

MANUAL FOR EARLY CHILDHOOD
ASSESSMENT
Birth-to-five

Sight and hearing

Early detection of visual and hearing problems is always a priority for practitioners who work with children, because problems with these sensory modalities are common, and if they are significant, they can permanently affect a child's development. Anyway, many hearing and vision impairments can be functionally corrected.

Visual tests for children are best when applied by trained professionals - ophthalmologists. Other practitioners who work with children contribute to the early identification of visual impairments by proactively addressing concerns, observing visual behavior and seeking additional specialist examination if needed. Noticeable deviations in vision, the presence of strabismus, or abnormal eye movements may be features of rare, serious eye conditions or systemic disorders such as cataracts, glaucoma, and retinoblastoma, which are sight-threatening but treatable.

The most common vision disorders in children are strabismus, amblyopia and optical problems that influence visual acuity. Approximately 2 percent of children have amblyopia - reduced vision in which the eye itself is healthy, but because of the difference between the vision of each eye, or strabismus, the brain has either suppressed or failed to develop visual function. It is usually unilateral, but rarely can be bilateral. About 1 percent of infants and 3-7 percent of young children have strabismus.

As the primary sensory modality, vision enables the child to perceive and interact with the social and physical world.

Systematic research

Talking and interviewing parents starts with open-ended questions to elicit any concerns:

- Are you worried about your child's vision?
- Is there anything about your child's vision (the way he/she sees things) that gives you cause for concern?

Visual acuity is quite poor at birth, but improves rapidly during the first few months, reaching approximately the level of an adult (around 6-8 months of age).

*Observation/examination
Required test*

By the end of the fetal period, the fetus has regular periods of activity when the eyes and ears respond to stimulation.

The examination is followed by a more focused age-related behavioral assessment of the child's vision:

From 1 week

- Does your baby turn to diffused light?
- Does your baby stare at familiar face?

From 2 weeks

- Does your baby follow your face if you move from side to side?
- Does your baby smile back?
- Do your baby's eyes move together (simultaneously)?

From 6 weeks

- Do you think your baby has strabismus? (At this age the occurrence of strabismus is not typical, no matter how small or temporary)
- Does your baby look around with interest?
- Does your baby struggle to reach for small objects?

From 9 months

- Does your baby pick and scratch very small objects such as crumbs or cake nuts with his fingers?

From 12 months

- Does your baby point to objects he likes?
- Does your baby recognize people across the room before being spoken to?

Changes in physical developmental trends
from one generation to the next are known as secular developmental trends

Strabismus can also cause:

- 1. Blurred vision;*
- 2. Double vision;*
- 3. Lazy eye (amblyopia) - when the brain starts to ignore the signals coming from the eye with strabismus.*

Table 1. Observation of the visual function

| | | |
|------------------------|---------------------------|---|
| A newborn | Reaction to light | Blinks and diffuse light |
| 6-8 weeks | Visual fixation | Fixates and people w nearby |
| 4 months | | Sees adults meters |
| 5 months | | Fixates a cube at a di 30 cm |
| 9 months | | Fixates cru 1.5 mm at a of 30 cm |
| At birth and 6-8 weeks | Red reflex | An ophthal is used |
| From birth onwards | Abnormal movements | eye Observation child's movements fixating on held in front eyes |
| From 3 months | Strabismus | Corneal ref cover-reveal cover-altern |
| From 3 years | Visual acuity | Sonxen Silv Acuity Test |
| | | |

Red flags for possible vision problems

- *Close-up viewing of objects;*
- *Does not respond to the caregiver's facial expression; does not make eye contact;*
- *Unpredictable eye movements;*
- *Itching, stinging, or*

Strabismus

Strabismus is a condition where the eyes are moving in different directions. One eye can be turned inward, outward, up, or down while the other eye looks straight ahead. Strabismus is common and affects about 1 in 20 children. They usually develop before the child is 5 years

old, but can appear later. By about 3 months of age, many babies occasionally exhibit strabismus as their vision develops; however, persistent strabismus at any age requires an ophthalmologic examination-opinion.

Most strabismus is first recognized by parents. The corneal reflex test (Hirschberg test) is performed by shining a light into a person's eyes and observing where the light reflects on the cornea. This light reflex is normally central and symmetrical in both eyes. In divergent strabismus (exotropia) light reflection is seen on the medial part of the cornea and in convergent strabismus (esotropia) on the lateral segment of the cornea (see illustrations). Some strabismus may not be visible on such an examination and the Cover-Discovery Test by a specialist may be applied. These tests are not always easy to perform or interpret, and referral to an ophthalmologist is essential if there is any doubt, parental concern, or family history.

Figure 1. Corneal Reflex Test



a) Normal: eye reflection to the light is central and symmetrical.

b) Twisted eye, external displacement to the light reflex.

HEARING

Conductive hearing loss is extremely common. At least half of preschool children have a history of one or more episodes of "sticky

Subjective impressions or poorly performed behavioral hearing tests can lead to a delay in the identification of hearing loss.

ear" or otitis media. Persistent otitis media, which can have negative effects on children's language and behavior, affects about 5-10 percent of children. Parental smoking is a risk factor for children to develop otitis media. Significant sensorineural hearing loss which requires a hearing aid, is present in about 16 out of 10,000 children. Delayed identification of children with congenital or acquired hearing loss can result in deficits in speech and language development, poor educational achievement, behavioral difficulties and emotional problems.

It is essential to check that the child has had a neonatal hearing screening and, if not, to refer the child for an examination. Awareness of risk factors (Box 2) forms the basis for proactive screening of parents and referral to local audiological testing centers. Hearing tests (Box 3) require appropriate training and an appropriate testing environment and are best administered by audiology centers.

Observation/examination

Observing auditory behavior in clinical settings:

- The child's reactions to sounds and conversations are noted. However, such observations are often unreliable due to ambient noise, visual stimuli, or the child's interest. Hearing assessment tests (auditory behavior) are best conducted in a specially soundproofed room by trained assessors.
- Children suspected of having hearing loss with signs associated with congenital disorders should be examined by a GP or paediatrician, e.g. iris heterochromia, malformation of the auricle or ear canal, dimples or skin growths around the auricle, cleft lip or palate, asymmetry or hypoplasia of facial structures, microcephaly, and abnormal pigmentation of the hair or skin.

Box 1. Risk factors for congenital or acquired hearing loss

- Family history of sensorineural hearing loss;
- History of maternal infection during pregnancy, e.g. toxoplasmosis, rubella, herpes, cytomegalovirus and syphilis;
- Craniofacial anomalies of the ear or other parts;
- Hyperbilirubinemia requiring extratransfusion;
- Birth weight less than 1500 g;
- Genetic syndromes known to be included in the group of (SNGS), e.g. Dawn syndrome, Waardenburg syndrome;
- Childhood diseases associated with (SNGS), e.g. meningitis, mumps, chicken pox;
- Ototoxic medications, eg. Gentamicin;
- Recurrent or persistent Otitis media with effusion (inflammation of the middle ear) within 3 months;
- Head trauma with temporal bone fracture;
- Neurodegenerative diseases, eg. Hunter syndrome or demyelinating diseases such as Friedrich's ataxia, Charcot-Marie-Tooth syndrome.

Interviewing parents is the most important aspect of early identification of hearing loss in the community. It begins with open-ended questions to note any concerns:

- Has the child had a neonatal hearing screening?
- Do you have any concerns about your child's hearing?
- Is there anything about your child's hearing that gives you cause for concern?

Typical auditory behaviour:

From birth

- Reflexively reacts or blinks to a loud sound.

From 1 month

- Calms down by hearing a sudden continuous sound like from a vacuum cleaner.

4 months

- Smiles or coos in response to being spoken to.

6-7 months

- Turns to locate the person speaking.

9 months

- Listens carefully and responds with babbling.

12 months

- Responds when called by name.

Physiological tests

- Evoked or automatic otoacoustic emission;
- Automatic brainstem response

These tests are performed in clinical centers to measure cochlear response to sound and the brainstem response

Behavioral tests

- Auditory distraction test: 7-18 months;
- Play audiometry: 2-4 years. A child's attention span can be used to test success;
- Conventional audiometry (speech and different frequencies reproduced as specific stimuli through headphones): from 2 years.

These tests are designed to assess the child's reaction to sounds. They are conducted in special soundproof centers, by trained staff using standard equipment.

Next steps in a case of not typical finding during examination

Practitioners should clarify and confirm any parental concerns and have a low threshold for referral to an audiologist or orthoptist/ophthalmologist, in accordance with policy or service availability at local level. Children with poor hearing or vision may also need developmental guidance and early educational advice from special educators and rehabilitators, which requires referral to local services.

During the infancy, they lose primitive reflexes and develop protective reflexes, children acquire muscle strength, balance and coordination; the muscle tone changes and the body

Motor development: from birth to 1 year

Model of typical development

- Loss of primitive reflexes in the 3rd month and emergence of protective reflexes (from 6 months onwards) (Table 2).
- Decreased limb flexor tonus resulting in increased range of motion, e.g. popliteal angle (picture 1.) 90° at 2 months, 100° at 5 months and 150° at 9 months.
- Improvement of strength, postural control and stability – in the cephalocaudal direction:
 - Head control (3-4 months);
 - Stability while sitting - straight spine when sitting since the age of 8 months;
 - Legs — carrying own weight (6-7 months), standing (9-15 months).

Observation / assessment

Equipment needed for assessment: mat; visually appealing toy.

posture improves. They become mobile on their own. Assessment of motor development does not rely only on milestones (jumps) of development, but also includes qualitative observations of body posture, while resting and during motion; information of existence of any neurological impairment; and information regarding family and birth history.

Most children (80%) sit independently between 7 months (median age) and 11 months (97th centile) and walk between 13 months (median age) and 18 months (97th centile). About 9% of children do not crawl before walking and drag themselves with their buttocks on the floor, often have a family history of dragging on the floor and/or poor muscle tone; they are also very late in independent sitting (12 months' median age, 15 months 97th centile) and independent walking (17 months' median age, 24 months 97th centile). There is a small group of children (1%) who skip crawling or dragging on the floor altogether and go straight to independent walking, slightly ahead of the rest of their peer group (median age 11 months and 97th percentile 14 months). All these three groups have normal patterns. However, a neurological examination is recommended for those who do not walk by 18 months to rule out any disorder.

To perfect walking, babies need to acquire certain skills such as standing upright, maintaining balance, alternating steps, and using information to evaluate the surface they are walking on.

Systematic assessment

The conversation with the parents starts with open questions about the spontaneous and planned movements that the child uses, coordination of the movements, not typical movements and the strength of the movements:

- Have you ever noticed any strange or unusual movements (too limp or too stiff)?

- Does your baby have a strong preference for one hand and ignore the other hand?
- Are you worried that the movements aren't coordinated on the both sides?
- Are you worried about the way your baby moves his arms/legs or body?

Age related questions:

When did your baby start holding his head up?

When did your baby start sitting up independently?

How does your baby move across the floor?

How does your baby move from one position to another? (for example from lying to sitting position)?

Motor development involves the refinement of separate skills and their integration into a coherent whole

Red flags re

- D
- Birth difficulties or neonatal difficulties;
- Feeding, swallowing issues
- History or present convulsive conditions

Spontaneous position and movement

When lying on the back (supination) Movements should be free and symmetrical on both sides

Spontaneous movements of the head, shoulders, legs and hands Turns head to visually follow an object 180° (from 3 months)

Hands mostly held open (from 2 months)
Holds hands together and brings them to mouth while looking at them (from 3 months)

Kicks legs vigorously, alternately or together (from 3 months)

Rolling

Rolls over from back to stomach and vice versa (5-7 months)

When lying on the stomach (pronation)

Lifts the head up below 90° and laterally (from 3 months)

Head and torso control, position

Raises chest, rests on arms/palms (4-8 months)

Tummy or soldier crawl (6-7 months), hands and knees crawl (8-9 months)

Pulling to sit

Little or no head lag at 3 months
Holds the shoulders and raises the head (5-6 months)



Pulling to sit

Способноста на детето да застане во исправена позиција е фундаментална за одењето.

Но, позиција на исправување е невозможна за новороденчињата заради формата на нивното тело. Со растење на нозете и мускулите бебињата можат да застанат во

исправена позиција

Siting

Control of the head while sitting with support and the position of the spine are observed, whether the back is straight or crooked. Sitting with support (5-6 months) or without support of hands (6-8 months) and reaching with hands for objects, manipulating objects. Pulls up to sit at 9 months and turns around to look and pick up objects.



Independent sitting

Standing

Carrying one's own weight while standing with support and the position of the legs are observed.

