

Between autism and schizophrenia

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INTRODUCTION:

Schizophrenia and autism are disturbance that were once considered the same entity, expressed in different periods of development. Even if the diagnoses have been separated for about 40 years, they **share many diagnostic and possibly etiological characteristics**.

The aim of this study is to review the borders between autism and schizophrenia, differentiating the two entities.

MATERIAL AND METHODS:

Revision of bibliography that addresses the topic.

RESULTS:

None of the two diseases have their neuropsychiatric bases clarified. There are many similarities in the presentation of these entities, yet the current literature, shows distinct clinical patterns, liable to characterize two different entities.

DISCUSSION:

The lack of understanding of pathophysiological mechanisms of both conditions prevents a correct understanding of its borders and points of intersection. It is not possible to understand completely the meaning of clinical similarities and differences, in the way that they can represent convergence mechanisms of different etiologies, or divergent mechanism of the same etiological origin. It is however reported in the current literature, **differences in various areas** of research that justify its **clinical individualization**.

CONCLUSION:

Only the clarification of etiological bases allow clear separation of the two entities.

Bibliography:

1. Durand-Zaleski, I., Scott, J., Rouillon, F., & Leboyer, M. (2012). A first national survey of knowledge, attitudes and behaviours towards schizophrenia, bipolar disorders and autism in France. *BMC psychiatry*, 12, 126. doi:10.1186/1471-244X-12-126
2. Zheng, F., Wang, L., Jia, M., Yua, W., Ruan, Y., Liu, T., ... Zhang, D. (2011). Evidence for association between Disrupted-in-Schizophrenia 1 (DISC1) gene polymorphisms and autism in Chinese Han population: a family-based association study. *Behavioral and brain functions*, 7, 14. doi:10.1186/1744-9081-7-14
3. Sullivan, S., Rai, D., Goding, J., Zammit, S., & Steer, C. (2013). The association between autism spectrum disorder and psychotic experiences in the Avon longitudinal study of parents and children (ALSPAC) birth cohort. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52(8), 806-814.e2. doi:10.1016/j.jaac.2013.06.010
4. Rajk, M., & Azzoni, A. (2010). Autistic spectrum disorders and schizophrenia in the adult psychiatric setting: diagnosis and comorbidity. *Psychiatria Danubina*, 22(4), 514-21. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21169891>
5. Naito, K., Matsui, Y., Meada, K., & Tanaka, K. (2010). Evaluation of the validity of the Autism Spectrum Quotient (AQ) in differentiating high-functioning autistic spectrum disorder from schizophrenia. *The Kobe journal of medical sciences*, 56(3), E116-24. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21063152>
6. Ph, D., & Gogtay, N. (2009). Clinical and Biological Contributions to a Relationship Revisited. 48(1), 10-18. doi:10.1097/CHI.0b013e31816b1c63 Autism Spectrum
7. Sugranyes, G., Kyriakopoulos, M., Corrigall, R., Taylor, E., & Frangou, S. (2011). Autism spectrum disorders and schizophrenia: meta-analysis of the neural correlates of social cognition. *PLoS one*, 6(10), e25322. doi:10.1371/journal.pone.0025322
8. Kohane, I. S., McIlhenny, A., Weber, G., Madfadden, D., Resparto, L., Kurtek, L., ... Churnin, S. (2012). The comorbidity burden of children and young adults with autism spectrum disorders. *PLoS one*, 7(4), e33224. doi:10.1371/journal.pone.0033224
9. Weiser, M., Raichenberg, A., Werbeloff, N., Kleinhaus, K., Lubin, G., Shmushkevitch, M., ... Davidson, M. (2008). Advanced parental age at birth is associated with poorer social functioning in adolescent males: shedding light on a core symptom of schizophrenia and autism. *Schizophrenia bulletin*, 34(6), 1042-6. doi:10.1093/schbul/sbn109