

## CONFERENCE SECTION: Doctoral studies

### **Studies with screening and assessment instruments in communication and language in Portuguese children with and without language difficulties in inclusive contexts**

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**Introduction:** The acquisition of communication and language is fundamental for the child's overall development. Therefore, communication difficulties may negatively influence the child's development, namely at the behavioral, socio-emotional, and cognitive levels (Prelock & Hutchins, 2018). Given the high prevalence of Portuguese children with communication and language difficulties, as well as with difficulties in school learning (Castro et al., 2019), it is essential to identify as early as possible the cases at risk that may require intervention. Thus, this paper aims to present and analyze valid and accurate screening and assessment tools, and to recognize Portuguese children at early ages at risk of language difficulties and disorders.

**Material and Methods:** Two screening/assessment instruments for communication, language, and emerging literacy at early ages are being developed and validated for the Portuguese population in early age range. The Early Communication Indicator (ECI) – Portuguese version assesses communication in children aged 6 to 42 months by observing the child's interaction with a caregiver during a semi-structured play. The Preschool Early Literacy Screening Tool (*Rastreo de Literacia Emergente Pré-escolar*; RaLEPE) assesses the emergent literacy skills of children aged 3 to 6 years, through the perspectives of parents, caregivers, or professionals.

*Early Communication Indicator (ECI)- Portugal*

The ECI was originally developed in the USA by the Juniper Gardens Children's Project team of researchers and experts in special education, child development, and early intervention. The ECI assesses and monitors the development of expressive communication in infants and toddlers between 6 and 42 months of age (Greenwood et al., 2010, 2020). Each assessment session with the ECI lasts 6 minutes, and involves the observation of a semi-structured play between the child and a caregiver. The session should take place in a convenient, comfortable space with few distractions. The play is centered on either the @Fisher-Price's farm or house, which should be used alternately in each session to promote play and encourage the child's communicative behavior. The adult caregiver (familiar to the child), should interact with the child during play, and encourage the child's communication by commenting on and describing what the child does, and following his/her guidance in a friendly and responsive manner. The session should be videotaped, and then an evaluator certified in the administration of the ECI should record the child's communicative behaviors on a recording form. In each session, the following communicative key skill elements used by the child during play should be recorded and counted: gestures, vocalizations, single words, and multiple words. After the register, the frequency of all the communicative key skill elements should be summed, weighted (e.g., gestures and vocalizations multiplied by one, single words multiplied by two, multiple words multiplied by three), and divided by the number of minutes of observation (i.e., typically 6 minutes) to form a weighted total communication rate of the child's expressive communication (Total Communication). The Total Communication will allow us to understand the child's expressive communicative level (Carta et al., 2010).

*The Preschool Early Literacy Screening Tool (Rastreo de Literacia Emergente Pré-escolar; RaLEPE)*

Screening for early literacy skills can be a way to quickly and easily identify children at risk or in need of specialized assessment and/or support. Given the scarcity of validated and/or measured instruments for European Portuguese-speaking preschool children that examine these issues, the Preschool Early Literacy Screening Tool (RaLEPE) was constructed, validated, and measured (Sapage & Cruz-Santos, 2021). The process of constructing the instrument began with a literature review of the construct, early literacy, and according to the population, preschool children. The literature review and the survey of the most relevant areas and skills in this subject and at these ages led to the construction of a preliminary version of RaLEPE. This initial version included five of the most significant domains and predictors of

future learning of reading and writing, namely oral language (comprehension and production), metalanguage, letter skills, and book skills.

**Results:** With regard to the adaptation of the ECI for Portugal, we followed: the guidelines for translation and adaptation of instruments from the International Test Commission (ITC, 2017); the procedures identified by Carter (2005), for the development of intercultural speech and language assessment instruments, for children; and the procedures indicated by Almeida and Freire (2017) for instrument gauging. In this sense, the following procedures have already been carried out: a) request for authorization, translation and adaptation of the ECI, to the respective authors; b) training and certification on the ECI, provided by the Juniper Gardens Children's Project team; c) translation of all documents associated with ECI into European Portuguese by specialists in the field of special education and early childhood education; d) application of the "thinking aloud" method, to check instructions, response formats, set-up, materials used, duration, etc.; e) pilot study; f) reliability (in the interobserver agreement were obtained intraclass correlation coefficients between .964 and .998), and validity (differences were found between age groups and between children with and without communication disorders).

In relation to the RaLEPE, the instrument's accuracy was analyzed through the assessment of internal consistency. The total Cronbach's alpha of the instrument was .97, showing a good internal consistency, similarly to other existing instruments in languages such as English and Spanish (Invernizzi et al., 2004; Lonigan et al., 2007). All domains showed high internal consistency with Cronbach's alpha between .84 and .94. When the domains were analyzed by age groups, a good accuracy was also found.

**Discussion and conclusions:** This paper had the aim to present and analyze two instruments for identifying Portuguese children at risk of difficulties in language and communication. Early childhood screening and assessment tools are important contributions for the early detection of communication, language and emerging literacy difficulties. Although the ECI-Portugal and RaLEPE benchmarking processes are still ongoing, the results of the work carried out so far demonstrate the future potential of these instruments to identify Portuguese children at an early age at risk of developing communication, language and learning difficulties. The validation of these instruments contributes to minimizing the financial and social repercussions for

Portuguese schools, families and children, and contributes to an effective inclusion of children in early ages.

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