Highly-gifted individuals appear to have significant discrepancies between their strengths and their weaknesses. This is one of the attributes of asynchrony that marks the development of the gifted throughout the life span. Asynchrony comprises several interrelated components: advanced cognitive abilities, heightened intensity and complexity, uneven development, unusual awareness, feeling out of sync with societal norms, and vulnerability. Uneven development is a universal manifestation of giftedness (Silverman, 1995). All gifted children develop at a faster rate mentally than they do physically. Mental age denotes the rate of cognitive development, while chronological age is more correlated with physical development. The intelligence quotient (IQ) originated as the ratio between mental age and chronological age. Therefore, the higher the IQ, the more asynchronous the child or adult.

Asynchrony is magnified when high levels of intelligence are combined with disabilities. However, Maddi Wallach (1995) suggested that asynchronous development in childhood causes “arrival at adulthood with extraordinary abilities and unusual deficits” (p. 36). If all highly-gifted individuals have “extraordinary abilities and unusual deficits,” how does one differentiate between those with disabilities and the rest of the highly-gifted population? This is not a simple question.

What Is Compensation?

Recognition of learning disabilities among the highly gifted is made extremely difficult by virtue of their ability to compensate. Compensation is the mind’s ability to solve a problem in another way than is typical. The highly gifted excel at problem solving. The more abstract reasoning capability one has, the more one can use reasoning in place of modality strength to solve problems. Let me give you an example. A highly-gifted child turned his mother’s face toward him when she spoke and intently studied her face. In school, he sat in the front row and watched his teacher just as intently. He was in second grade before it was discovered that he had a 98 percent hearing loss (C. J. Maker, personal communication, July 8, 1998).

Compensation enables one part of the brain to take over a function when there is injury to another part of the brain. Both sensory equipment and the processing of sensory information can be more acute in the remaining senses when one or more of the senses are impaired. The most dramatic example is Helen Keller—blind, deaf, mute—whose sense of smell (as well as taste and touch) was so finally tuned that she could detect a storm hours before there was any visible sign.

I notice first a throb of expectancy, a slight quiver, a concentration in my nostrils. As the storm draws near my nostrils dilate, the better to receive the flood of earth odors which seem to multiply and extend, until I feel the splash of rain against my cheek. As the tempest departs, receding farther and farther, the odors fade, become fainter and fainter, and die away beyond the bar of space (as quoted in Ackerman, 1990, p. 44).

Compensation is, indeed, one of the miracles of the mind.
But compensation is a two-edged sword. While it helps an individual to adapt, it also acts to prevent accurate diagnosis and recognition of disabilities by oneself and others. Many forms of compensation are unconscious. A child whose eyes do not team properly may see doors an inch to the right of where they really are. After bumping into several walls or doors, the mind automatically adjusts the child’s perception one inch to the left to enhance the survival of the organism. Instead of allowing the recognition of the problem, so that it can be mediated through exercises or lenses, the mind adjusts the perception—at least in some situations. This process occurs with all of the senses.

Some forms of compensation are conscious. Special educators attempt to teach children to compensate for weaknesses by consciously developing their strengths. And many determined individuals teach themselves to compensate for injuries or disabilities through years of practice and exercise. One gifted woman I know with cerebral palsy had to teach herself to walk three times. Even if the process of learning how to compensate is a conscious effort, the compensation itself eventually becomes automatic or unconscious, and the individual comes to rely on that capacity to compensate in order to function in the world.

The problem is that while modality strengths can be counted on consistently, compensation tends to be unstable. Under a variety of conditions, the mind stops compensating adequately. Fatigue, illness, and stress all have an impact on compensation mechanisms. When I am tired, my eyes cross. A person who has taught herself a set of organizational routines to help her deal with being organizationally impaired may not be able to rely on those strategies if she suffers a loss of a loved one.

