

APPENDIX 1

Operational definition and examples of study measures

	Measures and Symbol	Definition	Example
Pre-Linguistic skills	Turns taken ↓ Verbal turn	Turn-taking is an act that signifies that the sender and the receiver are exchanging communicative roles back and forth while sharing verbal or nonverbal information.	A child vocalizing a vowel on being asked if he or she is hungry would qualify to be a verbal turn
	Eye contact Eye contact Absent — Eye contact Present	Eye contact in terms of the number of syllables for which eye contact was maintained including both the span of eye contact with the speaker and also for the eye contact with the object/toy.	A child looks at the parent while they talk.
	Autonomy ✓ Autonomous Turn	Autonomy is the number of instances where a child initiated a conversation either with gestures or vocally.	While parent and child are playing, the child initiates a vocalization to get a toy that he/she wants.
Parental Roles	Helper	When a child has a hard time learning to communicate, his/her parents help them to make things easier for him/ her.	If a child has trouble recalling the name of a toy, parents immediately tell the name of the toy.
	Partner	Parents do not make communication goals very obvious but they take optimum communicative turns	Parent and child are play partners and engage in communication during the play

		and be supportive partners in facilitating desirable communication patterns in the child.	while building a castle.
	Cheerleader	Parent rewards child's every single attempt to communicate.	The parent uses descriptive praise or a natural reinforcer (Eg: Well Done! Good Job!) every time the child attempts to communicate.
	Do Not Disturb	In the Do-Not-Disturb role, since the child lacks interest in interaction and hence rarely demands parental attention, parents do not take optimum efforts in initiating any sort of communication with their children.	A child has been left to watch cartoons on TV and the parent does not attempt to communicate with the child at all.
Communication Stages	Own Agenda	A child at the Own Agenda stage may seem to want to play alone and may appear uninterested in the people around him/her. He/she does not yet understand that he/she can affect other people by sending a message directly to them.	A child gets excited when parents are getting ready to go out, child runs to open the doorknob and starts crying due to failure in opening the knob. The child continues to get frustrated and doesn't seek any assistance from parents.
	Requester	A child at the Requester Stage is just beginning to realize that his/her actions can affect people. By pulling or	A child wanting to go out with parents, pulls parents towards the doorknob to

		leading a parent, he/she can ask them for things he/she needs or enjoys.	express his/her desire as he/she understands the inability to independently open the door.
	Early Communicator	The Early Communicator has started to use specific gestures, sounds, pictures or words to ask for things that he wants, like requesting favourite foods or toys. He/she may still communicate mainly to ask others to do things for him/her, but he/she has also figured out that he/she can use the same form of communication consistently in certain situations.	A child wanting to go out with parents, would go near the door and say “open”.
	Partner	Children at this stage can use verbal or other modes of communication to communicate with their communication partners. Child would be able to independently carry out short conversations.	Parents wishing to go to the mall, a child would run and say ‘let’s go malleat candy’.
Play Behaviours	Exploratory	Child plays with toys mostly using his/her senses.	Child may engage in mouthing of a car or toy.
	Functional	Interacts and plays with a toy or object according to its specific function.	Shaking a rattle, moving a car on the floor.

	Constructive	Manipulation of objects to construct or create something.	Constructing a tower with Legos.
	Symbolic	Pretending acts or complex form of representation with or without the symbolic object.	Using a TV remote as a telephone.

Sample of transcription of the parent-child interaction with CWRELD

Parent: ✓ vəʊ vəʊ enθlɔ̃dɑ ↓ nɪn mʌneɪ eli: ↓

Child: ə ə ə

Sample of transcription of the parent-child interaction with CWTD

Parent: jeɪ kʃɑ heɪ ↓ dresɪz heɪ jeɪ ↓

Child: tu:θ heɪ ʌ ʌm kʃɑ heɪ nɪ ɾlθɑ merkeʊ