Communication development in young children

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INTRODUCTION

A. Human development

- Begins at the moment of conception & ends with death
- Human development depends on genetic & environmental factors.
- **Environment** consists of the people who are close to us & the relationships which we develop with them, our experiences & outside factors such as learning.
- **Genetic or hereditary factors** also influence development before and after birth. They consist of our genetic make-up & may be considered as a set of constraints on the environment.
- Relative impact of each in development is approximately 50-50.

**Interaction between development and the environment**

Changes which occur during development are:
- Predetermined
- Independent of environmental influences
- Consistent in all cultures in all the world

All children walk at approximately same time, start talking at approximately the same time.

But the environment must be «favourable» to these changes.

**Examples of environmental influence on development**

Children are not toilet-trained at the same time
They do not begin formal learning at the same time
They do not practice their gross or fine motor skills equally in all cultures
They do not learn to sit still & be obedient in all societies
Do not learn to dress or feed themselves at the same time in all societies

**Hereditary predisposition**

- Biological factors or hereditary factors predispose the individual to certain types of behaviour. *All children have a biological predisposition to learn speech & language.*
- There is a very wide range of individual differences and therefore each individual is unique. *Although the sequence is the same, children learn at different rates.*

**Genetic differentiation**

- Gender
- Rate of growth
- Learning ability
• Physical characteristics
• Intellectual functioning
• Temperament

**Biological maturity & learning**

Learning cannot occur without biological maturity. **At a certain age (biological maturity), a child may begin to talk, as long as s/he hears others speaking (learning)**

In cases where learning occurs without biological maturity, results are temporary or may lead to lack of interest, frustration, tiredness, etc.

**In conclusion**

- Development follows a specific and foreseeable route through specific stages.
- Every stage is characterized by ‘typical forms’ of behaviour.
- There are many different developmental areas, but they are interdependent.
- Children all over the world develop in more or less the same way.
- Developmental milestones are not the same for every child: there are differences even in the typically developing child.

**Developmental areas consist of**

- Linguistic
- Cognitive
- Motor
- Perception
- Emotional
- Social

1. **Cognitive functioning**

- Refers to the mental processes involved in gaining knowledge and understanding.
- Attention, memory & working memory, judgement, reasoning, problem-solving & decision-making.
- It is directly linked to language learning
- Thought develops through mental representations (later used in language)

In young children, cognitive development may be seen through……

- play
- imagination
- attention
- memory
- planning
- problem-solving activities
- ability to learn
2. **Perceptual development**

- Refers to ability to experience the world through the five senses and to recognize environmental stimuli
- Includes proprioception
- Child is able to perceive, match & categorize auditory & visual stimuli
- Important for his/her adjustment to the environment
- Classifies which are the significant stimuli in his/her environment, which s/he should pay attention to.
- Human & environmental sounds, as well as visual aspects of the real world are processed and stored

3. **Social & emotional development**

- Significant areas in relation to language
- Social development is important for pragmatics
- Emotional development is assessed by the child’s responses to internal & external stimuli
- Social development may be seen by the way the child relates to his/her environment

*In young children, we notice how*....

- Child responds to change
- Interest in stimuli and motivation to learn
- Response to stimuli in the environment
- Response to internal stimuli
- Need for reward
- Joint attention
- Responsiveness
- Frustration level

4. **Motor development**

- Two areas: **gross motor** (body movements) & **fine motor** (hand, finger & oro-motor)
- Gross motor development involves large musculature & ability to control them
- Progress from spontaneous to controlled movement – motor coordination
- **Oro-motor development** is particularly important in the development of speech.

