

# Adult Strategies & Child Acts for Communication Development in Early Intervention

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## Introduction

The first few years of a child's life are critical in the process of development and lay a foundation for cognitive functioning. Early intervention services are often used to support children with developmental delays or disabilities and their families. Early intervention in speech therapy is critical for infants, toddlers, and preschoolers to learn communication skills during the period of normal brain development and can have a significant impact on a child's development that minimizes the long-term negative impacts of a speech-language delay or disorder. Early intervention programs also aim to provide education, support, and guidance for parents and caregivers. These services can have a major impact on a child's ability to learn new skills and improve outcomes in school and in life. The earlier intervention begins, the more effective it is likely to be.



This photo is taken from a home visit where the EI provider (on far left), coaches the caregivers to embed strategies based on the child's identified target goals during their preferred routines.

Family Guided Routines Based Intervention (FGRBI) is a model for early intervention that promotes the ability of early intervention providers to coach caregivers to engage their young children in learning as they participate in daily routines within the child and family's natural environments. The goal of FGRBI is to build family capacity by using adult learning principles and participatory practices to affirm the caregiver as the intervention agent and decision maker. This model is individualized to each family, as coaching and intervention strategies are based on the family's unique routines and activities that are meaningful to them. Early intervention providers observe caregivers interact with their child during routines and provide specific feedback on caregiver and child behaviors about appropriate intervention strategies to embed. They help support the caregiver by identifying opportunities for intervention in additional contexts or other naturalistic routines.

## Method

Communication strategies were coded using The Observer XT software on the NOLDUS platform to add information on caregiver and child impacts in early intervention services within the home.

Coders retrieved 2-minute home visit videos from the TORSH website. Coders then uploaded the videos to the NOLDUS platform, where codes for different adult and child communication strategies were listed. After coding the videos, reliability scores were taken between the coders.

Adult Communication Strategies	
<b>Model gesture with short phrase</b>	such as a point, show, give, or open hand reach coinciding with less than 4 words
<b>Model short phrase</b>	using descriptive, content focused language at the child's level using 4 words or less
<b>Descriptive talk</b>	using descriptive, content focused language about joint activity using 5 words or more
<b>Responding</b>	acknowledging the child's communication act, by using words or gesturing and adding meaning to the object or action
<b>Verbal expansion with no gesture</b>	after the child communicates with words, the adult acknowledges this act by using the same word and adding additional words to it using less than 4 words; If the child vocalizes, the adult acknowledges it and adds to it
<b>Expanding with gesture</b>	the adult imitates the child's gesture and adds onto it with less than 4 words
<b>Wait time</b>	the adult pauses during an interaction and waits to allow the child the opportunity to communicate
<b>Environmental arrangement</b>	adjusting the environment to set up opportunities for the child to communicate. These include choices, presenting two clear options with verbal descriptions so that the child communicates what he/she desires, out of reach, which is placing a desired object out of reach but in sight, and help-needed, which is giving the child an object that they will need assistance with to encourage asking for help
<b>Questions</b>	asking yes/no questions and open-ended questions to the child

Child Communication Acts	
<b>Vocalization</b>	the child attempts to communicate by producing an unintelligible word
<b>Vocalization with a gesture</b>	the child produced an unintelligible word in conjunction with a gesture to communicate wants and needs
<b>Single verbal word</b>	the child produced an intelligible word that has clear meaning without the use of a gesture
<b>Single verbal word with a gesture</b>	the child produced an intelligible word that has clear meaning with a gesture
<b>Multiple words</b>	child uses produces more than one intelligible word
<b>Multiple words with gesture</b>	the child produces more than one intelligible word plus the use of a gesture
<b>Deictic gestures</b>	these include a point, when a child extends their arm and index finger in the direction of an object or individual in efforts to direct the caregiver's attention, a show, when the child holds an object in front of the caregiver in their line of sight, and a reach, when a child opens their hands and extends it toward an object of interest in attempt to take the object

Time	Subject	Behavior	Comment
00:00.00	Start		
00:03.14	Caregiver 1	Model short phrase	all done
00:04.77	Interventionist	Model short phrase	all done
00:06.11	Interventionist	Yes/No Questions	is it broken right now?
00:09.68	Child	Vocalization	
00:11.68	Interventionist	Model short phrase	woof woof
00:15.58	Interventionist	Descriptive talk	look you have two puppies. one. two.
00:16.45	Caregiver 1	Open-ended questions	how do you do two?
00:19.35	Caregiver 1	Model short phrase	one two
00:21.82	Child	Vocalization	
00:23.96	Interventionist	Model short phrase	couch. couch.
00:30.56	Child	Vocalization	
00:33.37	Caregiver 1	Yes/No Questions	you like those balls? yeah you gonna show those off?
00:34.70	Interventionist	Yes/No Questions	do you have balls?

This is an example of coding the communication strategies and acts on the Noldus Observer XT program.

