



PRAGMATIC SKILLS IN GREEK CHILDREN WITH ADHD

Pragmatics

- The term pragmatics comprises the use of language to convey meaning, which presupposes a broad array of social skills (Bates et al., 1979; Adams, 2002).
- Pragmatic skills include topic maintenance, turn taking, narration and comprehension of figurative language. Pragmatics about on the ability to understand others' minds as well as to select the appropriate linguistic forms in order to express the meanings demanded by the communicative context (Adams, 2002; Prutting, 1982; Speckman, 1984).

Attention Deficit /Hyperactivity Disorder (ADHD)

- Attention Deficit/Hyperactivity Disorder (ADHD) is one of the most common neurobiological disorders which affects 3% to 5 % of the school aged population. Individuals exhibit relatively high levels of inattention and/or hyperactivity and impulsivity that are inappropriate for their age (APA, 1994).
- Up to half of the children with ADHD will continue to display symptoms into adulthood (Manuzza, Klein, Bonagura et al., 1991).
- ADHD is the most frequently reported psychiatric diagnosis for children with language disorders (Beitchman et al., 1986, 1989; Biederman et al., 1991; Tirosh & Cohen, 1998; Westby & Culter, 1994).

Pragmatic impairments

- Pragmatic impairments involve difficulties in comprehension and use of language in context, rather than problems with semantic or structural aspects of language.
- Pragmatic impairments at the level of comprehension include a tendency to interpret figurative language literally. On the other hand difficulties at the level of use include poor turn taking as well as deficiencies in topic maintenance, expression of communicative intent and discourse management (Bingell & Cain, 2007. Landa 2005).

ADHD and Pragmatics

- It has been shown that children with ADHD have pragmatic difficulties (Bishop & Baird, 2001).
- They produce more inappropriate pragmatic behaviours in unstructured spontaneous conversations with adults than do typically developing children (Kim & Kaiser, 2000).
- Also, children with ADHD have been found to fail in taking a listener's perspective into account when retelling a story (Purvis & Tannock, 1997).

Aim of the study

This study aims to examine conversational and narrative skills in a clinical sample of inattentive/ hyperactive children age 6-11 years.

Method

Participants

2 groups of Greek school children diagnosed as ADHD, attending an individual intervention program of cognitive-behavioral approach at the Psychological Center of Developmental and Learning Disabilities "ARSI", which is a private facility, located in Athens.

- Group 1 attended an intervention program for less than 3 months (mean age= 8.6 years, sd=17.9).
- Group 2 attended an intervention program of similar kind for more than 3 months (mean age=8.4 years, sd=18.4).

The two groups were matched for age, verbal and non-verbal IQ.

