



Case Report

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## Redefining Autism as Uniquely Humans – A Case Study

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**Abstract**

*Autism is one of five developmental disorders included under the umbrella of the Pervasive Developmental Disorders. In general, relatively little has been written on autism in developing countries as compared with what has been published on autism in other developed countries. Incidence extrapolations for India for Autism as observed is 11,914 per year, 250 per month, 57 per week, 8 per day, 1.4 per hour; hence, with this high prevalence, the need for this study was felt. With this in focus, the present research following a case study approach promotes a more inclusive approach to the Wellbeing of Individuals with Autism Spectrum Disorder. The present study brings forth the case of an individual who through care and intervention diagnosed with Autism Spectrum Disorder was able to change his life as well as of his family"s and gave a new understanding, accessibility and inclusion of exploring his potentials and becoming a unique individual with skills nobody could imagine he could exhibit.*

*Interventions used with the individual case involved Occupational Therapy, Behavioural/Emotional Therapies. Interventions with parents includes psycho-education, parenting skills and Acceptance & Commitment Therapy. Just a year of intervention brought about remarkable changes in the individual and the understanding of the uniqueness that he had, by the family, experts and society. The case highlighted that children with autism spectrum disorder are highly intelligent with lots of savant qualities in them which go unnoticed and underdeveloped due to non-acceptance and untimely identification & treatment from parents, family & society. There is still a long way to go with the identification & proper treatment of children with ASD along with the intervention strategies that needs enhancement and up gradation. Hence, we need to open up our minds and help them explore their highest potentials along with allowing them to be the way they are or they want to be.*

**Keywords:** *Wellbeing, Autism Spectrum Disorder, Parenting skills, Acceptance, Savant Qualities of children with Autism Spectrum Disorder, Exploring Highest Potential.*

## Introduction

Autism is a heterogeneous group of conditions that differ in cause but overlap in observable behaviours. ASD involves conditions like deficits in social communication, restricted, repetitive patterns of behaviours, interests or activities, sensory processing challenges, a differently- wired brain, with diverse gifts and talents. Hence, this study is conducted to explore such savant abilities of children with Autism Spectrum Disorder. The abilities and needs of people with autism vary and can evolve over time. While some people with autism can live independently, others have severe disabilities and require life-long care and support. In 2020, the CDC reported that approximately 1 in 54 children in the U.S. is diagnosed with an Autism Spectrum Disorder. Boys are four times more likely to be diagnosed with autism than girls (1:34 boys, 1:145 girls). Autism Spectrum Disorder (ASD) emphasizes on problems in empathizing, involving the ability to attribute mental states to other people as natural way of understanding them and issues in reciprocating accordingly. Deficits in empathy restrict such individuals to make connections with other's feelings and emotions limiting their social skills. However, various recent studies suggests or propose that though individuals with autism display deficits in empathizing with others, they have intact or even superior systemizing ability.

Systemizing refers to that ability to analyze and build systems so as to understand and predict the functional behavior of impersonal events or inanimate or abstract entities. Myers, Baron-Cohen and Wheelwright (2004) have listed the following six systems: (1) mechanical systems such as machines and tools; (2) natural systems such as biological processes and geographical phenomena; (3) abstract systems such as mathematical concepts and computer programs; (4) motoric systems such as 3-D drawing or piano finger technique; (5) organisable systems such as Dewey Classification System used in library catalogue or a stamp collection; and (6) social systems such as a business management or a football team. Individuals with Autism Spectrum Disorder (ASD) understand or comprehend the above mentioned systems through underlying rules and regularities instead of application of self mental states. Autistic Savants are individuals in which such superior systemizing ability is observed. Sometimes, two or more savant abilities are explored or discovered in an individual with autism spectrum disorder. However, there is also another lesser known sub- group of autistic crypto-savants, who, "because of their inability to communicate, have savant skills that are hidden, or secret, and unknown to those around them" (Rimland, 1990, p.3). Treffert (2000) describes autistic savant (part of savant syndrome or SS for short) as "a rare, but extraordinary, condition in which individuals with serious mental disabilities, including autistic disorder, have some „islands of genius“ that stands in marked incongruous contrast to the overall handicap". While it is true that "the majority of autistic savants have low IQs, there are some autistic savants who are highly intelligent" (Exkorn, 2005, p.69). The estimated incidence of savant abilities in the autistic population is about 10%.