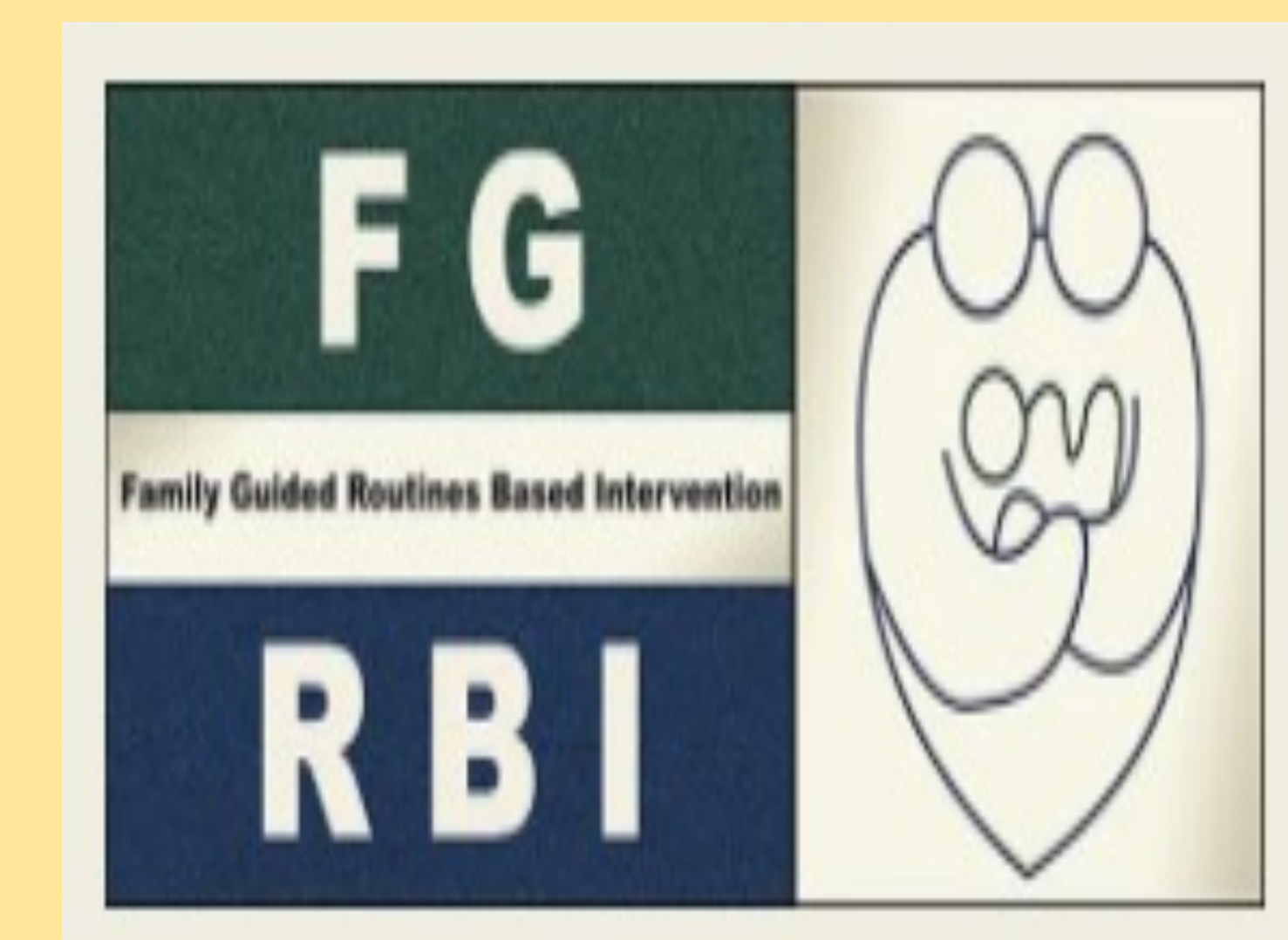
## Limitations

Limitations of the study include human error using the Observer XT software on the NOLDUS platform when coding the home visit videos. The reliability scores may also vary due to the differing coders of these videos.

## Future Directions

The data set came from an overarching study which examined the effect of a multicomponent professional development approach on early intervention providers' use of the Family Guided Routines Based Intervention framework.

Empirical support for the efficacy of FGRBI is still underway, which is why the major goal of ongoing research, and the use of the coded videos, is to develop an approach that meets the recommended practices of the field, as well as the empirical data to support its validity with the families and professionals involved in the intervention and implementation components. Further FGRBI research hopes to evaluate the effectiveness of this model in a variety of diverse natural environments with young children with disabilities and their families (FGRBI Partners, 2022).



## References

- FGRBI Partners. (2022). *Family guided routines based intervention*. Family Guided Routines Based Intervention. Retrieved March 7, 2022, from <http://fgrbi.com/>
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