

CHILD PRODIGIES: GIFTEDNESS AND INTELLIGENCE

Abstract: Children with special capacities have enjoyed for centuries careful attention to the purpose of both favouring their development and benefiting from these capabilities. The audience has followed their evolution with great interest. Over time, the conclusion has crystallized that if these talents amaze at a very early age, there is no guarantee they will develop with age and will not disappear in time. Exceptional talent is only one of the conditions for achieving a brilliant career: the education, the perseverance, the endeavour, the capacity to make sacrifices in view of developing talent, the social conditions wherein the child and later on the talented young person develops stand for other factors within the overall cluster that directly influences the talent development. All these do not remain constant, but they evolve once with the modification of the social – political conditions wherein the young person lives.

Keywords: Giftedness, intelligence, high performance, education.

1. Introduction

In the study upon the gifted children's development, there are more myths than scientifically provided data, although the balance begins to tilt towards the latter. The scientific study upon the giftedness phenomenon was delayed until methods were found to avoid the danger lest giftedness should be modified for the very reason and during this study. Although this aspect has not found yet a satisfactory solution, a more open attitude to the giftedness phenomenon has been approached, which mainly consists in helping the children, the families and the teachers to support – and not to control – a remarkable talent' healthy evolution, so that this one might remain active until the end of his life.

Exceptional musical abilities that manifest themselves at frail age both inspire admiration and, at the same time, excite and bring about envy. Any gifted person will have to comply with two issues:

- maturing his talent
- finding a path in life that should enable him to take advantage of his possibilities, despite the resistance he will be confronted to.

Giftedness is the result of a subtle coincidence between elements of human potential and of cultural tradition. Feldman²⁰ describes gifted children as wholly absorbed by their activity, absolutely in equilibrium with themselves, loving high musical

¹ steladragulin2005@yahoo.com <http://www.unitbv.ro>

performance and appreciating praise. They go along a path which they have firmly set and which they almost never give up.

2. Giftedness and intelligence

The fact has been noticed that gifted youth almost never deem themselves as such: on the contrary, they are framed in this category by the persons they come in contact with and who resort to social-character criteria. Some of them may be perceived as suspicious or as exerting negative influences upon the maturation process of the giftedness.

The criteria are, in fact, a sum of expectations that define **what exactly** these children do. Furthermore, the fact adds that they accomplish this at a much more frail age than the expected one. In the Oxford English Dictionary from 1971, a presentation of the multiple meanings of the word “prodigy” may be found, which show altogether the multitude of expectations and fears related to the person we characterize this way:

- Something amazing, wonderful, especially something that is utterly outside nature’s habitual course. Something abnormal or monstrous.
- Something that raises admiration, wonder.
- A person, especially a genial and precocious child, endowed with qualities that raise astonishment.
- Something extraordinary, wherein predictions and forebodings may be found. The latter may engender hopes, for whose achievement, significant efforts are invested, which lead to substantially modifying the child’s life course on his path towards maturity.

Feldman¹ submitted a definition of geniality – regarded as a form of giftedness – which may be used to scientific purposes: “A child – usually beneath 10 years old – who performs on the level of a grown-up well educated and trained in a very pretentious field of the intellectual effort”. The definition characterizes performance in a specific domain of human activity, allows its reasonable measurement and enables the comparison with standards from the respective sphere of activity. Feldman highlights that this distinct form of human intelligence cannot be reduced to any other known form and that psychometric intelligence – as it is determined through IQ – plays only a secondary part in assessing giftedness.

In another study, Freeman² supports the idea above, saying that: “The previously supposed connection between giftedness and IQ is questioned by the major influence exercised by the intellectual support that the gifted child is endowed with, by the accumulation of knowledge as well as by personal attributes, such as motivation, discipline, curiosity and a powerful tendency towards autonomy”. Another study³ conducted upon 500 children shows that there is no connection between the intellectual ability (measured by IQ) and their personality, formed mainly under the influence of the environmental factors. It is interesting to note that among the 210 children registered by a special school for gifted youth, none reached an outstanding or peak position at the age of 40-50 years old. Hence the conclusion

that intelligence has no direct relation with giftedness, although a connection should exist⁴.

