

WHAT IS A DEVELOPMENTAL DISORDER?



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World Autism Awareness Day
April 2 every year

Developmental disorders

- **Type of brain** that sees, perceives and feels things differently from a majority of people
- Condition is attributed to a malfunction of some part of the brain. As a result, it is manifested in various forms from early developmental stages, resulting in imbalance of physical and mental development.
- It is not caused by "bad parenting" or "lack of parental affection".
- The American Psychiatric Association's 2013 revision of the DSM-5 renamed them "neurodevelopmental disorders"

Various developmental disorders (neurodevelopmental disorders)

Intellectual Disability (Intellectual Development Disorder)	Weakness across the whole range of intellectual functions
Communication Disorders	Difficulties in any part of the process of understanding and uttering words
Autism spectrum disorder	Difficulty in social communication and interaction across multiple contents
Attention-deficit hyperactivity disorder	Symptoms of inattention and/or hyperactivity
Learning disability	Difficulty with reading, writing, arithmatic, or mathematical reasoning skills
Developmental Coordination Disorder (including tic disorder)	Clumsy or difficult to control coordinated movements

Knowing about developmental disabilities

- They are not good at accepting advice/help from others.
- Understanding their characteristics makes it easier for families and specialists to extend support.
- Difficulty in raising children with developmental issues can be a cause of abuse.

It is a vicious cycle in which inappropriate nurturing and abuse reinforce the symptoms of developmental disabilities.

自閉スペクトラム症

Autism Spectrum Disorder
(ASD)



Image by Bikki from Pixabay

Two Junior high school students(7th grade) in the same class

Taro : “He does not sit still during class and chat with classmates around him. He does not listen to instructions and tends to avoid things he does not want to do, even when urged by the teacher. Due to his own misunderstanding, he gets into trouble with his friends.”

He willingly participates in volunteer work and other activities outside the classroom, and he listens well to his homeroom teacher, but not to his mother .”



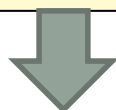
- Jiro : “He cannot understand the instructions and cannot keep up with his classmates in group activities. I am worried that there may be miscommunication among students, since he does not express his thoughts and feeling very well. His handwriting is poor and sometimes he cannot read what he writes. He is enthusiastic about club activities and is good at carrying out his chores. He is often unaware that he is in a difficult situation.



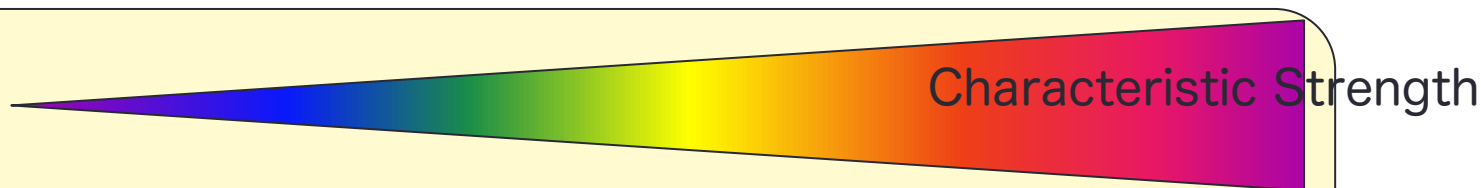
What is Autism Spectrum Disorder (ASD)?

Formerly classified in detail as Pervasive Developmental Disorder (PDD)

- Autism, Asperger's Disorder: characteristics present before age 3
- Communication disorders are mild in Asperger's disorder
(first word by age 2, second word by age 3)
- PDDNOS: Characteristic, but does not meet Autism, Asperger's Disorder



Now we see them as a continuous group.



PDDNOS, Asperger's Disorder, Autistic Disorder included
(Pervasive developmental disorder, unspecified)

Diagnostic Criteria for Autism Spectrum Disorders (DSM-5)

Social communication in diverse contexts and
Persistent disturbances in interpersonal interactions

deficits in the following three areas of social communication and interaction: (i) social-emotional reciprocity; (ii) developing, understanding, and maintaining relationships; and (iii) nonverbal communication.

Limited and repetitive behaviors, interests, and activities

Meet two of four behavioral criteria (i.e., repetitive speech or motor movements, insistence on sameness, restricted interests, or unusual response to sensory input)

persistent deficits in social communication and social interaction

❑ non-verbal communication

- Difficulty with natural use and correct understanding of non-verbal communication such as eye contact, facial expressions, pointing, nodding, gestures, etc.