5. **Language development**

Combines & uses all of the other developmental areas.
- It commences at birth, when the infant starts differentiating & classifying speech sounds
- Understanding the usefulness of language & communication
• Practicing his/her oro-motor skills
• Preparing for his/her voluntary controlled output

**Biological & environmental prerequisites for language development:**

<table>
<thead>
<tr>
<th>BIOLOGICAL</th>
<th>ENVIRONMENTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>hearing</td>
<td>motivation</td>
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<tr>
<td>larynx</td>
<td>experiences</td>
</tr>
<tr>
<td>memory &amp; attention</td>
<td>relationships</td>
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<tr>
<td>cognition</td>
<td>encouragement from environment</td>
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<td>oro-motor skills</td>
<td>Emotional bonding</td>
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</tbody>
</table>

**B. Terminology**

**What is communication?**

- Any verbal/ non-verbal/ paralingual form through which an individual exchanges/ announces/ informs ideas/ experiences/ knowledge/ situations/ needs and emotions to another individual.
- Communication is a basic function of language, but language is only one form of communication.
- Human ability to communicate is based on ability, desire & need

**What is language?**

- Requires cognitive skills: matching, processing categorization of experience which are then stored as “representations”.
- Representations are then used by language system to transfer thoughts, needs and emotions from the speaker to the listener.
- The message is transferred though a system of predetermined phonetic signals which belong to the particular language system.
- Language is expressed through speech.

**Language…..**

- Codes reality
- Has visual and auditory symbols
- Is an instrument for learning
- Has a two-way interaction with thought
- Has a culture-specific code
- Has grammatical rules
- Has social-pragmatic rules
- Is dynamic

**Interaction between internal & external reality**

✓ Language is personal.
✓ Represents each person’s ‘reality’.
✓ Each person’s reality is unique.
Therefore what we communicate to each other is unique.

Nevertheless we usually manage to understand each other.

What is speech?

- Unique and personal way of executing language
- Consists of biological act of breathing, voice, articulation & resonance
- Phonemes are combined to form words
- Articulation is the systemic oro-motor movements made to express the phonemes/words of a particular language
- Neuromuscular functioning is necessary for articulation

Linguistic rules

Language functions:
1. **Form**: phonology, syntax & morphology
2. **Content**: Semantics
3. **Use**: Pragmatics

It has two forms:

1. **Comprehension**
   - Decode the phonemes
   - Recognize the words
   - Remember series of words
   - Decode with grammar rules
   - Connect with meanings, concepts, knowledge, experience.
   - Screen for inferences
   - Match with non-verbal message

2. **Expression**
   - ‘Idea’ to be expressed
   - Choose appropriate message form
   - Retrieve words
   - Format syntactically
   - Articulatory programming
   - Feedback- correction

Psycholinguistic prerequisites for language processing

- Auditory memory
- Auditory attention
- Auditory sequencing
- Sound discrimination
- Auditory closure
- Processing speed

**Semantics**

- How do we learn words?
• Each word is connected with thought, experience, knowledge & emotion
• It concerns a very complex & organized cognitive skill.
• «Semantic frames» (Klatzky 1977) allow us to understand other people’s arbitrary symbols & also allows us to transfer our thoughts to others in a comprehensible way.
• Cognitive matching & categorizing are central functions of semantic networks.

**Pragmatics**

*Language use is determined by*

**Who** you are?
**To whom** you are saying it?
**What** you want to say?
**How** you phrase it?
**In what** context?
**What** is your intention?
**How** does the listener interpret your intention?

**Most speech acts are carried out in context**
• It depends on the speakers shared knowledge about the subject matter
• On the speakers’ knowledge of each other
• On their relationship
• On their previous communications
• On what happened before the discourse

This knowledge determines the **content, choice of words** and **syntactic structures** used.

**Discourse (Conversation) has rules:**

✓ Greetings
✓ Starting and ending a subject
✓ How the information is given- how one asks for information
✓ Amount of information (not too little, not too much)
✓ Changing subject appropriately
✓ Turn-taking; waiting for turn to speak & changing appropriately (not interrupting)
✓ Pauses
✓ The «truth» clause
✓ Given-new contract
✓ Checking & «repairing» the exchange
✓ Keeping the listener’s feelings in mind: theory of mind
✓ Polite forms.