More recent researches show a very powerful influence of high performance culture within society. Elshout⁵ describes a range of requirements and sacrifices that parents must make and that are necessary in order to well bear their child's thousands of working hours, to the purpose of the development of his capacity to perform at a very high level. In another study⁶ the fact is highlighted that also for unusually gifted children – having the IQ above 140 – minor changes are still possible in their first decade of life that should lead to much superior performance at adult age. Although a “gene of the geniality” could not be retrieved as yet, one can say that heredity together with the conditions from the first decade of life are primordial factors in determining the grown-up's level of performance. At present, it is assumed that hereditary factors are responsible for 70% of the IQ, 50% of the personality and 40% of the preferences.

3. Role of education and family

Parents – or a certain teacher – may be much more efficient in promoting a child's talent than the primary school⁷ which cannot fulfil a single gifted child's special requirements, but has to observe the curriculum, destined for educating an overall class of children with medium qualities.

The positive influence of the familiar environment is hard to explain as the studies⁸ showed that two contradictory conditions may lead to the development of the child's special qualities:

- extremely adverse conditions, which result in unhappy childhood. Time and again, the gifted child succeeds in overcoming the imposed restrictions and in developing his special talent. In this case, the danger however exists for the child to remain with emotional disorders bringing along an unfulfilled and unhappy private life.

- ideal conditions, which allow the optimal development of the inborn qualities.

Howe identified⁹ a few conditions that favourably influence the development of the gifted child's capacity:

- a long and strenuous learning process
- his family's intense pressure
- strong desire of material independence
- at least one parent's higher education and enthusiasm for his child's goals.

Sloboda¹⁰ completes the conditions above with the factors that contribute to the durable development of giftedness in the musical field:

- long periods of work with the instrument
- important material and emotional support from the family
- maintaining close relations with the first teachers
- early contact with those musical scores that stimulate and give confidence
- avoiding the apparition of the fear to perform
- attentively balancing the efforts for executing formal exercises in the first years of practice with the possibility of freely exploring the musical world.

Mention should be made here that those preschool children who are gifted in other fields than the musical one much benefit from effectuating some simple and short exercises (10 minutes) of music.

4. Giftedness and social behaviour

It could be proven that gifted girls suffer from significant disadvantages during their growth period and that their moral support is extremely important¹¹. This phenomenon is mainly due to the processes that lead to the child discrimination within school. This way, both parents and pedagogues, and especially schoolmates nurture the opinion that gifted children are freaks and consequently the latter are unhappy².

It is generally assumed – not scientifically proven – that gifted children are more liable to psychical disturbances as:

- talent makes them seem foreigners among their peers. Talent marks them as outstanding, which makes them become lonely¹².
- the gifted children's "social skills" undergo atrophy because of the concentration on the development of the performing qualities
- their sensitivity makes them vulnerable to conflicts and frustrations in other spheres of life.
- their brilliant talent ensues from a deep and intense reservoir of unique perceptions and passions. Their uniqueness may lead to unstableness of their personality during the growth.
- the child's gift is - partly – the outcome of his parent's exaggerated commitment. They have the tendency to isolate their child in a "greenhouse" and intensely fight towards the accomplishment of an aspect of his personal qualities. They encourage the hyper-development of this quality to the detriment of other qualities that would allow him balanced social relations.

These general opinions are countered by recent observations, not yet scientifically processed. Vulnerability may exist, however people will not notice it until the interaction with the environmental factors enhancing it:

- parents who do not bear the child
- certain attitudes of the educators as regards the pupil's special talent
- hostile attitudes from the colleagues.

The remedy may consist in modifying the child's preoccupations so that this one might keep his liberty and however enjoy his achievements; this leads to a diminution of his vulnerability.

The notions of "sensitivity", "social isolation" have not been yet sufficiently studied in the gifted children's case. It has been noticed that musically gifted adolescents are more communicative, more open than their peers who do not practice music.

In grown-ups¹³ it could be noticed that the severity of the musicians' psychical symptoms was more reduced than the one of the non-musicians undergoing comparable pressures; it seems that musicians possess a more intense self-defence process. This was attributed to the creativity and to the intense training attended by musicians.

