

**Pragmatic Deficit**

ανάπτυξη έρευνας και εκπαίδευσης λογοθεραπείας

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**Pragmatic deficit characteristics**

- Idiosyncratic style
- Persistence
- Lack of kindness
- Lack of empathy
- Lack of social knowledge
- Distrust
- Aggressiveness
- Torque in teasing
- Shyness
- Dependence

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**Pragmatics deficit causes**

- Autism
- Language Impairments
- Learning Difficulties
- Right hemisphere stroke
- Institutionalization
- Low social – economic status
- Personality Disorders

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### Pragmatic Deficit Severity

- Severe (autism, psychosis)
- Moderate (Language Impairments, Cognitive Difficulties, Right hemisphere stroke etc.)
- Mild (between us)

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### Communication Dance (Banathy 1992)

- Hearing of music/ Intention
- Steps/ Verbal and Non Verbal abilities
- Holding/ Adaptive behaviors
- Dancing floor/ Context of Communication

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### Hearing of music/ Intention

- Lack of interest for others
- Lack of Joint attention
- Lack of intention for expression of feelings
- Lack of understanding of intention of others

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### Steps/ Verbal and Non Verbal abilities

- Language development (vocabulary, morpho - syntactic abilities)
- Non verbal abilities (eye contact, facial expressions, turn taking)
- Conversation abilities
- Narrative abilities
- Idioms understanding, humor, metaphors
- Meta linguistic abilities

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### Holding/ Adaptive behaviors

- Difficulties in social interaction due to adaptive difficulties may be faced up in people with:

Stuttering

Articulation disorders

Phonological disorder

Language Impairments

Hearing impairments

Visual impairments

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### Dancing floor/ Context of Communication

- Non appropriate behaviors in the school place
- Non appropriate behaviors in public places
- Lack of understanding the rules of social interaction
- Lack of understanding the code for interaction in different places with different peoples
- AUTISM

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### Social Communication Disorder (SCD)

- an impairment of pragmatics and is diagnosed based on difficulty in the social uses of verbal and nonverbal communication in naturalistic contexts, which affects the development of social relationships and discourse comprehension and cannot be explained by low abilities in the domains of word structure and grammar or general cognitive ability.

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- B. The low social communication abilities result in functional limitations in effective communication, social participation, academic achievement, or occupational performance, alone or in any combination.
- C. Rule out **Autism Spectrum Disorder (ASD)**. Autism Spectrum Disorder by definition encompasses pragmatic communication problems, but also includes restricted, repetitive patterns of behavior, interests or activities as part of the autism spectrum. Therefore, ASD needs to be ruled out for SCD to be diagnosed.
- D. Symptoms must be present in early childhood (but may not become fully manifest until social demands exceed limited capacities).

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The new DSM-5 category requires persistent difficulties in verbal and nonverbal communication in social settings, manifested by all of the following

- There are deficits in social communication, such as greeting or sharing information in an appropriate manner.
- There is difficulty with changing communication to match the listener (e.g., an adult versus a child) or the context (e.g., classroom versus playground).
- Stereotypic or formal language may be inappropriately used for informal conversation.
- There is difficulty with the rules governing conversation, such as speaking in turn, repeating information if not clearly understood, and regulating conversation in response to verbal and nonverbal information from others.

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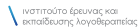
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- Inference of what is not explicitly stated may not be made, or language with ambiguous meaning may not be correctly interpreted, such as metaphors or jests.
- These problems must cause functional limitations in effective communication, social participation, relationships and academic or occupational performance, either individually or in combination.
- The symptoms must begin in the early developmental period, when language is usually acquired, and must not be better accounted for by another mental disorder or a general medical or neurological condition.
- In particular, cognitive impairment causing low abilities in the domains of word structure and grammar cannot be the cause, and developmental delay, intellectual disability and autism spectrum disorder must be excluded.