**Paralingual (paraverbal) communication**

• Voice tone
• Speech rate
• Volume
• Intonation
• Rhythm
• Pauses and silence
Non-verbal communication

1. Eye contact
   - Also known as ‘oculesics’
   - Involves eye expressions, but also ability to hold gaze.
   - Varies considerably among cultures
   - Europeans have a direct gaze when communicating, Asians indirect gaze
   - Eye contact is very important in communication & begins very early in infants

2. Facial expressions
   - May be controlled or spontaneous
   - Interpretation is dependent on communication context
   - The first expressions made by infants may be a result of bodily functions
   - They are very important in human interaction as people respond accordingly to facial expressions

3. Proximity
   - This aspect of communication deals with space and the distances between people
   - There are different standards in different cultures as to the acceptable distance when communicating
   - People in northern cultures need more space between them when communicating, southern cultures have more proximal distances.

4. Body contact or touch (haptics)
   - May create feelings of warmth and trust
   - It is a necessary accessory for child development

5. Hand movements (gestures)
   - Coded eg
     - Policeman stopping the traffic
     - Hitchhiking
     - Pointing
     - Waving goodbye
   - Expressive
     - There is a great variability between cultures

OBSERVATION

Observation consists of a detailed account of child’s behaviours in his/her natural environment.

Why is observation so important?
   - To enrich knowledge of child development
   - To gain insights on child’s abilities
   - To gain important information, which one would not be able to get in a more formal setting
   - To share knowledge with caretakers (parents- teaching staff)
• To use this information for future assessment & to understand child better
• It results in a more reflective and sensitive assessment of the child

**Observation as a scientific exercise**
- Collect data
- Challenge preconceived ideas
- Test hypotheses
- Practice objectivity - that way you don’t influence the outcome
- Control emotional responses
- Non-judgmental & sensitive to cultural bias

**Can the observer be objective?**
- The observer is naturally subjective
- Observer is constantly trying to make sense of what s/he sees by matching what is observed to previous experience and knowledge
- Nevertheless this matching & categorizing process may lead to serious misjudgements or misinterpretations
- The exercise is aimed at a more objective view of the child

**Developing objectivity**
- Observer must be unbiased
- Not be influenced by prior knowledge of child & family *eg if the family appears to be normal & stable*
- Not be influenced by personal feelings *eg if you like the child or his/her family*
- Nor by expectations *eg if you think the child should be able to achieve this task*

**Cultural bias**
When children are brought up in other cultural surroundings, they may react differently their interactions with others
For instance:
- *Eye contact*
- *Touch*
- *Verbal communication*
- *Shyness in front of adults*

**What do we observe?**
- How the child acts and reacts in his/her environment.
- How s/he responds to pressure or change
- His/her interests, the way s/he learns, communicates, responds, etc.
- His/her physical development & possible needs
- Abilities in all developmental areas

**Through the process of observation, the observer:**
- Becomes practised in objectivity
- Familiarizes with developmental milestones
- Becomes aware of differences in temperament
- Understands the particular child’s reactions to different stimuli
- Understands child’s needs
• Becomes aware of cultural differences

What do children need?
✓ Physical care: feeding, routine care & hygiene, medical care
✓ Protection: infection, abuse & neglect, safety
✓ Affection: attachment, security, care, guidelines
✓ Stimulation: social contacts, resources, play & education

Parameters that may influence the child
• Familiarity of the surroundings
• Weather
• Noise levels
• Change in routine
• People in immediate environment
• Illness
• Hour of the day

These must be noted when making the observation

What are the areas which are important in SLT observation?

<table>
<thead>
<tr>
<th>AREA</th>
<th>WHAT WE OBSERVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication abilities</td>
<td>Paralinguistic communication, non-verbal characteristics, responsiveness, eye-contact, turn-taking, gestures</td>
</tr>
<tr>
<td>Voice</td>
<td>Quality, pitch, volume</td>
</tr>
<tr>
<td>Linguistic abilities</td>
<td>Comprehension &amp; expression, phonology-semantics, syntax &amp; morphology, narrative skills, conversation skills-pragmatics</td>
</tr>
<tr>
<td>Play</td>
<td>Type, stage of development</td>
</tr>
<tr>
<td>Cognitive abilities</td>
<td>Memory, attention, concentration, problem-solving skills, imitation</td>
</tr>
<tr>
<td>Social skills</td>
<td>Interaction with others, group participation, friendship, empathy, collaboration, interest in environment</td>
</tr>
</tbody>
</table>

Also we pay attention to emotional & behavioural abilities, fine & gross motor skills, self-help skills & hygiene & health issues.