❑ Language Expression

- Use of his/her own unique phrasing or difficulties in changing expressions depending on his/her position, too distant/too casual

❑ Understanding Language

- Good at speaking, poor at comprehension
- Take the words as they are (literally).

Communication skills fluctuate greatly due to anxiety and nervousness

❑ Characteristics of interest in surrounding people and situations

- Unconcerned with spending time alone or behaving differently from others.
- Poor shared interests and feelings.
- Inability to reach out to others for help or to respond appropriately to others' approaches.
- Difficulty in understanding instructions and have little feeling that they should respond to those requests.
- Too close to others or one-sided in the relationship (difficulty in respecting personal space)

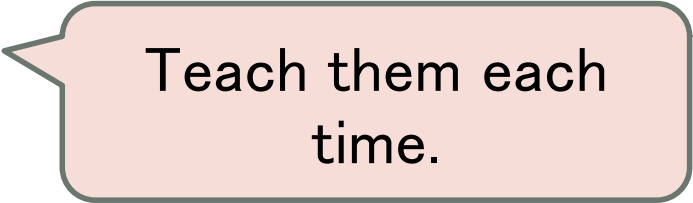
Struggling with friends of the same age group

❑ Difficulty in understanding the feelings of others and the atmosphere of the situations.

- Cannot stop teasing or interacting though rejected.
- Saying inappropriate things in front of others.

❑ Difficulty in understanding situations and unspoken rules

- Age-appropriate common sense not acquired naturally.
- Tend to comply too much with rules once they understood and enforce them on others



Teach them each time.

❑ Difficulty in seeing from an objective viewpoint

- Not good at realizing how others see you.
- Difficulty in recognizing one's own emotions

❑ Difficulty establishing and maintaining age-appropriate interpersonal relationships

- Especially in group participation where roles are unclear, they tend to wander, or get really fatigued.

Limited and repetitive behaviors, interests, and activities

- ❑ Difficulty in intuitively processing and accepting things that one has not actually seen, such as the essence of things, various possibilities, etc.
- It's hard to imagine something that isn't right in front of you, something you don't know
- Too nervous about new places, new people; easily confused by unexpected situations or changes in plans
- Uncertainty make them very anxious.

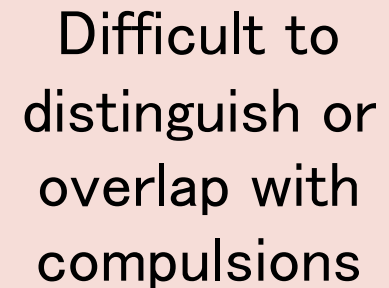
Difficulty in making a choice

Impairment of flexibility and imagination

Limited and repetitive behaviors, interests, and activities

❑ Easy to create routine patterns of behaviors

- Want to follow their own rules/specific customs and rituals.
- Inability to multitask, tendency to get lost in details and difficulty grasping the whole and narrow desire for knowledge, over-enthusiasm for specific topic.



Difficult to distinguish or overlap with compulsions

❑ Imbalance of sensory processing

- Hypersensitivity and hyposensitivity to a wide range of stimuli.
- Some sensory activities can be calming or being alert/focused→used in occupational therapy

Daily life problems

- Sleep cycles are not in order
- Picky eaters/smaller portions
heterophiliacs
- Sensory sensitivity or insensitivity (sound, light, touch, pain, cold, etc.)
- Abnormal movement, clumsiness
- Reluctant or dependent on help with daily life skills (get changed, personal hygiene, etc)

