

Different linguistic and socio-cognitive predictors of pragmatics across modalities in 5-6-year-olds

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Abstract

Recently, the interest in individual differences in pragmatic abilities and their relationship with other linguistic and socio-cognitive skills has increased [1, 2]. Previous studies confirmed the link between pragmatics and structural language [3-4], but the findings on the association between pragmatics and mentalization are mixed [3-7]. Existing research mainly focused on receptive pragmatics and rarely undertook a longitudinal approach (but see [8]). This study investigates the relationship between on the one hand pragmatics – both expressive and receptive – and on the other hand language and mentalization, focusing on early school-aged children and controlling for baseline expressive pragmatic variability.

A total of 69 typically developing Catalan-Spanish bilingual children participated in the study (39F; age $M_{age;months} = 6;5 \pm 0;3$, $M_{age;months}$ baseline = $3;9 \pm 0;3$). We assessed their expressive (speech act production, APT [9]) and receptive (metaphor comprehension) pragmatic abilities (the multiple-choice PMM [10] adapted to Catalan). We also measured linguistic skills including the expressive and receptive structural language (CELF-P [11]) and ToM skills, tasks including 1st and 2nd order FB, emotion understanding and emotion understanding based on FB [12-15], as well as nonverbal intelligence (K-BIT-2 [16]). Moreover, a baseline expressive pragmatic score from two years before was available.

We ran separate stepwise regressions for expressive and receptive pragmatic scores. First, linguistic, ToM and receptive pragmatic scores, including expressive pragmatics at baseline, were entered as predictors of expressive pragmatics. Expressive structural language ($p < .05$) and emotion understanding ($p < .01$) were significant predictors. Second, all language and ToM measures, expressive pragmatics scores, including the one at baseline were used as predictors of receptive pragmatics. Expressive pragmatics at baseline, receptive language and 1st order FB were significant predictors ($ps < 0.5$).

The novelty of these results consists in testing different modalities of the pragmatic competence, revealing distinct patterns for expressive and receptive pragmatics. Language played a significant role, with expressive structural language predicting expressive pragmatics and receptive structural language predicting receptive pragmatics. Mentalization also exerted a specific role in both pragmatic domains, but with a nice division of labor: emotional aspects of mentalization predicted expressive pragmatics, while cognitive aspects predicted receptive pragmatics.