

Autism: New Perspectives



ISTITUTO DI ORTOFONOLOGIA

Haifa, 11-12 September 2012

Diagnostic Profile: The ADOS (Autism Diagnostic Observation Schedule – administered every 2 years)

4 modules
administration from 30 to 45
minutes

Communication, social interaction, play,
stereotyped behavior

Autism Spectrum
(mild or moderate
symptomatology)

Autism
(severe symptomatology)



ADOS Activities- Module I

(administered to the 95% of children)

Free Play

Response to name

Response to joint attention

Bubble Play

Anticipation of a routine with objects

Anticipation of a social routine

Functional and Symbolic Imitation

Birthday Party

Snack



Diagnostic Profile: The ADOS (Autism Diagnostic Observation Schedule – administered every 2 years)

The higher the score is the more severe symptoms appear

Cutoff for th Autism
Spectrum Disorder

Score 7

Cutoff for autism

Score 12



Therapeutic efficacy of Turtle Project

Sample: 79 children (56 males, 23 females) aged between 2 and 17 years, the most of them with severe symptoms (76%) who've already received at least 2 administrations of the ADOS.



I target

Verify the efficacy of therapeutic intervention in terms of autistic symptomatology improvement



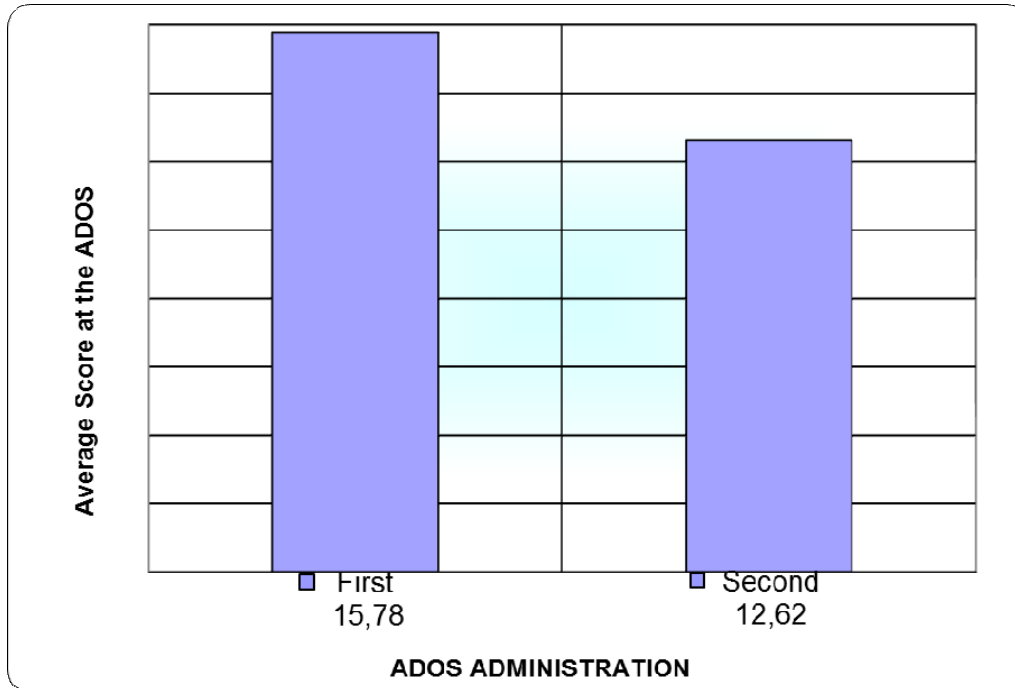
II target

Verify whether any possible improvements allow to get out from autism



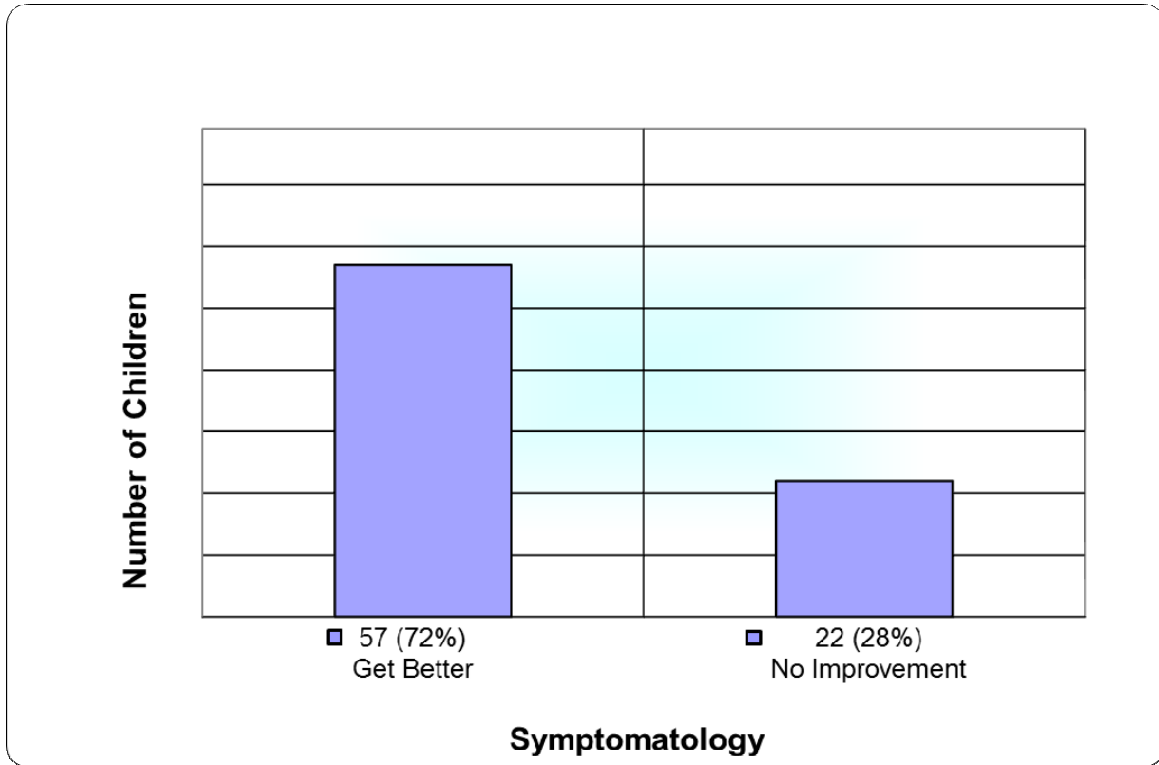
RESULTS: First Target

In the last administration the ADOS score is significantly lower (less severe symptomatology) than the one obtained at the beginning of the therapeutic process (M = 12.62 vs. M = 15.78).



