



Understanding Neurodevelopmental Disability

Introductory
Course

SDP Research Team



Hello, I am Meg
and I'm a high
school student.

Meg

And my name is Tom, I'm
a high school student, too .
Meg and I have been
friends since we were
young.



Tom

A few days ago, my doctor diagnosed me with ADHD (Attention Deficit Disorder).



What? So if you're
diagnosed with ADHD,
does that mean you act
all wild? ?



Since when have I ever acted wild?
But the reason I make careless
mistakes and lose things all the
time is because I have ADHD.

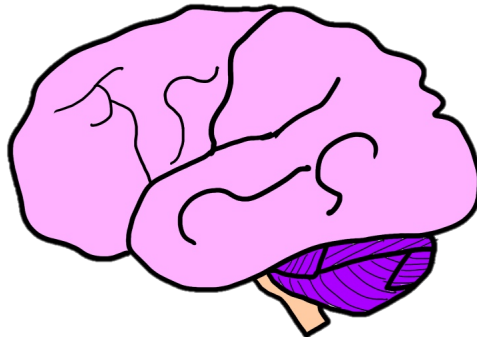


ADHD (Attention Deficit Hyperactivity Disorder) is a type of Neurodevelopmental Disabilities.

What is a
Neurodevelopmental Disability ?



A Neurodevelopmental Disability is not a type of disease and has nothing to do with how your parents raised you. You could say, it's a part of your brain's personality that's been there since you were born.



Neurodevelopmental Disability

Attention Deficit Hyperactivity Disorder (ADHD)

Autism Spectrum Disorder (ASD)

Learning Disability (LD)

Developmental Coordination Disorder (DCD)

Are some of the types of Neurodevelopmental Disability.

※ Intellectual disabilities are also sometimes classified as a Neurodevelopmental Disability.

**What types of trouble do you face with
a Neurodevelopmental Disability ?**

Attention Deficit Hyperactivity Disorder

1 Hyperactivity and Impulsivity

2 Inattention



These are the general symptoms, but the ways in which appear differs from person to person



Hyperactivity and Impulsivity

- Can't sit/stand still
- Doesn't think before acting
- Can't wait
- Doesn't stop talking



Inattention means

- Gets disturbed easily
- Can't clean up the mess
- Forgets things really quickly
- Loses things frequently
- Can't wait until someone finishes talking

But Tom,
you're really good at
soccer. ?



The symptoms are different for every person. In my case, inattention is the major issue. So I happen to make many careless mistakes. But if it's soccer, I can still contribute to the team.



Even if I try my best, my mind starts to wonder and I'll stop listening or forget what I'm told. So if I get information by memo or e-mail , there is less chance I'll forget. Making sure with the upcoming schedule would also help me too.



Autism Spectrum Disorder (ASD) means

1

Having Social Interaction and Communication Disability

2

Restricted, repetitive patterns of behavior, interest or activities

Insistence on sameness

Hyper- or hyporeactivity to sensory input



These are the general symptom, but the way it appears differs from person to person.

Social Interaction and Communication Disability means

- Knows a lot of vocabulary but struggles in communicating
- Struggles understanding people's feelings



Mary is a 6 years old girl with high functioning Autism Spectrum Disorder

※ High Functioning means without intellectual disability

How rude !!



Hey sis, be careful with
Metabolic syndrome.



Restricted, repetitive patterns of behavior, interest or activities means

- To fixate on certain thing.
- An expert on a certain subject

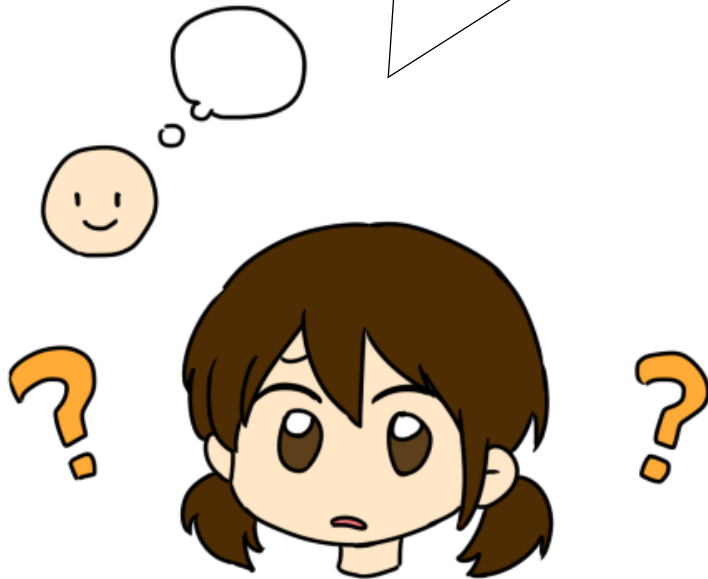


I really love plants! Strawberries are part of the rose family and are a type of perennial plant.

