

# Israeli Sign Language Communicative Development Inventory (ISL-CDI)

Rama Novogrodsky, Natalia Meir, Ora Ohanin, Hope E. Morgan & Irit Meir\*  
University of Haifa

\*We note with sorrow the recent, untimely death of Irit Meir, our coauthor, colleague and dear friend.

## Introduction

The current study looked at the vocabulary acquisition in the sign modality of **bimodal-bilingual children** acquiring Israeli Sign Language (ISL) and Hebrew.

ISL is the major sign language of the Israeli Deaf community. It emerged in the 1930s and the language is now in its fourth generation.

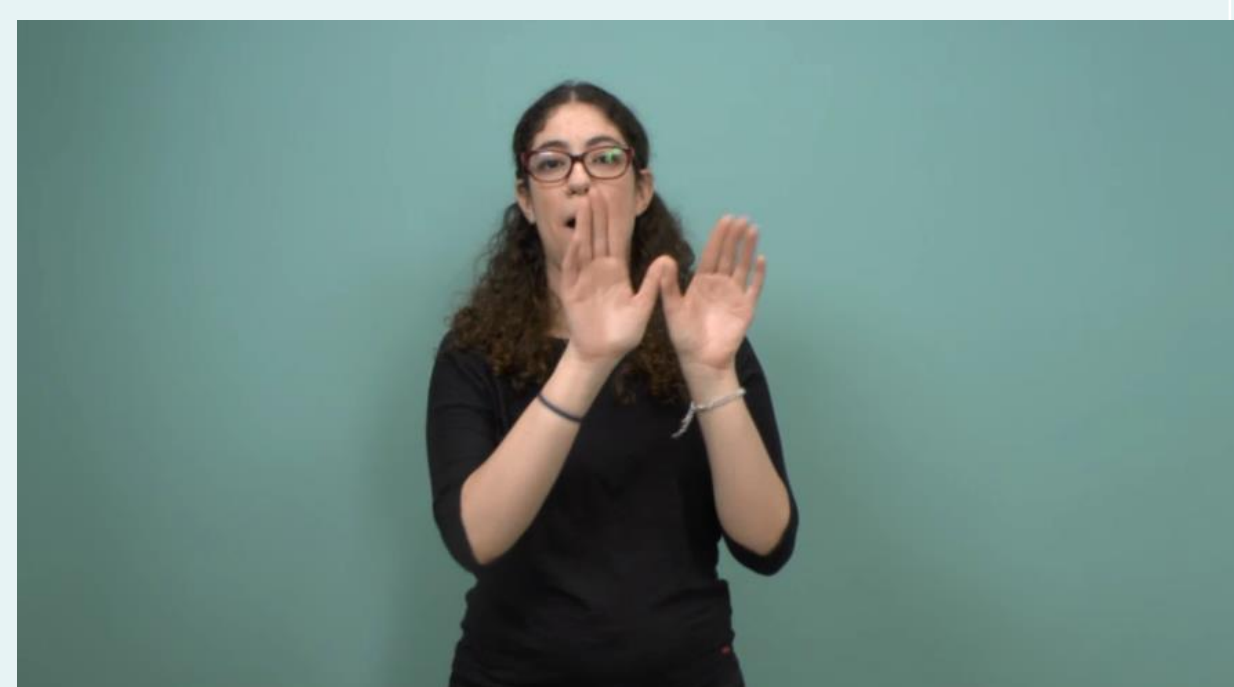
The study reported here is the first to address the acquisition of ISL.

