

# The Decision Tree

## Child Indicator Seeds for Success

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### Why Culture Matters: What Research Tells Us

One of the theories of child development early interventionists should keep in mind when working with a child and family who are from a different culture is Lev Vygotsky's Socio-Cultural Theory. Lev Vygotsky's (1896-1934) saw child development as a form of social constructivism, which maintains that human development is socially situated and knowledge is constructed through interaction with others, and subsequently determined by culture. According to Berk and Winsler (1995) there are a number of factors that are unique to social constructivism. First, because children's culture influences the activities, language, and education to which children are exposed, these variables affect children's development. Second, while some development is innate or influenced by biology, higher level development is affected by culture. Finally, the theory incorporates the zone of proximal development, that is, the range in children's development between their ability to perform a task independently versus their ability to perform a skill with the assistance of a more competent member of their culture (adult or older child). This is very much like what we consider hand over hand assist and modeling for instance to build on existing skills.

With Lev Vygotsky's theory in mind, I recently reviewed a study [Maternal Expectations About Normal Child Development in 4 Cultural Groups](#) (email me for full study: [anne.brager@dbhds.virginia.gov](mailto:anne.brager@dbhds.virginia.gov)) that explored the maternal expectations about normal child development within 4 different cultural groups. The objective was to determine whether expectations about normal infant and child development are different among mothers from different cultural backgrounds. The participants in the study included 255 mothers (90 Puerto Rican, 59 African American, 69 European American, and 37 West Indian\Caribbean) whose children received health care at hospital-based pediatric clinics, private pediatricians and family practitioner's offices. Excluded from the study were parents who had a child with a known behavioral or developmental concern or a chronic medical condition, parents who were not members of the ethnocultural groups under study, and parents who had no child rearing experience (such as first-time parents at their first postpartum visit).

In the study, researchers verbally administered a questionnaire that included 25 questions in which mothers were asked to give their opinions about the age at which a normal child should begin to accomplish standard developmental milestones. The questions were administered in the parent's native language. **Significant differences were seen for the following developmental tasks: able to be fed from a spoon, smiling at a face, recognizing mother, able to feed self with a spoon, putting on own shoes, saying first word; naming colors, able to see shadows and shapes, and able to be toilet trained.** The developmental tasks for which there were no significant differences in expected ages among the mothers of the different ethnocultural groups included the following: crawling, taking first steps, rolling over, able to get to a sitting position and stay there, picking up head, pulling to stand, turning head to sound, grabbing a rattle, playing "patty cake" or "gimme sleeping through the night, knowing own name, putting 2 words together, knowing body parts, babbling, understanding the word "no," and feeling pain.

The data in the chart below shows months for expected skill attainment and suggests 2 noteworthy patterns of parental responses. First, parents from the different ethnocultural groups were most agreeable in their responses when asked about milestones that fit within the gross motor and language domains. Conversely, the greatest differences in responses among the mothers from different ethnocultural groups were seen in milestones that could be grouped under attaining positive personal-social relationships and using appropriate behaviors to meet needs. Second, when differences were found, the Puerto Rican mothers expected children to attain the milestones at a later age, compared with the mothers from the other ethnocultural groups. This was seen in 6 of the 9 items for which there were significant differences. Of the remaining 3 items with significant differences (age at toilet training, being able to see shadows and shapes, and first words), European Americans expected children to attain these at a later age than did mothers in the other groups.