The part of the strawberry plant that we usually eat is actually a receptacle. Also, watermelon is not a fruit, it's a vegetable.

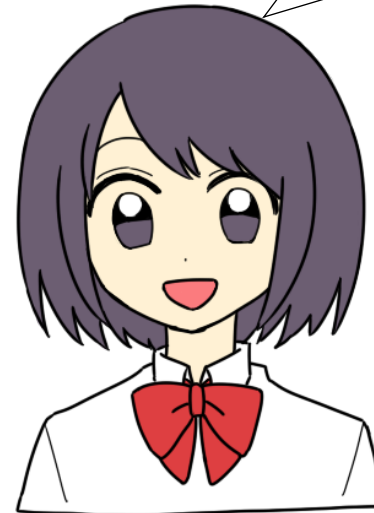
...

“Why do you like
plants so
much???”



What do you mean? I don't really
understand what you mean

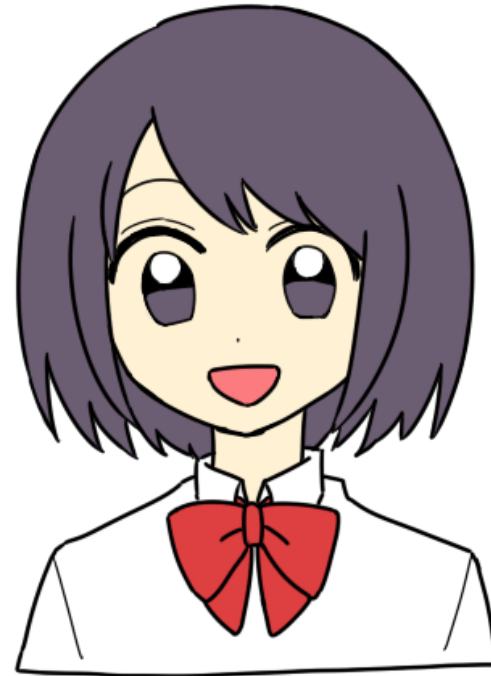
Hello Mary.
Why do you like
plants so much?



Oh if that's the question,
then I can answer that!
Dandelions are my favorite.
But on the other hand, I
hate sunflower because of
its smell and how it feels.



Well then what
plant do you like?



Sensitivity problem

means that they are

Very sensitive,
but also at the same time,
very insensitive.



- Doesn't like specific sounds or noises that are loud
- String preferences for certain foods
- Hates getting touched

etc.

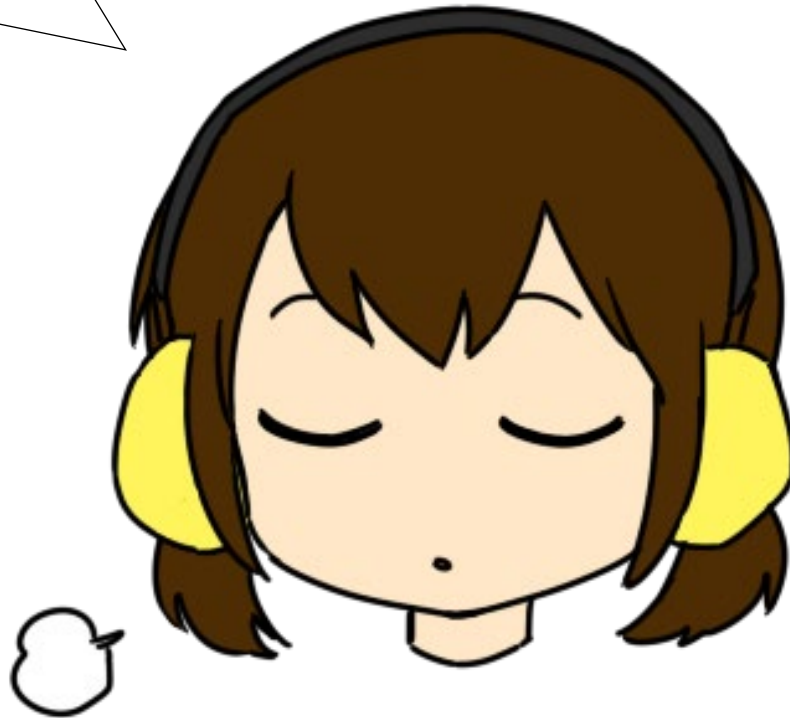


The symptoms vary from person to person,
but these are the general symptom.



