

Autism Spectrum Disorder among the Children

Myla Chester*

Department of Psychology, University of Legon, Methodist University College, United States

Abstract

The relationship between neuropsychiatric illness and exceptional cognitive abilities of various kinds has existed for a long time, but most of the research into this relationship has been exploratory and non-systematic. Subjects who have been identified as twice exceptional are one group in which this association has been investigated with greater rigor; a term used in education to describe students who are gifted but also have a neuropsychiatric disorder. Although this term refers to a variety of conditions, it is especially relevant to the study of autism spectrum disorder. Ongoing discoveries have prompted the improvement of a speculation that a specific level of the neurobiology related with mental imbalance could try and be favorable for people and could prompt high talent, while becoming disadvantageous, when a specific limit is outperformed. In this model, the same neurobiological mechanisms give people an advantage until a certain point, after which they become pathological. People who are twice exceptional would be at the tipping point, highly gifted but also symptomatic at the same time. In this article, we examine how research on twice exceptionality specifically can benefit from existing neuroimaging literature on autism spectrum disorder. To determine the neurobiology that lies behind twice-exceptionality, we propose conducting research on important neural networks that have a significant impact on ASD. Resilience and susceptibility to neurodevelopmental disorders should be better understood with a better understanding of the neural mechanisms of twice exceptionality.

Keywords: Autism; Child; Spectrum; Disorder; Children Mechanism

Introduction

There is a strong and consistent link between neuropsychiatric illness and intellectual giftedness and creativity. Andreasen were the first to officially identify this connection based on research conducted on students enrolled in a competitive Creative Writing Masters of Fine Arts program. According to Andreasen & Canter (1974), gifted writers had higher rates of neuropsychiatric symptoms, but not necessarily diagnoses, compared to controls. Additionally, gifted writers had significantly more relatives who were suffering from neuropsychiatric illness. There is currently no established explanation for the co-occurrence of increased ability and potentially debilitating neuropsychiatric dysfunction, which appears counterintuitive. An inverse-U relationship between these two conditions and the same neurobiological changes is one possible interpretation. In this model, the same mechanism or group of mechanisms gives an advantage up to a certain point, but after that point, they become pathological [1].

Although it has been determined that subjects with high intellectual and creative potential and a family history of neuropsychiatric illness are related in general, previous research has largely been limited and exploratory. Additionally, a wide range of definitions of both neuropsychiatric illness and ability are used in these studies. A more precise definition is required for systematic investigation of this relationship. According to Andreasen and Canter (1974), Assouline so-called "twice exceptional" individuals, who were first identified in educational studies of giftedness, are a relatively clearly defined group that exhibit both increased cognitive abilities and neuropsychiatric disorders [2, 3].

Discussion

This review will discuss how existing neuroimaging research on autism spectrum disorder and the twice-exceptional population, a term originating in educational research on gifted and learning-disabled students more generally, can be used to frame investigations of physiological links between cognitive abilities and neuropsychiatric illness. Since there is a substantial body of neuroimaging literature pertaining to subjects with both ASD and high IQ, we will primarily

concentrate on intellectually gifted ASD subjects. It is important to note that, although the results of these samples do not necessarily appear to be sufficient to answer questions about the neurobiology of twice-exceptionality, they will serve as a foundation for developing testable hypotheses and designing subsequent studies in populations with twice-exceptionality [4].

It was disorder characterized by stereotyped and ritualistic behavior, sensory deficiency, and significant impairments in social interaction and communication. ASD affects 1 percent of children worldwide, with estimates reaching 1 in 57 in some regions. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), states that its prevalence has skyrocketed all over the world to 1% in newborn children. Males are more affected than females, with a male-to-female ratio that has been reported as high as 3 to 1. Multiple domains, including memory, attention, cognition, emotion recognition and regulation, and social skills, are impaired in ASD children and adults. Current agreement is that the vital demonstrative highlights of ASD incorporate 1) persevering shortages in friendly correspondences and socio-profound collaborations across different settings, for example, trouble creating, keeping up with, and grasping the associations with others, and issues in verbal and non-verbal correspondence; 2) interests that are limited and repetitive, like insisting on a monotonous environment, using limited phrases, and obsessive behaviors; 3) erratic emotions and strange and unusual actions [5, 6].

The neurodevelopmental disorder known as Autism Spectrum

*Corresponding author: Myla Chester, Department of Psychology, University of Legon, Methodist University College, United States, E-mail: chestermyla@231.edu

Received: 1-Apr-2023, Manuscript No: jcalb-23-91793; **Editor assigned:** 3-Apr-2023, PreQC No: jcalb-23-91793(PQ); **Reviewed:** 17-Apr-2023, QC No: jcalb-23-91793; **Revised:** 21-Apr-2023, Manuscript No: jcalb-23-91793(R); **Published:** 28-Apr-2023, DOI: 10.4172/2375-4494.1000502

Citation: Chester M (2023) Autism Spectrum Disorder among the Children. J Child Adolesc Behav 11: 502.