**Table 3. Maternal Developmental Expectations\***

Expectation	Ethnic Group				P†	Between-Group Analysis‡
	Puerto Rican	African American	West Indian-Caribbean	European American		
Crawl	6.7	6.4	6.7	7.0	.30	...
First steps	10.7	10.5	10.0	11.6	.007	...
Roll over	3.7	3.6	4.1	4.0	.63	...
Get to sitting	7.0	6.1	5.9	6.9	.006	...
Pick up head	3.5	3.3	3.3	2.9	.43	...
Pull to stand	8.3	8.2	8.5	9.4	.04	...
Fed from spoon	7.3	4.1	6.1	5.5	<.001	PR>AA
Turn head to sound	3.2	2.7	2.1	2.3	.03	...
Grab a rattle	4.0	4.2	4.1	4.2	.95	...
Smile at face	3.6	1.9	2.2	2.2	<.001	PR>all
Pattycake or "gimme 5"	19.0	16.4	16.1	13.7	.04	...
Recognize mom	5.9	2.6	2.7	4.1	<.001	PR>AA and WI
Feed self with spoon	16.6	12.5	15.1	13.7	.002	PR>AA
Sleep through night	10.5	8.4	6.7	5.7	.006	...
Put on shoes	29.7	20.8	19.5	24.5	<.001	PR>all
Know his or her name	6.8	6.0	5.1	7.0	.11	...
First words	8.1	10.0	9.5	10.2	<.001	EA and AA>PR
Two words	17.6	17.0	17.5	19.2	.59	...
Name colors	30.1	25.6	23.3	23.8	.002	PR>EA and WI
Know body parts	20.3	18.3	18.0	19.2	.33	...
Babble	6.7	5.5	6.2	7.2	.07	...
Understand "no"	13.1	12.5	10.0	13.8	.17	...
Sees shadows and shapes	3.8	1.6	3.4	6.2	<.001	EA>AA
Feels pain	1.9	0.4	1.1	2.0	.10	...
Toilet trainable	22.2	20.2	21.6	28.1	<.001	EA>all

Maternal Expectations About Normal Child Development in 4 Cultural Groups by Lee M. Pachter, DO; Paul H. Dworkin, MD

The results of the study concluded that developmental expectations differ among mothers from different ethnocultural groups and determining parents' expectations is especially important for families from minority groups, in which traditional values, attitudes, and beliefs about family and child rearing may differ from those of the majority culture. When gathering assessment information providers should be aware that the general question, "How do you think your child is developing?" is important to ask recognizing parents' expectations for their child's development will influence their priorities and their concerns.

**Findings from this study emphasize the importance of interpreting parents' opinions and concerns about their children's development within the context of their cultural beliefs and expectations.**

## Test Your Inter-rater Reliability

Our state's focus on child indicator ratings has led many to wonder  
"Are we all rating children similarly?"



As part of our efforts to improve results for children, we are focusing each month on increasing our statewide inter-rater reliability. We are using examples of narratives from around the state that ideally will include observations of functional behaviors, parent/caregiver input, results from assessment tools and informed clinical opinion. Below is an example of a narrative from a recent Assessment for Service Planning. Using the limited information provided in the narrative and the process outlined in the child Indicator Booklet talk thru the scenario with your colleagues to determine a rating. The ratings given by the assessment team can be found at the end.

**Disclaimer: This activity is for learning purposes only and is not intended to be an endorsement of any particular narrative. It is intended to help you reflect on the questions that follow.**

### Questions to Consider:

1. Was there enough information provided to determine a rating? What additional information did you need?
2. Was there input into the narrative from all members of the assessment team including the family? Was the family's cultural differences considered?
3. Was the child's functioning across settings in each indicator clear?
4. Were functional skills listed under the correct indicator?
5. How close were your ratings compared to the ratings given by the assessment team? One or two off, in the same color family or way off? Did you agree with the ratings given by the team? Why or Why not?

**Emilio's Age: 13 months**

**Adjusted Age: 11.5 months**

**Referral Information, Medical History, and Health Status:** Emilio was born at 34 weeks gestation. He passed his newborn hearing screening (AABR). He was admitted to NICU after birth due to various diagnoses often associated with prematurity with the addition of intrauterine growth restriction. He stayed in the NICU for 20 days. Emilio was referred by his pediatrician due to concerns with his gross motor, speech and feeding development.