Pulls to stand (7-12 months) and stands holding on to furniture. Moves from standing to sitting without falling (7-9 months)

Pre-walking and walking

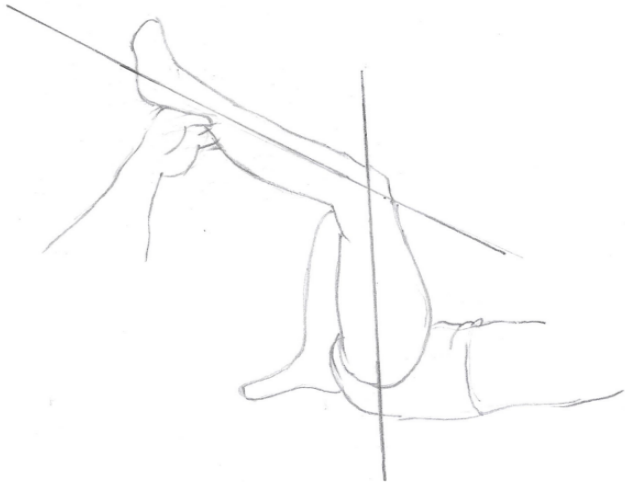
Crawls, rolls

Walks holding on to furniture (11-12 months)

Takes several steps holding one or both hands (11-12 months) or independently (12-13 months).



sitting, hands in front






Range of motion, popliteal angle

| | |
|--|---|
| Tonus | Any stiffness or lack of movements Range of motion |
| Ventral suspension | Control of the head and spine |
| Primitive reflexes | Grasping reflex, Moreau reflex, Asymmetric tonic neck reflex (Tab. 7) |
| Protective or supportive reflexes | Stretching arms down, to the side and forward (Tab. 7) |

**Assessment
(provocation of motor behavior)**




Spontaneous movements are observed during natural play, encouraging the child to move, pull back to stand up (stand), move through space, etc. Assessment of tone, range of motion, and reflexes are part of the neuromotor assessment performed during the general examination.

| | Appearance | Disappearance | Challenging |
|-------------|------------|---------------|--|
| Moro | Birth | 4 months | It is caused by (cm) drop-pul hand supporti The respor symmetrically wide and ope |

| | | | |
|---|----------------|-----------------|---|
|  <p><i>Moro reflex</i></p> | | | <p>few moments, the hands come together again, simulating a hug.</p> |
| <p>Palmar grasping reflex</p>  <p><i>Grasping reflex</i></p> | <p>Birth</p> | <p>3 months</p> | <p>Stroking the infant's palm with a finger</p> |
| <p>Asymmetric tonic neck reflex</p>  <p><i>Asymmetric tonic neck reflex</i></p> | <p>2 weeks</p> | <p>6 months</p> | <p>The baby is in a supine position. If the baby's head turns to one side, the arm and leg on the side the face is facing are extended, and the arm and leg on the opposite side are bent. If it persists after 6 months, it indicates the possibility of a motor disorder.</p> |

| | |
|--|--|
| <p>Protective / supportive reflexes:</p> | <p>These reflexes occur from 4-5 months onwards and may be absent or abnormal in motor disorders</p> |
|--|--|



| | | | |
|---|--|-----------------|--|
|  <p>Down</p> | <p>Parachute reflex – down</p> | <p>5 down</p> | <p>When held and lowered quickly, the infant extends and spreads (abducts) both legs, with the toes pointing downward.</p> |
|  <p>Lateral</p> | <p>Lateral parachute reflex</p> | <p>6 months</p> | <p>The infant extends its arms to the side to save itself if it falls off balance</p> |
|  <p>Front</p> | <p>Front parachute reflex</p> | <p>7 months</p> | <p>Arms and palms extend forward downwards as you lower the child forward toward the ground.</p> |

Atypical models

Children's muscle tone, the position they prefer when their preferred resting position during infancy (preferring to lie on their stomach or back) and their family history influence the sequences of motor development.

Children with atypical movement patterns before walking, e.g. dragging on the floor, have delays in achieving independent sitting and walking.

Premature babies often show early hypotonia, increased flexor tone of the limbs, extensor hypertonia in the neck and trunk muscles, and poorly coordinated movements and their motor development milestones are often delayed.

Abnormality of tone, balance or coordination:

- Excessive-inappropriate frailty (limpness) or stiffness;
- Poor balance;
- Poor coordination.

Red flags from the overview

- Poor eye movement, e.g. nystagmus;
- Small head circumference;
- Dimples, hairiness or tufts of hair on the lower spine;
- Congenital anomalies of the hips or feet.

Age-related red flags

- Holding the hands into fists after the 3rd month;
- Poor head control at 4 months;
- Presence (persistence) of primitive reflexes after the 6th month;
- Persistence of flexor hypertonia of the lower limbs (popliteal angle $<150^\circ$ over 9 months);
- Does not sit independently with a straight spine at 9 months;
- Does not walk independently until 18 months;
- Abnormality of movements:
 - Repetitive movements are present;
 - Asymmetry of movements.

Motor development 1-5 years

Assessment of motor development should not rely too much on developmental milestones, but should include qualitative observations of posture, both- during rest and in motion, presence of any associated movements, any neurological impairment, and information regarding family and birth history.

Patterns of typical development

Children from 1 to 5 years old, show improvements in the control, coordination and balance of their movements. After starting to walk independently, children refine their movement patterns: they develop anticipatory muscle movements and improved coordination and balance, reflected in the following abilities:

- Squatting (kneeling) to pick up a toy from the floor (12-18 months).
- Climbing into an adult chair to sit (from 18 months).
- Narrowing the walking base (how far apart the legs are): At the beginning of the walk, they keep the arms wide apart and the legs wide apart (wide base) for better support. The feet are only slightly apart at 2 years and in line with the body at 4 years.
- The arms begin to move alternately with the legs at 2 years.
- Toddlers walk flat-footed, some tiptoe, especially when excited or running. They walk mostly with heel-toe walking about 4-6 months after they start walking.
- They can run carefully from 2 years.
- They climb stairs without holding or without support at about 30-36 months, one foot on each step (climbing with alternation) and descending stairs between 3 and 4 years.
- They can walk in a narrow straight line, stand on tiptoe, and run around furniture from age 3.
- Children can throw a ball with a raised hand up to 2 years; to shoot from 2 to 2 ½ years and to catch a big ball at 3 years.
- They can hop and skip and stand briefly (five seconds) on one leg at 5 years.

Systematic assesment

A conversation with parents begins with open-ended questions to elicit any concerns:

- Are you worried about the way your child moves, walks or runs?
- Have you ever noticed any strange or unusual movements?
- Are you concerned about any unusual stiffness or slowness of movement?
- Do you think that your child's physical skills are in line with other children skills of the same age?





Age-related questions:

- When did your child start walking independently?
- Can your child run / jump / throw a ball / kick a ball?
- Can your child walk up and down stairs? If possible, how?

**Observation,
assessment or taking
data from the
parent/guardian**

Required test
equipment: mat; big

During the assessment, the following skills and activities are observed depending on the age:

| | | |
|---|------------------------|--|
|  | <p>Walking</p> | <ul style="list-style-type: none"> - Pre-walking / crawling, crawling; - Leading by the hand / independent; - Walking base – wide / normal; - Running. |
|   | <p>Climbing</p> | <ul style="list-style-type: none"> - On the furniture; - Stairs: going up and down with and without support, with the leading leg or alternating steps. |
|  | <p>Jumping</p> | <ul style="list-style-type: none"> ■ Both feet together. |
| | <p>Balance</p> | <ul style="list-style-type: none"> ■ Stability while standing. |



■ Stopping to pick up a toy from the floor.



■ Kicking a big ball.





■ Throwing a ball over the head.



■ Standing on one leg for 5 seconds.



| | | |
|--|--|---|
| | | <ul style="list-style-type: none"> ■ Walking a line. |
|  | | <ul style="list-style-type: none"> ■ Tiptoes standing. |
|  | | <ul style="list-style-type: none"> ■ Jumping / skipping. |

Assessment – motor behavior elicitation

- Spontaneous movements are observed by encouraging the child to playfully walk, run, pick up a toy from the floor, throw, catch, kick, etc.
- A neuro-motor examination is carried out if there are any concerns about motor or general development - this must include measurement of head circumference, examination of the eyes for any abnormal movements, the skin for any abnormal markings and the spine.

Age-related red flags

The following should prompt further evaluation by a physical therapist and/or pediatrician:

- Not walking independently up to 18 months;
- Walking on a narrow base (holding both legs very close together) at 18 months;

- Walking on tiptoes all or most of the time six months after starting to walk or after age 3 years;
- Still walking on a wide base (legs too far apart) and with poor balance at 2 years;
- Inappropriate (ungraceful) walking or running at 3 years;
- Unable to climb stairs at 3 years;
- Unable to catch, throw or kick a ball at age 4;
- Unable to balance well while standing on one foot at 4 years;
- Climbs stairs unsteadily (inappropriately) at 5 years;
- Any loss or regression of skills;
- Any asymmetry of movements - moves arms or legs more or only on one side of the body;
- Any stiffness of movements;
- Any motor delay associated with salivation or difficulty eating.

Model of typical development of fine motor skills

- Increasing eye coordination with head movement - visual tracking of a face (6-8 weeks) and a handing a toy from one side to the other (3 months). Seeing the movements of one's own hands, looking at the hand (3 months) or objects held in the hands (4 months).
- Improvement of depth perception and differentiated hand movements – initial grasping with two hands is replaced by grasping with one hand (5-6 months).

Fine motor skills and perception: from birth to 1 year

In early childhood, the effects of improving muscle tone, strength and coordination are evident in all movements. Improving hand-eye coordination and fine movements allow infants to explore the world. At the same time, the development of perceptual and nonverbal cognitive abilities—mental representation of objects, working

- Achieving sharp visual focus and differentiation of movements.
- Research using the index finger 8-9 months.
- Grasp maturation: improvement of fingertip placement with thumb tip (palmar grip - 6 months, pincer grip (thumb-index: 9-10 months) and fingertip pincer grip (12 months) (see series of illustrations with grasp of a cube and a small object, pp. 59-60).
- Hand or surface pressure release (10-11 months);
- Controlled release - placing one cube on top of another (13 months).

A model of typical perceptual development

- Connecting objects to each other by hitting or clicking them from 6 months, putting things in and out of boxes at 9-15 months and inserting small objects into holes by 15 months.

Fine motor skills progress after infantile period

- Cause and effect, concepts of taking action with an intended goal: these concepts appear as simple actions such as shaking a bell (7 months), using cause-and-effect toys (action-reaction) - pressing large buttons to activate a musical toy (9 months), a whole action with an intended purpose - such as pulling a toy with a string (9 months) and moving a toy car (12 months).
- Object permanence, understanding that objects continue to exist even when out of sight - at 6-8 months, infants begin to look for a partially hidden object and between 9 and 10 months they can look for a toy that is completely hidden from view their view.
- Categorization/functional use: use of familiar common objects/toys, e.g. toy car, cup, spoon, bell, phone (on yourself/ on doll/ on mother). From 10-12 months, infants use similar looking objects/toys in the same way, e.g. moving toys that look like a vehicle and from 14 months show "definition by use", e.g. she uses a hair brush to brush her hair.

Systematic assessment


A conversation with parents begins with open-ended questions to elicit any concerns:

- Are you concerned about the way your child uses his hands to reach for or pick up toys or objects?
- Are you concerned about the way he/she uses common objects and plays with toys?
- Have you ever noticed any asymmetry in his/her movements?
- Do you notice unusual hand movements?


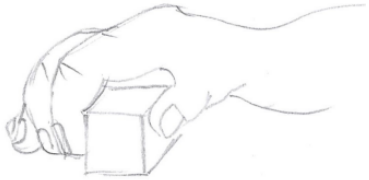

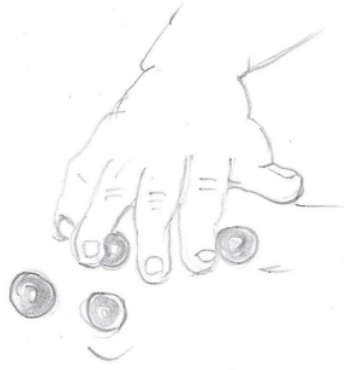
This is followed by more age-focused questions:

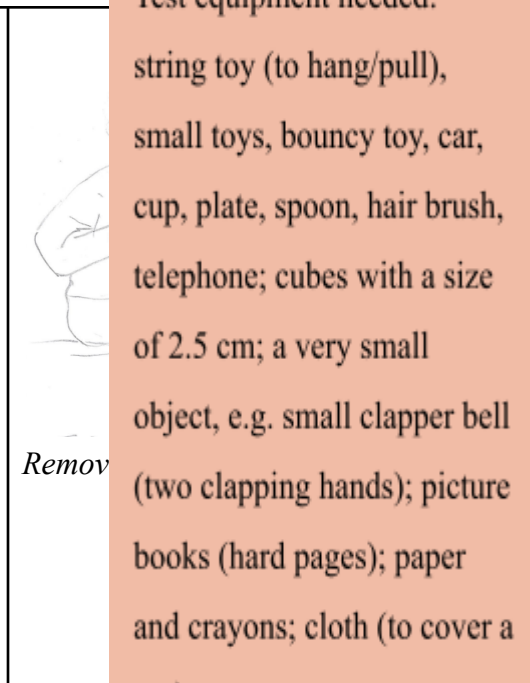
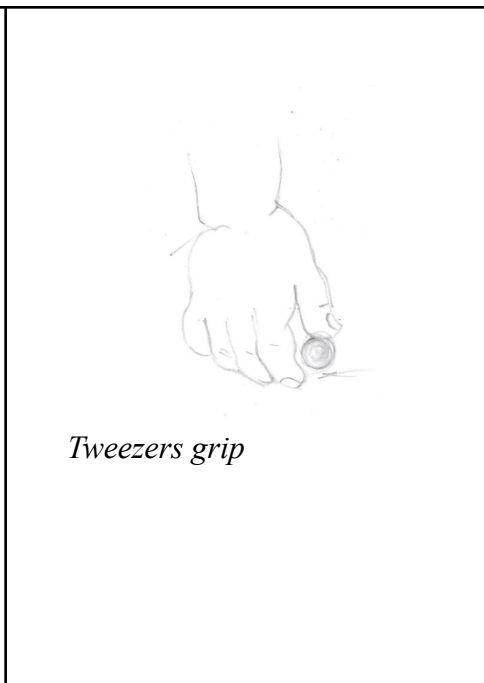
- Do you notice a preference for one hand? Or is he/she left-handed or right-handed?
- How does your child play with toys?