**LANGUAGE & COMMUNICATION DEVELOPMENT**

• Begins the minute the infant is born...possibly before they are born
• Language development continues into adulthood
• First three years are the most important, as the ‘language faculty’ is put into action
• Innate predisposition for language learning
• After the first few years the child is not as able to learn language and in adulthood it becomes even more difficult

**Interaction between predisposition & environment**
• ‘Language faculty’ is not enough: other language users in the environment are needed to put it into operation.
• Consequently the child works together with his/her caregivers for language development
• All children in the whole world follow a predetermined sequence for language development
• Most children in the world ‘live among two languages’ and learn them both simultaneously without any problems

*Caretaker speech* is also called ‘motherese’

✓ Different from adult-adult communication  
✓ Repetitive & redundant  
✓ Higher register  
✓ Exaggerated intonation  
✓ Smaller, simplified utterances  
✓ Simplified words- ‘baby talk’  
✓ Content is often ‘here-and-now’  
✓ Talks ‘as if…’ the baby is a conversation partner

**Variations in language development**
• Wide variation in the types of environment in which children are raised  
• Wide variety of individual differences in development  
• Child temperament varies and the environmental response may be influenced  
• Milestones are very individual  
• Developmental stages are approximate

**Infant’s early communication**
• Can be soothed by talk  
• Looks towards sound source  
• Recognizes and turns towards voices  
• Begins to respond to attention from adult  
• Changes posture in response to adult’s presence  
• Maintains fleeting eye contact  
• Responds to body contact & may initiate body contact

**Use of non-verbal forms**
• May cry to show distress or discomfort  
• Cries when needs feeding  
• May cry when wants comforting or attention  
• May laugh, smile when happy and content
• Vocalizes with appropriate intonation
• Shows excitement when mother approaches
• Moves body around to show feelings
• Intense interest in voices, faces and eyes

Infant’s early sound development
• Before birth, in the womb the embryo may be hearing his/her mother’s voice
• From the moment child is born s/he begins to process the sounds in the environment
• Very soon s/he starts to be interested more in the sounds of his/her immediate environment
• Also s/he begins to differentiate sounds within the first days

Summary: Key points
✓ Infants prepare for intentional speech in the first year of life
✓ Sound differentiation begins very early
✓ Spontaneous communication leads to intentional communication
✓ Communication techniques are non verbal at this phase
✓ Infants prepare for speech by ‘practising’ their oro-motor skills

Sound output
**Cooing:** recognizable sounds /k/ /g/ /i/ /u/
**Babbling:** syllable production /mu/ /da/
**Sound play:** repetitive and controlled use of speech sounds /ma-ma-ma/
**Sound imitation:** spontaneous or controlled imitation of speech sounds or words.
Output is tuneful & more like the language of the community.
**Jargon:** conversation similar to home language but incomprehensible.

Baby’s response to conversation
✓ Smiles
✓ Cooing
✓ Mouth & lip movements
✓ Eye-gazing
✓ Arm-waving
✓ Imitates tongue-poking, mouth-opening, eye-blinking, facial expressions
✓ Attentional focus

Showing intention
Infants progress from behaviours which are a response to things happening around them to using them in a planned and deliberate manner to achieve a goal.

For instance:
**Shouts to get attention** (4-7 months)
**Says /ma-ma-ma/, mother appears smiling** (9-11 months)

Becoming an intentional communicator
1. Involuntary reflexes
2. Involuntary reactions
3. Voluntary reactions

**Turn-taking**
- This is a very important factor in communication development
- Commences very early and is used by the infant as a communication strategy
- Early communication with adult is based on this
- Leads to what has been described as proto-conversations

**Stages in communication development in infants**

1. **Purposeful actions**

   In this stage the infant begins to explore and create changes in his immediate environment through movements which are planned and purposeful.

   Infant is now active in trying to do things for itself & also learning what it has to do to get what it wants.