**Daily Activities and Routines:** Emilio goes to bed between 7:30 to 10:30 depending on his parent's schedule. He sleeps in the same bed and wakes up often during the night. He typically begins his day between 6:30 and 9:00 am. He typically takes a two hour nap between 10:00 and 1:00 pm. Emilio is at home with his mother while his brother, who receives special education services, is at school and his father is at work. Mother has requested services be provided after Emilio's father returns home from work, which is typically around 5:00 pm. Emilio likes to spend his time watching tv for a couple of hours at a time. Mother reports he cries if the TV is off or if he doesn't like the cartoon that is on. During play time, he likes to play with a baby activity set and a baby computer with sounds. He continues to keep his hands closed often and has difficulty holding onto toys, bottle and spoon. He is not holding his milk bottles by himself and is not using his fingers or spoon to eat. His mother feeds him all of his meals. He drinks 6 bottles of milk (6 ounces each) during a 24 hour period. He eats soft puree foods 2 to 3 times per day. He eats limited variety of foods (banana, carrots, potatoes, beans, rice).

**Family Concerns:** Emilio's family is from Puerto Rico and their primary language is Spanish. Father speaks limited English and acted as interpreter for the assessment. The family is concerned with Emilio's overall development. He began rolling over both ways at 11 months. He began belly crawling a week ago at 12 months of age. When placed in a sitting position, he is able to maintain his posture while manipulating objects/toys and is able to transition to the tummy

position but is not able to assume the sitting position independently. Emilio is able to produce the sounds “ma” and “pa” inconsistently and his mother reported he does not produce a variety of sounds nor does he communicate his wants and needs. Instead he cries and whines. He is not imitating actions or playful sounds. He keeps his hands closed often and has difficulty holding objects and toys. Emilio also has difficulty eating solid food, he gags and vomits. His mother reported that he is not able to chew on a small piece of solid food without gagging or vomiting.

**Family Priorities:** Emilio’s family is familiar with EI services as their older son received services for three years. The family wants Emilio to acquire age appropriate gross motor, feeding and communication skills.

**Family Resources:** Emilio has Medicaid to support his medical needs and WIC to support his nutritional needs.

**Developmental Levels:** Cognitive- 9 months    Gross Motor- 9 months  
Fine Motor- 10 months                      Receptive Language- 8-9 months  
Expressive Language- 8 months                      Social/Emotional- 10 months    Adaptive/Self Help- 3-4 months atypical

**Social/Emotional Skills including Positive Social Relationships:** Emilio has recently begun to crawl and is exploring everything he can reach. He looks to his mother for assurance, and notices when she leaves his sight, turning toward where she is. Emilio was comfortable approaching the evaluators, reaching for their papers and accepting their assistance with toys. Emilio let his mother know when he was unhappy with an activity by whining, vocalizing and he easily calmed with her reassurance. He enjoyed cuddling with her after his feeding, listening to her voice and engaging in a vocal play game, giggling and laughing in response to her. He is beginning to understand “no” and is especially watchful of mom’s face and her expressions.

Of concern is that Emilio is not responding to his name being called or using social gestures like waving. He prefers to be held by mother in the company of visiting family members and friends. We would like to see more independence including sleeping in his own crib.

**Child’s Development in Relation to Other Children the Same Age:**

**Acquiring and Using Knowledge and Skills, including early language/communication:** Emilio is an adorable little boy who is learning so much about his environment through observation and exploration. When sitting independently, Emilio is able to manipulate toys, bang toys, shake toys and inspect them. He is mouthing some toys. Emilio is using both hands to reach for and grab at toys. Emilio shook and banged toys often to produce a noise. When a toy was hidden, he looked for it and removed a cloth to find it, showing object permanence. Emilio is repeating syllables “mamama, dadada, and gaga” and making vowel sounds to communicate. Emilio banged two blocks together in imitation and transferred that skill to banging spoons. Emilio is imitating familiar activities: he gets upset when he hears the bath water running, anticipates food preparation, and goes to the door when he hears a knock. Emilio is showing whole hand movements and is beginning to isolate his index finger. Emilio looked at pictures in his book when held open, but it took him some time to focus on the picture. Mother reported Emilio doesn’t show interest in books and prefers to watch TV. When told “no”, Emilio immediately looked at mother to regard her direction.

