Analisi di pratiche e interventi Evidence Based per l'autismo

Dott. Giovanni Valeri

UOC Neuropsichiatria Infantile – IRCCS OPBG

"Dall'Attenzione Congiunta alla Cooperazione: un Modello Evoluzionistico-Evolutivo"

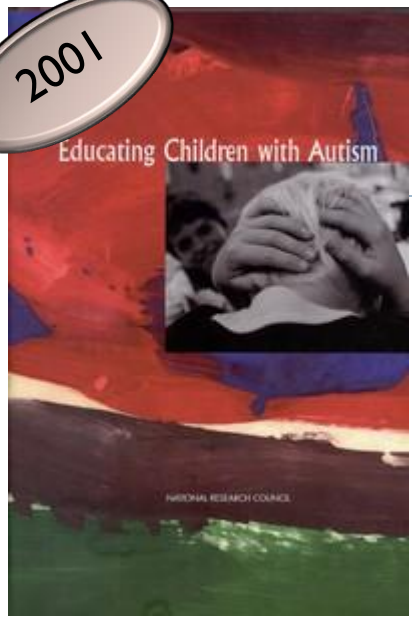
TERAPIA: PUNTO DI PARTENZA

- Diagnosi corretta

- Valutazione del livello di sviluppo (profilo psicoeducativo -> programma educativo **individualizzato**)

- Personalizzazione dell'intervento (esigenze della famiglia, dell'ambiente di lavoro, delle **predisposizioni del bambino**) -> motivazione.

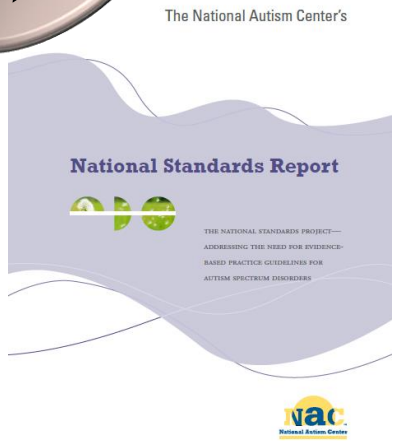
2001



2005

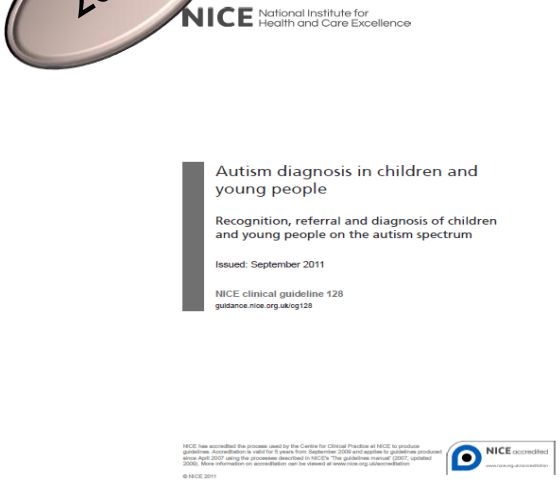
2007

2009



2011

2011



American Academy of Pediatrics (2007)

Elementi comuni a tutti i trattamenti

- **Precocità**
- **Intensità** *25 h/sett per 12 mesi*
- **Scuola** Piccolo gruppo / 1:1
- **Inclusione e formazione** *genitori*

- **Apprendimento Specifico** evolutivamente appropriato
- **Misura e monitoraggio** dei progressi
- **Elevato livello di struttura**
- **Generalizzazione**

Estabilished treatments (11)
Antecedent Package
Behavioral Package
Early Intensive Behavioral Intervention
Joint Attention Intervention
Naturalistic Teaching Strategies
Peer Training Package
Pivotal Response Treatment
Schedules
Self-management
Story-based Intervention Package

Linee Guida ISS (2011)

- **Interventi mediati dai genitori**
- **Interventi comunicativi**
- **Programmi educativi**
- **Interventi comportamentali e psicologici strutturati**
- **Interventi biomedici e nutrizionali**

Interventi Mediati dai Genitori

Interventi sistematici e modalità di comunicazione organizzate secondo specifiche sequenze, che il genitore, previa formazione, eroga al figlio con obiettivi precisi e sotto la supervisione degli specialisti che lo affiancano.

Programmi Comportamentali Intensivi

Programmi **intensivi**, (20-40 ore/settimana).

Obiettivo primario: intervento precoce rivolto a bambini di età prescolare, solitamente mediato dai genitori, con il supporto di professionisti specializzati.

