

Article

Prevalence of Emotional, Intellectual, Imaginational, Psychomotor, and Sensual Overexcitabilities in Highly and Profoundly Gifted Children and Adolescents: A Mixed-Methods Study of Development and Developmental Potential

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Giftedness

Social
Emotional
Physical
Cognitive

Human Development and Potential
Altruistic

Miraca Gross (1944 - 2022)

Gross, M.U.M. (2000). Exceptionally and profoundly gifted students: An underserved population. *Understanding Our Gifted*, 12(2), 3-9.



notes & take-aways

Goals

to *even better* understand human development and potential

- **KNOW** how to *even better* recognize the **distinct developmental differences**
 - independent overexcitabilities
 - multiple, higher-level overexcitabilities
- **UNDERSTAND** *even better*
 - internal expressions
 - external expressions
- **BE ABLE TO** *even better positively support*
 - natural development
 - developmental potential
 - well-being

Mixed-Methods Study

Prevalence of Emotional, Intellectual, Imaginational, Psychomotor, and Sensual **Overexcitabilities** in **Highly and Profoundly Gifted** Children and Adolescents: A mixed-methods study of **development** and **developmental potential**

Research Questions:

1. The Prevalence of Overexcitabilities... considering **gender, country, and age**
2. The Prevalence of Overexcitabilities... considering **development:** developmental milestones; holistic development; life experiences
3. The Prevalence of Overexcitabilities... considering **development potential:** genetic make-up; social-environmental influences; autonomous forces; overexcitabilities; special abilities and talents

When we are
 attuned to
 and supporting
 the natural
 development
 and potential
 of the child,
 we are
 attuned to their
 well-being



notes & take-aways

Highly-Profoundly Gifted

The study criteria employed a quantitative measure

- 99.6 - 99.9 percentile (IQ 140+) on the Wechsler Intelligence Scale for Children (WISC)

Highly-Profoundly Gifted

Profound giftedness is significantly advanced cognitive abilities and development, as compared to those of peers in the chronological age group, experienced through heightened sensitivity, intensity, and awareness identifiable through social, emotional, physical, cognitive, and/or altruistic behaviors, developmental milestones, and life experiences across the lifespan.

This intuitive, and often asynchronous, human development is at high risk of misunderstanding, misidentification, and misdiagnosis (the 3Ms), and requires support and scaffolding from like-minded peers, mentors, and practitioners to meet the profoundly gifted individual's exceptionally unique educational and developmental needs, and to provide fitting opportunities for positive growth and well-being.

IGC, Research Center for The Highly—Profoundly Gifted, 2019
 (based on the works of Terman, Hollingworth, Columbus Group, Clark, Gross, Dabrowski & Piechowski, Webb, et al.)

Study Sample

4-13 years	United States	Belgium	Total
males	49	14	63 (72%)
females	13	12	25 (28%)
Total	62 (70%)	26 (30%)	88 (100%)

Study Participants - Parents

- resided in the U.S. or Belgium
- child 4-13 yrs. identified as highly or profoundly gifted
- documentation of WISC IQ 140+

notes & take-aways

Measures and Methodology

1. Overexcitability Questionnaire II, Adapted (OEQ II, Adapted)

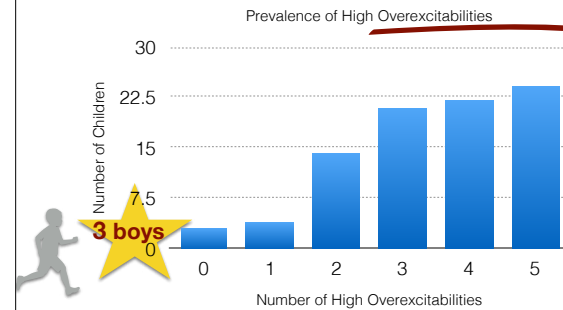
- reflect the parent's perspective
- 5-point scale re-worded 5= a lot like me
- added examples for age range e.g. Theories get my mind going
- added examples of internal internal OR external example
- and external expressions internal AND external example
- OEQ II, Adapted - validity and reliability Cronbach Alpha scores satisfactory**

OEQ II "I"	OEQ II, Adapted "my child"
5= a lot like me	5= a lot of the time
e.g. Theories get my mind going	Theories, possibilities, or poetic language can get my child's mind going
internal OR external example	internal AND external example