   **Intentional or goal-directed behaviour**
   - Child has goal in mind
   - Child tries to achieve goal
   - Child maintains and persists with this behaviour till he succeeds
   - Child stops his actions once he achieves his goal
   - If child does not achieve goal, he modifies his approach and continues (O’Kane & Goldbart 1998)

2. **Purposeful communication strategies**

   - This is an early stage in intentional communication.
   - Early three-way communication.
   - Child uses a range of behaviours to try and involve the adult & to communicate a message.
   - Cannot yet coordinate both object and adult at once- but action is directed either to one or the other.

3. **Situational three-way communication**

   Child has a range of recognizable communicative behaviours which he uses to gain adult attention and to direct the adult to what he wants the adult to do or to look at. He persists until he achieves his goal.

   Fully **intentional communicative behaviour** is now achieved.

**Baby’s understanding in the first year of life**

- Understanding is built slowly from observing the environment and its reactions
- Responds to different voices (about 6 months)
At about 6 months baby starts matching specific sound sequences to specific objects/people
At about 9 months may recognize his/her own name, /no/, /bye-bye/
By 12 months may point to common objects in environment

Comprehension development
1. Responds to things happening to or within himself
2. Responds to external things and events
3. Starts to interpret what the adult means by his actions and anticipates events
4. Begins to understand and respond to words

To do this, the infant must:
- Listen & control his focus of attention
- Remember what has been said to process its meaning
- Understand some words and be able to locate them in a longer sequence of words
- Have basic grammatical knowledge
- Interpret meaning through non verbal and paralingual communication

Situational understanding
- Cognitive processing of the world
- Understands that certain things in the environment are done in a certain way
- The world becomes more ordered and predictable
- He understands that a response is expected from him
- Familiar routines are connected to certain words

For instance, in the instruction ‘Give the spoon to mum’, if there’s a spoon & there’s mum, the child does not have to process the language components.

Key words
- These are words that carry important information
- These words convey meaning
- Must differentiate these from situational understanding

Infant begins to pay attention to words in the utterance

Testing key words

In order to test whether the infant is able to process key words, there must be a situation where he is presented with choice:

For instance:
The child has a spoon & a cup in front of him & only mum is present. He is told: ‘give the spoon to mummy’ (one information-carrying or key word)
Two key word understanding

- **Objects:** Spoon & cup, mum & dad
  Instruction: ‘give the cup to daddy’

- **Objects:** Spoon, cup, plate, box
  Instruction: ‘put the cup in the box’

Joint attention
The child responds more and more to the adult who uses a variety of cues
✓ Hand gestures eg holding out hand
✓ Pointing
✓ Facial expressions
✓ Encouragement eg repeating the command
✓ Actions eg pulling out chair, while saying ‘come and sit’

From holophrasic through telegraphic speech to complex sentences

**Summary so far**
- The infant has many communicative techniques which may be seen initially in non verbal forms
- The infant progresses through different stages in his understanding of the spoken code of his environment in the first year of life
- He simultaneously prepares himself for his spoken skills
- As the first year of life finishes, the infant is ready for his first **holophrastic utterances**

Holophrastic phase
This phase is clearly recognizable because the child is now able to:
- Use a recognizable phonetic sequence to signify something in his environment
- Synchronize the idea with its execution, that is, the oro-motor output
- Communicative intent may be complex
- Memory is limited therefore sequences are restricted

In the holophasic phase, the child’s utterance may signify many different meanings

**Vocabulary development**

**First words are related to:**
- People and objects in the environment
- Actions taking place
- Descriptions
- Needs and desires
- Indications of things that have happened
**Words and meanings**
- The child is now prepared to be an active communicator in his environment
- He has the means and has the desire
- He uses first words with a whole range of communicative behaviours, such as, pointing, reaching, vocalizing to get his meaning across.
- He names objects in his environment
- He imitates adult words and expressions.