Observation, assessment or taking of data from the parent/guardian

| | | |
|---|---|---|
| Hand position | Mostly closed (in a fist) or open when awake (2 months) | |
| Holds objects placed in hands | Holds briefly and waves around (3 months), brings them to mouth, looks at them (4 months) | |
| Hands together | Puts both hands/fingers together, plays with fingers, looks at hands (3-4 months) |  |
| Arm reach: grasping for toy hanging forward when lying on back or placed forward when sitting (with support) | Grabs with both hands (3-4 months) Grabs with one hand (5 months) | |



| | | |
|--|--|---|
| <p>Grasp</p> | <p>Finger grasping for a very small object or crumb (6 months) Takes a crumb or piece of string between the tips of the index finger and thumb, extended (9-10 months) Picks up a 2.5cm cube or small toy with fingertips bent (12 months)</p> | <p><i>Palmar grip</i></p>  <p><i>Intermediate grip</i></p>  <p><i>Mature grip</i></p> |
| <p>Connecting / exploring the toy objects</p> | <p>Moves from one hand to another (6-7 months) Hits objects from the floor/table or two objects together (6 months) Imitates clicking two small 2.5cm toys/cubes (8 months) Hold a toy in one hand and explore with the index finger of the other hand, e.g. jingle bell (9 months) Puts cubes in a big cup (10 months)</p> <p>Releases a small toy to place on the table without dropping it, or returns it (11 months) Places one 2.5 cm cube on top of another (13 months)</p> |  <p><i>Holds two objects at the same time</i></p>  <p><i>Raked grip</i></p> |



Test equipment needed:
 string toy (to hang/pull),
 small toys, bouncy toy, car,
 cup, plate, spoon, hair brush,
 telephone; cubes with a size
 of 2.5 cm; a very small
 object, e.g. small clapper bell
 (two clapping hands); picture
 books (hard pages); paper
 and crayons; cloth (to cover a
 toy).

| | |
|-----------------------------|--|
| Object permanence | He is looking for a toy that has fallen out of sight Finds a toy hidden under cloth/paper |
| Cause and effect | A game with moving push toys |
| Means and connection | Attempts to take a toy out of reach by using another object, eg. stick or by pulling on a string |

Red flags or age-related limitations, delays, or abnormalities

- Does not show interest and does not reach for a toy placed in front of him even after 6 months;
- Presence of attached hands (holding hands together) after 9 months;
- No research with the index finger of 12 months;
- Lack of intentional use of objects and toys from 12 months;
- No cause and effect game of



Eliciting an observational response

Fine motor and non-verbal cognitive skills are best challenged using age-appropriate toys. Objects/toys should be presented to the child one at a time or in appropriate combinations, avoiding clutter. The structured presentation approach helps in the realization of the observations. If the child isn't showing much interest, maybe they should come back to that toy/activity later. The child should sit comfortably, supported if necessary. The examiner should arouse interest and maintain the child's motivation without creating too much excitement; focus should be kept on the object/activity with appropriate praise and encouragement. A short pause after each step helps in conducting the observations.

It should be noted how the action is done, not simply what is done. Any response, whether partial or complete, should be noted. The following description explains the approach to conducting these observations; the order may change depending on the situation.

- Small cubes (2.5 cm).
- Begin by presenting a cube and placing it in front of the child on a flat surface or offering it placed in your palm (to make it easier to observe the grasp). If the child does not reach for it, place it in his/her hand. Pay attention to what the child does with the cube, eg looks at it, puts it in his mouth or passes it from hand to hand.

- If the child takes one cube, offer another (note the manipulation of two cubes), then offer another.
- Take two cubes and hit them together, encouraging the child to imitate.
- Place a box/cup in front of the child and drop a cube into it, encouraging the child to do the same with the cube and take it out.
- Ask for the cube back by extending your hand in front of the child or encourage the child to place the cube on the table. Note the release of the cube.
- Place one cube on top of another in front of the child and encourage the child to do the same, if the child succeeds give them more cubes to make a tower.
- Use a bell or rattle and/or sound toy to encourage reaching, grasping and exploration.
- Use a string toy to test the tweezer grip. Put the toy out of reach and the string within reach to see them in action to achieve the ultimate goal - pulling the string to get the toy.
- Use a bouncy or moving (cause and effect) toy - observe.
- Use simple toys, e.g. car, hair brush, to check functional use.
- Use a simple combination of toys, e.g. cup, spoon, pot to observe how the child connects these toys, uses them functionally independently, or offers them to the examiner/caregiver or the doll.

After infancy, much of what children do with their hands and fingers (explore, construct, draw, and write) also reflects/demonstrates development in fine motor and nonverbal cognitive skills—the mental representation of objects, working memory, flexibility, and focused attention. These abilities are observed through activities such as everyday use of objects, drawing, threading, cutting with scissors, and using developmental toys (tools) such as construction toys, sorting toys, shape board.

- Improving bimanual/bilateral coordination allows children to take action with one hand and use the other for support (eg holding). For example, at 18 months, the child holds the toy with one hand and explores it with the other.
- The improvement of hand movements and manipulative dexterity of the fingers allows children at the age of 2 to pull a door handle and turn a bottle cap, and by the age of 3, although still imprecise, to cut with scissors.

- Improved fingertip and hand dexterity is seen in turning pages of a book one at a time (age 2), stringing four large beads, holding a pencil with a three-finger grip (age 3-3.5), and buttoning/unbuttoning large buttons and precise cutting in a straight line (at 4 years).

**Fine motor
abilities and
perception: 1-5
years**

Imitation and drawing

Children demonstrate an understanding of objects and their arrangement, position and relationships in space by imitating an action demonstrated by another person, such as continuing patterns with blocks, copying models with construction materials or drawing/tracing.

When a child copies a model that is out of his field of vision, or it is shown to him and after a few seconds is removed from his field of vision, then additional abilities of working memory and recall, planning and mental rotation of objects are required (see cube structures and copying shape illustrations). Imitation, when the model or form is demonstrated to the child, is achieved earlier than copying a ready-made model.

Matching shapes

Shape boards: children progress from matching shapes that are easier to rotate (such as a circle) to matching more difficult geometric and irregular shapes. They get better at categorizing and visual scanning before they can match shapes; they stop putting the shapes in the wrong slot after the 30th month.

Color recognition

Observing children's ability to classify objects by color is realized by using objects or cards in different colors for naming and pairing. By the age of 30 months, 50% of children can match objects/cards by color. By the age of 42-48 months they should be able to name exactly four colors.

Sorting objects by size

By 30 months, children show a good awareness of the size of objects through appropriate tasks. They are able to show a large and small object by the age of 3 years, and a long and short line drawn on a sheet by the age of 42 months (50% of children) to the age of 54 months (90% of children).

Drawing

Drawing abilities are supported by the cognitive abilities of left and right orientation, visual perception, working memory and fine motor skills. Unrelated tapping on paper, which initially appears at 12-15 months, shows the child's exploratory interest and understanding of relationships.

Scribbling: Initially, at 15-18 months, the scribble occurs in a rhythmic forward-backward or lateral movement; by 2 years, the movement becomes smoother and has a circular or wavy appearance. Gradually the content of the drawing is enriched and it becomes more coherent. These drawings may be visually unrecognizable, but children often name them, demonstrating and honing their ability to present.

Drawing a human figure: There is a developmental progression in drawing a person (see- Draw a human person-illustration).

Copying figures: pre-drawing figures (see the illustrations for copying shapes) are obtained with the command "draw like this" - without naming the figures. Immaturity in figure drawing is noted by the presence of unfinished ends or corners and the wrong number of corners on the figure.

Systematic inquiry

Observation/examination (or interview with the parent/guardian/carer)

Equipment required for testing:

Wooden cubes (six of the same color); shape sorter ie. board with three shapes; a set of large/small toys (eg spoons, cups, cubes, sheet and marker); children's scissors, a book, a shoelace and large beads, a set of pairs of colored cards and dice (see - pictures to help test verbal and non-verbal skills)

Interviews with parents/carers begin with open-ended follow-up or yes/no questions to minimize anxiety:

- Are you concerned about the way your child uses his hands?
- Are you worried about your child's drawing or some other constructive games?
- Are you worried about your child's learning?

More focused age-related questions and observations follow:

- Have you noticed which hand the child prefers to use? Is your child left-handed or right-handed?
- What can your child do with a pen and paper?
- How many puzzle pieces does your child fit?

Book Turning a few pages of a book (18 months)/(independently at 2 years)

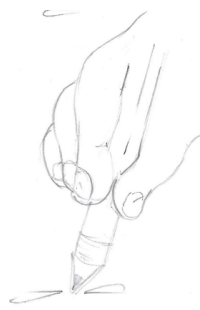
Holding a pencil



Cylindrical grip



Interdigital
grip



Modified tripod
grip



Dynamic tripod
grip

Line drawing

Drawing a long straight line
10 cm (4 -4 ½ years)

Beading

Beads four large balls of
string (3 -3 ½ years)

Cutting with scissors

Tries to cut paper correctly in a straight line (4
years), may not cut paper (3 years)



Turning the cap to open the bottle/ to take out something from the jar

Opening a jar to get out what's inside (22-24 months)

One-handed preference

Mainly uses one hand; uses the other hand as an auxiliary (18-24
months)

Using dice

Makes a tower (vertical)

-2 cubes (13 months)



-3 cubes (16 months)

-5 cubes (2 years)

Arrange cubes horizontally

Makes/copies: three-cube bridge (3 years), train (3 ½ years), six-cube ladder (4 ½ years)

Drawing

Makes a mark/leaves a mark, scribble – straight / circular line (13-18 months) copy line (2 years), shapes and people – human (see illustration)






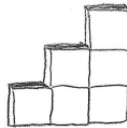

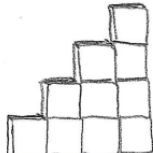
Matching shapes

Matches three shapes (circle, triangle and square) on a shape board for visual assessment before placing the shape - by 30 months and six or more shapes by the age of 3 years.



Eliciting responses during observation

- Demonstration of fine motor skills is often done during informal play sessions and during observation. Notes are taken for any difficulty in coordination, tremors, or any other abnormal movements.
- When observing non-verbal cognitive abilities, a structured immediate presentation of activities is necessary. One task at a time is presented, with increasing difficulty of the task / One task at a time, moving from an easier to a more difficult task.

| | 13 м | 16 м. | 2 г. | 3 г. | 3 ½ г. | 4 г. | 4 ½ г. | 5+ г. |
|-----------------|---|---|---|---|--|---|---|---|
| градба со коцки |  |  |  |  |  |  |  |  |

- In the cube-building task, the child is first encouraged to copy from a model or from a drawing. The examiner uses a sheet of paper to hide the model they are building and/or by using pre-drawn shapes.
- When the child cannot copy or follow the instruction, the examiner shows him how to do it - and notes that help / assistance is needed when performing the task.
- Shape boards or mold puzzles are presented first with simpler round / rounded shapes, then move on to more complex shapes (combinations of two or three shapes). After the child solves the three-shape shape board, it is turned over and the child is asked to do it again.
- The materials are placed in the middle in front of the child. Sometimes alternating placement of the crayon, pencil or cube on one side or the other of the child helps in favoring a certain hand
- After completing the task, the child's attention to the task, the way he approaches it and his response to more difficult tasks are noted.
- During the activity, the focus of the task is maintained by removing possible distractors, keeping "talking" to a minimum and encouraging the child with praise. Motivation is maintained by quickly presenting the task and creating interest in each new task.

Deviations from the standards appropriate for a certain calendar age

Poor performance on nonverbal tasks can be related to developmental delay, but it can also stem from poor motivation, poor vision and/or hearing, and in some cases, lack of stimulation. Further evaluation is indicated for:

- Poor fine motor coordination, tremors or related movements.
- Poor following of instructions, reduced attention to task completion, high level of distraction (distraction) and general / general high level of motor activity.
- Inability to stick one cube to another with separation of the cubes
- Cannot hold a crayon/pencil to make a mark on paper until 18 months, scribble until 2 years and copy a circle until 4 years.
- General inappropriate behavior.
- Noticeable inability to perform a particular task or partial inability to perform all tasks.

