

The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

# **AUTISM DIAGNOSIS – AN EVOLVING SPACE**

DR MANDIRA HIREMATH

# WHAT WILL BE COVERED

- INTRODUCTION TO AUTISM
- WHAT WAYS CAN WE FRAME AND UNDERSTAND AUTISM
- CHANGES IN DIAGNOSIS OF AUTISM
- COMPLEXITIES IN DIAGNOSIS OF AUTISM
- HOW DO THESE FEATURES INFLUENCE SUPPORTING AUTISTIC CHILDREN
- QUESTIONS AND DISCUSSION

# A Timeline Of Autism Classifications

by Embrace ASD



John Langdon Down

1887

1887: British physician **John Langdon Down** describes a group of children that didn't show many of the hallmarks of more typical mental retardation, and called it **developmental retardation**.

What Down described is referred to as **low-functioning autism** today.

1908: The Swiss psychiatrist & eugenicist **Eugen Bleuler** uses the term **autism** to describe schizophrenic patients who were especially withdrawn into themselves:

“The autistic withdrawal of the patient to his fantasies, against which any influence from outside becomes an intolerable disturbance.”

1908



Eugen Bleuler

1926: The Soviet child psychiatrist **Grunya Sukhareva** describes boys with a condition she names **schizoid personality disorder**.

What she described was what ultimately became known as **Asperger syndrome**.

1926



Grunya Sukhareva

1943: Austrian-American child psychiatrist **Leo Kanner** publishes a paper in which he describes 11 children who were highly intelligent, but with:

“A powerful desire for aloneness, and an obsessive insistence on persistent sameness.”

1944: **Leo Kanner** coins the term **early infantile autism** to refer to the condition he described the year before.

1943



Leo Kanner

1944



Hans Asperger

1944: Austrian paediatrician **Hans Asperger** publishes a paper in which he describes 4 boys with special talents, but also with:

“A lack of empathy, little ability to form friendships, one-sided conversations, intense absorption in a special interest, and clumsy movements.”

Hans Asperger called the condition **autistic psychopathy**.

'Psychopathy' refers to mental disorders (psychopathology); it has nothing to do with what is understood by psychopathy today.

1952

1952: In the DSM-I, autism is categorized under the umbrella term **childhood schizophrenia**.

1981: English psychiatrist **Lorna Wing** publishes a paper where she introduces the English-speaking medical world to the work of Hans Asperger.

To avoid confusion about the term 'autistic psychopathy', she suggests the term **Asperger's syndrome**.



Lorna Wing

1981

1980: The DSM-III lists infantile autism, separated from **childhood schizophrenia**

1980

1987

1987: The DSM-III-R replaces 'infantile autism' with **autism disorder**.

1994

1993: The DSM-IV includes the diagnosis **Asperger syndrome**.

1993



Simon Baron-Cohen

2000

2013: The DSM-5 adds **autism spectrum disorder** as an umbrella condition encompassing all previous separate autism-related diagnoses.

2013

2018: New research indicates differences between Asperger syndrome and **high-functioning autism**, thus taking the generalization of ASD into question.