Recent exploratory statistical studies suggests that about 10 percent of individuals with ASD, who may be intellectually disabled in most ways, show special or even remarkable skills. They can be classified under three categories of autistic savant skills as follows (Exkorn, 2005): (1) Splinter skills: These skills are most common. Autistic savants with splinter skills display obsessive preoccupations with and memorization of trivia and obscure information such as license plate numbers of vehicles and sports statistics, e.g., names of all the recent and past soccer players in the Manchester United FC, which they commit to memory. (2) Talented skills: Autistic savants with talented skills have a more highly developed and specialized skill. For instance, they can be very artistic and paint beautiful sceneries, or for some, have a fantastic memory that allows them to work out difficult mathematical calculations mentally. (3) Prodigious skills: These skills are the rarest. Prodigious savants have spectacular skills that would be remarkable even if they were to occur in non-handicapped individuals.

Autistic savant behavior (AuSS) is so far unexplainable. Its etiology can be either congenital or the result of disease or injury to the central nervous system (Shah, 2001). According to Hobson (2002), autistic superior performance is frequently considered to be a side effect of abnormal neuron- anatomical function, rather than a reflection of genuine human intelligence. Treffert (2000) posited that pre- or post-natal insult to the left cerebral hemisphere of the brain causes right cerebral hemispheric compensatory growth, reflected in impairment of languages as well as analytic thought. Hence, there is a heightened 5 capacity for right-brain-dominated functions such as, musical and visuo-spatial abilities (Di Martino & Castellanos, 2003). Any insult to the cerebral cortex causes memory functions to shift to a more primitive area of the brain (i.e., the corticostriated system), resulting in memory being non-associative, habitual, emotionless, and non- volitional – a conditioned response (Feldman & Morelock, 2003). Another theory proposed by Snyder et al. (2003) suggests that savant skills exist in all of us although not normally accessible. The normal brain is highly concept-driven, i.e., it allows us to function automatically, using unconscious mechanisms to sift through a world of unconscious information and arrive at final judgments and mindsets. However, autistic savants lack this ability for conceptualization. They have to rely heavily on the lower levels of neural information from which we abstract our conceptual schema. Hence, autistic savant artists draw with naturalistic detail, even at pre-school age; autistic savant calculators perform lightning-fast integer arithmetic computation; and autistic savant musicians rely on perfect pitch. All savants recall detail by accessing underlying processes common to all brains, but inaccessible to normal ones (Feldman & Morelock, 2003).

### **Background of the Adolescent in the Present Study**

The index adolescent was born of a full term caesarean delivery after prolonged labour of almost 24 hour since the water break of the mother during perinatal period. Birth place of the child was somewhere in

the northeast India where medical facilities were not efficient enough. Due to working outside the home the father could only see the son after almost 6months of his birth.

The mother started working as a teacher when he was just 1 year old, due to which he did not get enough opportunity to explore himself during early childhood as per need. In the words of Satterstrom et al., 2018, genes may load the gun, but it is the environment that pulls the triggers which supports the case of this child. Later, when the child was around 3years 6months old, his mother was told that her child was not behaving according to his age, hence she should get a consultancy done, when she first discovered that the child was having Autism. Due to a transferable job of his father, they used to change cities very frequently, hence could not start or continue with the therapeutic interventions in his early years of life. By age 8 when he became an elder brother to his younger sibling, his family shifted and settled in Kolkata, West Bengal. When he was admitted to a school, where he could not adjust and got traumatized due to various reasons and was withdrawn and hence continued his home schooling with his mother itself. With the child was 14years of age he was again brought for a re-assessment, where his test report findings revealed that he falls in the category of Moderate Intellectual Disability along with Mild Autism and gross deficits in his Social Adaptive Functioning. The Adolescent was having lot of aggressive tendencies, anxieties and emotional inappropriateness when he was referred to me for Behavioural/Emotional Interventions at around when he was 14 ½ years old.

#### **Statement that Client's consent is obtained**

Consent from the client as well as his parents had been taken before the presentation of this research study.

#### **Case Presentation**

This case study is about a 14-year-old adolescent with Autism Spectrum Disorder (let me call him DC), whom I worked with a few years ago. According to DC's parents, their son is very slow and clumsy who avoids or delays each and every activity to be done by him. He is mostly non-verbal and sometimes monosyllable with lots of emotional and behavioural issues involving restlessness, shouting, hand flapping as well as crying spells. DC loves to be left alone all by him.

