



# Early Precursors of Attention Deficit/ Hyperactivity Disorder (AD/HD): speech problems during the preschool period

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## Introduction

### A. Early Identification of ADHD:

ADHD is typically diagnosed during early elementary school.

#### However

Onset of ADHD behaviors is usually noted during the preschool years. (APA,1994)

### B. Difficulties in diagnosing ADHD in preschoolers:

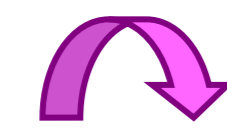
- » Behaviors resembling the primary symptoms of ADHD are normally expected at preschool age.
- » In various cultures parents may not perceive ADHD symptoms as problematic.
- » Therefore, they may not refer their child to the specialist.
- » Few assessment instruments are designed and validated for preschoolers. (Gimpel & Kuhn, Perrin, 2000)

### C. ADHD and Speech/Language Problems:

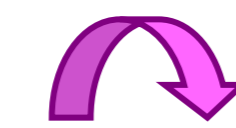
A strong link between ADHD and speech/language problems is widely documented mainly in clinical samples (Gadow et al., 2001).

## Aim of the study

To investigate whether parents perceive an association between ADHD and speech/language problems in preschool children.



The involvement of parents in the monitoring of their children's health and development is increasingly recommended (Hall, 1996).



## Method

### Participants

- 174 Greek children
- 85 boys & 89 girls
- Age: 3-5 years

### Instruments

- "Strengths and Difficulties Questionnaire" (SDQ) (Goodman, 1997)
- A questionnaire constructed to explore parents' evaluation of their child's language development

## Results

### ADHD

27 (15.52%) children  
18 boys and 9 girls showed symptoms of ADHD i.e. restlessness, fidgeting, inattentiveness, or impulsivity.

### ADHD and Speech/Language Problems

According to parents, ADHD was associated with difficulties in language comprehension, articulation, and vocabulary but not syntax (Table 1.) Nevertheless, speech/language problems were not perceived to be associated with social or emotional problems (Table 1)

Table 1: Correlations between parents' ratings on the SDQ and the questionnaire on language development

Aspects of Language	ADHD	EP, PP, PB	NOP
GLD	-.160*	.090	-.025
Comprehension	-.256***	-.025	.029
Articulation	-.178*	-.061	-.141
Vocabulary	-.203**	.082	-.017
Syntax	-.031	.172	.024

Note: ADHD=Attention Deficit / Hyperactivity Disorder; EP=Emotional Problems; GLD=General Language Development; NOP=No Observed Problem; PB=Prosocial Behavior; PP=Peer Problems \*p<.05, \*\* p<.01, \*\*\* p<.001

Parents of children with ADHD seem to be more worried about their children's language development compared to parents of children with social or emotional problems or no observed problem. (Table 2)

Table 2: Parents' worries about their child's language development in the three groups

	ADHD		EP, PP, PB		NOP		TOTAL
	f	%	f	%	f	%	
No worried	19	69.2	45	83.4	86	92.5	150
Worried	8	30.8	9	16.6	7	7.5	24
TOTAL	27	100	54	100	93	100	174

Note: ADHD=Attention Deficit / Hyperactivity Disorder; EP=Emotional Problems; GLD=General Language Development; NOP=No Observed Problem; PB=Prosocial Behavior; PP=Peer Problems