Sleep/wake regulation
and eating
abnormalities are
easily observed

Prevalence of autism spectrum disorders

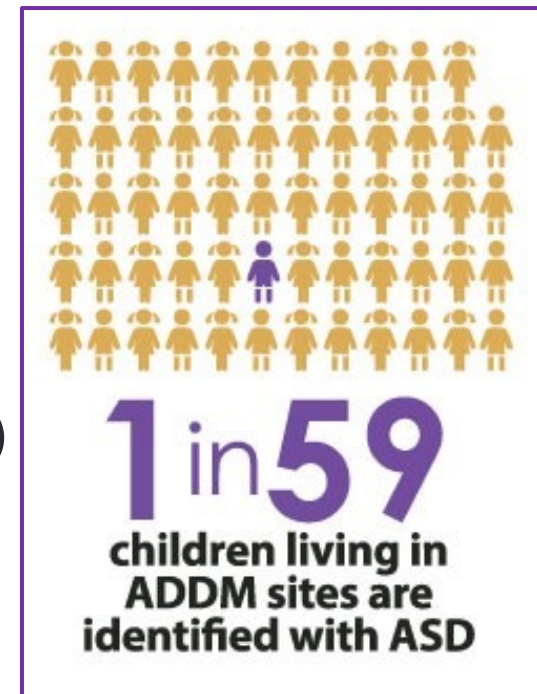
U.S. men and women ages 8 and older

■ 1 in 59 (1.68%)

- Boys: 2.66%.
 - Girls: 0.66%.
 - About 4 times higher for boys
 - 30% have intellectual disability (IQ <70)
- (2014)



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™



Prevalence of ASD in Japan

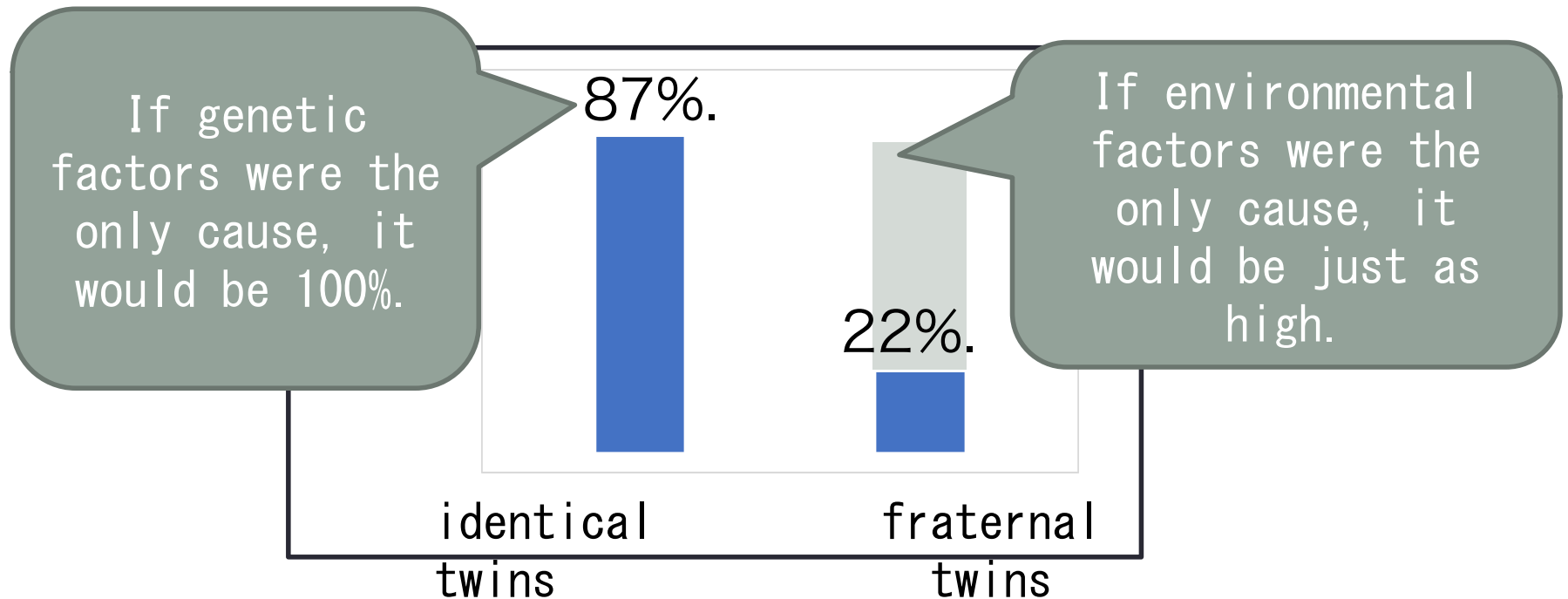
Results of a 5-year-old child's medical checkup in Hirosaki

- Prevalence at age 5 years 3.22%.
- No increase in prevalence from 2013 to 2016

Mol Psychiatry, 2020

	Medical institutions (%)	Schools (including suspected) (%)
Yokohama	5.4	5.4
Hiroshima	5.0	4.8
Toyota	5.3	2.8
Miyazaki	6.7	4.9
Matsumoto	1.5	3.6
Tajimi	2.9	5.9
Mizunami	1.6	1.3
Yamanashi	3.2	5.9

Twin studies of ASD



Both the individual's predisposition and environmental factors influence in the occurrence of ASD

Can autism spectrum disorder be cured?