There's so many
noises going in my
ears!

I feel much better when I
put on my noise canceler.



Struggles with
changes means

Hates schedule change
Hates set shifting



- Confusing by schedule change
- Difficulties of set shifting (start an activity or stop an activity) etc.



Symptoms vary
from person to person



I want to stay at
home and finish
reading my book! I
don't want to go to
kindergarten!

I'm not being selfish

Don't make me quit something or
make me do something.

But, if you let me know my schedule
ahead of time, I will be likely to
understand.



The traits of Autism Spectrum Disorder (ASD) are not necessarily a bad thing. Even with all the problems that they face, there is some bright side. Like being able to turn their interest into an actual job. And some people even made it to college or university. Some people have succeeded in becoming a doctor, lawyer, research, and even IT related job.

Specific Learning Disorder (SLD) (include Dyslexia) means

1

Difficulty in Reading

2

Difficulty in Writing

3

Difficulty in doing Math

Symptoms vary
from person to person





Kai

I have Specific Learning Disability (SLD) . In my case, I have difficulty in both reading and writing. Even if I know what the content is about or what the answer to the problem is, I have trouble reading the actual question and the textbook.

The difficulty in
reading and
writing is

Making mistakes while reading
Really slow in reading



- Difficulty understanding the meaning of what is read (Textbook or test)
- Struggles a lot in writing.

Symptoms vary
from person to person



This is how the people with
SLD might see the words...

gnibser ni ɹɔɪtɹɔɪffɪd

Difficulties in reading

Difficulties in reading

Difficulties in reading

Using the ICT

(Information Communication Technology)

Tablet and PC helps me a lot with reading and writing problems. With using the “Faster Reading Technology”, I am able to read books faster. And with the keyboard, I can write sentences too. For me, the tablet is basically a notebook and a pencil.



The color of the paper might also affect the way they see the words on the paper. There are people who tends to see the words better if the color of the paper is yellow or gray.

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Font that makes it hard to read (Mincho font)

Font that makes it easy to read (Arial font)

Font that makes it easy to read
(Courier font)

Font that makes it easy to read (gothic
type)

Developmental Coordination Disorder (DCD) means

1

Clumsy

2

Non-athletic

These are the basic symptoms, but
the way it appears differs from people.





Since I have DCD,
I am really non-athletic
and I am also really
clumsy.

After a lot of practice, I
can finally do a peace
sign/ v sign.

**Clumsy
means**

Struggling using their body
Difficulty in using their fingers



- Can't use pull-up bar as well as jump ropes
- Struggles with handwriting
- Bad at instruments



Symptoms vary
from person to person

If the people with
Neurodevelopmental Disability
work really hard,
will they be able to become normal
as other people?



Working hard would make them grow, or to improve.