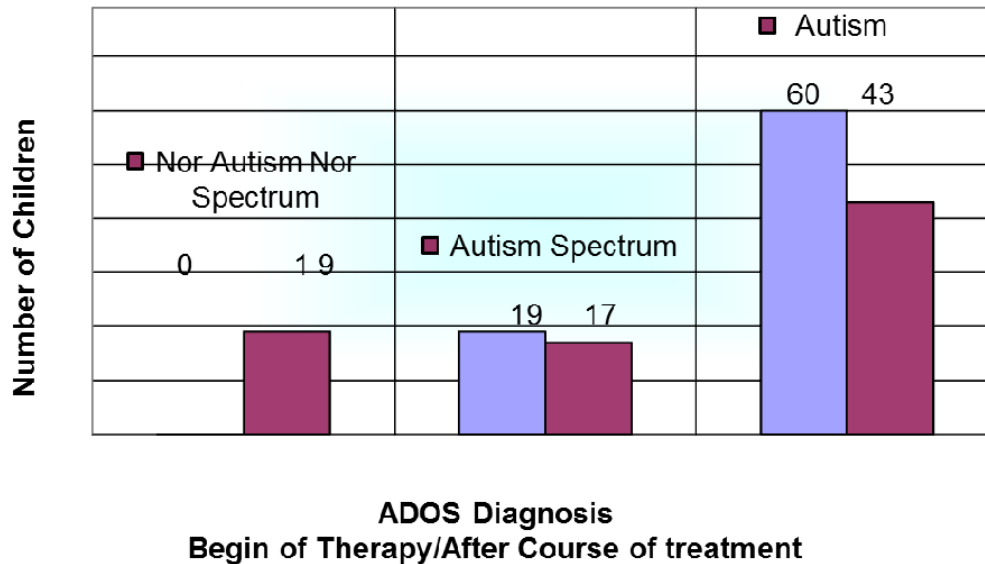
RESULTS: First Target

3 on 4 children have less severe symptoms after the course of treatment.

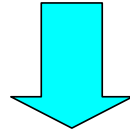


RESULTS: Second Target

19 children (24%) improve so to get out from autism.



THE LEITER-R NONVERBAL COGNITIVE RATING SCALE



Cognitive Skills involving functions such as:

Reasoning

Bidimensional and spatial visualization

Memory

Attention

Concentration in articulated tasks

Speed processing of complex informations



DSM-IV

Mental retardation associated with the 75% of autistic patients with an IQ between the range of 35-50

Findings

only the 34% of the sample falls within the range of moderate/severe MR



SAMPLE OF RESEARCH

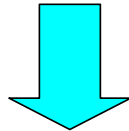
135 children (106M/26F)

aged 2,5 to 16,5 years

Average age 7,3



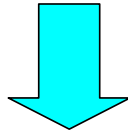
Fluid Reasoning and predictivity of the cognitive level



24 children
18% of the sample of 135
with $FR > IQ$



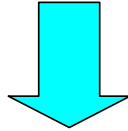
After the course of treatment



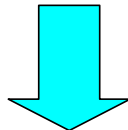
The 24 children with $FR > IQ$ present an average IQ



Fluid Reasoning



predictive of a cognitive potential still unexpressed

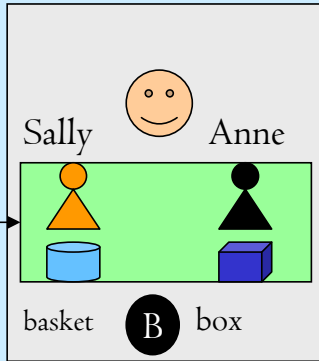


promotes an intellectual impulse capable of releasing
cognitive skills which level shouldn't be taken as
definitive

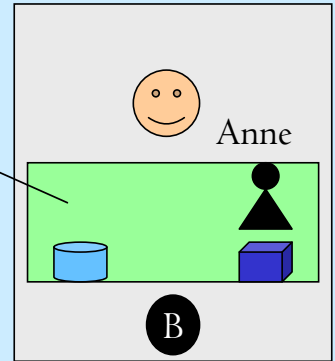


FALSE BELIEF TASK (Sally & Anne)

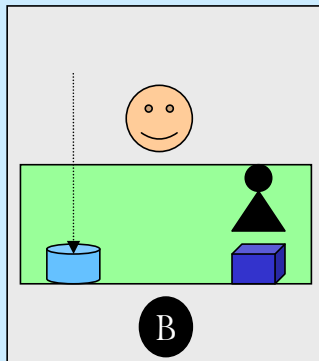
Sally hide her
marble into the
basket



Sally goes out
for a walk

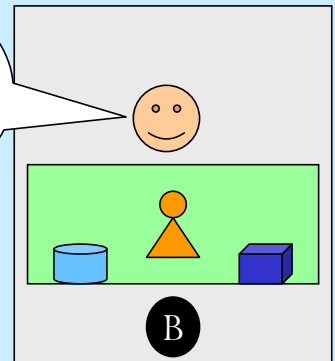


Anne takes the
marble out of the
basket and puts
it into the box.