Of concern, Emilio is not yet calling “Mama” and “Papa” by name. We would like to begin seeing Emilio putting things in and out of a container during play. Emilio is not yet responding to simple instructions or when his name is called. We would like to see more variety in the sounds Emilio is making.

**Child’s Development in Relation to Other Children the Same Age:**

**Use of Appropriate Behaviors to Meet Needs:** Emilio confidently crawls around his carpeted play area to get his toys. He pats, bangs, opens and hits his electronic toys that have lights and make sounds. Emilio pulls to stand at his sofa to reach purposefully for toys up high, and he has begun to cruise along the sofa (mostly stepping to the right). Emilio sits

on the floor with stability and transitions into other positions from sitting to reach for toys/items and play. He becomes excited when playing with toys he likes, patting and banging them together and attempting to put items into and take them out of a container. Emilio competently grabs and holds onto items with his whole hands. Sometimes, he takes time to focus with his eyes on what he's doing with his hands. His pincer grasp is emerging.

Of concern, Emilio demonstrated a delayed and inefficient swallow when eating crumbled cookies and milk. He has a wet, gurgly voice quality consistently. He coughs, gags frequently during eating. He vomits his meals at least one time per day according to mother. He is fearful of loud noises, crowds and bath time.

### Child's Development in Relation to Other Children the Same Age:

#### Assessment Team Ratings:

**Social/Emotional Skills including Positive Social Relationships:** Rating 3: Emilio uses many important skills that are necessary for the development of more advanced skills; he is not yet showing skills used by other children his age in this area.

**Acquiring and Using Knowledge and Skills, including early language/communication:** Rating 2: Emilio is beginning to show some of the early skills that are necessary for development of more advanced skills in this area.

**Use of Appropriate Behaviors to Meet Needs:** Rating 2: Emilio is beginning to show some of the early skills that are necessary for development of more advanced skills in this area.



Reflect back on one of the tips shared last month: **Respect and partner with the family.** Don't assume anything. A family may be nodding their heads "yes," but that might only symbolize that they heard you, not that they agree. Listen carefully. Be alert for cues from families. Don't be afraid to ask questions.

### Considerations for Emilio and his family:

1. Are the concerns listed in each of the three child outcomes the family's concerns or the providers'? If both, consider putting them in the context of the child and family's routines. For instance, what is the functional purpose of container play and how can it be assessed and incorporated in relation to the activities that are important to the child and family?
2. Were the family's cultural values and beliefs considered? Consider including information regarding the family's expectations. Does the family consider independence sleeping in a crib? Is that skill important or appropriate to the family's cultural values and practices?
3. Reflect back to table 3 above. And while these expectations were the reflection of the 90 mothers of Puerto Rican descent included in the study, it does remind us of the importance of exploring the family's expectations of when their child should achieve a particular skill.
4. Emilio's father would like to participate in all services. The father's role in early intervention can be affected by many things, such as his parenting beliefs, his cultural values, his understanding of the child's delay or disability, his concerns for the child's future, or his thoughts on how to support his family. It is important to try to accommodate the family's schedule, including the father. If he is typically unable to join the visit because he works during the day, consider offering sessions in the evening, videotaping visits, or doing visits using Skype or some other teleconferencing. For insights on engaging fathers in early intervention services, check out Virginia's Early Intervention Strategies for Success Blog [Don't Forget Fathers](#). Although from 2013, it has a lot of great information and would only take one post to revive the discussion.