- ❑ It is not a curable condition, it's a type of inborn brain function.
- ❑ Early support for developmental disabilities is proven effective.
- ❑ Social and communication skills are steadily acquired through responses tailored to characteristics and through developmentally appropriate medical care and SST.
- ❑ Early detection is important to achieve early support and education.

Comorbidities of ASD

Developmental Disorders

Intellectual disability	45%	
ADHD	28–44%	
tic	14–38%.	

Mental Disorders/Symptoms

anxiety	42–56%	Social anxiety most frequent 13–29%, more common in high-functioning group
depression	12–70%.	High-functioning adults with fewer social impairments are more likely to be affected (or have detectable symptoms)
OCD	7–24%.	
aggressiveness	≤68%.	
self-injury	≤50	suicidal thoughts/suicide attempts 11–14%

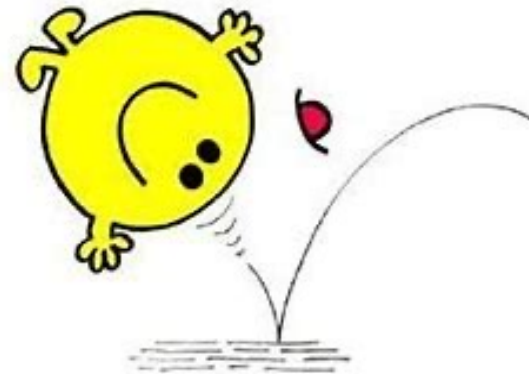
Physical Disease

epilepsy	8–30%.	
gastrointestinal disorder	9–70%.	Frequent constipation, abdominal pain, diarrhea
Immune System Disorders	≤38%.	Allergies, autoimmune diseases

注意欠如・多動症 (ADHD)について

MR. BOUNCE

by Roger Hargreaves



Attention Deficit/Hyperactivity Disorder (ADHD)

ADHD ; Attention-Deficit/Hyperactivity Disorder

<Definitions> 1. carelessness

2. hyperactivity

3. impulsivity

The above is present in less than 12 years of age and appears in two or more situations,

It affects social, academic, and professional functioning, and reduces quality of life.



DSM-5 criteria for ADHD



≥5 symptoms per category **in adults**, ≥6 months; age of onset ≤12 years; noticeable in ≥2 settings; impact on social, academic or occupational functioning; not better accounted for by another mental disorder

Inattention

- (a) Lack of attention to details / careless mistakes
- (b) Difficulty sustaining attention
- (c) Does not seem to listen
- (d) Does not follow through on instructions (easily side-tracked)
- (e) Difficulty organising tasks and activities
- (f) Avoids sustained mental effort
- (g) Loses and misplaces objects
- (h) Easily distracted
- (i) Forgetful in daily activities

Hyperactivity / Impulsivity

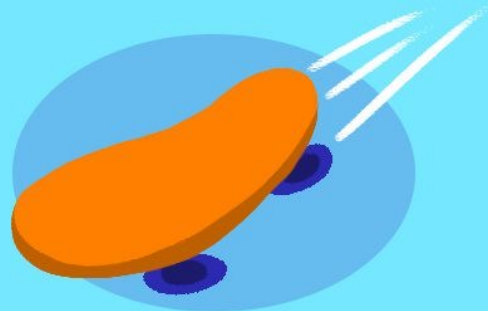
- (a) Fidgetiness (hand or feet) / squirms in seat
- (b) Leaves seat frequently
- (c) Running about / feeling restless
- (d) Excessively loud or noisy
- (e) Always “on the go”
- (f) Talks excessively
- (g) Blurts out answers
- (h) Difficulty waiting his or her turn
- (i) Tends to act without thinking



Forgetfulness



Carelessness



Risky behavior



Difficulties sitting still

ADHD Signs and Symptoms in Children



Trouble getting along



Daydreaming



Excessive talking



Disorganization

Children with ADHD

- Difficulty in controlling instant impulses.
- Instead of “stop → think → action”,
“feel → action”
- Hyperactivity and impulsiveness in thinking
- Unable to wait for one program to finish.
- When you're really into something you like, you tend to become so absorbed in it that you can't stop.