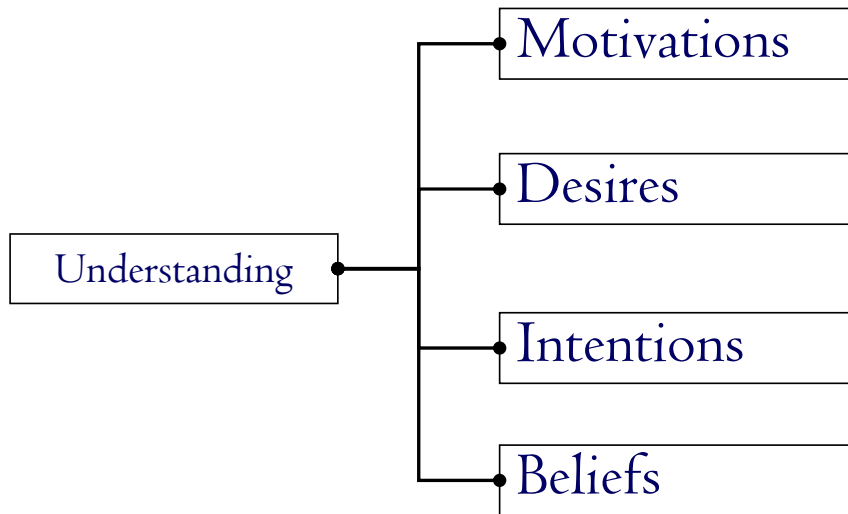


Where will Sally
look for her
marble?

Sally comes back



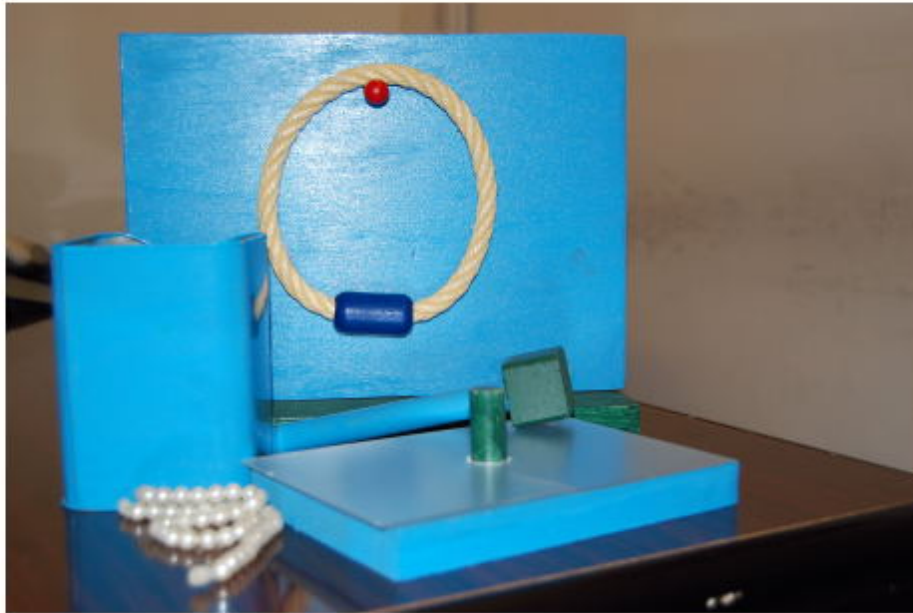
Mental states and clinical predictive indicators



The theory about how human beings function as different from inanimate objects



Task on the understanding of other people intention



Mental states and clinical predictive indicators

Sample: 113 children (85 male, 28 female) aged between 3-15 years, the most of them with severe symptomatology (69%).