Modello più studiato: Analisi Comportamentale Applicata (Applied Behaviour Analysis, ABA).

Programmi Psicoeducativi

Treatment and education of autistic and related communication handicapped children (TEACCH; E. Schopler, 1966)

1.abilità imitative

2. funzioni percettive

3.abilità motorie

4.capacità d'integrazione oculo-manuale

5.comprensione e produzione linguistica

6.gestione del comportamento (autonomie, abilità sociali e comportamentali)

Linee Guida ISS (2011)

Trattamenti **NON supportati** da prove scientifiche sufficienti a formulare una raccomandazione sull'utilizzo:

- L'*Auditory integration training (AIT)*
- Musicoterapia
- Comunicazione facilitata
- Diete di eliminazione di caseina e/o glutine
- Integratori alimentari vitamina B6 e magnesio e omega-3.

Linee Guida ISS (2011)

Terapie NON raccomandate, inefficacia nel produrre miglioramenti in soggetti con DSA:

- *Terapia con ossigeno iperbarico;*
- *L'equitazione assistita;*
- *Tomatis sound therapy (ascolto di sequenze musicali);*
- *Massaggio tradizionale tailandese;*
- *Qigong sensory training;*
- *Programmi di esercizio fisico;*
- *Programma di esercizio fisico sul tapis roulant.*

	Target group	Evidence for effectiveness*	Intervention framework and goals
Behavioural approaches			
Comprehensive: ABA-based			
Early intensive behavioural intervention	Young children (usually aged <5 years)	Low or moderate	Based on ABA principles; usually home-based or school-based; application of discrete trial training (ie, teaching in simplified and structured steps); 1:1 adult-to-child ratio; intensive teaching for 20–40 h/week for 1–4 years
Early intensive behavioural intervention integrated with developmental and relationship-based approaches (eg, ESDM and floortime [developmental individual-difference, relationship-based model])	Young children (usually aged <5 years)	Moderate or insufficient for ESDM; not established for floortime	ESDM: aims to accelerate children's development in all domains; intervention targets derived from assessment of developmental skills; stresses social-communicative development, interpersonal engagement, imitation-based interpersonal development, and social attention and motivation; integration of ABA principles and pivotal response training (ie, a naturalistic approach targeting so-called pivotal areas of a child's development, including motivation, response to multiple cues, self-management, and initiation of social interactions) Floortime: emphasises functional emotional development, individual differences in sensory modulation, processing and motor planning, relationships, and interactions
Comprehensive: structured teaching			
Treatment and Education of Autistic and related Communication-handicapped Children (TEACCH)	Children, adolescents, and adults	Low	Provides structures of the environment and activities that can be understood by the individual; uses individuals' relative strengths in visual skills and interests to supplement weaker skills; uses individuals' special interests to engage for learning; supports self-initiated use of meaningful communication
Targeted skill-based intervention			
Picture Exchange Communication System	Non-verbal individuals	Moderate	Teaches spontaneous social-communication skills through use of symbols or pictures
Training in joint attention, pretend play, socially synchronous behaviour, imitation, emotion recognition, theory of mind, and functional communication	Children	Not established, but potentially effective	Fairly short-term (weeks to months) training sessions targeting establishment of particular social cognitive abilities fundamental to typical social-communication development
Teaching social skills (eg, emotion recognition, turn-taking) with areas of interests (eg, in machines and systems)	Children, adolescents, and adults	Not established, but potentially effective	Short-term (weeks to months) interventions with DVDs (eg, Mindreading or *The Transporters*) or Lego therapy
Social skill training	Children aged ≥6 years, adolescents, and adults	Low or moderate	Fairly short-term (weeks to months) training sessions to build social skills, usually through a group format
Training in living skills and autonomy	Children, adolescents, and adults	Not established	Targets establishment of living skills and self-management to build autonomy; positive behaviour support
Vocational intervention	Adolescents and adults	Insufficient	Eg, interview training and on-the-job support
Targeted behavioural intervention for anxiety and aggression			
Cognitive behavioural therapy; ABA	Children, adolescents, and adults	Not established	Cognitive behavioural therapy to reduce anxiety: modifies dysfunctional thoughts; compared with ordinary cognitive behavioural therapy, therapy modified for autism relies less on introspection and more on teaching of practical adaptive skills with concrete instructions; often combined with social skill training; systematic desensitisation is useful particularly for individuals with intellectual disability ABA to reduce aggression: applies functional behaviour assessment and teaches alternative behaviours; skills include antecedent manipulations, changes in instructional context, reinforcement-based strategies, and behaviour reduction strategies
Parent-mediated early intervention			
Training for joint attention, parent–child interaction, and communication; or models like pivotal response training, parent delivery of the ESDM, and More Than Words	Young children	Insufficient or low	Teaches parent or caregiver intervention strategies that can be applied in home and community settings, potentially increasing parental efficacy and enabling child's generalisation of skills to real-life settings