During infancy the bases of speech, language and communication are developed through interaction with parents/caregivers. Before speech has even developed, most children are highly communicative, able to initiate, maintain and complete communication. All nonverbal strategic basic communication functions, such as seeking attention, greeting, commenting, and seeking information, are present in children's typical development. By 12 months, children have the basic motor competencies for speech production and are able to produce a range of speech sounds, changes in pitch and volume, and use these to engage in vocal play, alone or with others. The development of communication is inextricably linked to social behavior and play.

Speech,
language and
communication
: birth – 1 year

Typical developmental schemes

Receptive speech

- Turns the gaze to the source of a calm human voice (1 month).
- Makes pre-speech movements with the lips and tongue in response to the parent's speech (1 month).
- During the period when the infant begins to pay more attention to objects, it may seem that the interaction decreases (5 months).
- Turns / reacts to familiar voices, even when the adult is not in sight - out of sight (6 months).
- Responds to name (8 months).
- The child understands, "No!" and "bye" (9 months).
- Shows understanding of familiar words for people he/she knows or words used in family routines, e.g. "let's go to sleep", "where is dad?" (12 months).

Expressive skills

- Makes guttural sounds when satisfied (1 month).
- Vocalizes when excited by conversation or play with parent/caregiver (2-3 months).
- Sings-vowels, words with one or two vowels, e.g. "goo", "dada" (6 months).
- Imitates cheerful vocalizations and actions, e.g. coughing, sucking/pursing lips (9 months).
- Melodic babbling in phrase form (10 months).
- A few words with meaning, pointed towards known people (12 months).

Communication functions

- Clearly shows what he/she likes and what he doesn't, what he/she accepts or rejects (6 months)
- Invites adults and other children to communicate through vocal interaction, hand waving, (8 months).
- Points to what he/she wants (10 months).

Interviews with parents/carers begin with open-ended or limited yes/no questions to minimize anxiety:

- Do you have any concerns related to your child's communication style?
- Do you have any concerns related to the quality of the sounds your child makes?
- Do you have any concern about how the child reacts when you talk to him/her?

Age-related questions and observations:

- How do you get your baby's attention?
- How easily you (re)direct the baby's attention to his environment, e.g. pointing at a dog?
- Which words are you sure your child understands? How do you know that?
- Does your child look at family members or objects when you name them?
- What instructions does your baby follow?
- What sounds have you heard your baby make?
- Does your baby have any recognizable words / words with meaning? Did people outside of your family recognize and understand him?
- What language is spoken in your home? Do you think your baby reacts differently when spoken to in different languages?

Observation / Examination

Attention when speaking Speak to the baby in a pleasant tone, at a distance of approximately 60 cm

Expectations / Assumptions "I will catch you" with a pleasant facial expression

Babbling appears at the age of 5-6 months with single vowels and consonants, and then as a combination of different sounds, voices and intonation.

At the age of 7 months, babbling becomes intonation.

Necessary requisites for examination:
knockers/bells
set of keys, jigsaws,
phone, prams/push
trains, baby doll/beer

Responding to name Call him by name while the baby is busy with a toy

Responding to tone of voice When the baby reaches for a toy, stop it with a convincing "no!", but immediately after the restriction, show an appropriate reaction by giving permission or consoling.



Joint attention Shifts attention between the speaker and the toys to establish focus with the person he/she is communicating with.

Following simple sign instructions

"Give me the keys (or something the baby is holding)" with an stretched out hand to receive the object.

Tell the baby to "clap" when you clap, with an expectant expression on your face.

Responds to name Call his name when the child is looking in another direction, but not when he is completely absorbed in the game.

Follows direction Call him by name, then say "look" and point to an object that is placed at a small distance from the child.

Requests Place an attractive toy out of reach. Observe what strategies the child will use (eg reaching for the toy, pointing to the toy, looking at the toy and the adult).

Gestures As a reaction to separation, does the child wave and shout "bye" when leaving the room?

Assessment of infants takes place through observing family interaction. The examiner guides the child through the final set of activities:

Provide age-appropriate toys and ask the parent to demonstrate playing with the child. Observe the focus of attention and response in reaction to the parent's speech

The infant sits on the parent lap, facing the examiner but able to access the toy on the table. This is a suitable position to notice the child's response and the ability to follow instructions with signs

Encourage the child to make a choice, or ask again by starting and pausing activities

Notice which way the child addresses the parent -does it show enjoyment in the activities or is it just checking the parent's reaction

If the child doesn't seem responsive to examiner's offers, the parent can provide the activities by following directions from the examiner



As a basic life skill, the development of speech and communication has an impact on literacy, performance, as well as the general well-being of the child and its inclusion into society. Language is a key element for initiating and maintaining social relations, for the development of thought and access to formal learning.

Speech, language and communication include: language comprehension, children's ability to express themselves through grammatically correct and clear speech, as well as the use of non-verbal communication. The communication function, which is originally non-verbal, becomes expressive through spoken language.

Understanding language

-
- Understands names of familiar people or objects, practiced familiar routines used in everyday activities, e.g. "Where's your glass?" (12 months)
-
- Follows and executes simple verbal commands in context, eg. "come here", "give me", "take" (12-15 months)
-
- Can show body parts (nose, eye, mouth, arm, leg, stomach) (12 – 18 months)
-
- Selects named objects when other options are available, e.g. "Where is the spoon?" (18 months)
-
- Follows instructions in two parts eg. "take your cup and put it on the table" (18-24 months)
-
- Chooses toys according to their function, for example, "What do we drink from?" (24-30 months)
 - Understands sentences containing three key words in them (eg, "put the cup and plate on the stool" at 3 years old, four at 4 years old and five key words at 5 years old.
-
- Understands time and sequential concepts of time, e.g. "first", "then", "last" at 5 years.

Expressive skills

Speech, language and communication: 1-5 years

Between the ages of 1 and 5, there is an improvement in the way children communicate through a series of functions, including:

- Directing the behavior of others;
- Requirements;
- Affirmations and negations;
- Commenting;
- Interacting with others and involving others in mutual interaction, including greetings, greetings, using names, cultural (polite) language;
- Naming and explaining emotions;
- Information sharing;
- Using language for play and humor.

-
- A few consistent words, including slang, at 12 months (words used in the family).
-
- Rapidly increasing vocabulary, simple words can be used for a range of reasons eg. asking, commenting, questions (15-18 months). Copies words.
-
- A combination of two words, eg. "let's sleep", "mommy water" (18-24 months).
-
- Uses "no" in a phrase, eg. "No dog!" (24 months).
-
- Recalls and revisits past events (24 months).
-
- Three-word phrases, e.g. "hit the big ball" (30-36 months).
-
- Uses nouns "I", "me", "you" (24-36 months), followed by "he/she", "they" (36-40 months).
-
- Uses immature grammar (30-34 months), developing adult grammar, with occasional concessions, up to 60 months.
-
- The largest number of sounds he articulates are with correct pronunciation at the age of 5.

Around 18 months of age, many children experience a "naming explosion" in which they learn new words—mostly the names of objects—at a much faster rate than before.

Verbal cognition

Asks a question:

“What is this?” (24 months);

“Where...?” (30-36 months);

“Why?” (36-42 months).

Can say his/her name (30 months);

His/her gender (36 months);

His/her age (48 months);

His/her birthday and address (60 months).

Uses descriptive concepts: big/small, wet/dry, up/down, hot/cold, etc. (from 30-36 months).

Understands prepositions: in/out, on/off, out of/under/behind etc. (24-36 months).

Counts by heart, no number concept beyond 1 or 2 (36 months).

- Counts items 1-5 (40-54 months).
-

Recognizes named colors (36 months), names colors (43-48 months).

Understands and uses words that represent categories, e.g. toys, food (42-48 months).

Enjoys jokes and verbal irregularities, including awareness of rude, obscene words (48-60 months)

- Connects ideas linguistically – initially using “and” and “then” (36-42 months), before using “because”? (42-48 months).
- Uses a comparative gradation to make a comparison, eg. bigger, heavier, strongest (54 -60 months).
- Uses abstract linguistic concepts for temporal sequences, e.g. "when....., then.....", "if..... then....." after the 5th year.

Systemic research

The conversation with the parents begins with open-ended questions (not with offering yes/no answers, but with an opportunity for them to talk more) in order to elicit any concerns:

- Do you have difficulty understanding your child's speech?
- Do you have any concerns or doubts about how your child's speech is developing?
- Do you have any concerns about how your child connects sentences?

More focused questions related to age follow:

- Does your child point to the picture in the book when you name it?
- Does your child name pictures in a book?
- Give examples of words your child uses every day?
- Give examples of phrases that the child often uses?
- Does the environment have difficulty understanding your child's speech?
- Can you hold a conversation with your child?
- Can your child answer the question "where is...?"
- What questions does your child ask?
- Can your child listen to stories?
- Does your child join in the telling of stories that are already familiar to him?
- How does your child tell you past events?
- Can your child answer the "why..." questions?
- What language do you speak at home? Do you think your child has similar skills in the languages you speak at home?

After the child passes the stage of forming a 2-word sentence, they begin to master questions, negation and complex sentences.

Equipment required for testing:

doll/bear, cup, ball, teaspoon, sock, cubes (different colors – two each red, blue, green, yellow, orange), large and small cubes, boxes (large and small), plastic animals, e.g. cow, horse, elephant, lion, picture books, with a simple narrative (see Pictures to support non-verbal and verbal skills testing)

Observation/Examination

Showing body parts

Use a bear in the game - "the bear comes to tickle your nose" - "where is your nose?" or ask the child to "tick the bear's nose?" etc. or use a picture of a dog (see Pictures to support non-verbal and verbal skills testing).

Selecting/naming objects

Place four objects (from the same group / category), eg. cup, spoon, ball, sock...

"show / look / give me / take" (18 months).

Wait for eye contact before asking the question and avoid looking at the named object.

"Well, what is this?"



Tracing/using common words in action

With a bear: "Show how the bear jumps/sleeps/drinks"

"What is the bear doing?"

With pictures (from 24 months):

"Who is drinking/sleeping, etc?"

"What is the girl doing?"

Choosing subjects according to function

Place four objects/pictures eg. cup, teaspoon, ball, sock

"Which of these can we hit/carry/drink?"

"What are you going to do with the sock?"

Following instructions with concepts



Using a variety of colored cubes and boxes

Space:

“Put the cube in/on/under/behind the box” (in/on -24-30 months, under/behind 30-36 months).

Colours:

“Where is the red/yellow/blue/green cube?” (36-40 months).

“Names four colors” (42 months).

The ability to match two objects of identical color (classification) appears before color recognition/naming (30 months).

Size:

“Put the cubes in the big/small box” (30-36 months).

“Show me the long/short line of dice” (42 months).

“Which cube is heavier (not bigger)?” (48 months).

To maintain the child's interest, it may be necessary to give instructions using a toy, or for the child to carry out the instructions by manipulating the toy.



Monitoring extended and complex sentences

Uses a set of toys, eg. animals or small plates

“The cow and the horse want to eat” - three key words (3 years).

“The bear and the rabbit want to eat and sleep” - four key words (4-5 years).

“What happened to the bear?”.

*there should be an alternative for each underlined word.

Using language for a simple narrative

Use a simple storybook (with few words) or a set of miniature toys – start by telling a simple story and then ask the child to continue “now tell me what happened next” – note sentence size and use of conceptual vocabulary.

Describing past events

Ask the child to tell you about a recent event (weekend, party, etc.). - observe the structure of the sentence, the ability to create a coherent description and the ability to adapt to the listener, i.e. his knowledge of the topic.

Giving an explanation

Ask the child questions about the function of a simple object: for example, “What is the spoon for?” , “Why do we wear shoes?”.

Answering hypothetical questions

Ask: "What do you do when you are thirsty/hungry?" etc.



Eliciting responses during observation

Semi-structured play is useful for gathering information about a child's speech, language and communication, together with information about social interaction and play skills (see: Social behavior and play 1-5 years: Eliciting observational responses). Such a session usually begins with "free play" with appropriate developmental toys, e.g. causal and constructive toys and/or doll sets/family/ and/or action figures. The examiner then guides the child through the following set of activities:

- Interactive activities for observation of turn-based games and imaginative games.
- Introducing pretend play and role play to test children's creativity and use of language to negotiate.
- Free play can be a springboard for free communication (spontaneous flow of conversation and transition from topic to topic) in relation to children's experience eg. "Which toy do you want to play with at home?", "Who do you want to play with?" etc.
- Table activities to assess the level of language comprehension should only be done when the child feels comfortable in joint free play.
- If the child is not in the mood to participate in the activities, the parent can also carry them out, under the guidance of the examiner.

Deviations from calendar age standards

- Does not respond to familiar nursery rhymes, does not follow or follow simple commands and does not yet recognize words by 18 months.
- Does not connect two words until 24 months.
- Does not use three-word phrases until 36 months.
- Speech is significantly unintelligible to unfamiliar listeners up to 36 months.
- Language is mainly composed of phrases learned from programs that the child follows on multimedia devices, with less spontaneous speech, at any age.
- Cannot understand/use descriptive vocabulary concept (size, position, quantity) by 42 months.
- He cannot tell a past event until he is 4 years old.
- Cannot answer "where"/"who" questions, up to 4 years.
- Stuttering or repeating parts of words by age 4 (brief periods of disfluency are typical around age 3).
- Cannot hold a coherent conversation or give reasonably logical answers to questions at 5 years.
- Loss of language skills at any age should be the reason for an urgent and immediate examination in early childhood development monitoring centers (pediatricians, early intervention centers, child development monitoring centers).