but

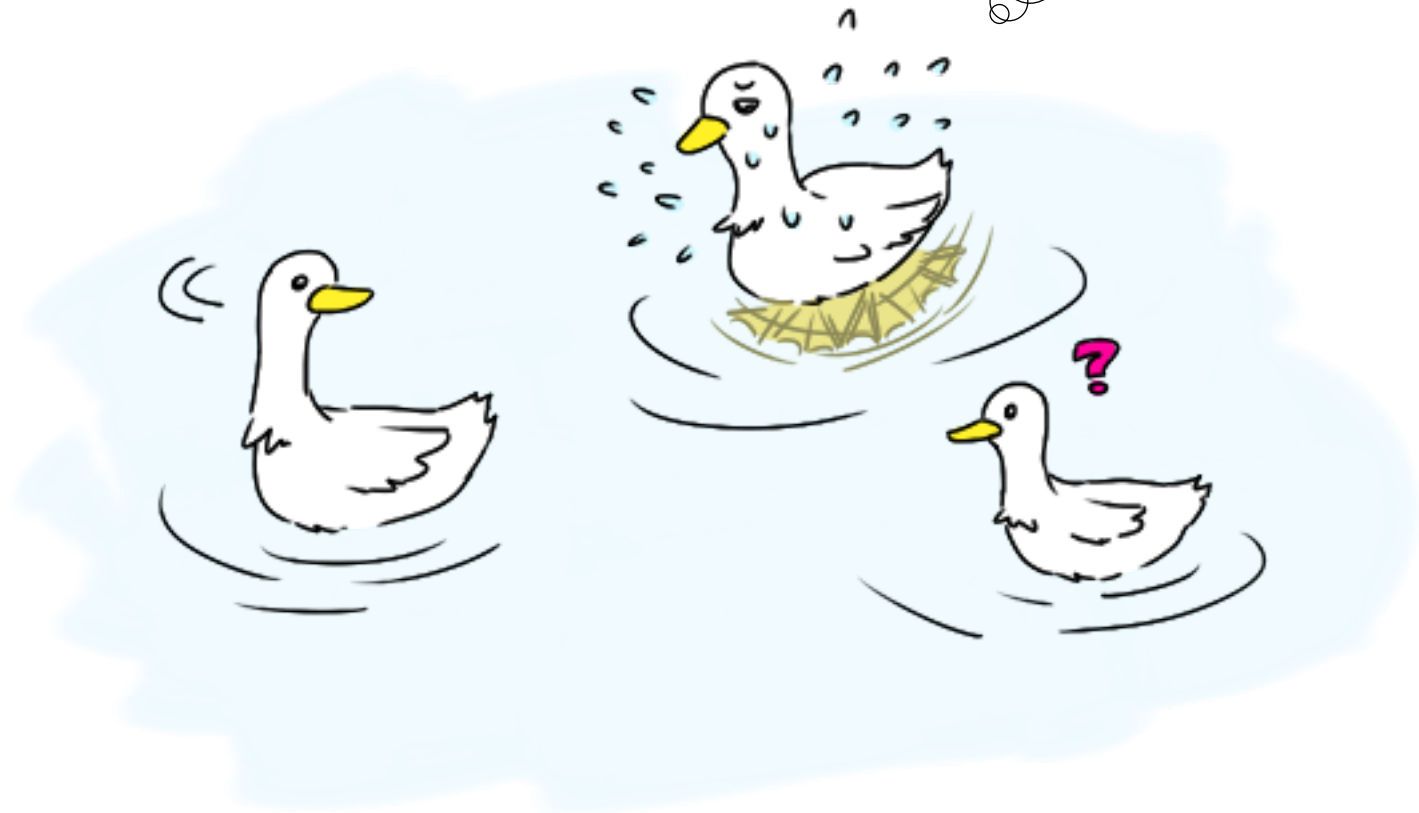


That doesn't mean
they can be the same as the others.

Some people find
their own way of doing a good job
that works for them.



Man, It's really hard
keeping up a t the same
pace.



I feel really bad for the people with
Neurodevelopmental Disability,
because
they can't do as much as we can.

If you have Neurodevelopmental Disability
there are many difficulties you have to face.