As regards the exploitation of the child's talent by tyrannical parent, only anecdotal accounts exist^{14, 15}. No statistical rise occurred in the frequency of such relations. Recent researches have offered no clear proof that exceptional musical abilities are brought along by emotional problems. On the contrary, it seems that children displaying high musical performance:

- are more psychically robust than other children
- have a low level of fear
- are very motivated
- are very active
- have increased productivity¹⁶.

One of the possible disadvantages of their tendency of surrounding themselves with a "high protection wall" during their activity, a fact also encouraged by the parents who express the opinion that their children are "too intelligent to mix with the others"¹⁶.

From the family, manifestations were noticed which may be disadvantageous for the child:

- exercising a permanent pressure for the child to constantly perform at the highest level
- too much respect towards the child's aptitudes
- too little respect towards his personality, which translates into little support for activities not related to music
- difficulty to balance the parent's effort for the gifted child's development with the ones expected by his less gifted brothers.

Under these conditions, we advance the proposal that the researchers' attention should be directed, in the future, rather on the dynamic relations between the gifted child and his instructor, which lay the stress on developing a creative activity. On the contrary, researching the causes that bring about giftedness cannot lead – in the current stage of development of the knowledge upon heredity – to practicable solutions.

5. Intelligence and high performance

Gardner¹⁷, unlike other authors such as Terman¹⁸ or Holligsworth¹⁹ distinguishes between the kind of intelligence animating the young musician and the knowledge-based intelligence, which manifests in other fields. The musician exhibits a unique capacity to perceive the rhythmical stimuli synthesized in a variety of symbols (musical notes) which convey him a genuine sensation of pleasure.

Certain musician-characterizing features are essential in supporting talent over time:

- his desire to be accepted by the audience
- his capacity to assume the risk of performing just to be accepted
- his capacity to be always confronted to the audience
- his capacity to withstand the pressure resulted from both musical triumph and disaster and to continue his activity despite these extremely appealing or unpleasant events.

All these characteristics make the musically gifted young person very different from other gifted youth.

Following his studies upon gifted children, Feldman²⁰ came to the conclusion they were much like the other children in all respects, with a single exception: they are able to go through certain spheres of knowledge at very high speed. This is due to some realities that he calls "coincidences":

- they possess remarkable organization of their personality
- they were born and educated in a favourable period to the development of their talent
- they were such educated that their interest was raised for reaching a very high level of knowledge.

Sosniak²¹ distinguishes between gifted pianists and prodigies. The former:

- prove major interest towards music even before starting to work for developing the necessary qualities for performing.
- are ready to avail themselves of the chances which would lead them towards exceeding the current performance stage, without becoming overwhelmed or discouraged by the lack of immediate success.

The parents or professors admit that even minor progresses play a very important part for them.

The prodigies, on the contrary, manifest none of these interests. They are – almost – insensitive to praise and their passion for music is the main force driving them far beyond the expectations of their parents or professors.

6. Psychological changes

Sosniak identifies three stages in a gifted child's development:

- the first, up to the age of 10 years old, in which the child "plays" with music, being assisted by "nice people" and the music is performed for doing "good things".
- the second, between 10 and 13 years old, in which the performing precision rises together with the time for finishing details. The instructors intensify the requirements and extent them over the time after exercises.

This period may be deemed normal for the child's development.

- the third phase, between 16 and 20 years old, in which the stress changes from mastering certain dexterities to offering a personal manner of performing the music track. The artist endeavours to integrate more of his personality and experience within the performance.

All authors agree that gifted performers are confronted, during their adolescence, to the *midlife* crisis, which may be either a chance or a danger. During this period, gifted children search for the answer at questions such as:

- Why am I doing this?
- Am I doing this activity for myself or for satisfying other persons' interest?
- Is it worth continuing it?

Those who do not find the right answer to these questions are in danger of interrupting their musical activity.