I target

Determine whether children with autism have the ability to understand mental states, and how this is related to symptoms



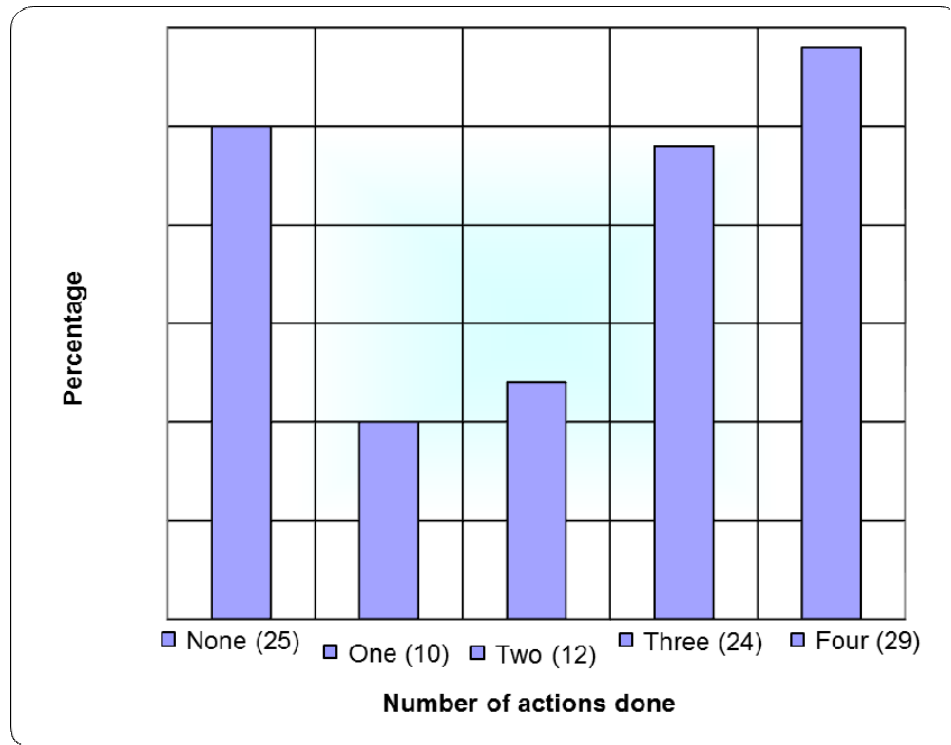
II target

Verify whether any possible ability may be predictive of a future cognitive development