But

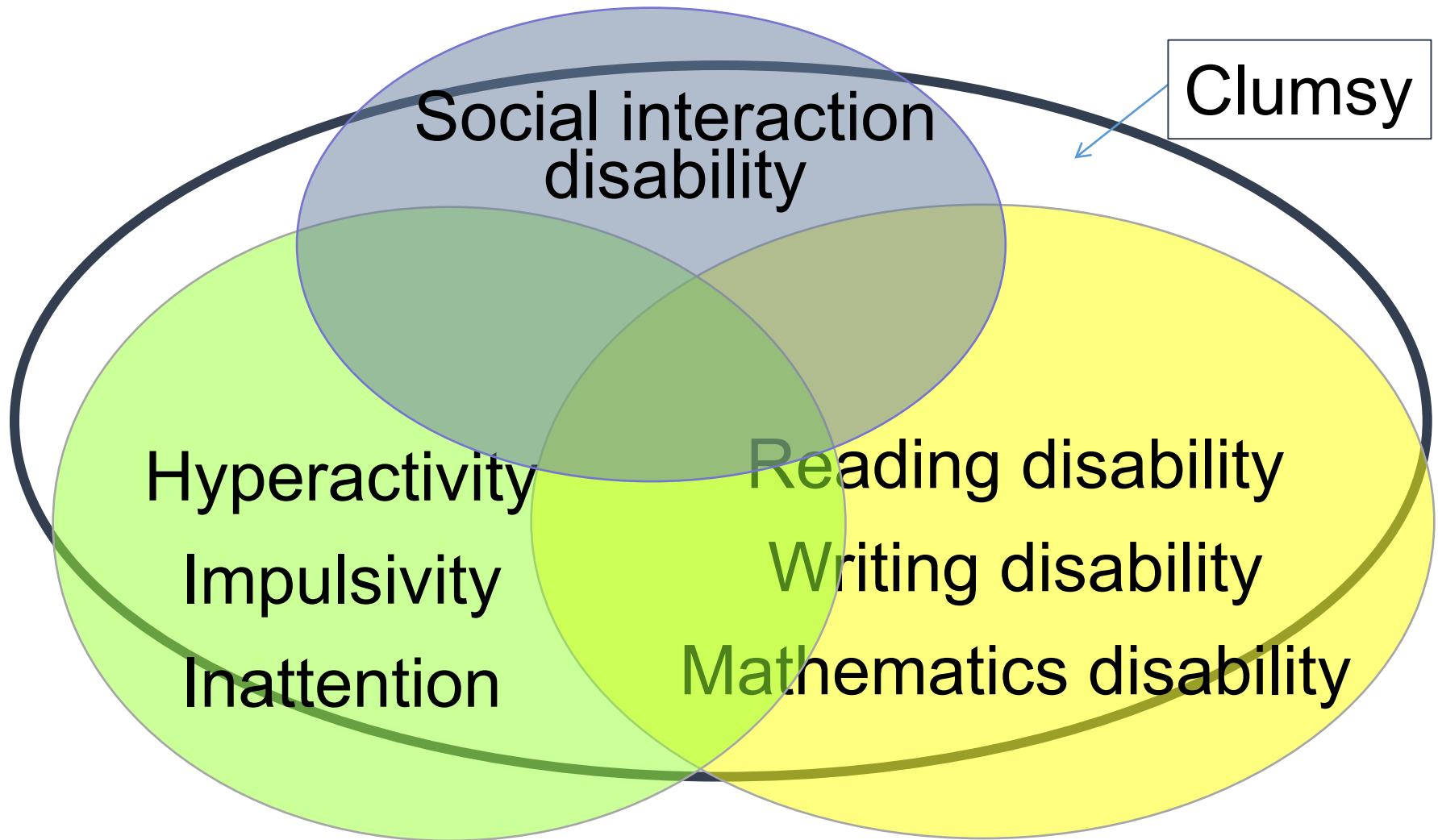
even if you are diagnosed with
any of the Neurodevelopmental Disabilities,
it doesn't mean you are hopeless.



There is a saying in,
“The more effort you put in,
the happier you'll be”



Some people might have more than 1 type of Neurodevelopmental Disability appearing at the same time.



There are many people who uses their Neurodevelopmental Disability as an advantage, or focusing other than the problem that they struggle at.

Those people have worked really hard, and now they have became a person that can contribute to the society, had become famous.

Famous people who disclose their Neurodevelopmental Disability

Michael Phillips:

Swimmer, Freestyle Gold Medalist

Daniel Tammet:

Memorized the number pi up to 22,514 digit.

Tom Cruise: Hollywood Star

Steven Spielberg: Movie Director

Fukase:

The Vocal of the Sekai No Owari (Japanese band)