2018

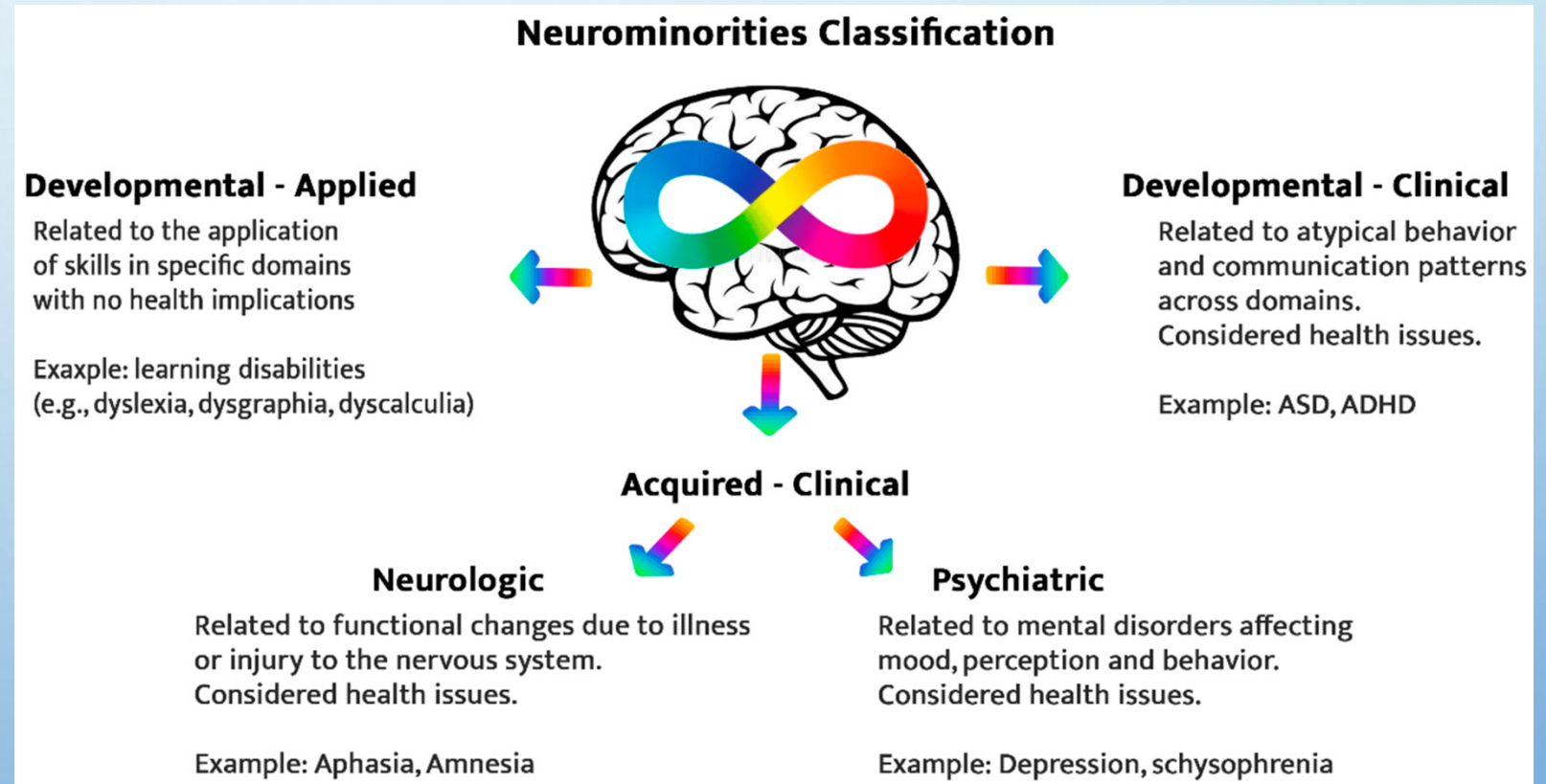
EmbraceASD.com

# AUTISM

- AUTISM SPECTRUM DIAGNOSIS (ASD) IS A DEVELOPMENTAL CONDITION CAUSED BY DIFFERENCES IN THE BRAIN.
- CORE CHARACTERISTICS ARE SOCIAL COMMUNICATION, REPETITIVE/RESTRICTIVE BEHAVIOURS AND SENSORY DIFFERENCES.
- AUTISM DIAGNOSIS RATES RISING IN AUSTRALIAN CHILDREN.
- ESTIMATED PREVALENCE IN 2015 WAS 0.8% TO ESTIMATED PREVALENCE NOW BETWEEN 1.3-2.5%.

# AUTISM AS PART OF THE NEURODIVERSITY MOVEMENT

- NEURODIVERSITY COINED IN LATE 1990S.
- DESCRIBES NATURAL VARIATION IN HUMAN NEUROCOGNITION.





# AUTISM AND NEURODIVERSITY

- THERE ARE SEVERAL WAYS OF UNDERSTANDING NEURODIVERSITY AND THESE PROVIDE FRAMEWORKS FOR UNDERSTANDING AND SUPPORT.
- NEED TO ADOPT A FRAMEWORK TO AVOID OVER EMPHASISING IMPORTANCE OF ONE RISK FACTOR OVER ANOTHER.
- NO UNIVERSALLY AGREED FRAMEWORK.
- EACH HAS ITS OWN STRENGTHS AND LIMITATIONS.

	Description	Aims	Critique
<b>Medical Framework</b>	Focuses on protective factors, deficits and impairments.	Treatment and interventions to address deficits.	<ul style="list-style-type: none"><li>• Overly focused on deficits.</li><li>• Emphasis on individual as opposed to broader context.</li><li>• Narrow perspective.</li><li>• Diversity not deficits.</li></ul>
<b>Social Framework</b>	Environmental factors and societal barriers that impact individuals.	Creation of inclusive environments, removing barriers to participation and accommodation of differences.	<ul style="list-style-type: none"><li>• Failure to address impairment.</li><li>• Lack of consideration of lived experience.</li></ul>

# FRAMEWORK AND AUTISM

- OTHER FRAMEWORKS: PSYCHOSOCIAL, NEURODIVERSITY, STRENGTH-BASED.
- IN WORKING WITH AUTISM AND NEURODIVERSITY, NEED TO HAVE KNOWLEDGE OF DIFFERENT FRAMEWORKS.
- INTEGRATED/MIXED APPROACH RECOGNISES COMPLEXITY OF AUTISM AND NO SINGLE FRAMEWORK CAN FULLY CAPTURE DIVERSITY.
- ELEMENTS ADOPTED TO SERVE DIFFERENT PURPOSES AND INDIVIDUAL NEEDS.