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Lai, Lombardo, Baron-Cohen, Autism, *Lanc*

	Target group	Evidence for effectiveness*	Intervention framework and goals
(Continued from previous page)			
Drugs			
Antipsychotic drugs			
Risperidone; aripiprazole	Children, adolescents, and adults	Children: moderate (risperidone) or high (aripiprazole) for effect, and high for adverse effect; adolescents and adults: insufficient, but might have effects as in children	To reduce challenging behaviours and repetitive behaviours; potential adverse effects include weight gain, sedation, extrapyramidal symptoms, and hyperprolactinaemia (risperidone)
Selective serotonin reuptake inhibitors			
Citalopram; escitalopram; fluoxetine; and others	Children, adolescents, and adults	Insufficient for effect and adverse effect	To reduce repetitive behaviours; potential adverse effects include activation symptoms (agitation) and gastrointestinal discomfort
Stimulant			
Methylphenidate	Children, adolescents, and adults	Insufficient for effect and adverse effect; might be helpful; clinical guideline established	To reduce attention-deficit hyperactivity disorder symptoms; potential adverse effects include insomnia, decreased appetite, weight loss, headache, and irritability

For version with full references, see appendix. ABA=applied behaviour analysis. ESDM=Early Start Denver Model. *Suggested by available systematic reviews and meta-analyses, with criteria directly following or similar to the Grading of Recommendations Assessment Development and Evaluation Working Group recommendation; different ratings for the same model or agent are from different reports.

Table 5: Interventions by major model or agent

OPEN ACCESS Freely available online

PLOS | MEDICINE

Non-Specialist Psychosocial Interventions for Children and Adolescents with Intellectual Disability or Lower-Functioning Autism Spectrum Disorders: A Systematic Review

Brian Reichow[1,2]*, Chiara Servili[3], M. Taghi Yasamy[3], Corrado Barbui[4], Shekhar Saxena[3]

1 Yale Child Study Center, New Haven, Connecticut, United States of America, 2 University of Connecticut Health Center, Farmington, Connecticut, United States of America, 3 World Health Organization, Geneva, Switzerland, 4 WHO Collaborating Centre for Research and Training in Mental Health and Service Evaluation, Section of Psychiatry, Department of Public Health and Community Medicine, University of Verona, Verona, Italy

TRATTAMENTI EB
effettuati da
NON
PROFESSIONISTI

Formati -Supervisionati

- ABA based
- Cognitive Rehabilitation
- Parent Training

EFFICACI

Livello di
EFFICACIA

BASSO
MODERATO

TRATTAMENTI **EB** EFFICACI - EQUI-SOSTENIBILI

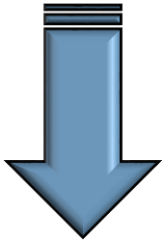
Tutti Bb con ASD → Terapie Scientificamente Fondate

- Genitori
- Insegnanti
- Educatori

→ Formati e Supervsionati

TERAPIE PIÙ EFFICACI E SPECIFICHE

1) Eterogeneita' clinica nell'ASD
2) Autismo come Disturbo dello Sviluppo
3) Maggior fondamento teorico



- Fase Prodromica
- SNC di persone con ASD cambia in modo atipico con età
- Individuare competenze CARDINE specifiche per fasi di sviluppo

DALL'ATTENZIONE CONGIUNTA ALLA COOPERAZIONE. PROPOSTA DI UN MODELLO "COMMUNITY BASED" PER IL TRATTAMENTO DEI BAMBINI CON DGS IN ETÀ PRESCOLARE: TRASFORMAZIONI EVOLUTIVE E INDIVIDUAZIONE DELLE CRITICITÀ TERAPEUTICHE.