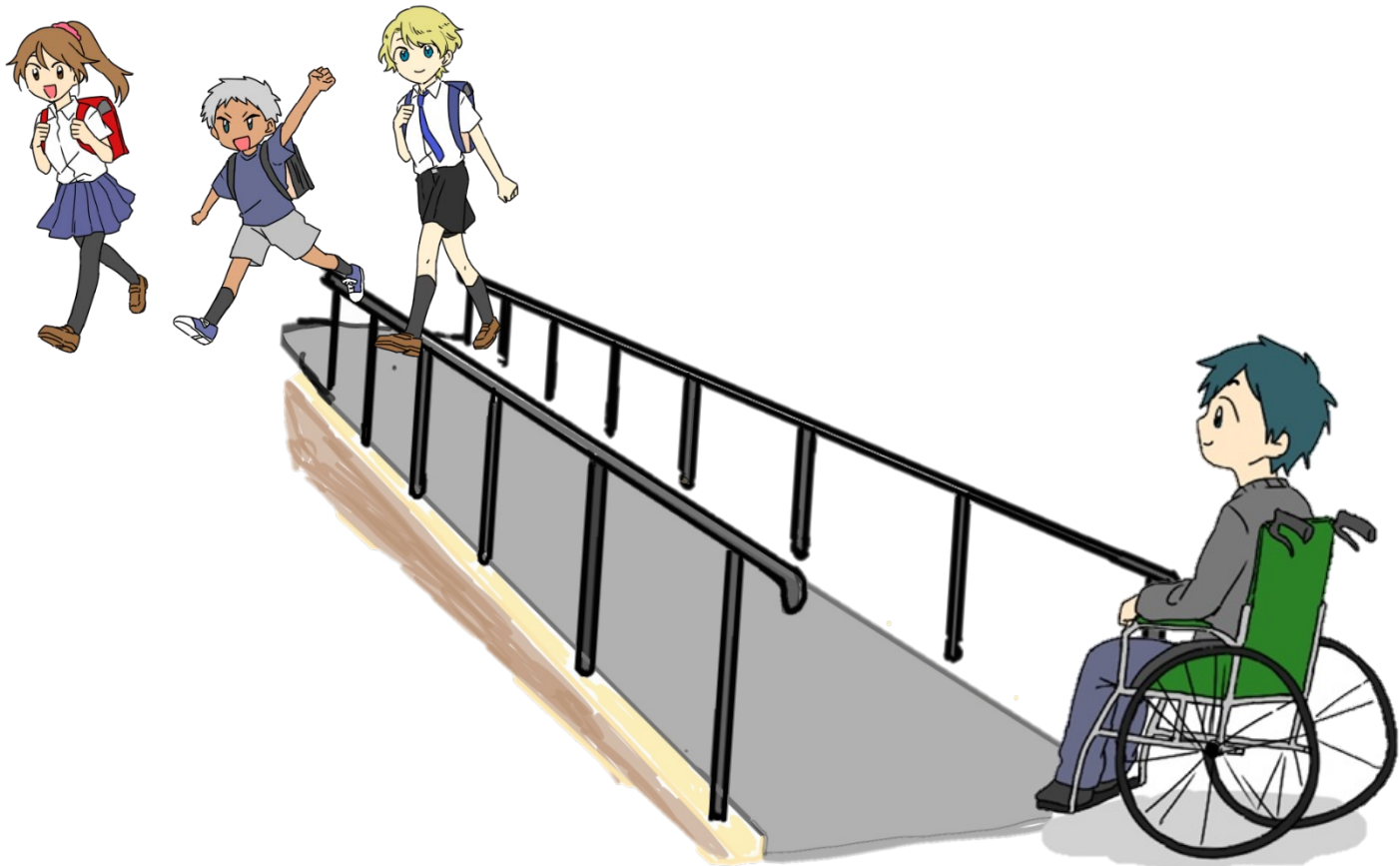
With having disability,
there is a limit.
But, that problem itself
isn't the main issue.



An environment without an escalator
or a ramp would also bring
a disability to handicapped people



But a community
with the elevator or the ramp,
would allow everyone
to be in the same society.



Our prejudices of thinking that
“People with Neurodevelopmental Disability
are...”
creates an obstacle in our mind.

You struggle at studying
because you have
ADHD, right Tom?



My grade for
English is
good.



I make many careless mistakes
but my English grade is really good.
I'm also good at soccer too.
Don't think I can't do anything
just because I have ADHD.



Oh, I didn't know that. I forgot you were a regular on the soccer team. I'm sorry about that.



Please be sure to understand what I face.

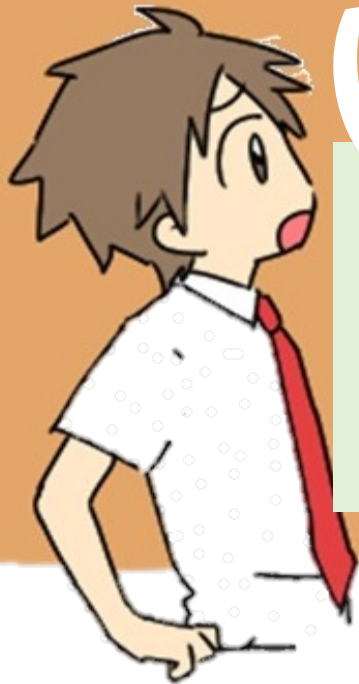


“Disability” conditions are changing
based on environment.