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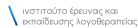
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### Aims of the study

- Collection of data related to pragmatic abilities of children with autism and mild learning difficulties (mental retardation).
- Comparison of pragmatic abilities of children with ASD with children with Down syndrome and mild learning difficulties (mental retardation) and also with children with typical development
- Collection of data related to typical development of Greek children
- Examination of the nature of pragmatic abilities in children with ASD

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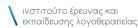
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### Participants

- 12 boys with autism
- 12 boys with Down syndrome
- 22 boys with typical development

Prerequisites:  
Their native language was Greek  
The autism and Down syndrome subjects had mild learning difficulties

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### Diagnostic tools

- Criteria of DSM-IV for diagnosis of ASD (APA 1994)
- Revised-Autism Diagnostic Interview (ADI-R) (Le-Couter, Rutter, Lord 1995)
- Childhood Autism Rating Scale (CARS) (Schopler, Reichler, Renner 1972)
- WISC-R (Wechler 1974)
- Pragmatics Profile of Early Communication Skills (Dewart & Summers 1988).
- Test of Receptive and Expressive Language Abilities (Vogindroukas, Grigoriadou 2009)

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### PPECS

- Is an informal interview with parents concentrated on four main areas of pragmatics,
  1. Communicative intention
  2. Response to communication
  3. Participation in social interaction
  4. Communication context

There are 33 questions which exam 43 pragmatic abilities, the questions are amplified by examples to stimulate discussion.

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### Ages of the participants

	Age in months
TD	66
ASD	84
DS	96

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### IQ results of ASD group and Down Syndrome group

ASD	IQ	DS	IQ
1.α	60	1.αv	65
2.α	61	2.αv	55
3.α	59	3.αv	69
4.α	55	4.αv	57
5.α	57	5.αv	60
6.α	65	6.αv	61
7.α	69	7.αv	66
8.α	65	8.αv	67
9.α	67	9.αv	59
10.α	56	10.αv	66
11.α	69	11.αv	68
12.α	55	12.αv	58

t:1,717, t: 0,525, df: 22, -0,525<1,717,p<0,05  
No significant differences

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### Verbal abilities results of ASD and Down syndrome group

	Verbal Abilities	SD
ASD	5,16	0,78
Down syndrome	4,49	0,679

t : 1,17, df: 22, p<0,05  
No significant differences

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### Verbal abilities results of ASD and Typical Development group

	Verbal Abilities	SD
ASD	5,16	0,78
TD	4,49	1,049

t = 1,17 df: 32 p < 0,05  
No significant differences

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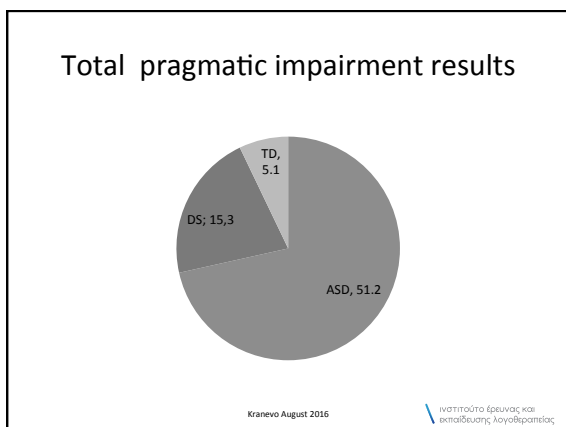
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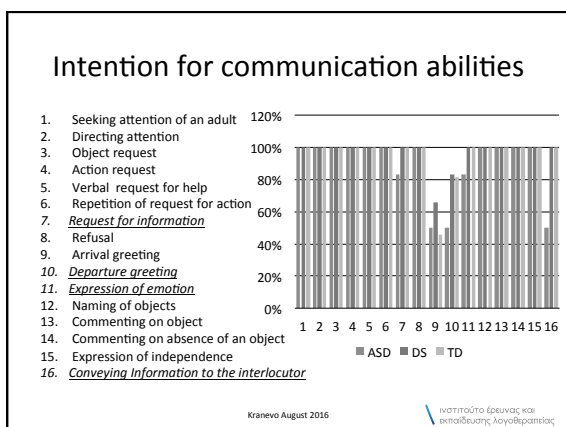
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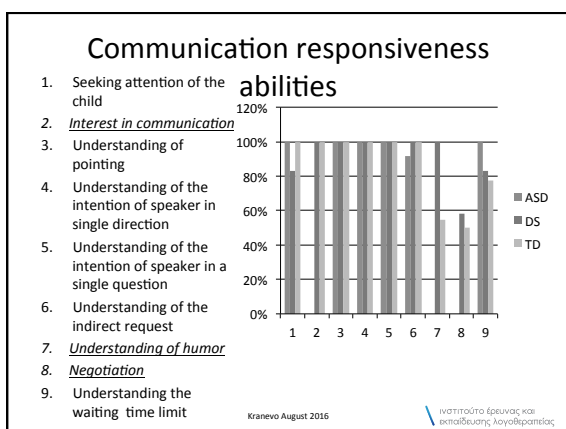
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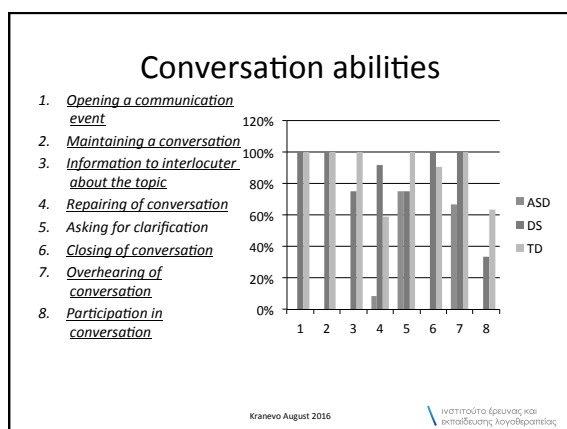
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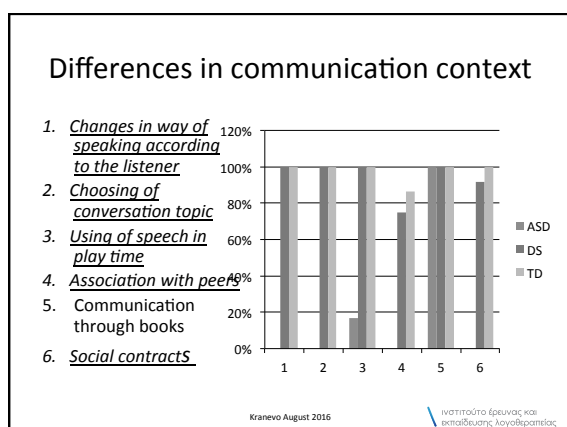
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- ### Down Syndrome difficulties
- Association with peers
  - Participation in conversation
  - Information to the interlocuter about the topic of conversation
  - Asking for clarification
  - Negotiation
  - Arrival greeting
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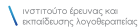
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### Typical development (66m) difficulties

