



IPA 2

MODULE

1

**Basic and
advanced
knowledge
on**

INDEX

Social communication

Limited stereotypical interests

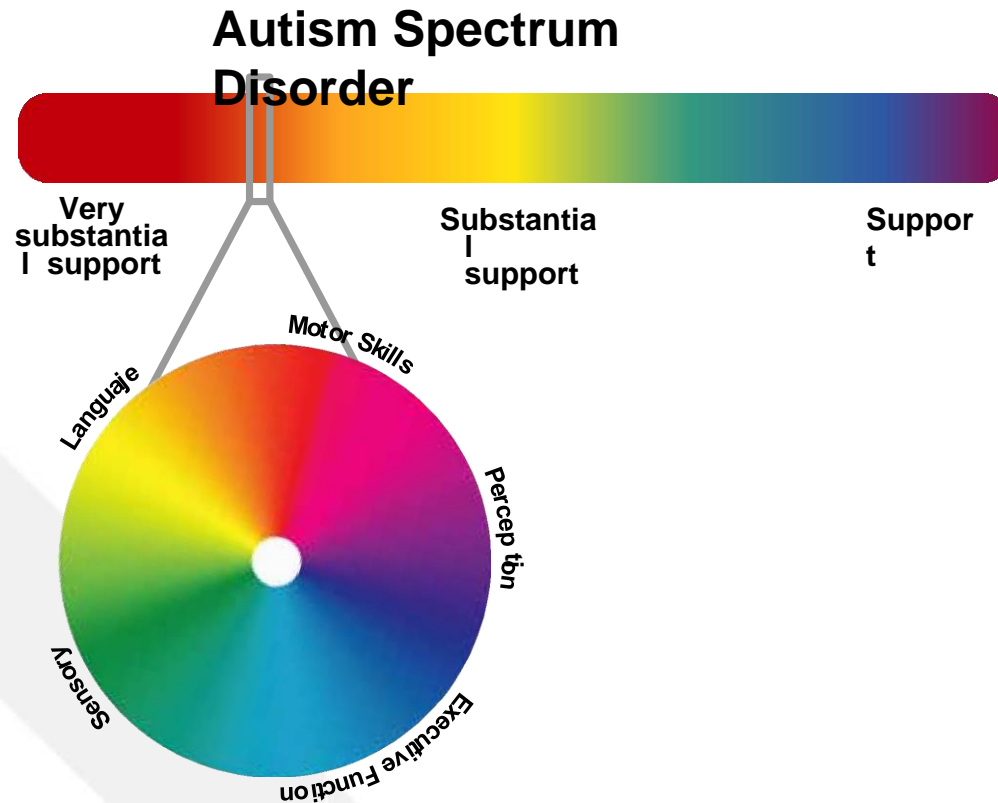
Heterogeneity

Co-occurring conditions

Developmental changes

The word “spectrum” refers to wide variation in the type and severity of autistic symptoms

HETEROGENEITY



**HETEROGENEITY DENOTES
VARIABILITY IN:**

Phenotype and level of support

Etiology

Onset of first symptoms

Gender distribution...

**SUBCATEGORIES
BASED ON RELATIONSHIP
BETWEEN
INTELLECTUAL
AND SPEECH AND
LANGUAGE
FUNCTIONING
(WHO, 2018):**

**Harmonized
profiles**

- ID and functional language impairment
- Average intelligence and functional language impairment

**Discrepant
profiles**

- ID and developed structural language
- Average intelligence and

**WITHIN EACH
CATEGORY
THERE ARE
NUMEROUS
VARIATIONS IN:**

**Repetitive
behaviors**

**Sensory
processing**

**Motor
skills**

**Executive
functions**

Co-occurring conditions etc.

SUPPORT LEVEL

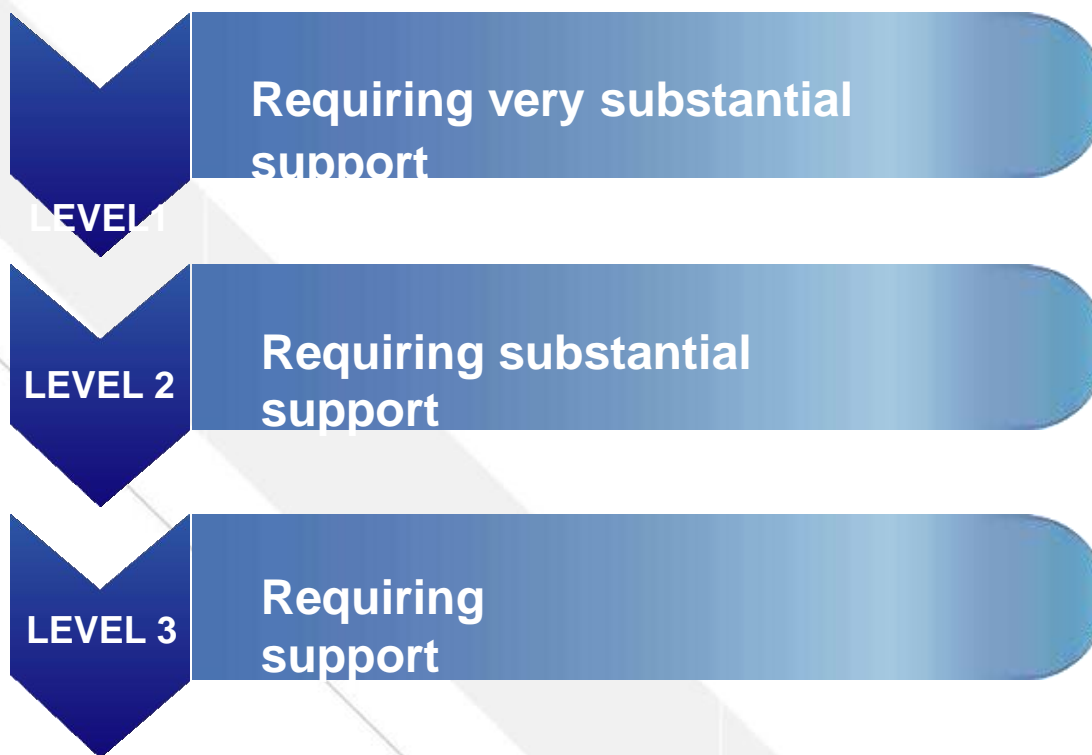
specifiers could be used to describe current state