Many children with autism prefer writing than to verbally communicate their emotions. One of the explanations can be that writings could be done within their own comfort zone even without interacting with others whereas verbal communication needs expressive social skills which is said to be one of the drawbacks in case of children with autism spectrum disorders. Therefore, writing can be a good modality for encouraging expression in children with Autism Spectrum Disorder.

Very little research has been done on emotional expression through writings of children/adolescents with ASD. It made me ponder that if we could help such children or adolescent on the spectrum of autism to express their feelings, emotions or needs and desires through writing, if they are non-verbal and face difficulty expressing through verbalization, so that it would help them become emotionally stable and gain confidence leading to much developed self-regulatory skills.

After a consultation session with DC's parents, I decided that the best way to understand or explore DC was to spend some few sessions just to observe him doing anything alone, and gradually tried to build rapport and befriends with him as he was old enough to take his decisions whether he wants to talk or connect with me or not.

After taking few rapport building sessions with him through various play and one-way communication as he was not reciprocating initially, but fortunately he started interacting non-verbally.

**Management and Outcome:** The interventions that were conducted for DC involved Occupational Therapy, Behavioural/Emotional Intervention along with homeschooling with his mother. Whereas, on the other hand, Acceptance and Commitment Therapy along with Parental Psycho-education was provided to the parents of DC.

Occupational therapy helped the adolescent to minimize his sensory loadings to a great extent so that it could increase the productivity of the adolescent. Occupational therapy also helped him enhance his writing skills so that he could express himself through writing as he was mono-syllable and mostly avoided speaking.

Psychological interventions helped him vent out his pent-up emotions, which he had inside him that was adding on to his externalizing aggressive behaviours. It also helped him overcome his anxiety issues along with enhancing his self-confidence and self-esteem. Emotional interventions also helped him develop trust, courage and strength to explore the world the way he wanted.

Parental interventions included Acceptance and Commitment Therapy along with Psycho-education that added on to their ability to cope up with their own stresses and anxious thoughts that restricted them to work with the adolescent with complete acceptance and commitment. As it is said that the more positive and committed the parent can be, the more effectively they could work and parent their kids.

**Observational findings:** Within few months of intervention, the adolescent started exploring himself through expression of writing which surprising shocked us every now and then. It was seen that when he was asked some questions and were told to write the specific answers to it, astonishingly he could answer them all through writing, which we never knew that he was absorbing everything whatever he was surrounded with. He could also answer to questions much higher to his standard or even of really very high standards. He could compute mathematical calculations of 6-7 digits mentally and could just write the answers on the sheet. He has very good writing skills through which he started sharing his

views regarding various social issues or even related to Autism. His reassessment after a year, suggested Bright Normal IQ with Mild Autism. He is 17 now and is recently admitted to OBE class VIII and is preparing for his exams.

The observations about DC revealed that he had lot of understandings regarding his life and disorder but he was always very much acceptant towards his own self. In his writings he said that “autistic child should not be considered as stupid, they are intelligent but they don’t like to show off” which indicates his clear intentions regarding need for graceful acceptance in the society and until and unless if that is not attained, he intentionally keeps avoiding interacting with people having stereotype and prejudiced thoughts regarding any children with special needs or atypical individuals.

### **Conclusion**

The case highlighted that children with autism spectrum disorder are highly intelligent with lots of savant qualities in them which go unnoticed and underdeveloped due to non-acceptance and untimely identification & treatment from parents, family & society. This study suggests that this child was quite intelligent but due to lack of and timely interventions, he could not explore him till age 14 and was assessed with Moderate Mental Retardation and Mild Autism whereas after just 1 year of proper intervention plan helped him break his bondages and explore him to the fullest, proving him to be an individual with Bright Normal Intelligence Quotient with Mild Autism along with various savant qualities that was never thought that he possessed. It was not a miracle that happened with this child, it was just that he needed a proper start or a way of expression to present him, that fortunately happened with him unlike the qualities of many other children on the spectrum of autism gets unnoticed. Thus, there is still a long way to go with the identification & proper treatment of children with ASD along with the intervention strategies that needs enhancement and up gradation. Hence, we need to open up our minds and help them explore their highest potentials along with allowing them to be the way they are or they want to be.

Hence, we could now finally conclude with the note that we all should take responsibility to create happy communities for all, i.e. not only for children with special needs or on the autism spectrum disorder but for each and every individual residing on this planet.

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