report.

This study of *ITLA-3* and previous psychometric studies provide evidence that support its ability to provide early childhood teachers, special educators, care providers and program administrators assessment information for curriculum planning and program evaluation. The tool offers information to help identify children's strengths and less well-developed skills that will be useful in identifying individualized instructional goals that can be incorporated into a classroom's daily routines and play activities.

With the increased demand from funders on the efficacy of chosen intervention approaches, the *ITLA-3* as a standardized measure, will also provide data on the efficacy of curricula approaches as a monitor of young children's growth over time. It's sensitivity

to change highlights its potential utility to monitor change across populations, including those with developmental disabilities, where change is often demonstrated in small incremental steps.

Limitations. The standardized scores represent children from only one midwestern state. Although the children represented several races and ethnicities from varying economic backgrounds, the sample was not stratified by race/ethnicities or primary caregiver education level, nor representative of English-speaking US populations of infant and toddlers. It was a sample of convenience. As a result, the standard score has most utility in tracking change over time rather than a comparison to a standard group of children. Furthermore, this study did not address intra-/inter-rater reliability.

Conclusion

The *ITLA-3* provides a valid assessment of developmental behaviors that reflect important foundations of pre-literacy skills in infant and toddler-age children. Future studies are needed to assess its stability of exemplars-by-age for a more representative U.S. population. But scholars could also use *ITLA-3* to develop local norms for unique cultural populations (i.e., native American communities, immigrant populations; non-English-speaking populations) and targeted program evaluations. Further research is needed as well on the validity of exemplars in populations exposed to increasingly technological environments and the need to include technology-related behaviors (e.g., up-down or left-right tablet swiping, and specific (i.e., arrows) keyboard character use) as precursors or foundations for later digital literacy behaviors.

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Appendix A

English-version of *ITLA-3*

Appendix B
Spanish-version of *ITLA-3*

Title of Person Rating Child:	
Site:	
Child Name:	
DOB:	Age: (in months)
Sex:	Today's Date:

Infant-Toddler Literacy Assessment (ITLA)

1 month to 42 months | Revised Version 2016

Barb Jackson, PhD, Munroe-Meyer Institute, University of Nebraska Medical Center
Chris Marvin, PhD, Special Education and Communication Disorders, University of Nebraska-Lincoln

TO BE COMPLETED BY EVALUATOR OR TEACHER

SUMMARY OF SECTIONS	Total Scores (35 max.)	MEAN SCORES (Total/5)
I. Communication: Social & Literate Language		
II. Print/Book Awareness		
III. Routines, Rhymes & Social Play		
TOTAL		

INSTRUCTIONS:

1. The ITLA has three (3) sections. Each section has five (5) Goals. Each goal has seven (7) behaviors that reflect the goal developmentally for children 1 month to 42 months.
2. Each of the seven behaviors reflects an example of how a child might demonstrate the goal. This is not a standardized test and a child can demonstrate the goal in similar, if not the exact manner reflected in the wording of each behavior.
3. This is an assessment based on recall and observation. The teacher completing the ITLA should have a history of knowing this child for at least 3 weeks. Base your assessment on what you know the child can do or have observed this child doing.
4. Read all seven behaviors listed for each goal. Consider any behaviors you KNOW/HAVE SEEN the child doing easily. Then consider the behaviors you have never seen the child do. **Check the box for the highest numbered behavior** that best describes the child's current, most established abilities for that goal.
5. You can observe for such behaviors more 2 to 3 weeks, recall parents reporting such behaviors or, if necessary, create a situation to prompt the goal and note how the child behaves to help you decide which behavior to circle.
6. The child can use any language to demonstrate abilities.