- Arrival greeting
- Negotiation

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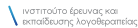
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### Conclusions I

- Pragmatic abilities are impaired in ASD
- Pragmatic abilities in ASD influenced by the nature of the autistic disorder and not by the low IQ
- Down syndrome also has pragmatic difficulties probably caused by low IQ
- Greek children aged 66m present some pragmatic difficulties caused by their age level

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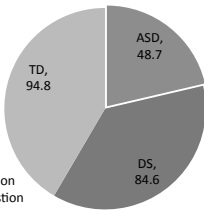
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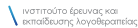
### Conclusion II

- But children with autism show a significant number of pragmatic abilities. They are able to:

- Seek attention of an adult
- Direct attention
- Request Object
- Request Action
- Request for help verbally
- Name objects
- Comment on object
- Comment on absence of an object
- Express independence
- Understand pointing
- Understand the intention of speaker in single direction
- Understand the intention of speaker in a single question
- Understand indirect requests



Group	Percentage
TD	94.8
ASD	48.7
DS	84.6

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• This finding is in agreement with findings from other research which conclude that the statement that children with autism are presented as non communicative is not valid (Cantwell & Baker 1987, Wetherby 1986)

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### Conclusion III

• The pragmatics abilities in children with ASD mostly relate to helping their needs and not to social communication needs

• Also the qualitative analysis of the results shows some differences between the three groups of participants which relate to the way of using these abilities

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### Examples

• **Asking for help:** they ask for help in the same way in all situations and without conveying more information about the reason which leads them to ask for help

• **Refusing:** they don't always refuse by using the appropriate phrases, but mostly by pushing away the object or by going away from the place

• **Expression of independence:** most of the participants use phrases which are different from the control groups phrases. The control groups participants use phrases such as "alone", "I can do this myself" .... Children with ASD give directions to the adults in order to do something alone such as "go away" "leave me"...

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### Last thoughts

- Regarding the nature of the pragmatic difficulties in children with ASD we conclude that these are observed as much in verbal communication as in non verbal
- According to our knowledge of autism perhaps we can use the term “pre verbal pragmatics” in order to understand better the nature of pragmatic difficulties in autism and also the concept of spectrum

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