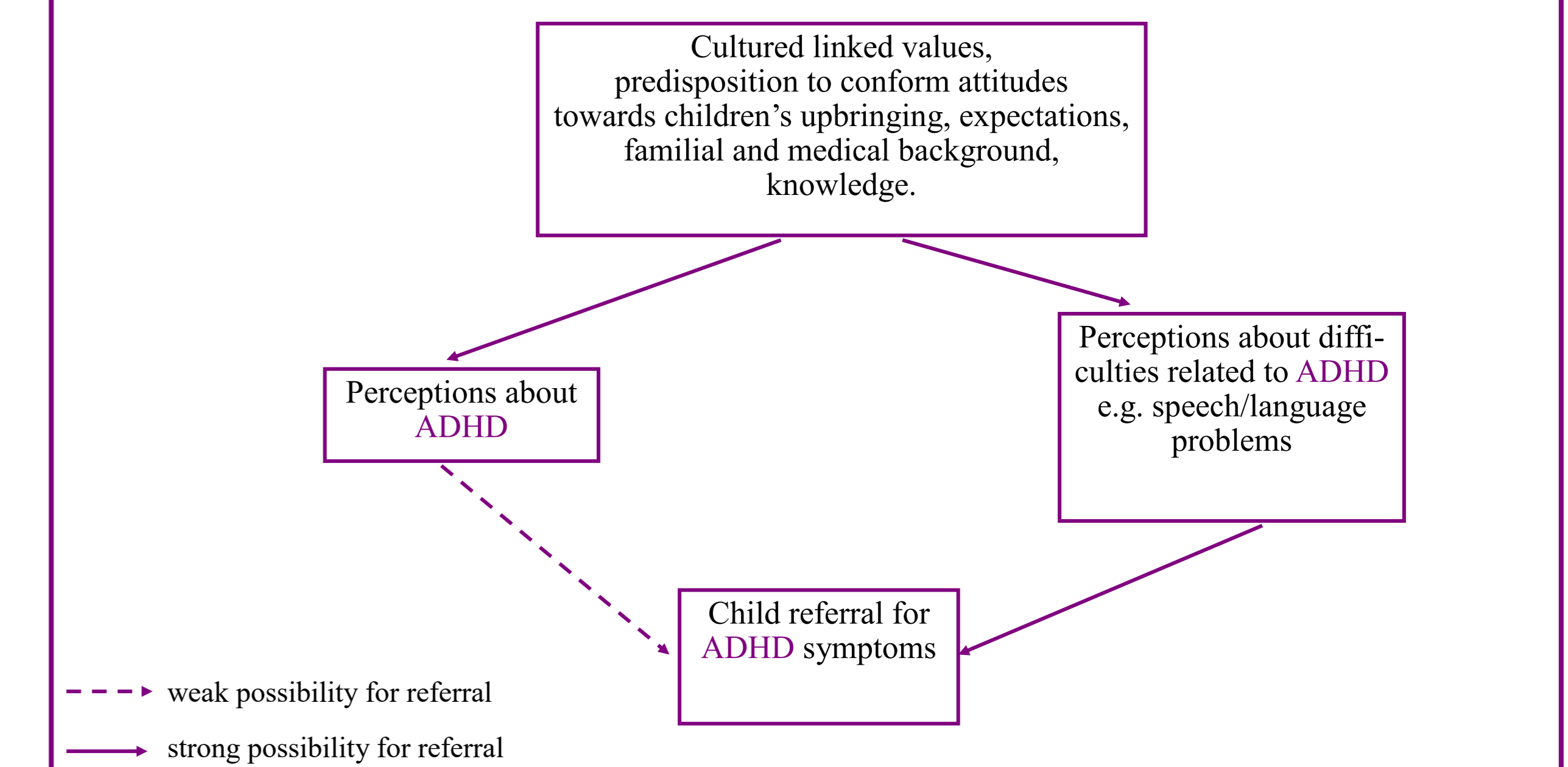
## Discussion

- » Parents perceive a strong association between ADHD and speech/language problems.
- » Parents do not usually refer their preschool child to a specialist for symptoms of ADHD because:
  - (a) They may not consider them as a problem.
  - (b) They believe that the child will overcome the difficulties.
- » Parental perceptions of ADHD are usually inaccurate. (Gimpel & Kuhn, 2000; Hutchison et al., 2001; Mulhern, Dworkin, & Bernstein, 1994)

### In contrast

- » Parents are very sensitive in their child's language development.
- » Parents may accurately identify speech /language problems from the age of 2 years. (Rescorla, 1989; Dale, Bates, Reznick, & Morisset, 1989) (Figure 1)

Figure 1: Factors affecting child referral to a specialist for ADHD symptoms



## Conclusion-Implications for practice

Parents' perceptions of even minor speech/language problems during the preschool period may lead to

- early child referral to a specialist
- early identification and treatment of ADHD
- prevention of secondary difficulties in social and academic functioning.

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