COMMUNICATION: SOCIAL/LITERATE LANGUAGE

Goal 1: Uses Intentional Communication Skills

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Uses differentiated cries (e.g., crying to be fed; crying to have diaper changed)	Reaches and vocalizes toward object or person they desire (e.g. mama, holds arms up)	Takes object to adult to request help or "play with me"	Uses recognizable words to announce, comment, request help or label (e.g. ball, all-done)	Consistently uses clear 2-3 word combinations (e.g., "my cup," "mommy go")	Uses 4+ word sentences to express wishes or ideas	Contributes to a conversation by adding new information

Goal 2: Understands Communication Directed Toward Him/Her

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Quiets or smiles to a familiar voice	Responds to adult's command (e.g., adult says, "Want up?" and baby responds by reaching towards adult)	Points at familiar pictures when named by adult	Retrieves named objects from across the room (e.g. shoe, book)	When not understood, says word louder or takes adult to item	Answers simple "who, where, what" questions from very recent event or action.	Answers variety of "who, when, where" questions

Goal 3: Understands "Then & There" Ideas

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Briefly looks to where an object or person was last seen	Anticipates an event when seeing a familiar object (e.g. car-keys mean bye-bye)	Shows excitement upon hearing name of familiar show, CD or book	Within a familiar routine, anticipates next step (e.g. after washing hands, knows to throw paper towel away)	Comments about a past event when prompted by a photo	Answers questions about past personal experiences without visual cue or reminder (e.g. recent birthday party)	Describes what is happening or will happen in the story book

Goal 4: Aware of how stories are structured

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Grasps/holds and looks at cover of books	Closes book to indicate disinterest or "all done" (puts book down/ pushes away)	Shows story preferences by searching for a certain page/picture or familiar book	Uses the phrase "The End" when closing a book	Announces the title of the book using a portion of the title (e.g., says "wheels" for wheels on the bus)	Describes relationships between characters and other things in pictures (e.g., "He's fishing in a lake." "Lady is feeding a duck.")	Asks about future events in a story (e.g., "What's he going to do?")

Goal 5: Relates stories to their own life

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
None of the descriptions apply	Reaches for adult's body or clothing to match named picture (e.g., "Where's Grandma?" "Hat?")	Responds by pointing to self or nearby object when prompted to match picture in book (e.g., Where's your pants? Nose?)	Announces own body parts or available objects, clothing as similar items are mentioned in a story/book	Asks to experience same event as character in book (e.g., We go to zoo?)	Re-enacts familiar routines from a story (e.g., going to the doctor, cooking dinner)	Communicates a personal experience that relates to the story

Communication Total Score _____

PRINT/BOOK AWARENESS

Goal 1: Takes meaning from print/books

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Looks intently at pictures in books	Touches and/or vocalizes recognition of familiar objects in picture books	Points to simple pictures in books	Recognizes familiar symbols/logos on clothing (e.g., Get your Lion shirt)	Announces familiar symbols (logos) (e.g., "stop sign," "favorite store")	Asks an adult to read words or symbols he/she sees in the environment (e.g., What's that?")	Points to his/her name in print (spontaneously or when asked)

Goal 2: Attends to book when "reading" with an adult

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Calms when being read to	Attends to an adult's point at a picture	Attends quietly as adult talks about pictures in book	Joins in by interjecting some repeated words from the story	Adds comments to the story based on pictures	Answers simple questions about the book (e.g, Who? What? Where?)	Makes predictions based on the story (e.g., What will happen next?)

Goal 3: Interacts with print

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Explores book as object (e.g., mouths, shakes, pats)	Randomly opens, closes, or turns pages in a book	Points to pictures that are named	Points to pictures without prompting	Imitates mannerisms of familiar adult pretending to read a tablet or book (e.g., lay back, cross legs)	Pretends to read a story to a doll or stuffed animal	Uses books, or other print material during pretend play (e.g., menus, phone book)

Goal 4: Draws/colors/writes

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Picks up hand-sized objects	Holds writing utensil with fist	Makes repetitive marks on paper	Imitates a line or a dot	Attempts to imitate marks made by adult (e.g., circle, squiggly)	Verbally labels drawings (e.g., "I made a cat")	Assigns meaning to his/her pretend writing