Development in these areas is supported through social interactions with parents/caregivers, and by expanding the child's social environment, these skills are also improved. The concept of “play” has different meanings for different cultures, therefore a certain amount of attention is needed during observations and conversations with parents.

Typical development patterns

- Developing social reciprocity (giving a response and expecting a response).
- Directing attention to mother/people (soon after birth).
- Social smile (6-8 weeks).
- Interactive imitation of smiles, facial expression and sounds (6 – 8 months).
- Responds/reacts to social games such as "yeah" and "crawl bug" and shows anticipatory response (6 months).
- Developing joint mutual attention (a key step for developing language/speech and communication skills).
- Follows other's finger when shown/indicated to look at an object (8 months).
- Uses finger and eye pointing to get others' attention to share interest (9-12 months).
- When he meets an unknown person - he reacts by withdrawing or crying (7-8 months).
- Social referral – withdraws/checks the carer's reaction in a new situation (12 months).
- Explores toys and objects: looks at them closely, touches them, puts them in the mouth and knocks them (5-6 months).
- Play with jumping and action toys with the appearance of understanding cause and effect - example, if you touch the bunny it will jump (8-9 months).
- Uses toys and objects functionally, e.g. "talking" on the phone and putting a hat on yourself (12 months) and others, e.g. on the doll, on the mother (15 months).

Systemic inquiry

Social behavior and play: Birth to 1 year.

The development of play and social behavior in a child is in a direct, inextricable relationship with language, speech and communication and cognitive skills.

Lack of social response and play skills can also be a consequence of impaired vision or hearing.

The interview with the parents/guardians starts with open questions:

- Are you worried about the way your baby reacts to you or others?
- Are you worried about the way your baby plays with toys?

This is followed by more age-focused questions:

- How does your baby react to you when you smile?
- Does and how does your baby participate in children's social games such as "crawl bug" or "peek-a-boo"?
- How does your baby gets your attention whe he/she wants to show you something?
- How does your baby react to an unknown person?
- What toys does your child show the most interest in?



Opservation / examination

Social Smile

Responds with a smile or vocalization

Social response

Responds with expression and interacting sounds

Social Expectation game

Curiously anticipating action in a "crawl bug" or "zee"

Target Tracking / Pointing** object

Says "see (object name)" and points to a medium distance

Points

- To ask
- To share an interest

Social direction

Withdraws/checks the reaction of the parents in a new unknown situation

Responding to name *

He turns to look

Follows simple orders

Responds respectively to "come" and "no"

Functional use of toys

Uses a toy car (moves the toy); uses a phone, comb, spoon or cup on himself, another person or a toy

Deviations from calendar age appropriate standards

- Not reciprocating and not interacting or smiling at the parent by 8 weeks.
- Absence of pleasure in participating in fun activities for up to 5 months
- Lack of observation of hands or toys by 5 months
- Absence or decreased interest in toys
- Lack of interest in social play by 9 months.
- Excessive placing of objects in the mouth that continues beyond the age of 12 months
- Does not use pointing or other gesticulation by 12 months
- He does not point to something that interests him until 18 months.

Systematic inquiry

- The parent/carer survey begins with open-ended questions to elicit concerns:
- Do you have concerns about the way your child responds/reacts to you and other people?
- Do you have concerns about the way your child plays with toys?
- Do you have any difficulty making eye contact with your child?

These questions are followed by more age-focused questions:

- Does your child bring home any interesting objects, such as a drawing of a toy, to show you?
- How is your child doing at home?
- How does your child interact with other children?
- Does your child engage in pretend play, such as feeding the doll or teddy bear, or putting a toy in the truck and pretending to drive it?
- Have you seen your child making up stories with toys/action figures?

A typical behavior pattern: developing self-awareness

- Activities become more intentional and purposeful by 12 months of age;
- Develops a sense of self-recognition in the mirror (20 months) and in pictures (24 months);
- Expressing self-conscious emotions such as shame and embarrassment (18-24 months);
- Expressing emotions through words (from 2 years and up);
- Learning how to express emotions appropriately in different situations (from 3 years and up);
- Understanding the intentions of others by 10-12 months of age;
- Sharing one's interest and intentions with others through shared (mutual) attention from 12 months onwards.
- Understanding that other people's wishes may differ from one's own, and developing the ability to make connections between wishes and positive or negative emotions, eg fulfilling wishes leads to positive emotions (from 24 months onwards).
- Understands that others may think or react to what they believe to be true and that those beliefs may be different for different people (2 ½ to 3 years);
- Understands that other people's beliefs may not be correct – understanding false belief (4 years);
- Responds to another's expression of distress by offering comfort from 2 ½ years on;
- Begins to share with peer group from 3 years on;
- Negotiates with others in order to maintain social interactions for 4-5 years;
- Play with intention, purpose and at least some brief plan, from 12 months onwards;
- Use of familiar objects for some functional purpose, first on self (12 months) and then with parents/caregivers from 14-18 months;
- Early pretend play: performing familiar routines from 18 months to 2 years;

SOCIAL

BEHAVIOR

1-5 YEARS

- Role play and the emergence of short sequences of imaginative play with object substitution (eg a box is a car) from 2 ½ to 3 years;
- Creating imaginative scenarios using miniature toys or swapping objects, 4 years and up;
- Following the rules for group games in cooperation with other children, from 5 years onwards.

Observation / examination

Equipment required for the test:

Telephone, hair brush, miniature dolls, animal toys, action figures, barbie house furniture, tea set, causal toys, building toys, blocks, ropes, small items of clothing, unrelated small toys.

| | |
|----------------------------|--|
| Social smile | As a result of the parent's smile or vocalization |
| Social Expectation | Desirable participation in chasing and turn-taking games (you then me) |
| Pointing a finger | In order to ask or to share an interest |
| Social Referral | Checking the parent in order to obtain reassurance |
| Pointing | Gets the parent/caregiver's attention in order to show them something |
| Social Interactions | Shows interest in other children. Initiates interactions by getting attention, and responds to others. Combines eye contact and facial expressions, gestures and words/voices to communicate |
| Group activities | Gets involved in some group/shared activities with others |



Pretend Pretends that objects are something else in the

game or offers imaginary food/drink

Play

Play interactive turn-taking games (you then me)

Eliciting responses during observation

A session of semi-structured play is useful for gathering information about the child's social interactions and play abilities as well as speech, language and communication. Such a session usually begins with “free play” with developmentally appropriate toys such as cause and effect toys, building toys, dolls, a tea set and/or action figures. The examiner then guides the child through the following set of activities:

- Interactive play activities to observe turn-taking and imaginative play;
- Encouraging the child to make choices, or ask for more, by starting and pausing activities, such as blowing balloons or bubbles;
- Preparing pretend or role play activities to test the child's creativity;
- Using play situations and "from-to" conversations.

If the child refuses to engage and interact with the examiner, many activities can be performed with the parent/caregiver, under the guidance of the examiner.

Deviations from calendar age appropriate standards

- Does not point or use other gestures by 12 months;
- Does not have joint attention and does not show toys or other objects to an adult under 18 months;
- Absence of simple pretend play (eg feeding a doll) by 24 months;
- Repetitive (repetitive) play with toys (eg arranging objects);
- Solitary (individual) play with a lack of social interest in others;
- Specific approach to other children or adults;
- Minimal recognition and responsiveness (desire to respond) to other people's expression of happiness or distress;
- Limited range of imaginative play, especially lack of social imagination (does not engage with others in shared make-believe play);
- Repetitive and continuous playback of video scenes;
- Strange relationships with adults (inappropriately friendly/or ignorant relationship).

Attention, responsiveness and activity level

Impulsivity and high levels of activity combined with poor attention can indicate the presence of attention deficit hyperactivity disorder.

The ability to maintain attention on specific tasks and events is of utmost importance for learning. Difficulties in maintaining attention on tasks are a common cause of poor social and educational participation, but sometimes learning difficulties can also be a cause of poor attention. Asking parents/caregivers and teachers and examining attention and behavior are helpful in understanding a child's performance and determining next steps.

Birth to 18 months

- Babies maintain attention by exploring toys up to 5 months
- From 9-12 months show target activities, and correct errors they make when searching for hidden objects

18 months to three years

- Become able to undertake planned sequential activities with increasing complexity
- Are getting better at inhibiting their impulsivity
- Resist the intervention of another person and need help from an adult when changing attention and redirecting attention to another task

3-4 years

-
- Attention becomes more flexible – easy redirection between different tasks
 - Become able to ignore irrelevant stimuli and attention can be maintained (from 36 months)
-

4-5 years

- Children now deliberately ignore task-irrelevant stimuli, thereby controlling the focus of attention
 - Make an effort to sort objects (or cards) into two categories eg color and shape
-

After 5 years of age

- Children integrate information from different sources, for example listening to directions without losing focus on the task
- Can make a plan and implement it with sustained and flexible attention

Typical developmental schemes of attention



Systematic inquiry

It is important to note the onset and duration of attention concerns because problems often arise as a result of a change in social or physical circumstances, such as moving, or health or social changes in family dynamics. Although behavioral concerns are often reported from infancy onwards, attention-specific concerns usually begin after age 4. Information from multiple sources in different environments is useful in determining the type of problem and its impact on functioning.

The parent/carer survey begins with open-ended questions to elicit the expression of concerns:

- Do you have any concerns about your child's obedience?
- Are you concerned about your child's activity levels?
- Can your child quiet down when told he is being too loud?
- Do you think your child's activity level is affecting learning, family life or interactions with peers?

This is followed by more age-focused questions:

- How long can your child focus on activities such as family meals, watching TV, listening to stories?
- Can your child complete simple tasks without being distracted?
- Does your child often interrupt others and not allow them to say what they want?
- Can your child wait patiently for his turn?
- Is your child often nervous, curls his fingers often?
- Can your child work in a group?

Observations/examination

- Observations are made within the framework of the activities described in the previous sections.
- Direct observations of the child's volitional behavior, impulsivity, activity level and functioning are useful because they provide special information to the observer, which may not be available for some children who do not yet attend kindergarten.

- Observations of attention, as well as observations of emotions and behavior should be performed across a range of different tasks/activities and performed over a longer period of time before any valid interpretation can be made.
- Observations across a range of structured tasks (verbal and non-verbal) and unstructured activities such as free play or drawing, provide information about a likely difficulty in a specific developmental area (eg poor language comprehension) that involves (or underlies) the difficulty with attention.
- Clinical observations are often affected by the child's anxiety and the level of motivation may not correspond to the actual child's behavior.

Attention and its correlates

Observed behaviors

Listening Attention

Ability to fully listen to commands

Listening to commands without losing focus on the task at hand

Sustaining Attention

The ability to keep a child engaged in complete, targeted, and planned activities

Distraction

The ability to avoid distractions such as other unimportant objects or activities while performing a planned task

Shifting of attention

Any shift of attention in relation to duration or in relation to a change in activity

Impulsivity

Rapidly making comments, interrupting others, grabbing hands, moving quickly from one subject to another

Activity level

Increased motor activity – running, climbing or jumping even though the child is asked to maintain attention on the task

Impatient behavior

Unnecessary and irrelevant movements of arms/legs/feet (hitting, shaking, jerking), chair rocking, lying on chair, acting like a clown

Attention deficit – clinical judgment and management

- Concerns about a child's attention become significant when it begins to affect their functioning in the family, peer group, and school.
- Such attention-deficit hyperactive behavior is likely if there are persistent difficulties in some traits or correlates of attention (described above), in different environments, as described by parents, teachers, and other professionals/caregivers.
- Various medical conditions are associated with attention problems in preschool children, including epilepsy, hypothyroidism, low birth weight, hearing impairment, and prenatal exposure to teratogens (fetal alcohol syndrome).

- Behavioral difficulties, language difficulties, social communication difficulties and coordination difficulties are common in children with attention deficit.
- A child with significant attention concerns requires further evaluation by a pediatrician/child psychiatrist and often needs the help of a teacher and psychologist.
- Parents should be offered help in managing their child's behavior and developing their attention skills.

Attention is a process in which information is selected that will be processed later. Habituation indicates that attention is selective—a stimulus that has once attracted attention cannot attract the same attention again.

Typical developmental patterns of emotions and behavior

- From birth to 12 months, parents help children deal with their emotions by soothing or distracting them.
- From 12 months onwards, children begin to recognize (social referencing) and respect adults' requests. Sometimes, parents, by ignoring children's emotional outbursts, convey a message that a certain emotional response does not attract their attention.
- By 24 months, children acquire some self-control regarding their own behavior, by delaying a certain action if there is a request for it (from a parent/caregiver most of the time).
- As children's language comprehension improves, parents help them manage their emotions by providing reassurance (eg: I know you're sad but you'll be ok), alternative meaning to an emotional stimulus (eg: I didn't mean to hurt you upset) or other alternatives (for example: why not make a card and show that you are sorry).
- From 3 years on, children show the ability to modify behavior based on situational rules (active play on the playground/sitting and paying attention in class). They now seek help in stressful situations.
- Gradually, by 4-5 years, the control over the expression of emotions changes and goes from seeking external help to internalized self-regulation that is based on understanding and reasoning. They also begin to hide or modulate their emotions to a socially acceptable way.