Compensation requires extra physical, emotional, and cognitive energy. When the body is fatigued, when it does not receive proper nutrition, when illness occurs, there is often insufficient physical energy to compensate. Likewise, when a person is emotionally wounded, there is less emotional energy. After exerting a tremendous amount of mental energy concentrating all day when concentration is difficult, an individual may feel “brain-fried”—unable to take in any more cognitive information. At all these times, disabilities may be more evident or appear more severe. Sometimes a person can have a surplus of cognitive energy, but not have enough physical energy to do anything but watch TV. One cannot borrow from one energy source to replenish another. All three sources of energy must be present for functioning to be optimal.

Age is another variable that affects compensation. A highly-gifted child may be sort of spacey in elementary school and still maintain a B+ average. However, by junior high school, when hormones kick in, and the work becomes more difficult, the student’s grade point average may drop to C. The compensation strategies that the mind developed for coping in the first twelve years of life may not work as well during the preteen years. Compensation can also be situation-specific. It works in some situations and not in others. New strategies may need to be consciously developed when the automatic mechanisms no longer do the job.

Unfortunately, since compensation occurs at an unconscious level, individuals are rarely appreciative of their own heroic achievements. Instead, they berate themselves for their weaknesses or inconsistency of performance. They expect the compensatory mechanisms to work all the time, and they blame themselves if they don’t. This undermining of self-esteem is often the by-product of the lack of understanding they received as children from the significant adults in their lives. I recently worked with a highly-gifted teen who is dyslexic. Her well-meaning teacher set standards for her based
on what she demonstrated she could do on one occasion. The teacher assumed that if she failed to live up to her previous performance, she must not be trying hard enough. So she was penalized for succeeding once when she was unable to repeat the performance.

Rose, my friend with cerebral palsy, provides another poignant example. Her high intelligence has enabled her to compensate well enough to pursue graduate studies in mathematics and live independently. However, there have been many ups and downs along the way, with accompanying self-deprecation during the down times. Last week, Rose visited a center for the disabled and came to the realization that she had been denying the impact of the cerebral palsy on her life, diminishing its importance since she could “pass as normal.” She also realized that in doing so she failed to give herself credit for what she had accomplished in coping with her disability. Rose had difficulty accepting herself as gifted, since she was unable to do so many things. When she finally understood how giftedness and disability interact, she was able to describe herself in her journal as gifted for the first time in her life, without putting gifted in quotation marks.

The Importance of Early Detection

It is essential to the well-being of the individual to have disabilities diagnosed as early as possible. Early diagnosis enables early intervention. Early intervention is particularly important in the case of motor delays, since the optimal time period for their correction is under the age of eight. Too many educators and pediatricians adopt a “wait and see” attitude, advising that children often “outgrow” these fine motor or gross motor problems. The window of opportunity for remediation of sensory-motor dysfunctions may be over before everyone takes the problem seriously. In my practice, I have found a startling number of highly-gifted children with sensory-motor delays. Many were the product of very long labor, emergency C-sections, a cord wrapped around part of the body, or the necessitation of oxygen at birth. A neuropsychiatrist in Denver hypothesized that in some of these cases perhaps one part of the brain is hyperoxygenated while another part has oxygen deprivation. A pediatric occupational therapist should be contacted to evaluate any signs of clumsiness, switching hands when engaging in activities, or difficulties with writing or drawing. Also, when highly-gifted children hate puzzles, that is another red flag. Although some children may exhibit these traits without having a disability, early diagnosis will enable early treatment for those children with those needs.

We have also found that chronic otitis media—more than nine ear infections in the first three years—can result in auditory processing impairment with concomitant problems in attention, listening skills, spelling, rote memorization, and handwriting. In highly-gifted children, otitis media is often difficult to detect, since the number one sign is irritability. Many highly-gifted children are just naturally irritable—with or without an ear infection! Frequent well-baby checkups are advised. Better yet, a young mother of a gifted child should have an otoscope and instruction on how to check her baby’s ears daily. By the age of seven, children who have had chronic otitis media should receive a full audiological examination, including a central auditory processing battery.