**Cognitive links**
- At this phase he is starting to make conscious cognitive links between objects & actions
- That is, he is starting to build his network of meanings or his internal representations
- *Mother points to sheep and says ‘sheep, it goes baaa’. Child responds ‘baa’*
- *Later seeing a cow, he may say ‘baa?’. Mother responds ‘No that’s not a sheep, it’s a cow...it goes moo!’*

**Examples of networks**
- ✓ When mother says ‘it’s time for your bath’, child may respond ‘bubbles’
- ✓ When mother says ‘let’s drink our milk’, child may say ‘bottle’
- ✓ When mother says let’s go for a walk, child may say ‘shoe’

**Generalizing communication skills**
- Generalization is still very limited
- Communication is still context specific
- Also it may be person-specific
- The child is persistent and determined, but he’s still mainly understood by people in his immediate environment

**Repertoire of first words**
**Things in the child’s routine:** bath, teeth, car, juice, biscuit
**Things he likes or wants:** foods & drinks
**Games & places he likes to be:** song or rhyme, cuddle, if his wants to get out of something eg chair
**People and animals in the home**
**Happening /attention words:** no, bye, look, gone

**Communication development**
- The child’s memory capacity and attention skills are still very limited
- Vocabulary development is slow, but steady
- Communication skills are being developed at the same time
- Phonetic output & articulatory skills are also limited and the child is often incomprehensible out of context

**Two-word level**
- ✓ At this phase the child starts to put two words together.
Often called ‘telegraphic speech’ because it does not follow morphological rules and patterns.
- It does however show the beginnings of grammatical rules, especially in word order.
- More action words are now being used.

**Examples**
More milk  
Hello doggie  
Daddy gone  
Mummy look  
Bye-bye ball  
Clap hand

Context is still very important  
Phrases may have a wide range of meanings  
**eg** ‘mummy shoe’
May mean: this is mummy’s shoe (statement)  
give me mummy's shoe (request)  
where is mummy’s shoe (question)  
put on mummy’s shoe (instruction)  
mummy is putting on her shoe  
(description)

**Communicative intention**
As we saw in the first year of life, communicative intention was built gradually from involuntary to voluntary.  
The child established three-way communication, that is, he was now able to coordinate directing his communicative behaviours at both the adult and the object **at the same time**

**Main objectives before words**
1. **To request something**
   - Pulling adult to door to open it
2. **To show something- get the adult’s attention**
   - Holds toy up to the adult
   - Points to something
   - Pulls adult while looking at something
3. **To reject something**
   - Pushes something away

**These objectives expand to a wider range of intentions in the holophrasic phase**
1. **Appearance/ existence**
   Child wants to tell you about things they know and recognize.  
   Directs adults attention to something of interest or importance to him.

2. **Disappearance**
   Child tells you something’s gone or disappeared.
He wants something to disappear.

3. **Recurrence/ repetition**
   Child tells you something has stopped or ended.
   Request for it to continue.

4. **Question about where something’s gone**
   Asks a question through intonation about where the missing thing is.

5. **Location**
   Child tells you where something or someone is.
   Request for thing to be put in its place.
   Answers a ‘where?’ question.

6. **Possession**
   Child tells you about who owns what.

7. **Rejection**
   Child tells you that it does not want person, object or event.
   Tells you when something is wrong.
   Requests that the current activity stops.

8. **To be the activator**
   Child wants to have a go at/ try something.
   Requests an object.
   Wants to do it himself, without help.

9. **To be the receiver of an action**
   Request that something happens to him.
   That he be included in some activity.

10. **To comment on an activity**
    Tells you about a mishap or accident.
    Tells you what he is doing.

11. **Attribute /description**
    Tells you about what he thinks of something:
    /dirty/ /yucky/

12. **Social purposes**
    Plays with words.
    Uses it for social interaction.

**Development during the two word level**
Further development includes:
   1. Negatives through /no/
   2. Questions: /what/ & /where/ are the first ones used eg /where mummy? /what that?/
      Intonation also denotes question eg /doggie walk? /go out? /sock on?/
4. Descriptions: /hot/ /sticky/ /hurt/ /wet/

Three- word level

- At this level, vocabulary is developing rapidly
- Child combines words to imply complex meanings and relations
- The sentences are still on the whole telegraphic
- Grammatical features are beginning to emerge
- However grammar is sacrificed for meaning

Early grammar

- Articles may gradually appear
- Pronouns reflect a preoccupation with possession (I, you, me, it, my, your, mine, yours)
- Plurals
- Negatives eg /not/
- Question /who?/
- Verb endings