Emotions and behavior

Difficulties with the regulation of emotions and behavior are frequent and affect the daily functioning of children. In some children, these difficulties may indicate the presence of a developmental disorder. A structured examination and observation can help decide whether a referral for further assessment and management of the condition is needed.

Systematic inquiry

The onset and duration of concerns about emotional difficulties are very important to note, as transient problems may arise as a result of changes in social or physical circumstances, such as a change of residence, or health or other changes in family dynamics. Behavioral concerns usually start from the second year onwards. Information about behavior in different settings, for example school or playgroup, social information such as family dynamics and how different family members react to the problem are useful in determining the type of problem and its functional aspect.

The parent/caregiver survey begins with open-ended questions to elicit some concerns:

- Are you worried about your child's behavior? If so, where is the behavior problem, how long has it been going on and what is causing the behavior and how do you deal with it?
- If your child is aggressive, ie often gets into fights with other children, hurts others or acts maliciously towards others?
- Are you worried that your child is unhappy, sad or crying? If yes, how long?
- Does your child often seem worried? If yes, in what situations?
- Are you worried that your child is shy? If yes, in what situations?
- Has your child ever hurt himself on purpose?

Observation (or examination of parent/carer)

Children express frequent changes in feeling, mood, anxiety and fear with their facial expression, gestures, voice and words, for example when they get excited about playing with a toy and upset when they don't get something they want; hiding behind their parents before gradually starting to participate in activities. Interpreting an emotion is

often a subjective decision. The observed behavior should first be noted before describing the parent and observer's interpretation. Any changes in behavior are noted by a change in activity, situation, or any interaction between parent and child.

- What do you think caused the behavior?
- How did the parent/caregiver react?
- How long did the behavior last?
- What helped in its management?
- How did the behavior affect the child's completion of tasks?



Observing the child's emotional regulation

Emotional expression and behavior are observed by examining any developmental area. However, these observations are best carried out in the home, kindergarten, school or playhouse/swings. The validity and utility of observations are enhanced by repeating observations adhering to the following principles:

- Observing both behavior and context. Context is often the most important influence on a child's behavior.
- Avoiding previous expectations regarding some behavior by the child because it can affect how we behave towards the child.
- Making objective observations and avoiding making conclusions and assumptions, for example: "the child took the toy from the brother/sister" instead of "the child was behaving selfishly" or "the child was crying" instead of "the child was sad", or "the child was running around the room most of the time" instead of "the child was hyperactive". Interpretations of observed behaviors may require synthesis of information from multiple informants in different circumstances.
- The tasks offered to the child when his/her behavior becomes negative must be developmentally appropriate (developmentally appropriate).
- Poor emotional regulation – considerations for coping.
- The most common cause of poor emotional regulation is the interaction between factors related to the child and environmental stresses that occur as a result of poor parenting or family dysfunction, poor socio-economic conditions and demands arising from the situation or task.
- Most of the behavior can be changed - by helping the child and parents as well as thinking about ways to reduce stress. A multidisciplinary approach involving primary care health professionals, teachers, and child and family services is often required in order to address significant concerns.
- Children with developmental disorders may have difficulty generating alternative behavior as a

result of warnings and limits set by guardians; these children may need specific intervention techniques, for example the use of visual supports for children with ASD.

- A change in the child's behavior with a change in the demands of a particular task or a change in the type of activity, for example moving from verbal to non-verbal play-based interactions may indicate that there is a developmental difficulty in the child. The child may simply avoid the experience or failure by refusing or making diversions, for example by becoming aggressive.

Observing parent-child interaction

Parental sensitivity and their responses to child behavior are important indicators of parent-child interaction. The parent's negativity towards the child, which may be expressed in their description of the child or seen in the inappropriate description of the child's behaviour, for example: believing that the child is doing something on purpose to upset them, may be a cause for concern. However, it should be remembered that observations of child-parent interactions in structured or artificial environments may not be representative of those that normally take place in the home, and a simplified interpretation of parent-child interaction may do more harm than good.

Observations can be made on:

The child

- Seeking closeness after a stressful experience;
- Showing affection towards parents;
- Any negative behaviors towards parents, for example: avoidance or withdrawal;
- Continuous attempts to control parents, for example by punishing them or making demands;
- Seeking unnecessary closeness or affection from unfamiliar adults.

The parent

- How the parent approaches or reacts to the child, for example: greeting or asking for physical closeness (hugging, comforting);
- Their emotional response, for example: being happy/positive or scared/unsure;
- Be consistent or inconsistent in their responses, for example: encouraging and praising or mocking and teasing or pulling the child away from them;
- Showing sudden changes in mood or giving contradictory signals to the child – inviting and then rejecting the child or mocking the child's anxiety;
- Demonstrating an environment with appropriate restrictions and rewards for the child's behavior;
- Showing any confusion of roles, for example: begging the child, or threatening to cry (by the

parent) or talking to the child as if he were an adult partner.

Parents' descriptions of the child also provide clinically relevant information about the parent-child relationship. The key points that would raise concerns regarding the parent-child relationship are:

- Lack of positive description of the child;
- Indifferent, hostile or impersonal description of the child;
- Expression of shame, guilt or disappointment regarding the child;
- Expression of anger, hostility or disappointment regarding the child's needs, describing him as a burden on the parents, or failure to imagine the child's needs;
- Describing the child as a friend, peer or confidant;
- Incoordination between the beautiful description of the feelings that the parents give versus the hostile description of the child.

| Methods of measuring behavior in children | | |
|--|---|--|
| Method | Advantages | Disadvantages |
| Natural observation | Observes the child's behavior in its natural environment | Difficult to observe behavior that is rare or occurs infrequently |
| Structured observation | It can be used to observe behavior that rarely occurs or that occurs in a private setting | It may be difficult to observe structured behavior in a natural setting |
| A model of task behavior | It can be used to study a large number of different behaviors | It may be difficult to observe behaviors that occur in a natural environment |
| Self-evaluation | It can be used to study a large number of different behaviors | It may be difficult for children to provide accurate answers or they may be biased |

Physical examinations are performed by an appropriately qualified practitioner, for example: pediatrician, nurse, child psychiatrist or

Physical examination

The clinician doing the test explains the purpose to the parents, tells them what was done, and shares the results with the parents and other clinicians, if relevant.

The most relevant aspects of the physical examination of children with developmental concerns are:

- Does the child seem cared for?
- Nutrition and growth – height and weight – to be defined according to the WHO growth map.
- Dysmorphic features.
- Ataxic walking.
- Observing whether the child can pick up something from the floor, which excludes proximal weakness.

pediatric neurologist - primarily to find the cause and/or other abnormalities associated with developmental disorders.

Physical examination has a limited but important role in the clinical evaluation of children with possible developmental problems. It can contribute to:

- Providing clues as to the cause of developmental impairment, for example dysmorphic features requiring genetic testing, small head circumference in fetal alcohol syndrome and, less commonly, abnormal skin markings indicative of tuberous sclerosis.
- Identification of any associated neurological impairments with the developmental impairment shown, for example: abnormal eye movements, large head, coarse features, hypotonia and cerebellar problems and proximal muscle weakness in Duchenne muscular dystrophy.
- Identifying the cause of a change in behavior in children who are unable to communicate verbally, for example: constipation, severe joint or dental abscesses.
- Self-inflicted injuries can be observed in some children with developmental disorders, for example: finger biting, hair pulling, eye rubbing.
- Providing information regarding care or neglect (in terms of hygiene, growth) or signs of physical abuse.

Neurological mild signs (eg: dysdiadochokinesis, mirror movements) are often encountered in preschool children with developmental difficulties but are non-specific for diagnostic purposes.

Starting in the later part of infancy, children begin to develop independent self-care skills. Cultural and family practices, views about the value of independence in activities of daily living, and concern for safety, at least to some extent, also influence when children learn about

Self care and independence

Most information about self-care skills is gathered from parents/carers, although some practitioners will be able to directly observe situations in which a child demonstrates eating, drinking, dressing and toileting skills.

self-care. However, it is useful to inquire about these skills as they relate to the child's general cognitive ability and also provide information about any stresses associated with childcare at home.

Children's initial attempts are related to feeding and begin by indicating the need to grasp the bottle or spoon (6 months). By 9 months they can hold, bite and chew food such as a biscuit or banana and can grasp a spoon - but only achieve a messy attempt to feed themselves by 12 months. Around the same time, they can drink from a cup (more effectively by 18 months) and also start to help (participate) in dressing, e.g. by reaching out to dress the sleeve and shoe the foot. By the age of 2 they can competently feed themselves with a spoon and drink from a cup - put the cup back without spilling. They also verbalize their toileting needs during this period. Food neophobia (refusal to try new foods) is common in children between 18 months and 3 years of age, but can cause considerable distress to caregivers.

Children start using a fork and spoon at the age of 3-3.5 years. They use a knife and fork competently by the age of 5. By 3.5-4 years they can wash their hands and can undress and dress themselves with little supervision. By age 5, children can usually feed themselves, dress/undress and brush their teeth independently.

Systematic assessment

Conversations with parents begin with open-ended questions to elicit any concerns:

- Do you have concerns about your child's feeding, chewing or swallowing?
- Do you think your child is more or less independent than other children of the same age?

The following table was obtained by asking parents questions regarding self-care and independence, related to the child's age:

| |
|--|
| |
|--|

Abilities for self-care

| Expected age range | |
|--|-------------------------------|
| Does your baby try to hold a bottle/cup/cup to drink? | 6-9 months |
| Does your baby hold any food, such as a biscuit or banana, to eat? | 8-10 months |
| Does your baby help with dressing/undressing, e.g. by raising the arms or lifting the foot? | 12-18 months |
| Is your baby feeding itself with a spoon? | 15-24 months |
| Does your child drink from a cup and put it down again without spilling? | 12-24 months |
| Can your child eat with a fork and/or knife? | 3-4 years |
| How independent is your child able to dress now? | Independent from the age of 5 |
| Can your child wash their hands and wipe them with a towel? | |
| Can your child brush their teeth independently? | |
| Can your child use the toilet independently? | |

Deviations from the standards provided by the calendar age

Most of the variation in self-help and independent skills can be attributed to the socio-cultural context. However, neurological and developmental disorders affecting general development, perception and coordination of movements can result in significant delay or specific difficulties e.g. coughing/choking when swallowing. Further help should be obtained for:

- Any concerns about the infant's feeding or swallowing
- Lack of interest or ability to feed self beyond 2 years of age
- Lack of sphincter control over the age of 3 years.
- Rigid insistence on self-imposed self-care routines, including following strictly restricted diets.

APPENDIX: Developmental scales

| Motor Development Scale, 0-12 months | |
|---|--|
| A newborn | <ul style="list-style-type: none"> - Moves the head from a central position to the side - The limbs are in a completely bent position - Reflex crawling movements - Holds the head to the side, without a privileged side (in a supine position) - Moves alternately, without a privileged side |

| | |
|-----------------------------|--|
| | <ul style="list-style-type: none"> - When placed in a sitting position, lifts head back and forth, for one (1) second - Primitive reaction of leaning on the legs: stretching of the hips and knees when standing up - Automatic step-like movements during alternating weight shifting |
| End of the 1st month | <ul style="list-style-type: none"> - Holds the head straight for at least 3 seconds - Placed in a supine position, holds the head to the side for 10 seconds |
| End of the 2nd month | <ul style="list-style-type: none"> - Raises the head at an angle of at least 45° - Holds the head straight for at least 10 seconds - Holds the head in a sitting position for at least 5 seconds - Transition phase: leaning reactions and automatism in walking gradually stop |
| End of the 3rd month | <ul style="list-style-type: none"> - Raises the head between 45° and 90° - Holds the head straight for at least 1 minute - Rests on both forearms - The hips are mostly partially extended - In a sitting position, keeps the head straight for at least 30 seconds - The head does not fall back when raising the child in a floating position - When placing in a standing position, the legs are bent - After raising the head in a stomach position, lowers the head slowly towards the mat (does not let it fall on its own) |
| End of the 4th month | <ul style="list-style-type: none"> - Secure support on the forearm - When attempting traction (gentle withdrawal up to 45°), he raises his head and gently lifts his gently bent legs - When touching the surface, it stops the bent position of the legs and straightens the knees and ankles |
| End of the 5th month | <ul style="list-style-type: none"> - Breaks the position of leaning on the forearm by raising the arm - Repeats leg stretching movements (swim) - Holds the head when in a sitting position and when the trunk is tilted to one side - Rests on the tips of the toes |
| End of the 6th month | <ul style="list-style-type: none"> - Rests with outstretched arms on an open or half-open palm - When the examiner lifts the base laterally, he lowers the arm and leg that are in a higher position (balance reaction) - When trying to pull, he gently bends both arms - Has good head control in the sitting position when bending the trunk in all directions - Extends the legs at the knees and hips, taking the body weight on itself for at least 2 seconds (without leaning) - Just withdraws from a lying position to a sitting position (strains shoulders and raises head) |

| | |
|-------------------------------------|---|
| | <ul style="list-style-type: none"> - Placed in a supported sitting position reaches for an object/toy - Soldier crawl |
| End of the 7th month | <ul style="list-style-type: none"> - Holds one hand above the mat for at least 3 seconds - The ability of the hands to bounce - Actively turns from the position of the back to the position of the stomach - In a lying position he plays with his feet (eye-hand coordination) - Plays on a firm surface if someone holds it by the trunk |
| End of the 8th month | <ul style="list-style-type: none"> - Transitional phase regarding the development of crawling and walking (see 7th and 9th month) - Rises from a lying position when fingers are extended - Sits for at least 5 seconds if held from the front |
| End of the 9th month | <ul style="list-style-type: none"> - Sits independently for at least 1 minute - Stands for at least 30 seconds, taking the weight of the body on himself, if he holds onto both hands - Crawls on hands and knees - Passes from a standing position to a sitting position without falling |
| End of the 10th month | <ul style="list-style-type: none"> - Rocking on hands and knees - Just standing up from a lying to a sitting position, holding on to pieces of furniture - Long sitting: sit freely, the back is straight, and the legs are gently stretched - Stands independently holding onto an object - Srawls uncoordinated - From a crawling position by supporting the hip, straightens the trunk and moves into a sitting position |
| End of the 11th month | <ul style="list-style-type: none"> - Crawls on hands and knees with cross coordination forward and backward - Reliable balance during long sitting (11th and 12th months) - Stands up independently, holding on to pieces of furniture - Alternating movements of the legs in place and to the side - Takes steps forward while holding both hands |
| End of 12th month | <ul style="list-style-type: none"> - Crawling - Balance when sitting - Walks holding on to pieces of furniture - Takes steps forward holding one hand |