The barrier in Environment
against participation to society
for individuals with disability is “Disability”.
This is the social model of disability.



WALL (Barrier)



Environmental Factors
Assistive devices,
Construction, Human
Environment (Family,
friends), System, Service,
Etc.

Society

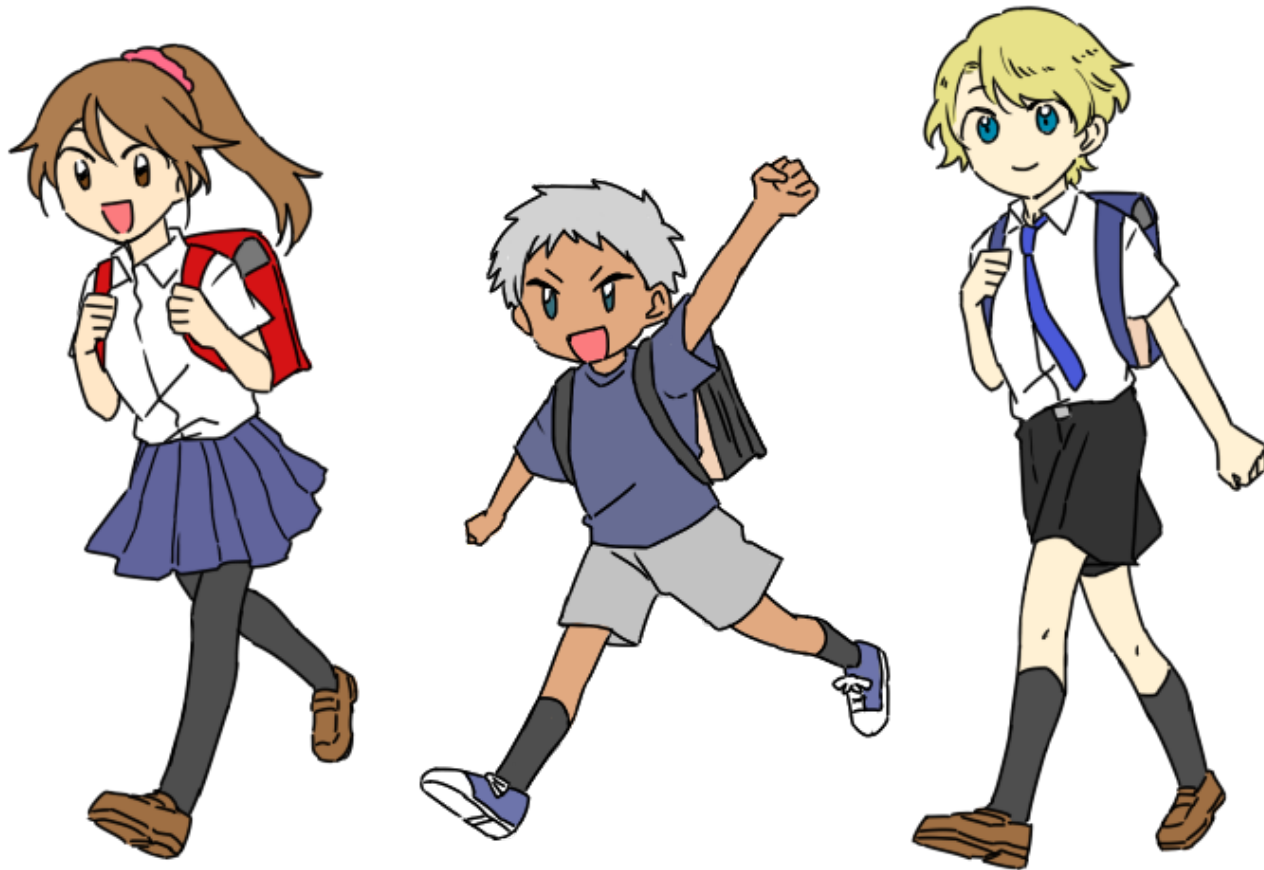
So it's our job to help
remove the barriers
between individuals and
society.



Even if you are an individual with/without Neurodevelopmental Disability , we all live in the same community where everyone's life is worth the same as others.



Let's create a world without any
segregation or prejudice!



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