Hard to learn from
mistakes



School-age: 3-7%.

Mainly those who show both inattention and
hyperactivity-impulsivity
More common in boys



Adult 2.5% (1-7.3%)

Mainly those in which inattention is seen as
predominant.
Gender ratio approaches 1:1

(Simon et al. Br J Psychiatry, 194: 204-211, 2009)

Risks of Untreated ADHD in Adults

Job
instability

Relationship
issues

Anxiety

Relief Society
Service
4:30pm

• Respond
to texts
• Brush teeth
• Eat lunch

Increased
mortality



Low
self-esteem



FOCUS!

Substance
use

STAY
MOTIVATED



do i have adhd



misunderstanding

- ✗ ADHD is often misunderstood as a parenting problem. It can be thought of as a selfish child or a teacher's lack of competence.
- Factors that may be involved in the development of ADHD include genetics, the environment or problems with the central nervous system. Exacerbated through experiences of inappropriate interactions with surroundings.

Common Comorbidities in Childhood

- Specific learning disabilities (learning disorders)
- Anxiety disorders
- Mood disorders (depression, bipolar disorder, etc.)
-
- Oppositional defiant disorder
- Conduct disorder
- Other (bed-wetting, sleep disorders, tics, epilepsy)

Physical disorders that tend to coexist with ADHD

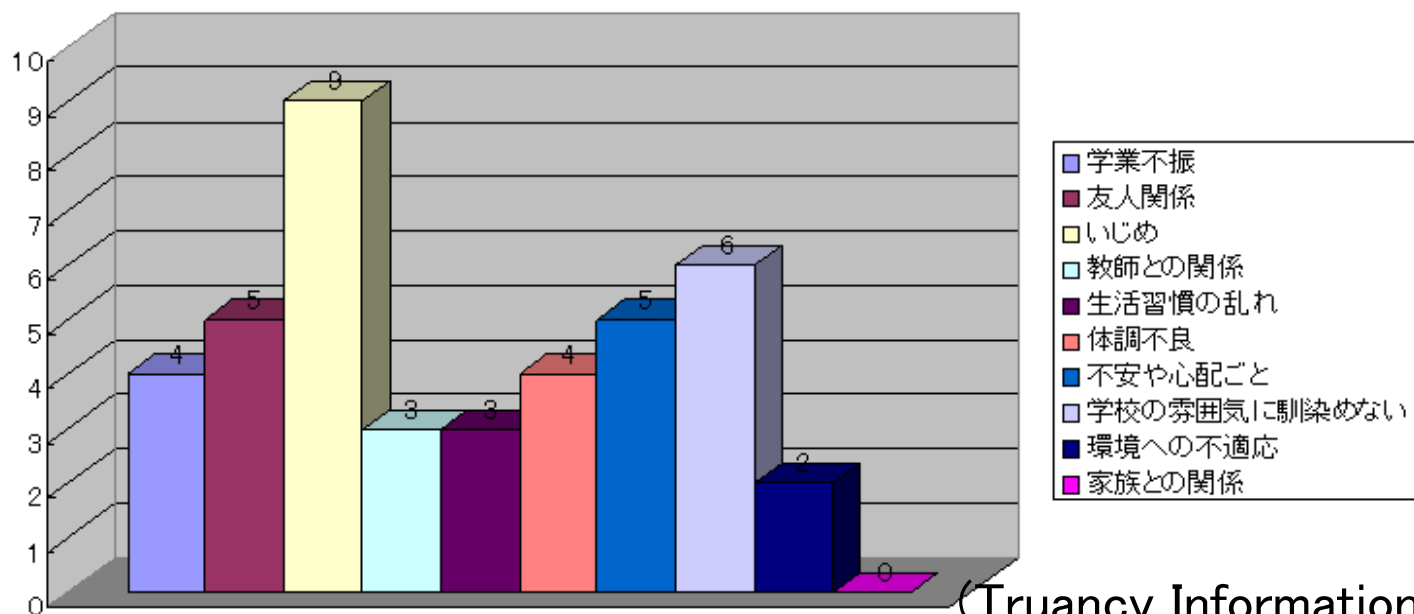
- sleep disorder
- obesity
- Allergic diseases (hay fever, asthma)
- Skin diseases (atopic dermatitis, acne vulgaris, alopecia)
- Digestive symptoms (irritable bowel syndrome)
- diabetes mellitus
- thyroid dysfunction
- enuresis
- epilepsy

