### The Symptoms of Gifted and Autistic Children: A Critical Assessment of the General Problems Associated With Them

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#### ABSTRACT

The study sought to assess critically the general problems and symptoms associated with gifted and autistic children. Gifted children are those children who give evidence of high performance capability in areas such as intellectual, creative, artistic, leadership capacity, or specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities. Autism is a neuropsychiatric disorder characterised by severe and sustained impairment in social interaction, deviance in communication, and patterns of behaviour and interest that are restricted, stereotyped, or both. Onset is generally before age 3 years. The task of effectively providing for the education of special children (gifted and autistic requires major changes in concepts and practice. The curriculum of the special should emphasize what will be taught, what will be learnt and what specific teaching strategies will be adopted. These demands create problems for the curriculum planners who have to create reliable programmes to meet the mental and physical needs of both the gifted and the mediocre in our schools. Special children pose problems for the school administration. Without stimulating items to keep these children constantly occupied, they revolt and refuse to co-operate with the school administration. The study concluded that special education is not restricted to academic skills but must also include learning styles, resistance to distraction, functioning in group situations, independent skills, and everything else that might impact the learning situation. It was therefore recommended that skilled teachers with experience in teaching students with these unique strengths and weaknesses are a necessity! Teaching special children requires thorough assessments of all aspects of their functioning.

### KEYWORDS: Gifted Children, Autism, Classroom Teacher, School Administration, Curriculum Planners, Symptoms, General Problems.

#### **INTRODUCTION**

According to Gross (2013), gifted children are, by definition, "Children who give evidence of high performance capability in areas such as intellectual, creative, artistic, leadership capacity, or specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities." There is a biological difference between the gifted child and the typical child. The gifted child seems to have an increased cell production that also increases synaptic activity. This all adds up to an increased thought process. The neurons in the brain of the gifted child seem to be bio-chemically more abundant and, as a result, the brain patterns that develop are able to process more complex thought. There seems to be more prefrontal cortex activity in the brain, which leads to insightful and intuitive thinking. Gifted children have more alpha wave activity in the brain. They not only get more alpha wave activity faster than the typical child, but they also sustain it longer. This allows for more relaxed and focused learning with greater retention and integration. The brain rhythms of the gifted child occur more often, and this allows for concentration, attention, investigation, and inquiry (Gross, 2013).

It is a common misconception that gifted students are universally gifted in all areas of academics, and these misconceptions can have a variety of negative emotional effects on a gifted child. Unrealistically high expectations of academic success are often placed on gifted students by both parents and teachers. This pressure can cause gifted students to experience high levels of anxiety, to become perfectionists, and to develop a fear of failure. Gifted students come to define themselves and their identity through their giftedness, which can be problematic as their entire self-concept can be shaken when they do not live up to the unrealistically high expectations of others. A person with significant academic talents often finds it difficult to fit in with schoolmates (Ajuwon, 2008).

Autism is a severe developmental disorder that begins at birth or within the first two-anda-half years of life. People with autism thrive on routine, and the ability to predict the outcomes of certain behaviors and places. A break in routine or exposure to loud, over-stimulating environments can overwhelm a person with ASD, leading to outbursts of anger, frustration, distress, or sadness.

## STATEMENT OF THE PROBLEM

At least one out of ten children in the world has exceptionality, according to estimates by the World Health Organization. These include people with hearing, vision, language, mobility and learning impairments. Gifted children pose great problems to the school teacher, other children, and even to the school administration. Children with autism have trouble with communication. They have trouble understanding what other people think and feel. This makes it hard for them to express themselves, either with words or through gestures, facial expressions, and touch. People with autism might have problems with learning. Creating a compatible syllabus for both the gifted and other children is also a problem for schools.