Copyright: © 2023 Chester M. This is an open-access article distributed under the terms of the Creative v Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Disorder (ASD) affects approximately 18.5 out of every 1,000 children in the United States that includes restrictive or repetitive behaviors in addition to social and communication deficits (DSM 5). Sleep apnea, parasomnias, and limb movements that disrupt sleep are all medical sleep disorders that can affect any child. Children with Autism Spectrum Disorder (ASD) also have these symptoms. Children and adolescents with Autism Spectrum Disorders (ASD) typically struggle to get to sleep and stay asleep. All in all, rest issues are related with more terrible debilitations in conduct, socialization and versatile working. The diagnostic tools, treatment options, and outcomes of intervention for children and adolescents with sleep disorders that complicate their underlying ASD will be discussed in this chapter [7].

Conclusion

ASD's pathology and etiology are not completely understood. Brain perfusion patterns, regional brain volumes, excitatory/inhibitory neurotransmission, synaptic plasticity, and neural biochemical characteristics of ASD have all been found to be abnormal in neuroimaging studies. These abnormalities affect more than just one part of the brain. Instead, they are brought on by a failure in the integration and operation of long-range neural circuits. A few neurophysiological discoveries that might be fundamental neurotic reason for the side effect related with ASD incorporate huge volumes of the right mind structures related with social capabilities and language. Hypoactivation of explicit cerebrum locale (like amygdala) is connected with social cognizance and face handling, unusual synaptic turn of events and abnormal decrease of cortical versatility, reflect neuron brokenness, and diminished inhibitory capability in GABAergic interneurons because of deficiencies in the fringe compartment of small sections and variant expansion in excitation to restraint proportion in the cortical design [8].

Youngsters on the chemical imbalance range frequently arrive at consistency in daytime toileting abilities at a later age in contrast with neurotypical kid. The average age at which children would consistently use the toilet or the potty without having an accident was between 33 and 37 months, according to two studies that looked at 675 typically developing children. Contrarily, 35% of 583 children on the autism spectrum would regularly use the toilet or potty without having

an accident by 36 months, and approximately 5% would still have accidents at 12 years. Also, youngsters on the mental imbalance range have higher paces of nighttime enuresis (bedwetting; Niemczyk and other, 2019; Niemczyk and other, 2018) and more frequently than the general population go to constipation clinics [9, 10].

Acknowledgement

None

Conflict of Interest

None

References

1. Jang KL, Livesley WJ, Angleitner A, Reimann R, Vernon PA (2002) Genetic and environmental influences on the covariance of facets defining the domains of the five-factor model of personality. *Pers Individ Dif* 33: 83-101.
2. DeYoung CG, Quilty LC, Peterson JB (2007) Between facets and domain: 10 aspects of the Big Five. *J Pers Soc Psychol* 93: 880-896.
3. Gosling SD, Vazire S, Srivastava S, John OP (2004) Should we trust web-based studies? A comparative analysis of six preconceptions about internet questionnaires. *Am Psychol* 59: 93-104.
4. Hazan C, Shaver P (1987) Romantic love conceptualized as an attachment process. *J Pers Soc Psychol* 52:511-524.
5. Jang KL, Livesley WJ, Angleitner A, Reimann R, Vernon PA (2002) Genetic and environmental influences on the covariance of facets defining the domains of the five-factor model of personality. *Pers Individ Dif* 33: 83-101.
6. Fleeson W, Gallagher P (2009) The implications of Big Five standing for the distribution of trait manifestation in behavior: fifteen experience-sampling studies and a meta-analysis. *J Pers Soc Psychol* 97: 1097-1114.
7. Costa PT Jr, Terracciano A, McCrae RR (2001) Gender differences in personality traits across cultures: robust and surprising findings. *J Pers Soc Psychol* 81: 322-331.
8. Hyde JS (2005) The gender similarities hypothesis. *Am Psychol* 60: 581-592.
9. John OP, Naumann LP, Soto CJ (2008) Paradigm shift to the integrative Big Five trait taxonomy: history, measurement, and conceptual issue. *Handbook of Personality Psychology: Theory and Research* 3: 114-158.
10. Soto CJ, John OP, Gosling SD, Potter J (2011) Age differences in personality traits from 10 to 65: Big Five domains and facets in a large cross-sectional sample. *J Pers Soc Psychol* 100: 330-348.