## **Italian Sign Language - LIS**

Pasquale Rinaldi
ISTC - Institute of Cognitive Sciences and Technologies
CNR - National Research Council
Via Nomentana, 56 - 00161 Rome ITALY
Tel. +39 06 4416 1518
Fax +39 06 4416 1513
pasquale.rinaldi@istc.cnr.it

Maria Cristina Caselli
ISTC - Institute of Cognitive Sciences and Technologies
CNR - National Research Council
Via Nomentana, 56 - 00161 Rome ITALY
Tel. +39 06 4416 1516
Fax +39 06 4416 1513
cristina.caselli@istc.cnr.it

The development of the MacArthur-Bates CDI in Italian Sign Language (LIS) started in 2015. As versions in other sign languages, only one version has been developed, for infants and toddlers. The age range covered is 8-36 months.

It is a web-based version freely available at <a href="www.volis.it/areatest">www.volis.it/areatest</a>. Users who want to use the instrument for research or clinicians purposes must be registered at <a href="www.volis.it">www.volis.it</a>.

As version in other sign languages, the LIS version is a compound of the Words and Gestures and Words and Sentences Forms. It is composed by 24 questions on Early Understanding; 634 lexical signs (comprehension and production), organized into 20 categories: Animals, Vehicles, Toys, Food and drink, Clothing, Small household items, Furniture and rooms, Outside things, Places to go, People, Games and routines, Verbs, Descriptive signs, Signs about time, Pronouns, Question signs, Locations, Quantifiers, Connecting signs, Verb inflections; one question on the use of fingerspelling and one question on the production of sentences. In order to follow the specific properties of LIS more closely, the checklist includes different signs for a same (glossed) word (for example, for the verb "to eat" more than one sign are proposed in the checklist because different specific signs could be produced in LIS depending on what a person is eating, a sandwich, pasta, cookies, ad so on). Furthermore, the category helping verbs (presents in the questionnaires for spoken languages) has been substituted with the category "verb inflections", in order to study the acquisition of the inflections of a particular class of verbs that changes the location of execution depending on the subject and the object of the sentence (for example to give, to tell, etc.).

Each lexical sign as well as each example of sentence and/or question is provided in videoclips in which LIS is used by an Italian deaf native signer. Also instructions to how fill in the questionnaire are provided in LIS. This is crucial to guarantee that deaf signing persons have complete access to the standardized procedure. Parents or educator are asked to recognize what the child produce and/or understand and tick the corresponding YES/NO button. Responses are automatically saved in a database and the final score of the child is automatically generated. A written version (in Italian) of the instructions is also provided.

Norms are not available, because very few data have yet been collected on acquisition of Italian Sign Language by deaf infants and toddlers exposed to this language since birth or early in life.

The web-based version derives from a preliminary printed version that included 538 items. In that version the signs were glossed in written language and parents were asked to fill in the questionnaire.

Currently we have collected data on 17 children (8 longitudinally, from 2 to 9 observations) for a total of 54 questionnaires filled in by parents of 12-38 months old children.

To date, an article with data collected through the printed form is in preparation.