Being absent from school

- Some reports indicate that about 60% of students who are not attending school have developmental disabilities.
- Nearly 50% of children with developmental disabilities have been absent from school
- Interpersonal and academic failure are the most common causes of truancy in children with developmental disabilities

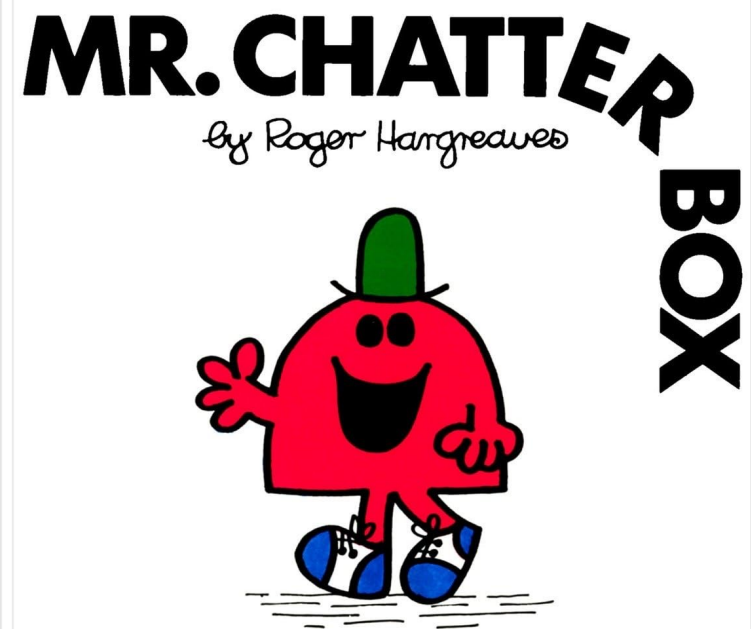
ASD: interpersonal relationship difficulties,
ADHD and LD: poor academic performance

■問：不登校になった原因は？



(Truancy Information
Center)

まとめ



Roger Hargreaves, "Mr. Chatterbox (Mr. Men and Little Miss Book 20)", Egmont Books Ltd, 1976

Significance of Diagnosis

- Knowing the characteristics of cognitive development allows us to arrange an environment that is appropriate for the child.
- diagnosis and evaluation = Attempt to know their characteristics
- It is important to make use of the diagnosis of developmental disorders in a way that is beneficial to the individual and their family.

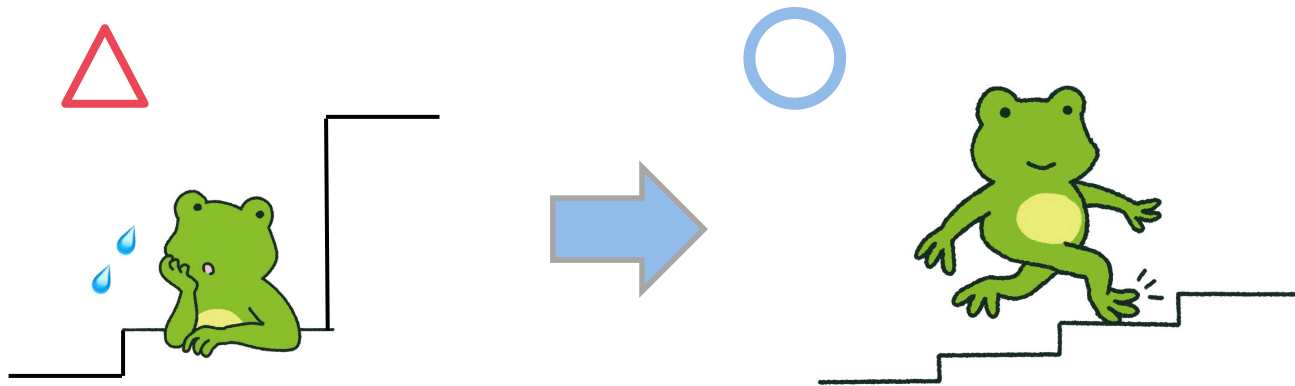
Feeling different from everyone else and not being able to do the same things as everyone else can make me lose confidence in myself, and because I also tend to get scolded, my sense of self-affirmation tends to be low.