may vary by context and fluctuate over time

of social communication and restricted, repetitive behaviors should be rated separately

is always determined at an individual

Support levels for autism spectrum disorder:



ETIOLOG Y

The etiology of autism is very complex and it is influenced by numerous factors.

Precise etiology is unknown.

There are some genetic and environmental risk factors.

Different etiological factors can cause similar phenotype.

**RELATION
TO GENETIC
CONDITIONS
:**

**Idiopathic
autism**

- No relation with any known syndrome.
- The risk for other children ranges from 3% to 10%.

**Syndromic
autism**

- Associated with condition of etiology (e.g. Fragile X syndrome, tuberous sclerosis...)
- The risk for the other children highly variable.

THE ONSET ON AUTISM

- Earliest behavior symptoms of autism sometimes begin to emerge in the first year of life.
- In children with so-called regressive type of autism the onset of symptoms follows the period of apparently typical development.
- Average age of onset of regressive autism is around 20 months (Tan et al., 2021).
- Risk for regression is equal for males and females.

GENDER DISTRIBUTION

- Male-female ratio within the spectrum is usually considered to be 4-5:1.
- Possible explanations for uneven distributions are: female protective effect and delayed diagnosis in girls on the spectrum due to specific clinical manifestations and their tendency to camouflage the symptoms.

Uneven gender distribution is particularly prominent in high-functioning individuals

LINK SAN RESOURCES

:

- ❏ American Psychiatric Association (APA). (2013). Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5). American Psychiatric Publishing.
- ❏ Capal, J. K., Macklin, E. A., Lu, F., & Barnes, G. (2020). Factors associated with seizure onset in children with autism spectrum disorder. *Pediatrics*, 145(Supplement 1), S117-S125.
- ❏ Casanova, M. F., Frye, R. E., Gillberg, C., & Casanova, E. L. (2020). Comorbidity and Autism Spectrum Disorder. *Frontiers in Psychiatry*, 11, 1273.
- ❏ Hervás, A. (2016). Un autismo, varios autismos. Variabilidad fenotípica en los trastornos del espectro autista. *Revista de Neurología*, 62(Suppl. 1), s9-s14.
- ❏ Lai, M. C., & Szatmari, P. (2020). Sex and gender impacts on the behavioural presentation and recognition of autism. *Current Opinion in Psychiatry*, 33(2), 117-123.
- ❏ Lugo-Marín, J., Magán-Maganto, M., Rivero-Santana, A., Cuellar-Pompa, L., Alvia-ni, M., Jenaro-Rio, C., ... & Canal-Bedia, R. (2019). Prevalence of psychiatric disorders in adults with autism spectrum disorder: A systematic review and meta-analysis. *Research in Autism Spectrum Disorders*, 59, 22-33.
- ❏ Mannion, A., & Leader, G. (2013). Comorbidity in autism spectrum disorder: A literature review. *Research in Autism Spectrum Disorders*, 7(12), 1595-1616.

LINK SAN RESOURCES

:

- ☐ Miller, H. L., Sherrod, G. M., Mauk, J. E., Fears, N. E., Hynan, L. S., & Tamplain, P. M. (2021). Shared Features or Co-occurrence? Evaluating Symptoms of Developmental Coordination Disorder in Children and Adolescents with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 1-13.
- ☐ Pan, P. Y., Bölte, S., Kaur, P., Jamil, S., & Jonsson, U. (2020). Neurological disorders in autism: A systematic review and meta-analysis. *Autism*, 1362361320951370.
- ☐ Silleresi, S., Prevost, P., Zebib, R., Bonnet-Brilhault, F., Conte, D., & Tuller, L. (2020). Identifying language and cognitive profiles in children with ASD via a cluster analysis exploration: Implications for the new ICD-11. *Autism Research*, 13(7), 1155-1167.
- ☐ Tan, C., Frewer, V., Cox, G., Williams, K., & Ure, A. (2021). Prevalence and Age of Onset of Regression in Children with Autism Spectrum Disorder: A Systematic Review and Meta-analytical Update. *Autism Research*, 14(3), 582-598.
- ☐ WHO (2018). ICD-11. Retrieved from <https://icd.who.int/browse11/l-m/en>

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