Goal 5: Uses technology and understands cause/effect

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Uses simple actions to activate a toy (e.g., shake, pound, slide)	Touches action part of a toy to signal for more/ continue (e.g., touches dial on See and Say when it stops its motion/sound)	Hands toy to an adult to "fix it" or turn it on	Turns on/off switch on devices/toys	Uses specific action on keyboard or screen to make something happen on the screen	Searches for pictures or icon on phone or tablet	Navigates in and out of programs on a tech device

Print/Book Awareness Total Score_____

ROUTINES, RHYMES, and SOCIAL PLAY

Goal 1: Takes turns in social games

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Smiles or vocalizes in response to familiar social game (e.g., peek-a-boo)	Takes and releases objects to/from adult's extended hand (e.g., one turn in a give/take game)	Takes multiple turns in a give/take game	Invites adult to imitate their actions (e.g., your turn mommy, handing the microphone to mom)	Performs correct action/ word at correct time in a familiar rhyme/song (e.g., shakes toy at correct time during a song)	Invites other children to join in play or a song/game and waits for response (e.g., "Let's do this")	Takes turns playing "rule-governed" games (e.g., Duck-Duck-Goose; or Hide & Seek)

Goal 2: Recognizes/predicts routine events

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Smiles at adult's initiation of a familiar action/activity	Recognizes words or actions of a familiar routine (e.g. preparing the bottle)	Initiates familiar routines in response to adult's request (e.g., goes to the high chair when you say, "It's time to eat.")	Predicts next action of a familiar routine/ event (e.g. goes to door when given coat)	Announces what typically comes next in a daily routine (e.g., book time after bath)	Asks about time until the anticipated event (e.g., Is grammy coming now?)	Uses phrases to describe steps in the routine (e.g., first and then)

Goal 3: Attends to familiar/repeated music or songs

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Calms to music	Moves to music (e.g., wiggling, rocking)	Approximates actions to familiar songs	Uses words to "sing" along with familiar songs	Sings phrases of songs along with music	Sings a song in sync with recognizable tune	Sings familiar songs from beginning to end upon request

Goal 4: Takes interest in rhyming words

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Calms to adult recitation of familiar lullaby	Attends by listening and watching as adult recites rhymes	Imitates some words in familiar rhymes	Provides last or missing word in adult's very familiar rhyme (e.g., all fall _____(down))	Repeats a key phrase from a familiar rhyme or chant	Recites simple 2 – 3 lines in familiar rhyme (e.g., Hickory Dickory Dock)	Spontaneously adds silly rhyming words for words in story book (e.g., rainbow fish, swish bish)

Goal 5: Engages in pretend play

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Uses simple exploration of objects (e.g., mouthing, banging, shaking)	Demonstrates functional use of objects on self or others (e.g., brings empty spoon or bowl to mouth; touches brush or comb to hair)	Demonstrates functional use of objects on a doll or stuffed animal (e.g., gives the baby a bite to eat)	Uses familiar single words from daily activities in pretend play (e.g., no-no, night-night, shhh)	Pretends a real object is a different object (e.g., uses a block as "food" for his stuffed animal)	Narrates pretend play with phrases (e.g., "Go to bed baby," "Let's go to the store," "Here's the pizza")	Assigns and acts out roles of pretend play (e.g., "You're the mommy, I'm the daddy; I'm Spiderman and you're the Hulk")

Routines, Rhymes & Social Play Total Score _____

University of Nebraska Lincoln | Medical Center

Infant-Toddler Literacy Assessment (ITLA)

Evaluación de Alfabetización para Infantes y Niños Pequeños

De 1 mes a 42 meses | Versión revisada 2016

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Título de la persona calificando al niño:	
Localidad:	
Nombre del niño:	
Fecha de nacimiento:	Edad: (en meses)
Sexo:	Fecha:

ESTA SECCIÓN ES COMPLETADA POR UN EVALUADOR O MAESTRO

RESUMEN DE LAS SECCIONES	PUNTAJE TOTAL (35 máx.)	PUNTAJES PROMEDIOS (Total/5)
I. Comunicación: lenguaje social y alfabetización		
II. Conocimiento sobre textos impresos/libros		
III. Rutinas, rimas y juego social		
TOTAL		

INSTRUCCIONES:

1. La evaluación ITLA contiene tres (3) secciones. Cada sección tiene cinco (5) metas. Cada meta tiene siete (7) comportamientos que reflejan la meta del desarrollo de niños de 1 mes a 42 meses de edad.
2. Cada uno de los siete comportamientos reflejan un ejemplo de cómo un niño quizás demuestre una meta. Este no es un examen estandarizado y un niño puede demostrar la meta de manera similar, o exactamente como está reflejada en la descripción de cada comportamiento.
3. Es una evaluación basada en el recuerdo y la observación. El maestro que complete el ITLA deberá tener un historial de conocer al niño por lo menos 3 semanas. Base su evaluación en lo que sabe que el niño puede hacer o en lo que ha observado al niño hacer.
4. Lea los siete comportamientos enlistados para cada meta. Considere cualquier comportamiento que usted CONOCE/HA OBSERVADO al niño hacer con facilidad. Luego considere los comportamientos que usted nunca ha visto al niño hacer. **Marque la casilla del comportamiento con el número más alto** que mejor describa las habilidades actuales y más establecidas del niño para esa meta.
5. Puede observar dichos comportamientos durante 2 – 3 semanas, recordar comportamientos reportados por los padres o, si fuese necesario, crear una situación para impulsar la meta y anotar cómo el niño se comporta para ayudarle a decidir cuál comportamiento marcar.
6. El niño puede usar cualquier lenguaje para demostrar habilidades.

COMMUNICACIÓN: LENGUAJE SOCIAL/ ALFABETIZACIÓN

Meta 1: Utiliza habilidades de comunicación intencionales

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Utiliza diferentes llantos (ej., Llora para que lo alimenten; llora para que le cambien el pañal)	Alcanza y vocaliza (hacia) el objeto o la persona deseada (ej., mamá, levanta las manos)	Lleva un objeto a un adulto para pedir ayuda o "juega conmigo"	Utiliza palabras reconocibles para anunciar, comentar, pedir ayuda o nombrar (ej., pelota, terminé)	Constantemente usa combinaciones claras de 2-3 palabras (ej., "mi vaso," "mami va")	Utiliza oraciones de 4 palabras o más para expresar deseos o ideas	Contribuye a una conversación agregando nueva información

Meta 2: Entiende comunicación dirigida hacia él/ella

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Se calla o sonríe a una voz familiar	Responde a las órdenes de los adultos (ej., el adulto dice: "¿Te levanto?" y el bebé responde alcanzando al adulto)	Señala imágenes familiares cuando las nombra un adulto	Recupera objetos que están en otra parte del cuarto cuando lo nombran (ej., zapatos, libro)	Cuando no le entienden, dice la palabra más fuerte o lleva al adulto hacia el objeto	Contesta a preguntas simples "quién, dónde, qué" de un evento o una acción muy reciente	Contesta una variedad de preguntas "quién, cuándo, dónde"

Meta 3: Entiende ideas "entonces y ahí"

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Mira brevemente donde un objeto o persona fue visto antes	Anticipa un evento cuando ve un objeto familiar (ej., llaves de carro significa salir)	Demuestra emoción al escuchar el nombre de un show, CD o libro familiar	Dentro de una rutina familiar, anticipa el siguiente paso (ej., después de lavarse las manos, sabe que hay que tirar el papel)	Comenta sobre eventos pasados cuando se le enseña una fotografía	Contesta preguntas sobre experiencias personales pasadas sin ayuda visual o recordatorios (ej., fiestas de cumpleaños recientes)	Describe lo que está pasando o pasará en un libro de cuentos

Meta 4: Consciente de cómo se estructuran las historias

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Agarra /sostiene y mira la portada de libros	Cierra el libro para indicar desinterés o "terminé" (pone el libro abajo/ lo aleja)	Muestra sus preferencias de la historia al buscar una página determinada/ imagen o un libro familiar	Usa la frase "fin" cuando cierra un libro	Anuncia el título del libro usando una parte del título (ej., dice "las ruedas" para las ruedas del autobús)	Describe las relaciones entre los personajes y otras cosas en las imágenes (ej., "Está pescando en el lago." "Señora le está dando comida al pato.")	Pregunta sobre futuros eventos en una historia (ej., "¿Qué va a hacer?')