Gross motor development scale, 1-5 years

| | |
|------------------|--|
| 12 months | <ul style="list-style-type: none"> - Moves by holding on to furniture - Holds on to furniture, kneels to lift an object from the floor without falling on the fall |
| 13 months | <ul style="list-style-type: none"> - Walks only 10 steps (Walking interval ranges from 9-18 months of age) |
| 14 months | <ul style="list-style-type: none"> - Stands for at least 5 seconds |
| 15 months | <ul style="list-style-type: none"> - Walks only 10 steps - (It is taken as an average. The interval of passage ranges from 9-18 months of age) |
| 16 months | <ul style="list-style-type: none"> - Bends and straightens up |
| 17 months | <ul style="list-style-type: none"> - Runs around |
| 18 months | <ul style="list-style-type: none"> - Takes three steps back - Tries to climb into an adult chair to sit |
| 19 months | <ul style="list-style-type: none"> - Climbs three flights of stairs while holding on with both hands |
| 21 months | <ul style="list-style-type: none"> - Goes down the stairs holding on with both hands |
| 22 months | <ul style="list-style-type: none"> - Kicks a ball without holding it |
| 23 months | <ul style="list-style-type: none"> - Climbs stairs holding one hand |
| 24 months | <ul style="list-style-type: none"> - The base of the legs while walking narrows, the feet are only slightly apart - The hands move reciprocally with the legs - Begins to run carefully - Throws a ball with a raised hand |
| 25 months | <ul style="list-style-type: none"> - Goes down the stairs holding on with one hand |
| 31 months | <ul style="list-style-type: none"> - Jumps with both legs |
| 33 months | <ul style="list-style-type: none"> - Walks up the stairs, takes an alternate step, holding on with one hand |
| 36 months | <ul style="list-style-type: none"> - Stands on one leg for 1 second without holding - Catches an thrown big ball - Walks 5 steps per line |
| 37months | <ul style="list-style-type: none"> - Walk down stairs taking a step holding on to one hand |
| 40 months | <ul style="list-style-type: none"> - Walks 3 steps on the heels |
| 44 months | <ul style="list-style-type: none"> - Jumps a height of 5 cm with an alternating step |
| 45 months | <ul style="list-style-type: none"> - Skips a lenght of 20 cm |

| | |
|------------------|--|
| 48 months | <ul style="list-style-type: none"> - Throws a ball with a raised hand in the direction of a teammate at a distance of approximately 2 meters - Hops on one or the other leg at least once without losing balance - Jumps forward with both feet together at a distance of less than 1 meter - Maintains balance while standing on one leg for at least 5 seconds |
| 57 months | <ul style="list-style-type: none"> - Walks on tiptoes for a length of approximately 4 meters - Hops on one leg for a length of 2 meters without putting the other foot on the floor - Jumps over an obstacle with an alternating step |

| Scale of development of fine motor skills, 0-12 months | |
|---|--|
| Newborn | <ul style="list-style-type: none"> - The palms are mostly closed - Prominent grasping reflex |
| 2 months | <ul style="list-style-type: none"> - Transitional phase: palms are often partially open |
| 3 months | <ul style="list-style-type: none"> - Moves his hand with a half-open palm in the direction of a red object that is offered to him - Follows the movements of his own hands |
| 4 months | <ul style="list-style-type: none"> - Hands are often open - The hands are playing with each other - Puts a toy in the mouth (hand-mouth coordination) |
| 5 months | <ul style="list-style-type: none"> - When held on the lap, in a sitting position, reaches for a toy that is in the field of vision, regardless of whether it has reached it before - Points his hand to the toy and feels it (eye-hand coordination) |
| 6 months | <ul style="list-style-type: none"> - The initial grasping of an object with both hands is replaced by grasping with one hand - Consciously takes an offered toy and keeps it for up to 1 minute - Palmar grip with the entire surface of the palm and with the thumb extended - Moves a toy from one hand to another - Picks up a small object from a pad with one hand - Hits an object from the floor or table |
| 7 and 8 months | <ul style="list-style-type: none"> - Grabs one cube with both hands and consciously keeps them in the palm for a short time - Picks up a small tile with fingers and outstretched thumb without the palm touching the tile |
| 9 months | <ul style="list-style-type: none"> - Intentionally drops an object - Research using index finger - Drops an object on a pad without opening the palm ahead of time |
| 10 months | <ul style="list-style-type: none"> - Tweezers grip |



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| | <ul style="list-style-type: none"> - Grasps small objects with outstretched index finger and thumb - Hits one cube against another multiple times |
| 11 and 12 months | <ul style="list-style-type: none"> - The grip is like a plier - Grasps small objects with bent index finger and thumb - Controlled release of hand pressure (places one cube on top of another) |

| Scale of development of fine motorics, 1-5 години | |
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| 12 months | <ul style="list-style-type: none"> - Grasps with both palms as if with pliers - Puts down a small toy without letting go of it - Throws a small ball with a small movement of the hand forward - Pushes cart (toy) 10 cm |
| 16 months | <ul style="list-style-type: none"> - Hits or scribbles with a pencil on a sheet |
| 17 months | <ul style="list-style-type: none"> - Lists 2 (two) pages of a picture book with help in supporting the pages - Stacks 3 (three) cubes on top of each other - Puts 2 (two) rings on a stand |
| 19 months | <ul style="list-style-type: none"> - Scribbles dashes on a sheet |
| 21 months | <ul style="list-style-type: none"> - Pulls a thread / cord into a bead |
| 24 months | <ul style="list-style-type: none"> - Pulls a door handle - Lists book pages one by one - Scribbles spiral lines - Unscrews caps/screws |
| 25 months | <ul style="list-style-type: none"> - Builds a tower of 5 cubes |
| 26 months | <ul style="list-style-type: none"> - Puts 3 (three) stubs in a small box |
| 28 months | <ul style="list-style-type: none"> - Rewins a rewinding toy |
| 29 months | <ul style="list-style-type: none"> - Strings a large bead on a string |

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| | - Turns a key in the door |
| 32 months | - Builds a tower of 7 (seven) cubes |
| 35 months | - Screws caps/screws |
| 36 months | - Strings 4 (four) large beads on a string |
| 37 months | - Draws with a pencil over drawn lines - Builds a tower of 9 (nine) cubes - Shapes a plasticine sausage on the table - Cuts with scissors with 2 (two) movements |
| 38 months | - Redraws a circle |
| 42 months | - Uses a tripod grip when using a writing tool |
| 48 months | - Buttons/unbuttons large buttons - Precisely cuts a straight line with scissors - Redraws a square (one corner can be obtuse or rounded) |
| 60 months | - Correctly draws a square and a triangle (drawing of a house) |

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| Developmental perception scale, 0-12 months | |
| Newborn | - Shows an indignant reaction to extreme light and sound stimuli |
| End of 1. month | - Follows a toy towards both sides view up to 45° |
| End of 2. and 3. months | - Tracks when the parent moves from one place to another in the room - With a gaze follows a toy placed at a distance of 25 cm, from one end of the corner of the eye to the other - Reacts to the sound of a bell by maintaining gaze or movement - Placed on his back, while being shown a toy, he makes movements with his hands as if reaching for the toy |
| End of 4. month | - Observes the toys in his hand |



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| | <ul style="list-style-type: none"> - Looks at a toy that the parent moves slowly at a distance of 25 cm - Observes or puts in the mouth a toy that is given in his hand |
| End of 5. month | <ul style="list-style-type: none"> - Looks for where the source of a specific sound is coming from |
| End of 6. month | <ul style="list-style-type: none"> - Looks at the fallen toy - Tries to reach for a dropped toy, if it is still in sight - Moves a toy from one hand to the other - Plays by hitting the toy from the table or if he holds two objects in each hand, he individually hits the objects from each other |
| End of 7. and 8. months | <ul style="list-style-type: none"> - Tries to reach an object that can be reached only by changing position - Begins to understand cause and effect: ringing a bell - Takes 2 (two) objects in each hand individually and holds them for approximately 1 (one) minute |
| End of 9. month | <ul style="list-style-type: none"> - Notices a cube in a box and reaches out to grab it - Pulls a desired toy on a string - Object permanence- starts looking for a fully hidden object - Cause/effect: press big buttons to activate musical toy - Finds a toy that has seen where it is completely hidden (under canvas or paper) |
| End of 10. and 11. months | <ul style="list-style-type: none"> - Intentionally throws toys - Touches details of toys with the index finger - Uses similar objects for the same purpose (uses a remote control as a telephone) |
| End of 12. months | <ul style="list-style-type: none"> - Throws small tiles into a box, one by one - Moves a toy car - Imitates placing a small object in a box - Imitates a short scribble with a crayon on a sheet |

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| Developmental scale of perception, 1-5 years | |
| 12 months | <ul style="list-style-type: none"> - Pulls a string to bring the toy closer - Copies the action of placing an object in a box (may not drop the object in the box) |
| 13 months | <ul style="list-style-type: none"> - Associations: when holding a pencil looks for a sheet of paper |

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| 14 months | <ul style="list-style-type: none"> - Puts several small objects in a box one after the other (can also copy the action) - Knows the function of known objects, eg. With a comb, combs hair - By model, tries to reach for an object in an alternative way, e.g. to grab an object with a spoon |
| 15 months | <ul style="list-style-type: none"> - Places a lid on a suitable box |
| 18 months | <ul style="list-style-type: none"> - Overturns a bottle/tall box to retrieve an object inside the bottle |
| 20 months | <ul style="list-style-type: none"> - Puts one cylinder into another (can be two cups of different sizes) - Copies at least two facial expressions: mouth opening/closing, eye blinking, cheek tapping - Flips into the correct position an object that is offered to him upside down, eg. spoon, cup, bottle - Uses an alternative way to reach a desired object, eg. he takes a chair and climbs on it |
| 22 months | <ul style="list-style-type: none"> - Opens a bottle/jar to remove a small object |
| 25 months | <ul style="list-style-type: none"> - Places small and large rings |
| 28 months | <ul style="list-style-type: none"> - Puts 3 (three) wooden cylinders inside each other - Returns objects to the place from where they were taken |
| 30 months | <ul style="list-style-type: none"> - Matches objects/cards by color - Repeats a sequence of 2 (two) numbers in the same order, eg. "Say 7 and 4" - If asked, gives the name of the "drawing" |
| 31 months | <ul style="list-style-type: none"> - Puts a circle, square and triangle in a suitable mold - Stacks at least 4 (four) cubes in a row - Assembles 4 out of 6 shapes in a box with a mold |
| 32 months | <ul style="list-style-type: none"> - Distributes 3 (three) different sizes |
| 35 months | <ul style="list-style-type: none"> - Recognizes and allocates 4 (four) colors |
| 36 months | <ul style="list-style-type: none"> - Assembles more than 6 (six) shapes in a suitable mold |
| 40 months | <ul style="list-style-type: none"> - Builds a bridge of 3 (three) cubes per model - Repeats a sequence of 3 (three) numbers in the same order in which they are given |
| 42 months | <ul style="list-style-type: none"> - Names at least 4 colors - Distinguishes long/short line - Builds a train out of blocks - Starts playing role-playing games |



