The characteristics of precocious intellectual children

Claudia Jankech-Caretta
Specialist FSP in child and adolescent psychology and psychotherapy

Formation continue
Société Suisse de Pédiatrie
Fribourg, 2003
Definition

- IQ higher than 130 (2 standard deviations above the average)
- The significant zone of 125 (children have intellectual over-capacity above this figure)
- 5% of children have an IQ above 125
- If the IQ is higher than this value, we can confirm the child is exceptionally gifted, the opposite is not inevitable true
According to J.Ch Terrassier, in France in absolute values, there is the same quantity of children with an IQ above 125 in 2 social groups, namely:

- Working-class
- Manager/Professional
Gifted children & social level

- At university, children of professionals/managers represent double that of the children of the working class.

- As specialists of gifted children, the responsibility we face is to support the children who are not supported in their native surroundings.
Prejudices

- Gifted children are all little geniuses
- They are gifted children because their ambitious parents have pushed them
- All children are gifted (denying differences)
- All gifted children become outstanding adults
Prejudices

- They are not mature (confuse emotivity and immaturity)
- The biggest danger: The child is so intelligent that he doesn’t need the support of adults
Prejudices

Idealisation:

- Descartes legacy is: "I think so I am", inversely Damasio says "I am so I think" (prof. neuropsychology, USA). The emotional part is very important for the functioning of intelligence.

- Consequence of this idealisation: Need to require unobtainable perfection.
Development information

Child history:

- Baby very sharp, reactive, able to enter relationships quickly
- and/or able to fix on an object for a long time from the first weeks, very observant
The parents have the impression to run after a curious child, who asks a lot from them. They are pleased to share the activities which the child likes, but are not responsible for this early giftedness.
ASEP Investigation (d’Agostino, Bammatter, 2001) 165 children/ teenagers:

- Walk early, at around 12 months (m=14)
- Oral language before 2 years, good at 25 months
- Have control of reading and/or numbers between 3 and 5 years (39/165 between 3 and 4 years, learnt without help)
Development information

ASEP 2001 Investigation:

- 2/3 of children had or have trouble sleeping (difficulty sleeping and/or short sleep)
- Less powerful motor function: 27% of M and 21% of F
The neuropsychology contribution

According to J.C. Grubar:

The working memory is $2\frac{1}{2}$ times greater in an individual with an IQ of 140 compared to one with an IQ of 95.

That concerns:

a) storage memory
b) amount of information stored
Brain activation threshold

- The brain activation threshold of the subjects intelligence and the difficulty of the proposed task
- When the attention and performance demands increase, the brain will employ more regions to solve the given task

Prof. S. Clark, neuropsychology, CHUV-Lausanne
R.E.M. Sleep

The study of sleep has demonstrated that for a given amount of sleep, the precocious child has longer phases of R.E.M. sleep (paradoxical sleep).

J.C. Grubar
Brain plasticity

The gifted child keeps longer the brain plasticity of a baby, capable of complex and rapid learning in a short time.

J.C. Grubar
Speed of information

The study of the recall potential demonstrates that for a given time interval the gifted child will transmit to the cortex a greater amount of information.

J.C. Grubar
Intellectual functioning

Characteristics:
- Mnemonic capacity higher than normal
- Speed
- Capacity to show good criteria
- Possibility of co-ordinating various criteria
Intellectual functioning

This includes:

- Categorical thought much higher than normal
- Very good abstract thought

Moreover:

- Attracted by what is more complex
- Uninterested by what appears simple and repetitive.
Intellectual functioning

If we do not propose more complex tasks to him, we risk:

- not noticing his potential
- to have a false image of him
- contribute in the construction of a false self-image.
Emotional functioning

- Hypersensitivity and perspicacious: “embarrassing clearness”, too much capacities to anticipate as factor of inhibition, generally revolts to injustices
- Not supported when he fails, as he is often a perfectionist
- Devalues self, too conscious of own limits
- Badly manages aggressiveness
Emotional functioning

- Centered on adult, who readily answers his questions
- Inclined to rationalisation
- Conforms sometimes excessively to his entourage, which risks cutting a proper emotional life
- Often very passionate, but hides it at school.
J. Ch. Terrassier introduced this term to illustrate the shifts:

- **Internal**: between intelligence and emotion, intelligence and motor functioning, real age and mental age
- **External**: between intelligence and social development

The shifts are very variable depending on the child. It is not inevitably a source of problems, in particular if the child’s qualities are recognised and supported.
The parents position

- Heavy prejudices often supported

- Child is very gratifying but difficult to educate. At times, because:
  - Narrow margins: at what level to treat, mental age or real age?
  - To answer this question: Shift between the danger to sensor and the excess of information causing anxiety
The parents position

- To channel without persecuting
- To recognise without being afraid of having a “big headed” child
- To guide without over-protecting the sometimes abused child, who is the target of aggression from classmates, because he does not defend himself and he is “an intellectual”
1. Signs of intellectually gifted children, according to Terrassier

In order to be able to determine if a psychological assessment is necessary in the case of a gifted child:

- The child was able to learn how to read, before the first primary school year
- Read a lot and quickly without attaching importance to pictures
- Expressed an interest in dictionaries and encyclopedias
- Read quickly but finds more difficulties in writing
2. Signs of intellectually gifted children

- Chooses the largest friends and likes self-focused activities
- Likes talking with adults very much
- Asks lots of questions, that are varied, original, and/or relevant
- Wants to know “Why” always
- Can do 2 or 3 things simultaneously
3. Signs of intellectually gifted children

- Can make relevant observations, even if he seems not to be listing or paying attention
- Readily judges people and adults
- Annoyed by routine and repetitive activities, especially when they are easy.
- Very sensitive to injustice
- Has a sense of humor
4. Signs of intellectually gifted children

- Has a very rich vocabulary, but the level of thought is especially astonishing
- Likes and is successful in complex games
- Popular, especially in small classes
- Prefers to work alone
- Interested in the origin of man and the universe
5. Signs of intellectually gifted children

- Is at the top of the class without making an effort
- Has a strong sense of very developed aesthetics
- Not passionate about one hobby, often changes

J.Ch. Terrassier in: « LES ENFANTS SURDOUES OU « La précocité embarassante »
6. Signs of intellectually gifted children

- The scientific detection of these intellectual capabilities: the IQ test is the centre piece of psychological assessment, but this is insufficient

- An additional test of logical reasoning is essential (Columbia, Raven)

- Emotional assessment is needed, as soon as signs of bad emotional and relational management occur (projective tests)
Conclusion

Children and teenagers with high intellectual potential need our assistance, like the others, for two reasons:

- In general, official teaching is not adapted to these remarkable intellectual abilities, insatiable curiosity, and sensitivity.
- The shifts in their total development can cause problems, particularly if they are not recognised and not supported.
Conclusion

We must say it because the widespread idea is that he is self-sufficient because he is intelligent, is harmful to his development.

His development is before everything, and while respecting the comfort of the adult, the child and teenager must be guided whether they are gifted or not.

Our duty as specialists, parent and teachers is to help him to become, who he is.