Meta 5: Relaciona historias con su propia vida

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Ninguna de las descripciones aplica	Alcanza el cuerpo o la ropa de un adulto para que coincida con una imagen nombrada (ej., "¿Dónde está la abuela?" "¿Sombrero?")	Responde señalando a sí mismo o hacia un objeto cercano cuando se le pide que coincida con una imagen de un libro (ej., ¿Dónde están tus pantalones? ¿Nariz?)	Nombra sus propias partes del cuerpo u objetos disponibles, ropa parecida a objetos mencionados en el libro/historia	Pide experimentar el mismo evento que el personaje en el libro (ej., ¿Vamos al zoológico?)	Recrea rutinas familiares de una historia (ej., ir al doctor, cocinar la cena)	Comunica una experiencia personal que se relaciona con la historia

Puntaje total de comunicaci·n_____

CONOCIMENTO SOBRE TEXTOS IMPRESOS/LIBROS

Meta 1: Encuentra el significado de textos impresos/libros

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Mira atentamente a las imágenes en los libros	Toca y/o vocaliza el reconocimiento de objetos familiares en libros ilustrados	Señala a imágenes simples en los libros	Reconoce símbolos familiares/logotipos en la ropa (ej., agarra tu camisa de León)	Anuncia símbolos familiares (logotipos) (ej., "señal de alto," "tienda favorita")	Le pide a un adulto que lea palabras o símbolos que ve en su entorno (ej., "¿Qué es eso?")	Señala su nombre en letra impresa (espontáneamente o cuando se le pide)

Meta 2: Presta atención al libro al "leer" con un adulto

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Se calma cuando le leen	Presta atención cuando un adulto señala a una imagen	Presta atención en silencio mientras un adulto habla sobre las imágenes en el libro	Participa interponiendo algunas palabras repetidas de la historia	Agrega comentarios a la historia basado en las imágenes	Contesta preguntas simples sobre el libro (ej., ¿Quién? ¿Qué? ¿Dónde?)	Hace predicciones basadas en la historia (ej., ¿Qué pasará después?)

Meta 3: Interactúa con textos impresos

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Explora el libro como un objeto (ej., poner en la boca, sacudir, tocar)	Abre, cierra o pasa las páginas de un libro al azar	Señala imágenes que son nombrados	Señala imágenes sin ayuda	Imita los gestos de un adulto conocido que finge leer una tableta o un libro (ej., recostarse, cruzar las piernas)	Pretende leerle un cuento a una muñeca o peluche	Usa libros u otro material impreso durante el juego (ej., menús, directorio telefónico)

Meta 4: Dibuja/colorea/escribe

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Recoge objetos del tamaño de la mano	Sostiene un utensilio de escritura con el puño	Hace marcas repetitivas en el papel	Imita una línea o un punto	Intenta imitar las marcas hechas por un adulto (ej., círculo, línea ondulada)	Nombra dibujos verbalmente (ej., "Hice un gato")	Asigna significado a su escritura simulada

Meta 5: Usa tecnología y entiende causa/efecto

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Utiliza acciones sencillas para activar un juguete (ej., sacudir, pegar, deslizar)	Toca la parte de acción de un juguete para indicar más/ continuar (ej., toca la palanca en el juguete cuando deja de moverse/hacer sonido)	Le da un juguete a un adulto para "arreglarlo" o prenderlo	Prende/apaga el interruptor de los aparatos/juguetes	Utiliza una acción específica en el teclado o la pantalla para hacer que suceda algo en la pantalla	Busca imágenes o conos en el teléfono o la tableta	Navega dentro y fuera de programas en un aparato tecnológico