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| 48 months | <ul style="list-style-type: none"> - Builds a square of 4 (four) cubes - Distinguishes the largest from the smallest - Can count 5 (five) objects - Understands and uses words that represent categories, eg. toys, food - Enjoys jokes and verbal abuse, including awareness of rude, impolite words |
| 54 months | <ul style="list-style-type: none"> - Builds a scale of 6 (six) cubes - Counts to 15 |
| 60 months | <ul style="list-style-type: none"> - Distinguishes morning from evening - Recognizes numbers up to at least 3 - Recognizes at least 2 (two) letters of his name |

| Developmental scale of speech, 0-12 months | |
|---|---|
| Newborn | <ul style="list-style-type: none"> - Cries when unsatisfied - Strong sucking |
| End of 1. month | <ul style="list-style-type: none"> - Vowels between a and e, often combined with the sound h - Makes guttural noises when satisfied |
| End of 2. month | <ul style="list-style-type: none"> - Voices: e-he, e-he, e-ree - Vocalizes in interaction/play with parent |
| End of 3 months | <ul style="list-style-type: none"> - First vocal cords; sings vowels - baby words with one or two vowels |
| End of 4. months | <ul style="list-style-type: none"> - Labials (m, b) - Squeakig |
| End of 5. months | <ul style="list-style-type: none"> - Rhythmic syllable chains: aa-aa-aa, eee-eee-eee |
| 6. - 7. months | <ul style="list-style-type: none"> - Babbling: stringing together different, clear syllables with alternating volume and pitch - Clearly shows what he likes and what he does not - accepts or rejects - When a parent imitates him in vocalization, he responds in the same way |
| End of 8. months | <ul style="list-style-type: none"> - Whispering - Through vocalization and/or gestures invites known or unknown persons to interact |
| End of 9. months | <ul style="list-style-type: none"> - Clear double syllables - Imitates cheerful vocalizations and actions eg. coughing, lip-sucking |
| End of 10. months | <ul style="list-style-type: none"> - Dialogue: accurate voice repetition of known syllables |

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| | <ul style="list-style-type: none"> - Melodic babble in the form of a phrase - Points with his hand to a desired object |
| Till 12.months | <ul style="list-style-type: none"> - First meaningful syllables and words with meaning aimed at known people |

| Expressive speech developmental scale, 1-5 years | |
|---|---|
| 12 months | <ul style="list-style-type: none"> - A child's first word that makes sense |
| 13 months | <ul style="list-style-type: none"> - Imitates noises and tones (vibrating with lips) |
| 14 months | <ul style="list-style-type: none"> - 4 (four) words in addition to "mom" and "dad" |
| 16 months | <ul style="list-style-type: none"> - At least 8 words in addition to "mom" and "dad" |
| 18 months | <ul style="list-style-type: none"> - Connects two words that represent a different idea, eg "mother dog" |
| 21 months | <ul style="list-style-type: none"> - Names an object if asked |
| 22 months | <ul style="list-style-type: none"> - Uses more than 15 words - Uses at least one possessive pronoun - "me", "my" or says his own name instead of a possessive pronoun |
| 24 months | <ul style="list-style-type: none"> - Uses "no" or "won't" in a phrase eg. "no child" |
| 25 months | <ul style="list-style-type: none"> - Uses noun, verb, adjective - Utters time sentences with childish speech |
| 27 months | <ul style="list-style-type: none"> - Shows 8 out of 12 images - Asks about objects using a matching word |
| 29 months | <ul style="list-style-type: none"> - Says name when asked |
| 30 months | <ul style="list-style-type: none"> - Names 2 out of 3 actions in a picture |
| 35 months | <ul style="list-style-type: none"> - Says sentences with 3 (three) words in children's speech - Names 12 pictures - Speaks in 1st person |
| 36 months | <ul style="list-style-type: none"> - Uses "he"/ "she" |
| 40 months | <ul style="list-style-type: none"> - Names plurality of objects in 2 of 3 pictures |
| 48 months | <ul style="list-style-type: none"> - Says his name and surname, uses main and subordinate clauses - Names three objects from the same category (food, animals) - Answers questions "what do you do when you are thirsty/hungry/tired?" |



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| | - Describes an object with a few simple sentences |
| 54 months | - Uses sentences with 4 and 5 words |
| 60 months | - Articulates sounds with correct pronunciation - Uses gradation in comparison (more-most) |

| Developmental scale for receptive speech, 0-12 months | |
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| 1. months | - Turns to the source of a calm human voice - Makes pre-speech movements with the lips and tongue in response to the parent's speech |
| 2. months | - Rejoices when the parent returns to his field of vision |
| 4. months | - Stops crying or reduces the intensity of crying when a familiar adult addresses him |
| 5. months | - In the period when he starts to pay more attention to the objects, it may seem that the interaction decreases |
| 6. months | - Turns around / reacts to familiar voices, even when the adult is not in sight - out of sight |
| 8. months | - Responds to name |
| 9. months | - Understands, "No!" and "bye bye" - Responds to a verbal command to show or play something, without being shown the activity beforehand (bye, peek-a-boo, good job) |
| 10. months | - When asked about a specific person or object, he turns his head and looks for the person or object |
| 11. months | - Reacts to a ban by stopping the current activity |
| 12. months | - Shows understanding of familiar words for people he knows or words used in family routines - Executes simple verbal commands: "come", "give" |

- Uses hand/finger pointing when searching for an object

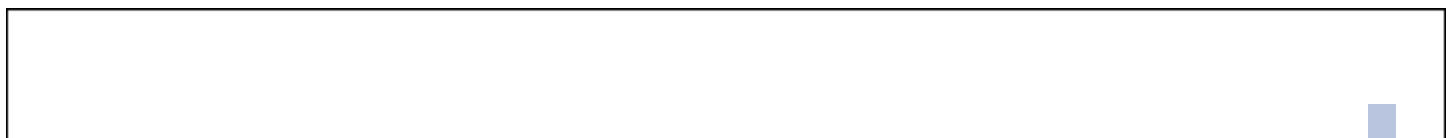
| Developmental scale for receptive speech, 1-5 години | |
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| 12 months | - Understands names of familiar people or objects, practiced familiar routines used in everyday activities, e.g. "Where's your glass?" |
| 14 months | - Follows a command from the persons he/she interacts with/ simple verbal commands, eg "give", "come", "take"; - Goes to another room to perform an order to find a familiar object or toy |
| 16 months | - Reacts to his name with a look or by stopping the started activity |
| 18 months | - Selects a named object when other options are available eg. where is the bottle - On request it points to a picture that you have named eg "where is the kitten?", "show me the dog" - On request, shows any part of the body |
| 20 months | - Names a familiar object in response when asked "what is this?" |
| 22 months | - Shows 4 out of 8 pictures or names them verbally |

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| 24 months | <ul style="list-style-type: none"> - Shows at least 3 body parts when asked - Follows and executes 2-step instructions, eg. take the glass and put it on the table |
| 26 months | <ul style="list-style-type: none"> - Shows 8 out of 12 pictures or name them with a word - On a given tasks spatially allocates an object "on" and "under" e.g. put the ball under the table" |
| 29 months | <ul style="list-style-type: none"> - Understands the meaning of "big" and "small" |
| 30 months | <ul style="list-style-type: none"> - Understands 2 out of 3 questions and points to a picture "what flies?", "what drives?", "what floats?" |
| 34 months | <ul style="list-style-type: none"> - Shows 7 body parts when asked |
| 36 months | <ul style="list-style-type: none"> - Understands 2 out of 3 prepositions (on, beside, under) - Understands sentences that contain 3 words carrying meaning in themselves, e.g. put the book and the glass on the table |
| 40 months | <ul style="list-style-type: none"> - Knows and describes the purpose of objects that are used daily eg. what do you do with a comb, a spoon, a cup |
| 40 months | <ul style="list-style-type: none"> - Recognizes physiological needs and expresses them verbally (I'm hungry/I'm thirsty/I'm tired) |
| 42 months | <ul style="list-style-type: none"> - Recognizes the longest of 3 drawn lines - Without the help of gestures and without repeating an order, is able to follow 3 mutually unrelated instructions, e.g. "clap your hands, knock on the door and jump" |
| 48 months | <ul style="list-style-type: none"> - Understands sentences that contain 4 words carrying meaning in themselves |
| 60 months | <ul style="list-style-type: none"> - Understands sentences that contain 5 words carrying meaning in themselves - Understands temporal and sequential concepts - first/then/last |

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| Personal and social independence developmental scale, 0-12 months | |
| Newborn | <ul style="list-style-type: none"> - Calms down if they take him in their hands |
| End of 1.month | <ul style="list-style-type: none"> - When he sees a person he follows him |
| End of 2.month | <ul style="list-style-type: none"> - Social smile - Fixes a moving person and follows him - Interactive imitation of smiles - Shows a reaction to social games - Seems to recognize when breastfeeding is offered |

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| End of 3.months | - Constant social smile |
| End of 4.month and 5.month | <ul style="list-style-type: none"> - If they tease him, he laughs out loud - Tries to hold the bottle with both hands when being fed - Reacts to his reflection in the mirror - Explores objects and toys: observes them closely, touches them, puts them in the mouth and hits them |
| End of 6.months | <ul style="list-style-type: none"> - Behaves differently towards known and unknown persons - Interactive imitation of smiles, facial expressions and shouts - Reaction of expectation during social game "crawl bug", "peek-a-boo" - Reaches for an object that is out of reach |
| End of 7.months | - Carefully follows what the examiner or the person who is with him is doing |
| End of 8.months | <ul style="list-style-type: none"> - Reacts happily to hide and seek games and peek-a-boo - Follows a pointing gesture when someone points to an object/person - Withdraws or is afraid of strangers - Drinks liquid from a glass held by an adult - Eats dry food by himself (biscuit, bread) |
| End of 9.months and 10.months | <ul style="list-style-type: none"> - Uses a pointing gesture to draw attention to others by pointing to an object - Plays with action toys and understanding of cause and effect emerges - On request, he gives a toy / object that he is holding in his hand (he can also not give it) - He participates by raising his arms and putting them through the sleeves when they put him on |
| Till 12.months | <ul style="list-style-type: none"> - If he receives an order with a gesture or a word, he gives the object to the person who gave the order - Social referral – withdraws/checks the caregiver's reaction in a new situation - Participates by raising the leg when putting on shoes - Throws or rolls a passed ball to continue the game - Plays with a stuffed toy by hugging it |

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| Personal and social independence developmental scale, 1-5 години | |
| 13 months | <ul style="list-style-type: none"> - Holds a spoon and just brings it to his mouth - Joint attention |
| 14 months | - Can refuse an activity by shaking the head |



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| | <ul style="list-style-type: none"> - Expresses desire for an object with facial expressions - Tries to attract attention or tries to show something by pulling on the arm or clothing |
| 16 months | <ul style="list-style-type: none"> - Holds a glass independently while drinking - Takes off shoes or hat - Offers a toy to his reflection in the mirror - Approaches the parent offering the object to ask for help (e.g. to wind up a wind-up toy or open the lid of a box) |
| 17 months | <ul style="list-style-type: none"> - Imitates simple domestic activities (throws waste in a basket, tries to feed with a spoon, combs hair) |
| 19 months | <ul style="list-style-type: none"> - Pets a doll or teddy bear |
| 20 months | <ul style="list-style-type: none"> - Rolls the ball towards the mother or examiner - Develops a sense of self - recognition in a mirror - Starts using a fork - Helps to reveal the toys |
| 22 months | <ul style="list-style-type: none"> - Helps with household chores, performs simple activities - Avoids obstacles when playing with a toy on wheels |
| 23 months | <ul style="list-style-type: none"> - Washes and wipes hands |
| 24 months | <ul style="list-style-type: none"> - Begins to express emotions through words - Develops a sense of self-recognition of images - Expresses emotions of self-consciousness such as embarrassment |
| 26 months | <ul style="list-style-type: none"> - Stays with known people for a short time - Eats food from a plate without help |
| 28 months | <ul style="list-style-type: none"> - Knows how to take off a jacket |
| 29 months | <ul style="list-style-type: none"> - Takes care of a doll or teddy bear |
| 30 months | <ul style="list-style-type: none"> - Role-playing and the emergence of short sequences of imaginative play with substitution of objects (for example the box is a car) - Begins to understand that others may think and believe differently - Responds to another's expression of distress by offering comfort - Covers pants that are pulled up to above the ankles |
| 34 months | <ul style="list-style-type: none"> - Expresses desire in "I" form |
| 36 months | <ul style="list-style-type: none"> - Adheres to the rules of the game: me then you - Starts sharing toys with peers - Is able to take off clothes independently |

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| | <ul style="list-style-type: none"> - Knows his name and gender |
| 42 months | <ul style="list-style-type: none"> - Self-serves by taking food from one bowl to another using utensils |
| 45 months | <ul style="list-style-type: none"> - expresses the need for the toilet at the right time |
| 48 months | <ul style="list-style-type: none"> - Understands that other people's beliefs may not be correct – understanding wrong belief - Begins to negotiate with others in order to maintain communication - Creating fantasy scenarios through the use of miniature toys or substituting objects - Washes hands with soap and water and wipes them with a towel independently - Puts paste on the brush and brushes the teeth (there may be gaps in brushing) |
| 54 months | <ul style="list-style-type: none"> - Gives an appropriate answer to basic social questions (name, surname, age, place of residence, gender) - Dresses and undresses independently including medium sized buttoning and front zipping |
| 60 months | <ul style="list-style-type: none"> - Follows rules for group games in cooperation with other children - Dresses and laces independently - Independently washes face and hands with soap and water and wipes them with a towel - Uses the toilet independently (gets undressed, sits down, flushes, gets dressed - can be reminded) |