Four word level and above

Child begins to use longer and more complex sentences containing grammatical information

- Tenses and plurals
- Links sentences with /and/
- Time concepts
- Emotions
- Possessives
- Use of /because/

Verbs

- Regular & irregular verbs
- Auxiliaries
- Past tense
- Future tense
- Negative forms
- Reflexives

Questions

- How?
- Why?
- When?
- Which?
- How many/ much?
- Also question form becomes more complex ‘can you....?’ ‘are you going....?’ ‘is doggie sick?’
Complex sentences

- Two different things are connected in a sentence
  /I eat my biscuit and my apple/
- Two phrases are connected
  /she was running and fell over/
- Cause and effect relationships
  /she’s crying because she fell over/
  /he’s running to catch the ball/

Description words
Child uses more abstract words as the sentences become more complex.

Quality - hard/smooth, same/different, tight
Quantity – full/empty, a little/a lot
Emotions – happy/sad, afraid, tired, angry
Size – big/small, high/low, thin/fat
Time – first, next, later, before/after
Position – under/ontop, behind/in front, next to, between

Development of reasoning

During this time children learn to reason, to deduct, to make hypotheses and to draw conclusions:

/this bigger than that one/
/daddy drink wine, mummy drink tea, I drink milk/
/kitty smile, not angry/
/I big girl now, can jump!/

Development of inference and prediction

Examples:

1. It’s raining out & mum says A can’t go out.
   A. /wear boots!/

2. Milk is spilt on the table
   A. /more milk in fridge!/

3. The TV is not working
   A. /daddy cross!/

Development of sequencing

Examples:

/mummy laugh then kiss/
/first eat then go out!/


Development of pragmatic skills

- Children often imitate their parents non verbal and paralingual communication.
- They have difficulties understanding covert messages, irony and sarcasm. They take words literally.
- Nevertheless they begin to use pragmatic skills eg. when talking to a baby.

Development of conversation skills

One-to-one interactions require basic conversation skills. Many of these have been learnt during infancy:

- Eye contact
- Getting the listener’s attention
- Turn-taking
- Initiation

Later development of conversation

Maintaining the conversation by
- Asking and answering questions
- Using statements /replying to statements

Repairing the conversation
- Recognizing that a breakdown has occurred
- Rephrasing when the listener has not understood
- Asking for clarification if have not understood

Showing that you are listening
- Making non verbal responses (expressions, nods, etc)
- Looking at the speaker

Managing topics of conversation
- Talking about the same thing as the other person
- Changing the topic appropriately

Knowing when and how to interrupt

Ending the conversation

Pragmatic development

- This may take some time to be established.
- Parental modelling is very important.
- It is dependent on cultural factors.
- Other pragmatic skills may take up to 5-6 years to be established eg
  - Given-new contract
- Politeness forms
- Amount of detail
- Use of syntax & vocabulary according to context
- Paralingual factors eg volume, speed
- Theory of mind

**Story-telling and narration**

- Being able to tell a story, to re-tell one or to narrate some event are the tip of the iceberg as far as language skills are concerned.
- The child has to be able to simultaneously coordinate many independent skills.
- These skills are cognitive, language and communication, emotional, perceptual & social.

**Narration**

- Sequencing – establish the time line
- Story line - establish the characters
- Salient characteristics – make sure you are relevant
- Economy – use the right style for the listener
- Syntax and morphology -
- Vocabulary – chose appropriately
- Inferences – make sure they are understood
- Awareness of the listener’s needs – understand his mood & level of interest

**Parameters which may influence normal language development**

- SES of family.
- Parental interaction.
- Multilingual background.
- Child’s temperament and motivation.