Puntaje total de conocimiento sobre textos impresos/libros_____

RUTINAS, RIMAS Y JUEGO SOCIAL

Meta 1: Toma turnos en juegos sociales

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Sonríe o vocaliza en respuesta a un juego social familiar (ej. ¿Dónde está el bebé?)	Agarra y suelta objetos hacia/de la mano extendida de un adulto (ej., un turno en un juego de dar/recibir)	Toma múltiple turnos en un juego de dar/recibir	Invita al adulto a imitar sus acciones (ej., es tu turno mamá dándole el micrófono a su mamá)	Realiza la acción/palabra correcta en el momento correcto de una rima/ canción conocida (ej., mueve el juguete en el momento correcto durante una canción)	Invita a otros niños a participar en el juego, una canción/juego y espera una respuesta (ej., "Vamos a hacer esto")	Toma turnos jugando juegos "gobernados por reglas" (ej., "papa caliente"; o a las escondidas)

Meta 2: Reconoce/predice eventos de rutina

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Sonríe cuando un adulto inicia una acción/ actividad familiar	Reconoce palabras o acciones de una rutina familiar (ej., preparando el biberón)	Inicia rutinas familiares en respuesta a lo que pide el adulto (ej., va a la silla cuando le dicen, "Es hora de comer.")	Predice la siguiente acción de una rutina/ evento familiar (ej., va a la puerta cuando se le da el abrigo)	Anuncia lo que normalmente sigue en una rutina diaria (ej., tiempo de leer después del baño)	Pregunta por la hora hasta el evento anticipado (ej., ¿Ya viene mi abuelita?)	Utiliza frases para describir los pasos de la rutina (ej., primero y después)

Meta 3: Presta atención a música o canciones familiares/repetidas

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Se calma con música	Se mueve con la música (ej., meneándose, meciéndose)	Hace acciones que corresponden con canciones familiares	Usa palabras para "cantar" canciones conocidas	Canta frases de canciones con la música	Canta una canción en sincronía con una melodía reconocible	Canta canciones conocidas de principio a fin cuando se le pide.

Meta 4: Se interesa en palabras que riman

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Se calma cuando un adulto recita una canción de cuna conocida	Presta atención escuchando y observando mientras un adulto recita rimas	Imita algunas palabras en rimas conocidas	Proporciona la última palabra o la que falta en la rima conocida de un adulto (ej., todos nos _____ (caemos))	Repite una frase clave de una rima o canto familiar	Recita 2 – 3 líneas simples de una rima familiar (ej., Cucú, cucú cantaba la rana)	Agrega espontáneamente palabras tontas que riman con palabras en el libro de cuentos (ej., zapato rojo, sapo loco)

Meta 5: Participa en juegos simbólicos/ de ficción

1 ❍	2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍
Utiliza la exploración simple de objetos (ej., poner en la boca, pegando, sacudiendo)	Demuestra el uso funcional de objetos en sí mismo o en otros (ej., lleva una cuchara o una taza vacía a la boca; toca el cabello con un cepillo o un peine)	Demuestra el uso funcional de objetos en una muñeca o animal de peluche (ej., le da comida al bebé)	Utiliza palabras aisladas conocidas de actividades diarias en el juego (ej., no-no, noche-noche, shhh)	Pretende que un objeto real es un objeto diferente (ej., usa un bloque como "comida" para su animal de peluche)	Narra juegos de ficción con frases (ej., "Vete a dormir bebé," "Vamos a la tienda," "Aquí está la pizza")	Asigna y actúa roles de juego de ficción (ej., "Tú eres la mamá, yo soy el papá; Yo soy Spiderman y tú eres el Hulk")

Puntaje total de rutinas, rimas y juego social _____

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