## Materials

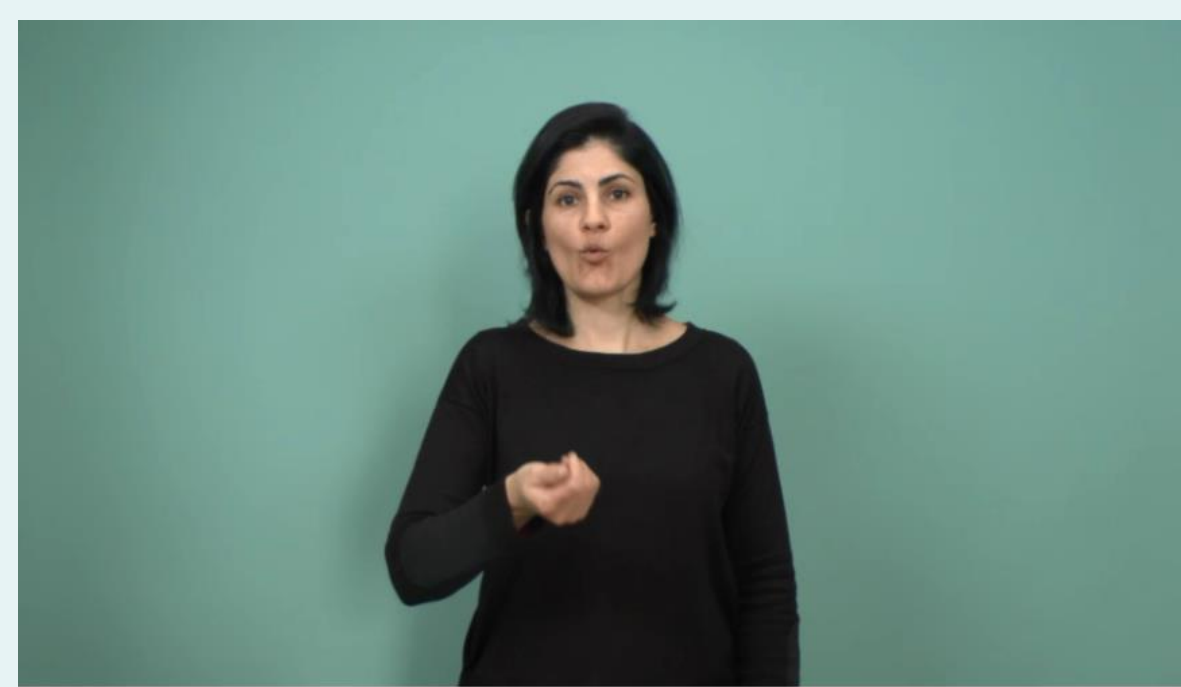
The **ISL-CDI** (Communicative Development Inventories) was adapted from the Hebrew-CDI (Gendler-Shalev & Dromi, 2017). It presents **563 videos** of lexical signs.

Based on the Hebrew-CDI, changes for modality and language specific properties were made.

[BUTTERFLY]



[DICE]



## Study 1: Iconicity Ratings

Thirty-nine sign-naive adults who speak Hebrew as their native language completed an iconicity-rating questionnaire.

The participants rated the iconicity of the signs, which were given to them with the Hebrew translation on a scale of 1-7 (1 - absolutely non-iconic and 7 - very iconic).

The signs with the highest iconicity rating were: [BYE-BYE], [TELEPHONE], [NO], [SLEEP], [CAMERA], [SMILE], [PUSH]. The signs that received the lowest iconicity rating were: [REFRIGERATOR], [LIVING-ROOM], [CHEESE].

The results showed that **56% of signs** (308 out of 554) in the ILS-CDI were rated as highly iconic, i.e. greater than a 4 on a 7-point scale.

## Study 2: Frequency Ratings

Twenty-two ISL native signers were asked to rate the frequency of signs on a scale of 1-7 (1 - very rare and 7 - very frequent).