**PLAY DEVELOPMENT**

**Why is play important in child development?**

«Play is the work of the child» *Maria Montessori*
«….the leading source of development in the preschool years» *Leo Vygotsky 1933*

**Play…..**

Is essential for healthy development

It helps brain development by linking sensori-motor, cognitive & social-emotional experiences

It exercises the child’s abilities:
- fine/ gross motor abilities,
- language,
- socialization,
- Personal awareness,
- emotional well-being,
- creativity,
- problem-solving & learning ability

**Through play, children...**

- Try out new ‘ideas’ under safe, risk-free conditions
- Find an emotional balance: learn to work through and let go of negative feelings & emotions
- Re-live and modify/generalize their experiences
- Learn to self-regulate
- Learn to be with others, to act according to rule
- Enjoy themselves & have fun

**Famous people talking about play**

“Combinatory play seems to be the essential feature in productive thought.”

*Albert Einstein*

“We are never more fully alive, more completely ourselves, or more deeply engrossed in anything, than when we are at play.”

*Charles E. Schaefer*

Men do not quit playing because they grow old; they grow old because they quit playing.”

*Oliver Wendell Holmes Jr.*

“You can discover more about a person in an hour of play than in a year of conversation.”

*Plato*

**Functions of play**

- Learning and practice
- Exploration and experimentation
- Expression of emotions
- Repetition
- Problem solving & modifications
- Narration & storytelling
- Creative thinking & flexibility
- Voluntary, enjoyable, purposeful & spontaneous
- Creativity is expanded through language etc.
- Helps generate and expand new ideas
- Helps to stop or alleviate emotional problems
- Helps children adapt socially
Stages in play development

1. Exploratory play
   - At this phase the child treats objects alike and performs a series of actions on them.
   - These actions don’t usually appear all at once but develop as the child matures.
   - Relates objects to himself - discovers materials and properties
   - This stage requires a combination of motor, perceptual & cognitive skills.

Actions performed at this phase

- Holding
- Mouthing
- Hitting
- Examining
- Throwing
- Rubbing

2. Relational play
   - Now the child attempts to relate two or more objects.
   - This commences by child putting one object on top of another or an object into another eg into a box.
   - At the same time the child is extending his knowledge of the world and his experience & so he begins to relate objects in a special way eg to put a spoon in a cup, a doll in a bed.

3. Functional play
   - The child starts to relate objects to himself in a functional way
   - Beginning of ‘symbolic’ play
   - He may ‘drink’ from a cup, or ‘comb’ his hair.
   - The action is usually related to himself, but may extend to others too.
   - Play is usually with one object at a time.

Symbolic play is related to language development

- Language and play use symbolic systems
- Symbolic play represents a major advance in child’s development.
- He is no longer tied down by reality, he can imagine objects that are no longer present
- He can re-create past events through symbols
- He can think & remember
- Experiments with language and emotions

4. Pretend play
   - The pretend actions may centre on a doll
     - He will pretend to feed it
➢ To comb its hair
➢ To put it to bed
Child is now able to connect two things together & relating them through pretence & imagination.

Pretend play now develops into longer sequences

For instance:
➢ He’ll put the pillow on the bed
➢ Put the doll to lie on it
➢ Cover it with a sheet

This requires ‘mental planning’

Becomes all the more complex

Use of ‘imaginary object’

Types of play Behaviour
➢ Motor/ physical play
➢ Constructive play
➢ Symbolic play (pretend –fantasy play)
➢ Play with rules (social play)

Forms of play

A. Solitary play
B. Parallel play
C. Group Play: Interactive, cooperative: share & take turns

Stages of child play development

0-6 months
 Begins to explore the environment: child likes things that turn, shine or make a noise

6-12 months
 Interested in toys: explores them, experiments with them
 Usually plays alone
 Social play: peek-a-boo!

12-18 months
 Explores objects
 Starts to be interested in other children
 Beginning of symbolic play: functional play

18-24 months
 Experiments with trial & error
 Starts to imitate other children & adults
 Enjoys repetitive actions
2-3 years
Starts parallel play with other children
Begins to use symbols
Starts to use imagination

3-4 years
Plays collaboratively with other children and waits for his turn
Plays symbolic play & pretend play
Uses reasoning skills

4-6 years
He is cooperative when playing
Follows rules
Uses his experiences in play scenarios
Justifies his actions
Uses a greater range of symbols

6-8 years
Can make up his own game with rules
Plays well with other children, collaborates and follows instructions
Prefers children same gender as him

Maria Vlassopoulos
Torino, May 2015