Important tips in Interacting with Children

To raise self-esteem

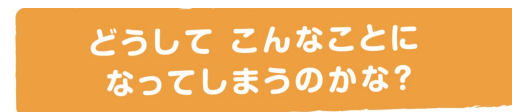
- Don't expect too much
Build up a sense of success through small steps
 - Break down a single task into as many small steps as possible, and take “small steps”
 - Focus on just that step as your goal, and praise them when they succeed
 - Help them when they ask for help, and encourage them



Tools for psychological education (for kids)



(Janssen pro)



どう？ きみは○がいくつあったかな？

もしたくさんあったなら、きみには

- 【じっとしてられない】とか
- 【がまんできない】とか
- 【集中できない】という

とくちょうがあって、みんなと少しちがうのかなって思うかも。



じゃあ、どうして そんなとくちょうが出てしまうのかな？

じつは、その答えは「脳」にあるんだ。

人間がなにかするとときには、
いつも頭のなかで脳がはたらいている。
脳が、「○○しなさい」という
指令を出して体をうごかしているんだ。

いつも脳がじょうずに指令を出せるといいけれど、
ときには うまくいかないこともある。
そうすると体もじょうずにうごかなくて、
【じっとしてられない】とか【がまんできない】とか
【集中できない】ということになるんだ。

だから、やろうと思ってもなかなかできないのは
けって きみの努力がたりない、なまけてる、
ということではないんだよ。



token economy

【ご家族・学校関係者の方へ】

がんばりカード Daily Report Card : DRC の使い方

～ADHDのお子さんとのよりよいコミュニケーションのために、
この冊子をお読みいただき、巻末のDRCをご活用ください～



監修：久留米大学医学部小児科学講座 主任教授 山下 裕史朗

目標と評価基準の記入例

■ 家庭での行動が中心の場合の例

【今週の目標】	4月 11日 月	4月 12日 火	4月 13日 水	4月 14日 木	4月 15日 金	4月 16日 土	4月 17日 日
① 学校から帰ってきたら、 決められた場所に荷物を置く	はい	はい	はい	はい	はい	はい	はい
② 夜7時までに宿題を終らせる	はい	はい	はい	はい	はい	はい	はい
③ 注意された後の 口ごえを減らすこと	はい	はい	はい	はい	はい	はい	はい

■ 学校での行動が中心の場合の例

【今週の目標】	4月 11日 月	4月 12日 火	4月 13日 水	4月 14日 木	4月 15日 金	4月 16日 土	4月 17日 日
① 授業中、先生から3回以上の 注意を受ける	はい	はい	はい	はい	はい	はい	はい
② 手をあげて発表する	はい	はい	はい	はい	はい	はい	はい
③ 給食の時間、 席を離れるのは2回まで	はい	はい	はい	はい	はい	はい	はい

ごほうびの記入例

ごほうびシート

監修：久留米大学医学部小児科学講座
主任教授 山下 裕史朗

名前(せう)

～毎日のごほうび～

がんばりカードの
「はい」が1つ 7食の後、アイスクリームを1個食べられる

「はい」が2つ お母さんに本を10分間読んでもらえる

「はい」が3つ 7食の後、お父さんと15分間一緒に遊ぶ

ヤンセンファーマ株式会社

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ADHD Coping Strategies for Unmotivation



Break projects into manageable pieces



Set small (and realistic) goals



Work on frustrating tasks for shorter time periods to beat overwhelm



Get enough exercise



Reward yourself for little accomplishments

Examples of Reasonable Accommodations for Examinations due to Developmental Disabilities



<https://www.teensmoon.com/chart/koukoujiyuku/> 2025.9.9



Nagoya university website of the Ability Support Center provides information on 'Learning support', 'Reasonable accommodation', 'Life design support'.