- IGC Development & Family History Questionnaire
- Semi-Structured Interview

Research Findings

1. Most Prevalent High OE Profile – all 5 overexcitabilities

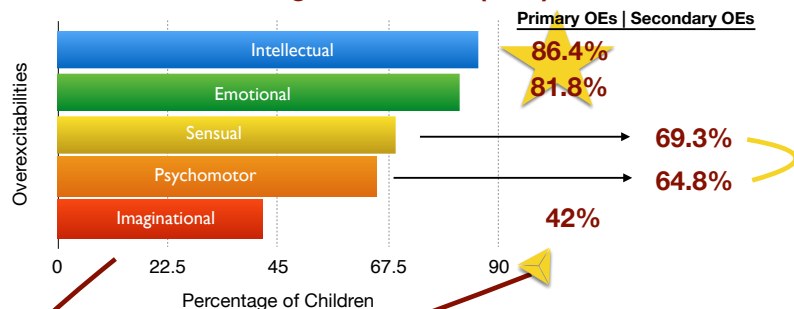


2. 76% 3+ high OEs

3. No significant differences between gender or country

Research Findings

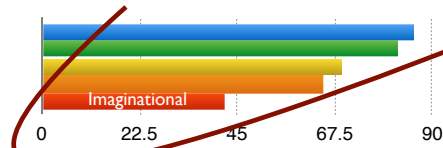
Most Prevalent High OE scores (3.5+)



notes & take-aways

Imaginational OE

Most Prevalent High OE scores (3.5+) - **Imaginational OE - 42%**



Higher-level Imaginational OEs include
 ★ abstract ★ intuitive, ★ empathic
 behaviors and development

- ★ OEQ II questionnaire was constructed to measure the five forms of OEs as individually expressed forms
- ★ imaginational OE is the most complex form
- ★ harder to discern behaviors and development of imaginational OE
- ★ imaginational OE may be misunderstood - training is needed

Research Findings

Developmental Milestones

	Number of responses	Mean (months)
crawled	77	5.2
walked	84	11.9
recognized letters	55	19.4
recognized numbers	49	12.2
spoke words	73	8.2
spoke in sentences	65	26.5
began reading	72	42.5
began reading books	64	45.6

World Health Organization Study (2006)
 816 children
only 1% crawled at 5.2 months

Research Findings

Holistic Development and Life Experiences

1. ★ 99% of the transcripts coded for ★ 3+ Overexcitabilities
2. Including emotional OE
 intellectual OE
 imaginational OE → primary overexcitabilities
3. Occurring together

Higher-level Overexcitabilities

notes & take-aways



Research Findings

Developmental Potential

- 89% indicated a family history of giftedness
- Social-environmental influences
- Autonomous forces - The Third Factor
- Higher-level overexcitabilities
- Special abilities and talents

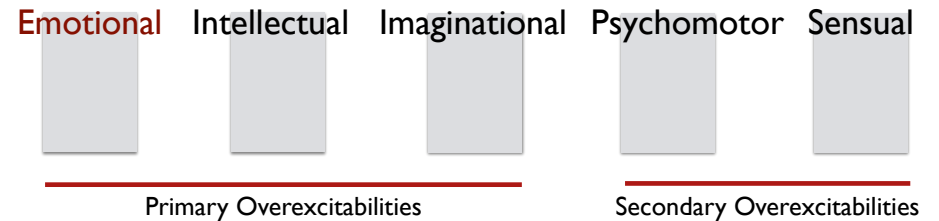
evident

self-education, self-navigated intuition, emotional bond . . .
that motivated a response



Overexcitabilities

The greater-than-typical response of the nervous system



Emotional Overexcitability

The greater-than-typical response of the nervous system

- extraordinary awareness
- takes in and "feels" environment
- perceives depth and complexity
- deeply processes emotions of self and others
- physical manifestations such as stomach aches
- innately empathic, compassionate
- bonded attachment
- difficulty with transitions, new environments

internal expression external expression

Emotions are deeply processed

Emotions are displayed very strongly



notes & take-aways



Intellectual Overexcitability

The greater-than-typical response of the nervous system

- rage to learn; make sense of things
- strategic, extremely logical thinker
- keenly observant/perceptive
- tenacious problem solver
- driven by a need to know
- reflective metacognition
- constantly processing, analyzing, and reflecting

internal expression external expression

strategic mindset

strategic execution



Imaginational Overexcitability

The greater-than-typical response of the nervous system

- can see many possibilities
- visionary - can see the big picture
- can see the abstract
- enjoys the creation of their own inner world
- can manipulate scenarios or figures in their mind

internal expression external expression

development and visualization of ideas and possibilities

Creative presentation



Psychomotor Overexcitability

The greater-than-typical response of the nervous system

- high energy levels
- the need for physical movement
- literally powers intense thinking
- rapid speech
- biting nails
- taping foot

internal expression external expression

harnessing of energy

physical release of energy



notes & take-aways



Sensual Overexcitability

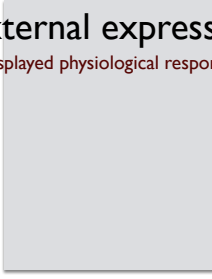
The greater-than-typical response of the nervous system