# LITERATURE REVIEW

# GIFTEDNESS

While giftedness is seen as an academic advantage, psychologically it can pose other challenges for the gifted individual. A person who is intellectually advanced may or may not be advanced in other areas. Each individual student needs to be evaluated for physical, social, and emotional skills without the traditional prejudices which prescribe either "compensatory" weaknesses or "matching" advancement in these areas. These pressures often wane during adulthood, but they can leave a significant negative impact on emotional development. Social pressures can cause children to "play down" their intelligence in an effort to blend in with other students. "Playing down" is a strategy often used by students with clinical depression and is seen somewhat more frequently in socially acute adolescents which is usually discouraged by educators when they recognize it. Unfortunately, the very educators who want these children to challenge themselves and to embrace their gifts and talents are often the same people who are forced to discourage them in a mixed-ability classroom, through mechanisms like refusing to call on the talented student in class so that typical students have an opportunity to participate. Students who are young, enthusiastic or aggressive are more likely to attract attention and to disrupt the class by working ahead, giving the correct answers all the time, asking for new assignments, or finding creative ways to entertain themselves while the rest of the class finishes an assignment. This behavior can be mistaken for Autism Deficit Hyperactivity Disorder (Obani, 2004).

Many parents of the gifted find that it is the social-emotional aspect of their children's lives that needs support. Schools and Talent Development programmes often focus on academic enrichment rather than providing time for gifted kids to have the social interaction with true peers that is required for healthy development. National organizations such as Supporting Emotional Needs of the Gifted (SENG) as well as local organizations have emerged in an effort to meet these needs. It can also happen that some unidentified gifted students will get bored in regular class, daydream and lose track of where the class is in a lecture, and the teacher becomes convinced that the student is slow and struggling with the material (UNESCO, 2009).

Gifted and Talented students also have a higher chance of co-occurring learning disability. Gifted students with learning disability are often called twice exceptional. These students can require special attention in school. Finally, Gifted and Talented students are statistically somewhat more likely to be diagnosed with a mental disorder such as bipolar disorder and to become addicted to drugs or alcohol.

## Symptoms of Giftedness

- General intellectual ability,
- Specific academic aptitude,
- Creative or productive thinking,
- Leadership ability,
- Visual and performing arts, or
- Psychomotor ability.

## The Problems of Gifted Children to the Classroom Teacher

As observed by Udokang (2005), there are various problems created by the gifted children. Such problems include inattentiveness, asking questions to embarrass the teacher, truancy, breaking of school rules and being arrogant. The teacher also finds it difficult to plan his lesson to suit the exceptionally bright, the average and the dull students. Let us briefly look at these problems.

**Inattentiveness**: As the gifted are exceptionally bright and knowledgeable, they lack patience to listen to what the teacher is trying to teach. They feel that the teacher is wasting their time hence they refuse to pay attention and instead, find something else to occupy their time.

Asking Catching Question: The gifted are fond of asking their teachers catching questions, which the teacher least expected. These might embarrass the teacher and make them irritable especially when they cannot answer such questions.

**Truancy**: Playing of truancy is possible for the gifted student who feels that they can easily meet up with whatever the teacher is doing in their absence. As they are insatiable the teacher finds it uneasy to make them satisfied.

**Arrogance**: Arrant (1964) sees the gifted children as excessively proud because of their extra knowledge. Banjo (1976) also supports this view, but adds that teacher have to prepare their lesson properly to be able to capture the interest of these children. As the gifted are always ahead of their thinking and performance, they create problems of reconciliation between the bright and average student, for the teacher. With their arrogant characteristics, they refuse to be regimented through school rules and regulations thereby being in confrontation with the teacher. These acts of insubordination, insurgence and gross misconduct, could break the mutual relationship between the teacher and other student in the classroom.

### **Problem towards Others in the Classroom**

**Individual Differences**: These seem to be neglected in the presence of the gifted children. These happen as the teacher trying to appease or please the gifted, may accelerate the speed of delivering a lesson to the detriment of the understanding of other students. The gifted may understand the lesson quite well but the slow learners who need more time, would be lost. This may trigger off some negative attitudes towards school.

**Disturbances in the Classroom**: If a gifted child is not favorably recognized in the class by the teacher, he may foment some trouble in the class by disturbing the rest of the class. If, for example, four sums are given to the class for a stipulated time, the gifted child could complete working those sums in a twinkle of an eye. The remaining time would be used to create havoc in the class while the classmates are still struggling with theirs.