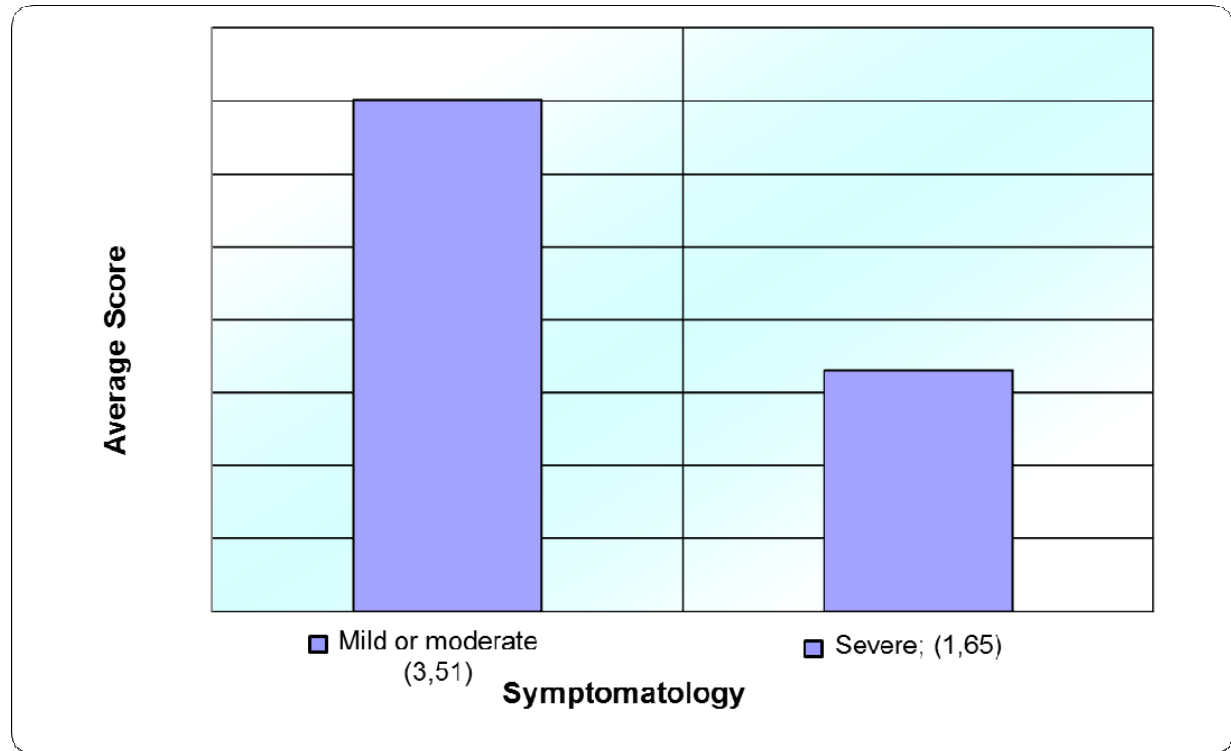
RESULTS: First Target

More than half of the children (53%) show a good awareness of another's intention, making 3 or 4 actions.



RESULTS: First Target

Children with mild or moderate symptoms show a significantly greater understanding of another's intention ($M = 3.51$ vs. $M = 1.65$).



EMOTIONAL CONTAGION

Primitive form of empathy that consists in the tendency to imitate in an automatic and unintentional way the facial, vocal and postural expressions of another person, and consequently to converge emotionally with him.

It's then an automatic and precognitive response of assimilation and introjection of the emotional experiences of the others, which are experienced as personal.

EMOTIONAL CONTAGION TEST (ECT) OBSERVATION OF THE EMOTIONAL RESPONSE

Allows you to determine whether in the child there's an emotional attunement in the relationship with the other.

EMOTIONAL CONTAGION TEST (ECT) OBSERVATION OF THE EMOTIONAL RESPONSE

- 1) Presentation of the emotional stimulus
- 2) Parameters observed:
- 3) Physiological correlates
- 4) Reproduction of the motor pattern with or without an emotional involvement
- 5) Postural changes
- 6) Eye contact
- 7) Verbalizations related to the personal or of the other emotional experience
- 8) Instrumental behaviors such as escape, approach or hit



RESULTS ON A SAMPLE OF 90 CHILDREN

N. 32 Children

«No Response »

(no affective attunement)

N.58 Children

«Response»

(46 Emotional Contagion;
12 Empathy)



RESULTS ON A SAMPLE OF 90 CHILDREN

The Finding
«No Response»

(No affective attunement)

Correlate with a more severe
symptomatology

The Finding
« Response »

(Emotional Contagion)

Correlate with a less severe
symptomatology



RESULTS ON A SAMPLE OF 90 CHILDREN

The 12 children who responded with Empathy
came out from the ADOS diagnosis of autism.

LTP

Lausanne Triadic Play

It's a structured observation of family triangulation conducted while playing with the child.

The observation is divided into 4 phases for a total of 20 minutes

- 1) A parent leads the game (5')
- 2) The other parent leads the game (5')
- 3) The 3 members play together (5')
- 4) Parents interact with each other commenting the activity done (5').



FINDINGS

- SIGNIFICANT PRESENCE OF DYSFUNCTIONAL ALLIANCES
- ABSENCE OF COLLABORATIVE ALLIANCE
- MORE PROBLEMS OCCUR IN THE 3-4 PHASE IN WHICH THE COOPERATION IS NECESSARY
- LACK OF COOPERATION BETWEEN PARTNERS
- LACK OF BOUNDARIES BETWEEN PARENTS AND CHILD
- THE ADOS CORRELATES WITH THE SCORES OBTAINED BY THE CHILD BUT NOT WITH THE FUNCTIONIALITY OF THE PARENTS
- THERE'S A CORRELATION BETWEEN THE GRAVITY OF THE SYMPTOMATOLOGY AND THE SCORES OF FOCAL ATTENTION AND EMOTIONAL CONTACT.