Bamberger²² argues that young performers go through significant changes as regards the manner of perceiving musical structures. The multiple dimensions of the connection among perception, synthesis, audition and artistic emotion begin to be lost with the onset of puberty. Youth must coordinate again these elements among themselves, as well as their mental representation. If this operation is successful, then their previous performance, remarkable however deprived of the reflex of their own understanding, becomes mature and full of feelings. This life period – which begins once with puberty – is accompanied by an inner conflict which overlaps with contesting the authority already existing in the performer's life and with the increased preoccupation for their body. Concomitantly, the struggle manifests for better performance, for the teacher's approval and for the audience's adoration. All these are complicated by realizing and admitting that – suddenly – successes no longer come almost by themselves, but continuous efforts are necessary for maintaining the same level of performance.

Robson²³ lays the stress on the importance of the post-performing period in the young artist's life. The post-show depressions are characterized by bouts of crying, fear, sadness, lack of interest, fatigue, lethargy, excessive sleep, the failure of making one's homework, even the emergence of suicidal thoughts. Suddenly it becomes visible that the strengths of a performer's character are at the same time his weaknesses. The favouring factors are:

- the necessity of competing with 100 or 200 candidates for only 1 or 2 places
- the pressure of repeated auditions
- the isolation during the trips and tours, which removes them from their familiar environment and friends
- the tendency of developing a one-dimensional lifestyle, characterized through isolating oneself from friends, relatives.

The musician's psychological treatment must be deemed a necessary event for maintaining his level of performance. It is known that famous musicians – Schumann, Bruckner, Rachmaninoff and others – needed and benefited from psychological treatment during their life. The general opinion is that the intensity level or the frequency of the psychological treatment is lower in the musicians' case than for other persons, as – seemingly – the musicians have developed a more stable, powerful personality. Therefore their vulnerability to psychical disorders is lower²⁴.

In a more recent study²⁵ the fact is signalled that after a few years of exercise, the necessity to perform music becomes imperious and is no longer dictated from outside. Gifted youth confess sometimes an euphoria enveloping them whilst intensely concentrating on their pleasure-inducing activity. Under these conditions, the time control and the perception of one's own person are lost, only remaining the pleasure to play or sing. If further pressure from outside is applied, the gifted child feels discontent and disturbance from his inner world.

A predisposition probably exists for this self-training, independent of the environment. Children often describe their practicing hour as a "precious dream". At an older age, this manner of expression disappears; after adolescence, even the displeasure of making sometimes music for other appears.

Many children feel, whilst performing music, something beyond description, but which acts as a drug, compelling them to keep practicing. Nevertheless, some children express their regret for possessing a special talent and want to get rid of it. Even if they are aware of possessing a rare gift, they do not deem themselves different from their peers and of special worth. They only do what they “must” do, nothing special. However, beyond 10 years old, children develop an aesthetical feeling for music and begin practicing it in a creative manner.

The child’s naturalness manifests at an early age. On the stage, he feels at home, despite being the focus of the audience’s attention. He has no difficulty in performing the musical track. As he approaches adolescence, his preoccupation to show ease rises in intensity and exceeds his actual relaxation. Hence immense conflicts for the young musician:

- in his private chamber, he has a relaxed attitude, but full of interest, for the music track he is to perform.

-on the stage, he tries to impose composure, to display indifference towards the upcoming event.

Sometime he will have to choose the type of attitude which will best suits him on the stage. If he decides for an attitude of grandiosity and omnipotence, the danger exists of losing the control of his own person and subsequently losing the trust in his forces.

Sooner or later he will discover he is not the only one confronted to such problems, which will help him return to a more open attitude.

7. Conclusions

Following the information and facts above, a few conclusions may be drawn on the tasks of the pedagogue who works with a gifted child:

-The goal of the common activity must be to ensure a lifetime career.

From the very beginning, the distinction must be made from other gifted performers whose career is much shorter: gymnasts, football players or other sportsmen whose career lasts for about a decade. They must reach perfection very quickly, even at the risk of physical or psychical accidents: their manner of training and payment considers the very short period in which they can – they must – ensure their living for the rest of their lifetime.

Most musicians are not similarly remunerated and their professional career extends over several decades. To the purpose of ensuring such a career, the teacher’s primordial task is to provide the pupil with the means and methods for diminishing the possible psychological stress and suffering, so that he might perform till old age.