Giovanni Valeri, Simone Cuva
Gruppo di lavoro DGS ASL RmC

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UOC Neuropsichiatria Infantile – IRCCS OPBG

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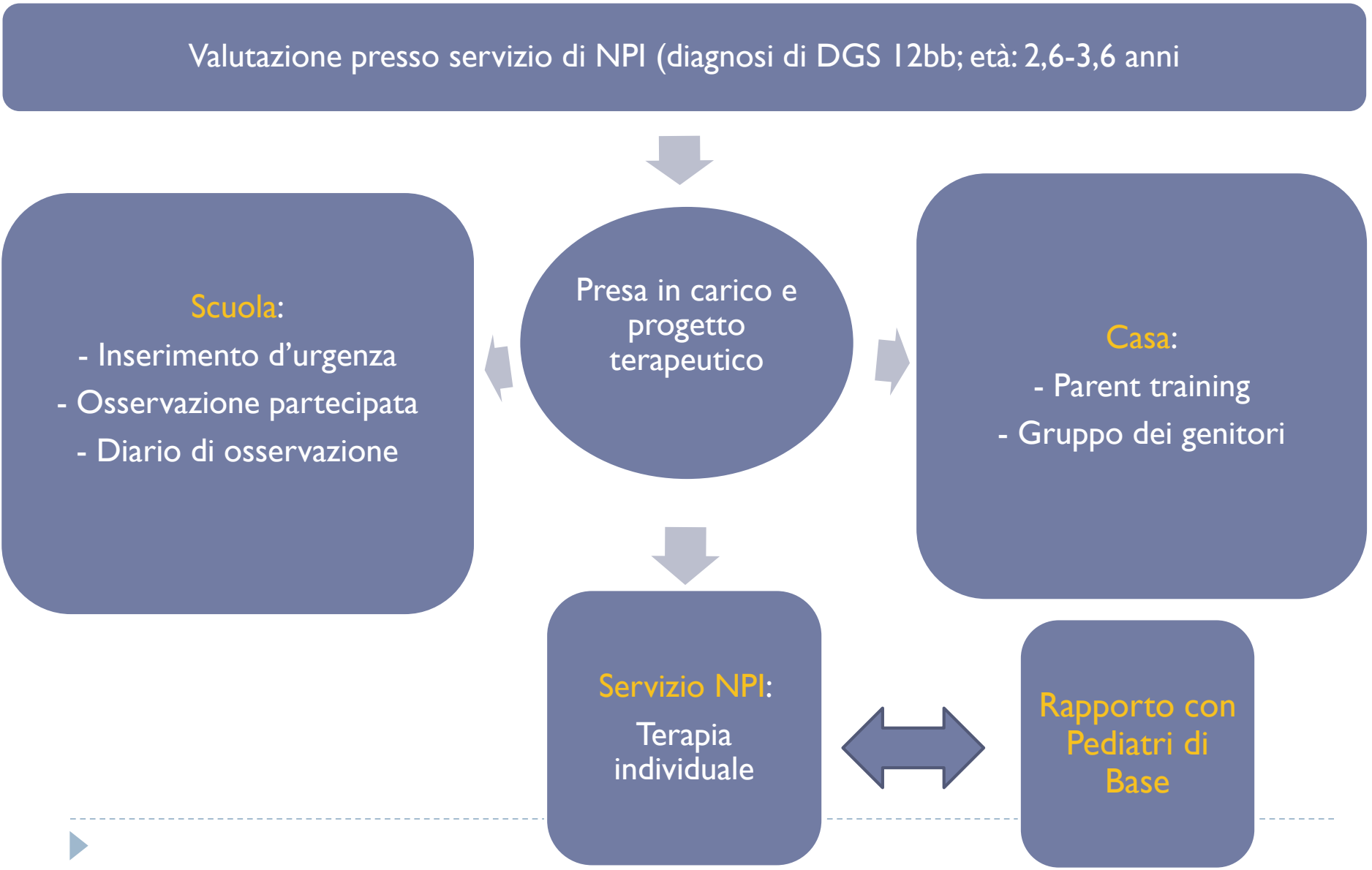
Studio ricerca-azione longitudinale (2005-2007)

- Presa in carico di bb prescolari con ASD
- Equipe Multidisciplinare TSMREE ASL RM/C (Educatori, Neuropsicomotricisti, Psicologi, Neuropsichiatri Infantili)
- Intensità: 2 incontri/sett di 3h per 4 mesi.

Modello “Community Based”



Riferimenti teorici

Modello Sviluppo Psicologico: Tomasello e collaboratori

Modello sviluppo bambini con ASD:

-Siller e Sigman (2002)

-Mundy (2003)

-Rogers (2000)

-Greenspan e Wieder (2006)

-Baron-Cohen et al. (2000)

-Ballerin et al. (2006)

Studio ricerca-azione longitudinale

2005 2-3 anni	• Diagnosi • Parent Training d'urgenza • Terapia Individuale • Inserimento a scuola
2006 3-4 anni	• TI(Intervento Educativo a Domicilio) • Parent Training • Gruppo Genitoriale • Consulenza alla scuola
2007 4-5 anni	• Intervento terapeutico di gruppo