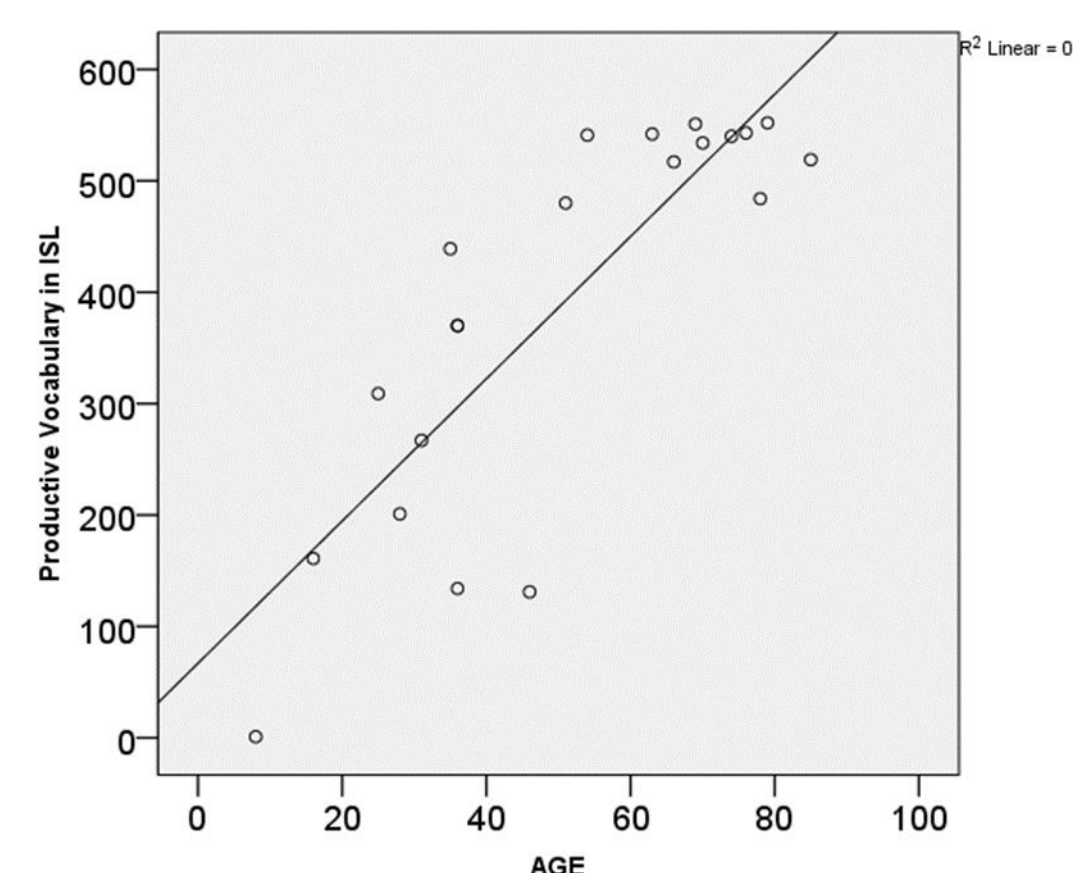
The signs that received the highest frequency ratings were: [DOG], [CAR], [STORY], [FOOD], [SHOES], [FATHER], [MOTHER].

The signs with the lowest ratings were [HIPPOPOTAMUS], [CHALK], [SQUIRREL], [RAISINS].

The results showed that **95% of signs** (538 out of 563) in the ILS-CDI were rated as highly frequent, i.e. greater than a 4 on a 7-point scale.

## Study 3: Acquisition of ISL

Twenty-one bilingual-bimodal children who acquire the ISL as their mother tongue and Hebrew as their second language participated in the study (Mean = 50.57 months, SD = 22, Min-Max: 8-85). Older children were included in the sample to validate the test. The results show production scores.



There was a strong correlation between productive vocabulary (ISL-CDI) and Age ( $r(21) = .837, p < .001$ ).

In younger children up to the age of 40 months, **Age** explains 12% of the variance, **Frequency** explains 5.8% of the variance, while **Iconicity** explains 0.7% of the variance.

## Conclusions

With age children learn more words.

The ISL-CDI is a valid language assessment tool.

Children are more likely to learn signs that are more frequent, and signs that are more iconic.

However, the road to vocabulary learning in sign languages is “not exclusively iconic” (see Caselli & Pyers, 2017)

This research was supported by ISF (grant 1068/16)

Contact Information: [ramanovo@gmail.com](mailto:ramanovo@gmail.com)