**Hatred Development**: Many gifted children do not receive the love of their teachers who consider their questioning of authority and lack of conformity as a nuisance in the classroom (Torrance, 1972). Moreover, the gifted are not liked by their classmates for they consider some of the ideas as 'crazy'. This agrees with the assertion of laycock (1979) that teachers who are either emotionally insecure or lacking in their knowledge, find questions and ideas of gifted children as a real threat, therefore, they frown at them. If the teacher reveals their dislike for gifted children in class, other children in the class will echo same. The children will be unhappy as mutual respect and understanding delude them (Usoro, 2005).

## Problem posed by the Gifted to the School Administration

According to Clenching and Davies (1980), "instructional materials for special education classes for the gifted should be different from those purchased for the regular curriculum". This is acceptable whole-heartedly. If this is not complied with, the teachers and the school administrators might face the problems of planning to fit the individual needs of the extremely able pupils and at the same time, enhance the problem solving techniques of other children. Lack of supplementary books, pamphlets and periodicals, selected special programmes, extraordinary field trips, tape and recording consumables, laboratory equipment and the like may contribute to making the gifted children uneasy. In some cases, due to the insatiable demands of these children, the school administrators are forced to alter plans to meet their needs at the detriment of other children (Barton & Smith, 2000).

## **Problems toward Curriculum Planners**

The curriculum planners are at a fix because they cannot plan appropriately without the knowledge of the number of gifted children to plan for in our schools. To identify these children, much observation and follow-ups come in here, too. All these need money and expertise. Even, an individualized education programme for the gifted will create problems to the government and the education planners because of lack of finance and manpower. In orientating the curriculum towards the needs of the gifted, the needs of other children may be neglected (Ellis & Stuen, 1998).

### **Destruction of School Equipment**

The gifted in our secondary schools need varieties in toys, bicycles, old cars, clocks, laboratory equipment and other things, to 'play' with. They would like to dismantle some items into bits and pieces before reassembling them. In so doing, some of the school equipment might be broken hence the authorities would prevent them from even entering the laboratory until the broken things are replaced. With the imaginations of these children running wild, they should be given chance to conduct experiment with materials available, instead of locking such materials in cup-boards with inscription, "please don't touch".

#### **General School Behavioural Problems**

As the gifted are, all told, imbued with a reasonably good health, they have self-confidence and may not like to take part in group activities. They cannot stand stupid and irresponsible people, hence they prefer working in solitude. These do not augur well for them because other students misconstrue them and their intentions (UNICEF, 2007).

These children are used to telling the truth or speaking their minds and are prepared to take the consequences. With these, they oppose 'irrelevant' and unnecessary rules and regulations which they even encourage others to break. They see some of the human constraints as uncalled for and unnatural, thus coming directly against the school authorities. But they are equally happy to comply with 'reasonable' rules and conventions under their own terms.

These children like reading a lot. At times, this makes them have problem with the school authorities as their inquisitiveness makes them read even things exclusively meant for the staff. Some of them do not like dressing well. This may be counter to the school regulations, hence problems. As some of these children leave their hair unkempt and their shirts flapping over their un-ironed pair of trousers, the school authorities become worried and punish them, all to no avail. We can go on and no but what is obvious is that, this rare breed type of children have problems which are not their own deliberate making. Even the way they talk, walk, see, write and spend their leisure, constitute problems for them.

## The Use of Computer in Facilitating the Education of Gifted Children

Lindsey (2000) identifies three ways in which the computer can be used to facilitate the education of gifted children. These three ways are, Computer Assisted Instruction (C.A.I), developing thinking skills and as tools for facilitating specific tasks.

*Computer Assisted Instruction:* This is the use of software to teach concepts or processes in an interaction-learning environment. In Computer Assisted Instruction, the computer presents information, asks questions and verifies responses in much the same way the teacher does. The Computer Assisted Instruction operates in four main modes, drills and practice, tutorial games and simulation.

*Drills and Practice:* This mode of instruction provides students with practice using materials they have already encountered. Since these programs covers various levels of many subject area, it can be used to programme and accelerate the pace of a gifted child's educational programme, thereby helping students who want to go beyond the lock step curriculum to acquire new skills.