Children who begin reading at two, three, four, or five years old may be bringing naturally farsighted eyes into near-point focus, leading to slight muscular imbalances. Don’t hide the books and the cereal boxes. A behavioral optometrist who specializes in vision training can retrain the eyes within six months. Some highly-gifted children have
tracking problems (they lose their place when they are reading) or near-far/far-near focusing problem (they find it difficult to copy for the board). Some have poor binocular fusion, depth perception, visual discrimination, visual-motor coordination, or visual perception. High verbal IQ combined with performance IQ that is fifteen or twenty points lower should signal the need for an optometric evaluation. Regular eye exams can detect these difficulties. If vision training is recommended, the exercises should be practiced for fifteen minutes a day, every day, with at least one parent, for about six months. These exercises work for adults as well as children, and should be considered in the event of closed head injuries.

In assessing highly-gifted children, whether intellectually or in terms of modality strengths (vision, audition, kinesthetic abilities), it is vital for the examiner to compare the child’s strengths to his or her weaknesses, rather than to the norm for average children. Highly-gifted children often have strengths at the top of the test and weaknesses within the average range. The uninformed interpreter will not realize that those average scores are being inflated (compensated) by high intelligence and actually represent disabilities. On a Wechsler scale, for example, a discrepancy of nine points is significant (Kaufman, 1994)—even if the high score is 19 (the ceiling of the test) and the low score is 10 (exactly average). From a normative viewpoint, the scores are averaged and the child is seen as having moderate abilities with some unusual strengths. Instead, the strengths should be seen as the approximate level of the child’s actual abilities, and the low scores should be interpreted as significant weaknesses, possibly improvable through therapeutic intervention.

Perils for the Highly Gifted

I know a half dozen highly-gifted women who have sustained closed head injuries or other cognitive impairments—from car accidents, falls, and Lyme’s disease. All of them had cognitive assessments ordered by their insurance companies. None received insurance compensation. Why? Because their high intelligence enabled them to score within at least the average range on these assessments, especially when their strengths and weaknesses were averaged. Their previous accomplishments and expected levels of continued achievement were dismissed as “overachievement”! In the majority of cases, there were no IQ scores available prior to the insult to the nervous system, which could have served as a basis for proving to the insurance company that losses had occurred. Even in cases in which that documentation has been available, psychologists have ignored the significant losses, attributing them to “depression,” etc. A person is considered “normal” (unimpaired) if he or she scores anywhere within the normal range on assessments. This normative basis of evaluation, which is prevalent in psychology, discriminates against the highly gifted. I wish this discrimination could be challenged legally.

The good news is that the mind’s power to compensate really comes to the forefront when there is cognitive injury. It may take several years of exercises and practice, and some processes will never be as rapid as they once were, but in many cases it is possible to regain most of one’s functioning abilities in time. Since the process is lengthy, it may be terribly discouraging, but retraining and practice eventually pay off. When brilliant violinist Nadia Solerno Sonenberg accidentally cut off one of her fingers, she was able to reteach herself to play the violin with four fingers, and eventually
achieved the same level of expertise that she demonstrated before the accident. Mobilization of the will is the key to compensation.

**Conclusion**

It is difficult to determine whether a highly-gifted person has disabilities or just the natural asynchrony that accompanies that degree of difference from the norm. When the weaknesses pose a problem for the self or for others, it is wise to seek professional diagnosis. To be highly gifted is to be idiosyncratic. There are no two highly-gifted people who are alike. In fact, highly-gifted people differ from each other to a greater extent than other groups. Self-acceptance may be hard won, especially accepting one’s weaknesses. But it is important to raise the question, “To what extent could I be more effective (or fulfill my potential) if my weaknesses were ameliorated?” Detection and amelioration of disabilities can dramatically affect the quality of one’s life. They enable the appreciation of one’s self and the development of conscious strategies of compensation. They shift attitudes toward oneself during periods when compensation is faulty. Highly-gifted people with disabilities are heroic. They are to be admired when their compensation attempts work and supported when the mechanisms are in consistent. Only then will they develop the confidence to fulfill their own unique purpose in the world.

**References**


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