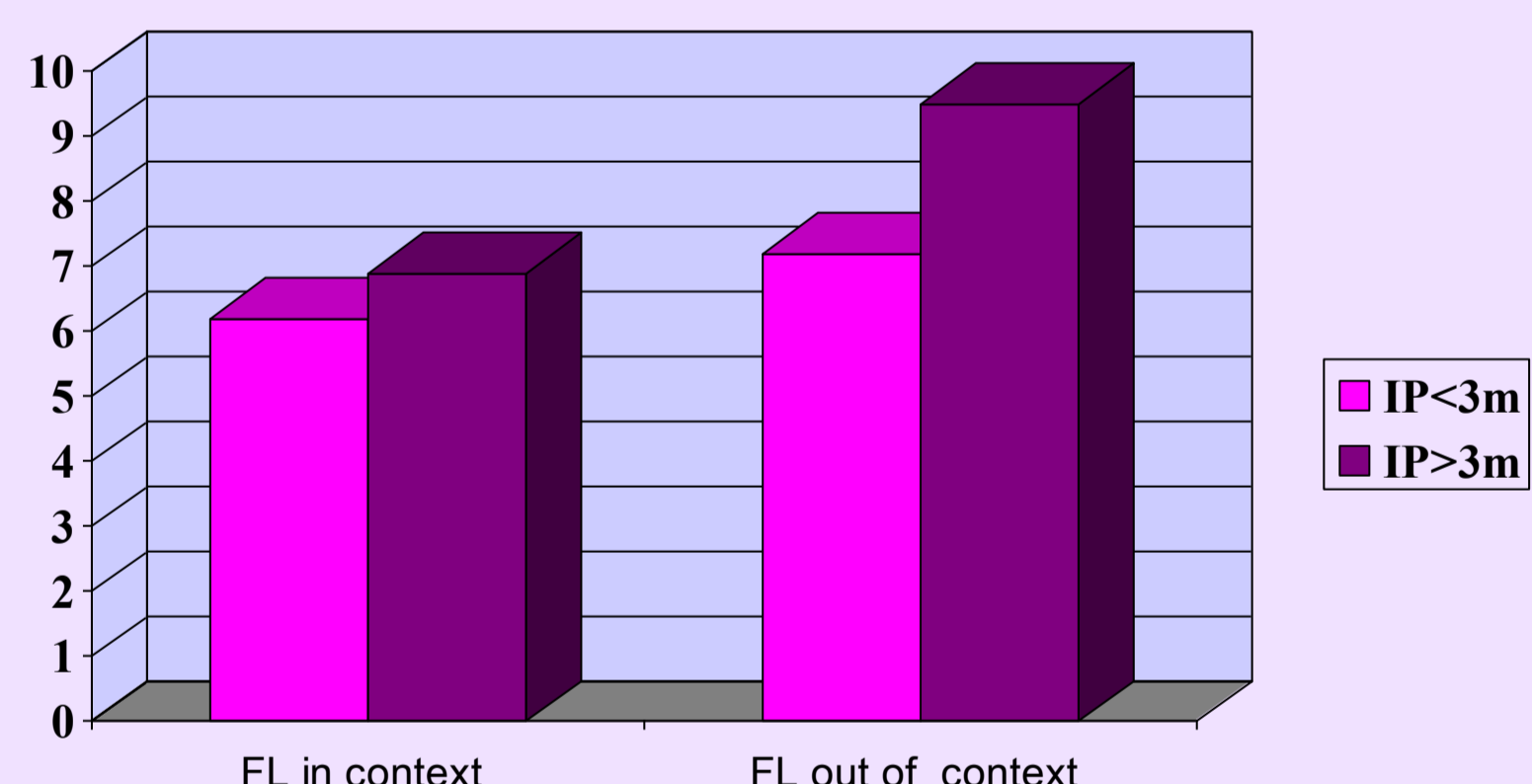
Measures

- Child Behavior Check List (CBCL 6-18years) (Achenbach, 1991) is a parent-report measure assessing common maladaptive behaviours in childhood.
- ADHD Rating Scale (DuPaul, Power, Anastopoulos & Reid, 1998).
- Verbal IQ Test (Stavrakaki & Tsimpli, 1999) which assesses comprehension and production in vocabulary, syntax and morphology.
- WISC-III Test: which assesses verbal and nonverbal mental abilities
- A questionnaire designed by the authors to assess pragmatic skills with a focus on children's understanding of figurative language with and without supporting context.

Data collection

Children were assessed during three sequential therapeutic sessions.

Results



- Group 1 (intervention program <3months) obtained significantly lower scores in figurative language (FL) out of context, compared to Group 2 (intervention program >3months) (p=.04). However, there were no differences in performance between the two groups in figurative language (FL) in context (p>.05).

| | FL out of context | Total score in DuPaul |
|-------------------|-------------------|-----------------------|
| FL in context | | |
| Group 1 | .410 | -.907*** |
| Group 2 | .913*** | .257 |
| FL out of context | | |
| Group 1 | — | -.942*** |
| Group 2 | — | .100 |

- In Group 1 the total DuPaul score is significantly negatively correlated with FL in context and FL out of context. This correlation was not obtained for Group 2.

Discussion

- The present study demonstrated that ADHD may affect children's ability to understand figurative language out of context. However, an appropriate intervention program may help children to improve this capacity.
- These findings support Cohen's (Cohen et al., 1998) view that language difficulties experienced by children with ADHD may lead to social difficulties.
- Further exploration of pragmatic skills in ADHD may lead to the design of more effective intervention programs (Baird, Stevenson & Williams, 2000; Camarata & Gibson, 1999; Kim & Kaiser, 2000; Oram et al., 1999; Westby & Cutler, 1994).

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