- heightened senses
- the most amazing or the most repulsive
- literally powers intense thinking
- experience through a multi-faceted lens
- perceive, process, and synthesizes things others simply don't

internal expression external expression

heightened sensory response

displayed physiological response



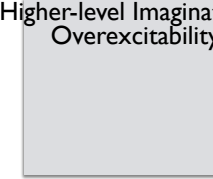
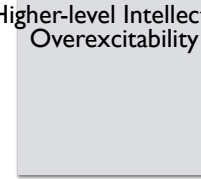
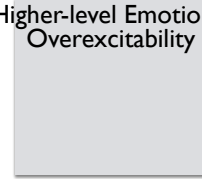
Higher-level Overexcitabilities

- 3 or more overexcitabilities acting together including emotional, intellectual, and imaginal - the **primary overexcitabilities**
- Dabrowski - distinct differences - begin at Level III

Higher-level Emotional Overexcitability

Higher-level Intellectual Overexcitability

Higher-level Imaginal Overexcitability



Levels of Development

- Level I - primary integration
- Level II - unilevel disintegration
- Level III - spontaneous multi-level disintegration
- Level IV - organized multi-level
- Level V - secondary integration



notes & take-aways



Social-Environmental Influences

“It’s like 100 ideas a minute that they are expressing to each other. And their head is full of this game. In those moments, they will not be a sloth which they usually are. They will not be so zoned out and zombie like. But it’s not like they’re actually jumping around, in their head they are, but not physically. They have so many ideas in a minute. When they’re playing this special Lego game, they’re in the habit of changing subjects all the time. Then, expressing all the time what these figures are and what they are supposed to do. And it’s kind of a ping pong game. It feels like there’s some kind of a neural storm going on at that moment. And it’s connecting with the same type of neural storm from their sibling. And then their ideas are connecting. They seem to be fully switched ‘on.’ And then you see the power of what’s in that little brain because the creativity that comes out is enormous. It’s really staggering to witness this, to see where they’re going and how strange that game becomes. But it’s rare that we see it. In other situations, the spark goes ‘on,’ the spark is there, and it happens at times, but it has become more rare. For example, when my child is talking to their (passion mentor), there’s not an ounce of slowness or sloth in that body. My child is fully engaged. My child is active. My child is ‘on.’ Usually, they are on snooze. It’s pretty rare because day-to-day, which is just going to school, it doesn’t happen there. It doesn’t happen at school, but it doesn’t happen at home either.”



Social-Environmental Influences

- Like-minded peers
- Like-minded mentors
- Like-minded practitioners



Theory Conclusion

“We observe above average abilities in many areas, emotional richness, and depth, and multiple and strong manifestations of psychic overexcitability...One may observe from childhood difficulties of adjustment, serious developmental crisis, psychoneurotic processes, and a tendency towards disintegration of lower levels of functioning and reaching toward higher levels of functioning. This, however, does not occur without disturbances and disharmony with their external environment and within their internal environment. Feelings of ‘otherness’ and strangeness are not uncommon. We find this in gifted children, creative, and prominent personalities, men of genius, i.e., those who contribute new discoveries and new values (Mendaglio, 2008) (p. 30 from Dabrowski, 1996).”



notes & take-aways

Recommendations and References

- Universal screening for overexcitabilities is recommended as part of the holistic gifted identification process, beginning in kindergarten
- Additional recommendations for parents, teachers, psychologists, pediatricians, and researchers can be found in the article
- A PDF of the article is accessible on the home page of The International Gifted Consortium website GiftedConsortium.org
Click on the image of the article -



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[PDF](#)



Review Article

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How Can We Better Understand, Identify, and Support Highly Gifted and Profoundly Gifted Students? A Literature Review of the Psychological Development of Highly-Profoundly Gifted Individuals and Overexcitabilities

Vanessa R Wood^{1*} and Krystyna C Laycraft²

[PDF](#)

