

2-15. Communicative development of Portuguese infants aged between 8 and 15 months

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In the last decades research has shown the importance of oral language development, not only as a facilitator of learning, but also as fundamental to social integration (Locke, Ginsborg, & Peers, 2002; Neaum, 2012). Some authors point out the importance of developmental relationship between gestures and oral language referring that the production of first words is preceded by the use of gestures, especially deictic ones, and that in children's early communicative repertoires, gestures and words coexist, forming an integrated system (Bavin et al., 2008; Caselli, Rinaldi, Stefanini, & Volterra, 2012; Olson & Masur, 2015; Sansavini et al., 2010). Early assessment of the communicative development allows the detection of difficulties or problems that children present in this area, leading to an effective intervention and to better clinical and educational practices (Mariscal et al., 2007; Westerlund, Berglund, & Eriksson, 2006). Studies on the communicative development of Portuguese children under 1;5 are scarce. One of the most used parent report instrument is the MacArthur-Bates Communicative Development Inventories (CDI). These inventories are an assessment tool of communication and language development for children from ages 8 through 30 months based on information given by parents (Fenson et al., 2007). In this paper, we present the results from a large-scale study on infants' (aged 8 to 15 months) gesture and language acquisition in European Portuguese, using the Portuguese version of the CDI: Words and Gestures. The main goals of this study were: (a) to assess the existence of age and gender effects on phrases understood, on word comprehension, on word production and on total gestures; (b) to evaluate the relationship between phrases the four dimensions, inclusively after controlling for age and gender effects.

Method

Infants' gestures and language competences were assessed using the European Portuguese CDI: WG, which was filled by their parents. The parents' reports of 1314 children, aged between 8 and 15 months, were collected.

Results

As expected, results indicate that words comprehension, words production and the use of gestures increase with age. A main effect of gender was found for total gestures, with girls obtaining higher scores than boys. No differences between girls and boys were obtained for word comprehension, word production and phrases understood. All lexical and gesture measures are positively correlated, even after controlling for age and gender effects.

Discussion

The results indicate the existence of a clear age effect in all four dimensions. The number of phrases understood, word comprehension, word production and total gestures increases with age. The results of Portuguese children are similar to those observed in many other languages (Bleses et al., 2008; Fenson et al., 2007; López-Ornat et al., 2005; Pereira & Soto, 2003; Simonsen et al., 2014). A gender effect was only found in the gestures subscale, with girls having higher results than boys. In the other dimensions a gender effect was not established. These findings are consistent with the results of other CDI versions (Bleses et al., 2008; Fenson et al., 2007; Sansavini et al., 2010; Simonsen et al., 2014), although, and contrary to our study, in all these CDI versions a gender effect was found in other subscales too. The correlations between all subscales are moderate to high. Our results confirm the findings of other studies (Bavin et al., 2008; Caselli et al., 2012; Fenson et al., 1994, 2007), showing that total gestures are more closely associated with vocabulary comprehension than

with vocabulary production and suggesting that CDI gestures measures are good predictors of vocabulary development, but foretell better vocabulary comprehension than vocabulary production.

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