-Talent, when developed by a set of measures that should ensure its harmonious development, is very resilient

Many children exhibit an aggressiveness, an intensity and a force in their study, which is by no means fragile. Although these qualities may be disrupted by the alcohol and drug abuse or by other harmful practices, the very talented youth’s special qualities cannot be easily destroyed. Geniuses – such as, for instance, Mozart – were in fact indestructible.

Under these conditions, the pedagogue's task mainly consists in helping the gifted young person not to make mistakes, not to deteriorate his qualities. There is very important for the instructor to offer him the possibility to analyse all aspects of life, not only those related to his very special talent. The performance offered at medium or older age will reflect the musician's personality and entire life experience.

- **Although a gifted child's special qualities impress so much and induce a protection and stimulation reaction, the child's fate may be in danger even in the most careful person's hands if too much stress is laid on explaining the necessity of discipline and performance.** This might overburden the child and might lead to early attrition of his psychological qualities. The same concentration effect may be implicitly and instinctively obtained, allowing the child to enjoy what he does and the results he obtains.

- **One of every musician's basic problems is his tendency of being permanently discontented of the achieved performance, of wishing to be better.**

The child should be explained that to err is part of a musician's expertise and that he will be confronted to this fact, for his entire lifetime. The child must accept that mistakes are part of the musical activity and are necessary for improving performance.

- **The pedagogue must allow the child the necessary time for discovering himself and the surrounding world and for finding the manner to earn his living.**

This connection leads to subsequently avoiding the psychotherapeutic treatments, which are not deprived of unforeseen problems and consequences.

- **Both musically specialized institutions and family offer numerous possibilities of psychological support, which may help the musician to overcome the crises he might go through during a certain life period.**

Over adolescence, the formation of youth groups with common interests, who spend together an important part of the spare time, especially the after-performance time, when the child might experience exhaustion, reduces the danger of psychological crises. The organization of after-performance activities, not related to music, is a proof of respect for every young musician's personal complexity.

- **The attitude towards the audience must be prepared before the entrance on stage.**

The fact that the audience – or the art critics – will express critical opinions is part of the rules of the game, is nothing special; criticism improves performance. This way, the young performer will perceive himself, the audience and the art critics as component parts of a group interested in the musical outcome and he will endeavour to feel and to integrate the audience's reaction to his performance.

- **The young performer must be taught how to enter and leave the stage, how to use the relaxation technique and how to react – or even dialogue– with the audience.**

Resorting to video records helps to explaining the differences between what the musician feels on stage and what the audience feels in its turn. The recording must not, nevertheless, be shown to the musician immediately after the performance, when the musician's sensitivity has reached a maximum level.

Despite the musician's tendency and strenuous, permanent struggle towards perfection, to be perfect...is rather God's reality, and not an artist's experience.

Bibliography:

