

Can You Understand Your Child? Reliability and Validity of a Parent Questionnaire: The Intelligibility in Context Scale: Italian

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Keywords

Functional intelligibility · Intelligibility in Context Scale · Speech sound disorders · Reliability · Validity

Abstract

Introduction: The Intelligibility in Context Scale (ICS) is a parent-report scale by which parents can rate their child's functional speech intelligibility according to seven different communicative partners. Translations, linguistic adaptations, and psychometric and norming data for ICS have been achieved in different languages. **Objective:** To evaluate the psychometric properties of the Italian version of the ICS (ICS-I) in terms of internal consistency, test-retest reliability, criterion validity (correlation with speech measures), and construct validity, and to investigate potential differences between mothers' and fathers' subjective ratings in ICS-I. **Methods:** Italian-speaking children aged 3.0–5.11 years ($n = 364$), without major developmental impairment, were recruited in kindergartens. All children were independently rated by their mothers (ICS-I_m) and fathers (ICS-I_f). A subsample of parents ($n = 127$) rated ICS-I twice after 3 weeks (test-retest reliability). Children were administered a naming and a word repetition task, by which speech measures were calculated: percentage of phonemes correct (PPC), percentage of consonants correct (PCC), and percentage of vowels correct (PVC). **Results:** High internal consistency ($\alpha = 0.92$) and

good test-retest reliability ($r_s = 0.78$) were found. A high ($r > 0.67$) correlation between the ICS-I total scores and single-item scores was found (construct validity), except for *parental* perception in ICS-I_m and ICS-I_f. Moderate correlations ($r_s > 0.38$) between the ICS-I and the PPC and PCC tasks suggested adequate criterion validity. Mothers' and fathers' ratings showed an appropriate agreement in the items *acquaintances* and *teachers*, but overall parent ratings were significantly different, with higher mean scores in ICS-I_m (median = 4.57) than in ICS-I_f (median = 4.46), $Z = -2.852, p < 0.01$. **Conclusions:** As for other previous international studies, ICS-I presents good psychometric properties, but some differences in mothers' and fathers' scores suggest a potential parental influence in rating a child's intelligibility. Findings support cross-linguistic research, and further investigation could promote the application of ICS-I as an outcome measure in children with speech sound disorders.

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Introduction

Intelligibility as a Functional Speech Outcome Measure

Speech intelligibility is a relevant variable in oral communication. A growing number of authors [1–3] agree with Weismer [4] in considering speech intelligibility as