*Tutorials:* Tutorials provide new information. Typically, a program presents a body of information and then questions the student on the information. Like in drills and practice, tutorials can be a form of enrichment or acceleration for students who want to explore areas that may not be in the regular curriculum.

*Games:* Before presentation, computer games for the gifted children need to be evaluated individually. Such games combine intellectual challenge with the compelling game format. Good computer games develop logical thinking, organization and planning skills. They have variable-difficulty level, multi-level goals, hidden information and randomness.

*Simulation:* Simulations are among the most powerful learning tools for gifted children. It is based on the discovery approach to learning i.e. learning by doing. Simulation provides situations that are analogous to real situations, but they control limiting factors that exist in the real situation such as danger, expense, time and space.

## **Developing Thinking Skills**

Gifted children are believed to be particularly adept at learning to use the cognition skills of analysis, synthesis and evaluation. Also, to be proficient at problem solving, students are taught to pose problems, precisely define the problem, gather information pertaining to the problem, develop a solution strategy, find the solution and check the solution. Computer programming is an excellent vehicle for teaching problem solving skills because these six steps are essentially the same steps that programmers use in writing programmes.

## Computer as a Learning Tool for the Gifted

A tool is a device that makes work easier. Computer is a tool in that it can perform tasks that are beyond the capabilities of humans. Of particular use to gifted children are the computers' capabilities for processing data, word processing, creating designs in arts and music, facilitating creation of programs through the authoring language and linking students with the outside world.

**Data Processing:** one of the goals of educational program for the gifted children is to foster independent learning. To achieve this goal, students are encouraged to conduct their own

research. The computer is a powerful research instrument because it can run data from the researches conducted by gifted children.

*Word Processing:* Word processing has changed the way composition is taught. Before the age of the microchip, writing and rewriting were often troublesome, but now, students can enter, store, edit and print text in many different formats. Sentences can be shifted or paragraphs moved with the push of a button.

*Creating Arts and Music:* Student can create works of arts on the computer through some software packages like the "Delta Drawing" which allows students to use the keyboard to draw pictures on the screen.

Also some programs such as "The Magic Melody Box" makes it easy for musicians to create four voice-harmonized songs.

Authoring System: Authoring system and languages allow users to create computer programs even if they know very little about the conventional program language. Typically, authoring languages allow the user to create drill and practice or tutorial programs. It can also be used by gifted students who want to create interactive software without going through the usual stages of programming.

*Networking:* Networking is a popular term that refers to the process of sharing information. The age of technology has greatly expanded human capabilities for sharing information with sources outside the school to enrich their knowledge (Aniefiok, 2008).

## AUTISM

Autism is a complex disorder with many contributing factors. While there are many theories as to the cause of the increase, Autism Research Institute (ARI) believes that environmental factors including unprecedented exposure to toxic substances and over-vaccination of infants and young children are the key factors triggering this devastating epidemic (ADB,2010).

## **Symptoms**

- Insistence on sameness; resistance to change
- Difficulty in expressing needs; using gestures or pointing instead of words
- Repeating words or phrases in place of normal, responsive language
- Laughing (and/or crying) for no apparent reason; showing distress for reasons not apparent to others
- Preference to being alone; aloof manner
- Tantrums
- Difficulty in mixing with others
- Not wanting to cuddle or be cuddled
- Little or no eye contact
- Unresponsive to normal teaching methods

- Sustained odd play, and spinning objects
- · Obsessive attachment to objects
- Apparent over-sensitivity or under-sensitivity to pain
- No real fears of danger, and Noticeable physical over-activity or extreme under-activity
- Uneven gross/fine motor skills
- Non-responsive to verbal cues; acts as if deaf, although hearing tests are in normal range.