- Feldman D. *Child Prodigies: Distinctive Form of Giftedness*. Gifted Child Q. 1993
- Freeman J. *Annotation: Recent Studies of Giftedness in Children*. J Child Psychiatry. 1995
- Marjoriebanks T. *Ability and Personality Correlates of Children's Ability and Aspirations*. Psychol Rep. 1992
- Detterman D. *Giftedness and Intelligence: One and the Same?* In: Bock GR, Ackrill K, eds. *The Origin and Development of High Ability*. Chichester, England, 1993
- Elshout J. *Talent: the Ability to Become an Expert*. In: Freeman J, Span P, Wagner H, eds. *Actualizing Talent: a Life Long Challenge*. London, England: Casell, 1995
- Walberg HJ, Zhang G, Haller EP, et al. *Early Educative Influences on Later Outcomes: the Terman Data Revisited*. In: Heller KA, Momks FJ, Passow HA, eds. *International Handbook of Research and Development of Giftedness and Talent*. Oxford, England: Pergammon Press, 1993
- Csikszentmihalyi M, Rathunde K, Whalen S. *Talented Teenagers: the Roots of Success and Failure*. Cambridge, England: Cambridge University Press, 1993
- Csikszentmihalyi M, Csikszentmihalyi IS. *Family Influence on the Development of Giftedness*. In: Bock GR, Ackrill K, eds. *The Origin and Development of High Ability*. Chichester, England, Willey, 1993
- Howe MJ. *The Early Lives of Child Prodigies*. In Bock GR, Ackrill K, eds. *The Origin and Development of High Ability*. Chichester, England, Willey, 1993
- Sloboda J. *Musical Ability*. In Bock GR, Ackrill K, eds. *The Origin and Development of High Ability*. Chichester, England, Willey, 1993
- Arnold KD, Subotnik RF. *Lessons from Contemporary Longitudinal Studies*. In Subotnik RF, Arnold KD. Eds. *Beyond Terman: Contemporary Longitudinal Studies of Giftedness and Talent*. Norwood, NJ, Ablex Publishers, 1994
- Pollock GH. *The Mourning Liberation Process and Creativity*. In *The Annual of Psychoanalysis*. New York, NY, International University Press, 1978
- Cohen BJ, Kupersmith JR. *A Study of SCL-90 Scores of 87 Performing Artists Seeking Psychotherapy*. Med Probl Perf Art. 1986
- Miller A. *The Drama of a Gifted Child*. New York, Basic Books, 1981
- Babikian HM. *The Psychoanalytic Treatment of the Performing Artist, Superego Aspects*. J Am Acad Psychoanal. 1985
- Olszewski-Kubilius PM, Kulieke M, Krasney N. *Personality Dimension of Gifted Adolescents: a Review of the Empirical Literature*. Gifted Child Q. 1988
- Gardner H. *Frames of Mind: the Theory of Multiple Intelligences*. New York, Basic Books, 1983
- Terman LM, Oden MH. *The Gifted Group at Mid-Life: a 35 Years Follow up of the Superior Child*. Stanford, Calif, Stanford University Press, 1957
- Holligsworth L. *Musical Sensivity of Children who Score Above 135 IQ*. J Educ Psychol. 1926

- Feldman D. *Beyond Universals in Cognitive Development*. Norwood, NJ, Ablex Publishers, 1980
- Sosniak LA. *A Long Term Commitment to Learning*. In Blom BS, ed. *Developing Talent in Young People*. New York, Ballantine Books, 1985
- Bamberger J. *The Mind behind the Musical Ear*. Paper presented at: Biology and Music Making Conference, Denver, Colorado, 1987
- Robson BE. *Post-Performance Depression in Art Students*. Med Probl. Perform Art. Dec. 1987
- Ostwald PS. *Psychoterapeutic Strategies in the Treatment of Performing Artists*. Med Probl. Perform Art. December 1987
- Pruettt K. *A Longitudinal View of the Musical Gift*. Med Probl Perf Art. March 1987.

STELA DRAGULIN

Fakultet za muzičku umetnost

Univerzitet Transilvania, Braşov Rumunija

steladragulin2005@yahoo.com <http://www.unitbv.ro>

**ČUDO OD DETETA: DAROVITOST I INTELIGENCIJA – PROBLEMI
METODOLOGIJE ISTRAŽIVANJA**

Okruženje u kom darovita deca žive i razvijaju svoje urođene potencija ima snažan uticaj na njihov razvoj. Stoga se značajna pažnja mora posvetiti čudima od deteta da ona ne bi protraćila svoj talenat. Zbog toga daroviti moraju iskoristiti sve fizičke, psihičke, socijalne i duhovne uslove. Talenat je privilegovan, međutim svi uticaji sredine moraju se preplesti da bi uspešni mladi ljudi procvetali u svom talentu. U okviru uravnoteženog socijalnog i političkog konteksta, koji prepoznaje značaj obrazovanja, kulture i civilizacije, koji je podržan posvećenim porodicama koje obezbeđuju višestruki razvoj darovitih koji su pokrenuti sopstvenim impulsom da prevaziđu sebe, ovakva deca i mladi ljudi će obogatiti i unaprediti ono što su nasleđem dobili i pred njima će biti izvanredna budućnost. Postoje određene značajne teškoće u istraživanju odnosa između uloge darovitosti i inteligencije u oblasti muzike.

Ključne reči: čudo od deteta, darovito dete, okruženje, obrazovanje, talenat, razvoj.