Competenze pivotal

2-4 anni

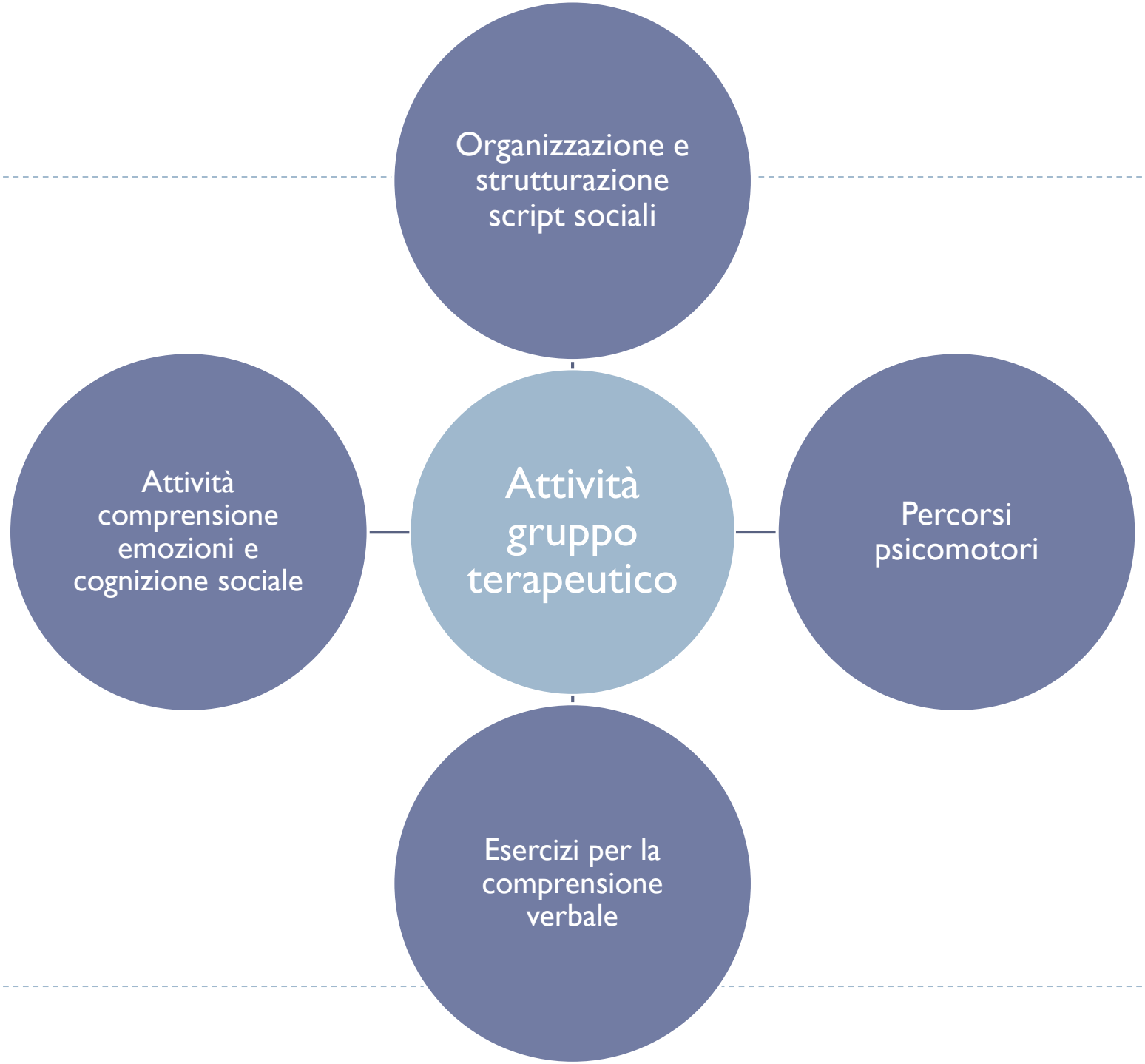
Terapia individuale

- Miglioramento della regolazione emozionale
- Sviluppo della attenzione congiunta

4-5 anni

Terapia di gruppo

- Facilitazione emergenza competenze socio-cognitive
- Riorganizzazione dei comportamenti cooperativi complessi
- Ampliamento uso linguaggio (aspetti lessicali, sintattici e comunicativi)


Organizzazione e strutturazione script sociali
Attività comprensione emozioni e cognizione sociale
Attività gruppo terapeutico
Percorsi psicomotori
Esercizi per la comprensione verbale