### Problems faced by Autistic people and recommended help

**Organizational Difficulty:** Self-organization is difficult for most people and especially for students with autism. It requires an understanding of what one wants to do and a plan for implementation. These requirements are sufficiently complex, interrelated, and abstract to present formidable obstacles for students with autism. When faced with complex organizational demands, they are frequently immobilized and sometimes never even able to begin their required tasks. Developing systematic habits and work routines have been effective strategies for minimizing these organizational difficulties (The National Special Needs Education Policy framework, 2009). Students with established left to right and top to bottom work routines do not stop working in order to plan where to begin and how to proceed. Organizational difficulties are also minimized through checklists, visual schedules, and visual instructions concretely showing autistic students what has been completed, what remains to be done, and how to proceed.

**Distractibility:** Distractibility is another common problem of students with autism. It takes many forms in the classroom: reacting to outside car noises, visually following movements in the classroom, or studying the teacher's pencil on the desk instead of completing the required work. Although most autistic students are distracted by something, the specific distractions differ considerably from child to child. Identifying what is distracting to each student is the first step in helping them. For some it might be visual stimuli, while for others it might be auditory. Careful assessments of individual distractions are crucial. Following these assessments environmental modifications can be made, which might involve the physical make-up of a student's work area, the presentation of work-related tasks, or many other possibilities.

**Sequencing:** Another area of difficulty for autisms is sequencing. These students often cannot remember the precise order of tasks because they focus concretely on specific details and do not always see relationships between them. Sequences involve these relationships, which they often disregard. Consistent work routines and visual instructions compensate for these difficulties. Visual instructions can highlight sequences of events and remind autistic students of the proper order to follow. The visual picture remains present and concrete, helping the student to follow the desired sequence. The establishment of systematic work habits is also helpful; a student who always works from left to right can have work presented in the correct sequence.

**Difficulties:** Difficulties with generalization are well-known in autism and have important implications for educational practices. Students with autism frequently cannot apply what they have learned in one situation to similar settings. Appropriate generalization requires an understanding of the central principles in learned sequences and the subtle ways in which they are applicable to other situations. Focusing on specific details, students with autism frequently

miss these central principles and their applications. Community-based teaching is also important for improving generalisation skills (World Health Organization, 2002). Since our ultimate goal is successful community-based training, activities must be available throughout educational programmes. These should include regular field trips as the students grow older, community-based work opportunities in 'real' job settings, and community-based leisure activities.

*Uneven profiles of skills and deficits:* Uneven profiles of skills and deficit are well-documented characteristics of students with autism. They are also among the most difficult to programme because an autistic student can have the extraordinary ability to see spatial relationships or understand numerical concepts but unable to use these strengths because of organizational and communicative limitations.

**Deaf:** Despite having normal intelligence, people with hearing impairment may need instructions repeated and may have difficulty following directions in the classroom. In particular, they may not respond appropriately to instructions that are lengthy or that include more than one task. Dr. Bill Keith, an Audiologist and CEO of Sound Skills noted that APD affects an estimated five per cent of children (more boys than girls) and most go undiagnosed. APD can be present as a learning or behaviour problem and can cause under-achievement because these children are missing out on vital information. Ultimately, the problem lies in the hearing pathways and centres in the brain (Brophy & Alleman, 1991). Children are unable to extract the message that they need to from all the sound and noise around them. Or they have trouble retaining auditory information unless it is brief." The condition often occurs in conjunction with other areas of difficulty such as Attention Deficit Hyperactivity Disorder (ADHD), Language and Phonological Awareness problems, and reading disorder. It can be the underlying cause of language, spelling, reading and learning disorders.

The underlying auditory problem should be addressed before trying to remedy the language, spelling, reading or learning difficulty. The condition requires specialised testing and assessment, and individualised treatment. A multi-disciplinary team approach is necessary.

## CONCLUSION

- 1. Parent-professional collaboration and community based instruction are important ways to improve generalisation in students with autism. The more coordinated between the home and the school teaching efforts can be, the more likely it is that the students will apply what they learn to different settings.
- 2. Special education is not restricted to academic skills but must also include learning styles, resistance to distraction, functioning in group situations, independent skills, and everything else that might impact the learning situation.

# RECOMMENDATIONS

- 1. Skilled teachers with experience in teaching students with these unique strengths and weaknesses are a necessity! Teaching special children requires thorough assessments of all aspects of their functioning.
- 2. Learning styles are especially important for the assessment process because they are keys to releasing learning potential.

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