# HISTORICAL PROPOSED CAUSES OF AUTISM

- REFRIGERATOR MOTHER THEORY (MID-20<sup>TH</sup> CENTURY)
- VACCINE CONTROVERSY (1990S AND 2000S) - MMR



# INFLUENCES ON AUTISM

- ACKNOWLEDGEMENT OF COMPLEX INTERPLAY BETWEEN A BIOPSYCHOSOCIAL /BIOECOLOGICAL AND LIFE COURSE.
  - INTERACTION BETWEEN CHILD, GENES AND ENVIRONMENT.
  - HELPS TO IDENTIFY, ANALYSE AND UNDERSTAND PROTECTIVE AND RISK FACTORS.

# GENETICS AND NEUROIMAGING

- ASD HIGHLY HERITABLE AND HUNDREDS OF GENES IMPLICATED.
- NEUROINFLAMMATION MAY CONTRIBUTE TO CAUSATION OF AUTISM.
- EEG, BRAIN IMAGING AND GENETICS COMBINED BEGINNING TO UNDERSTAND NEUROBIOLOGICAL MECHANISMS.
  - SPECIFIC GENETIC VARIANTS MAY HAVE EFFECT ON BRAIN CIRCUITS ASSOCIATED WITH FACIAL PROCESSING AND SOCIAL COGNITION.
  - 8-10% OF AUTISM CASES LINKED WITH ABNORMAL MTOR SIGNALLING PATHWAYS AND MRI CHANGES INCLUDING HYPERCONNECTIVITY.



The biopsychosocial model of health

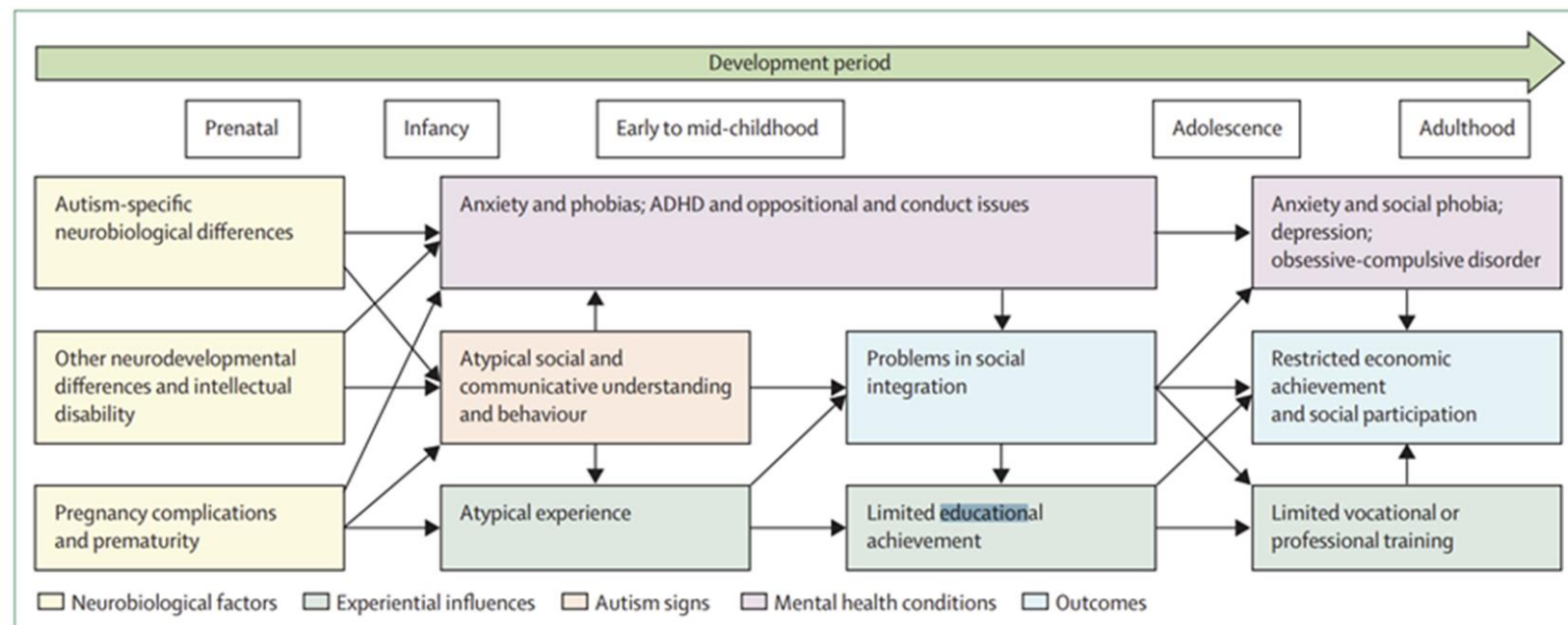
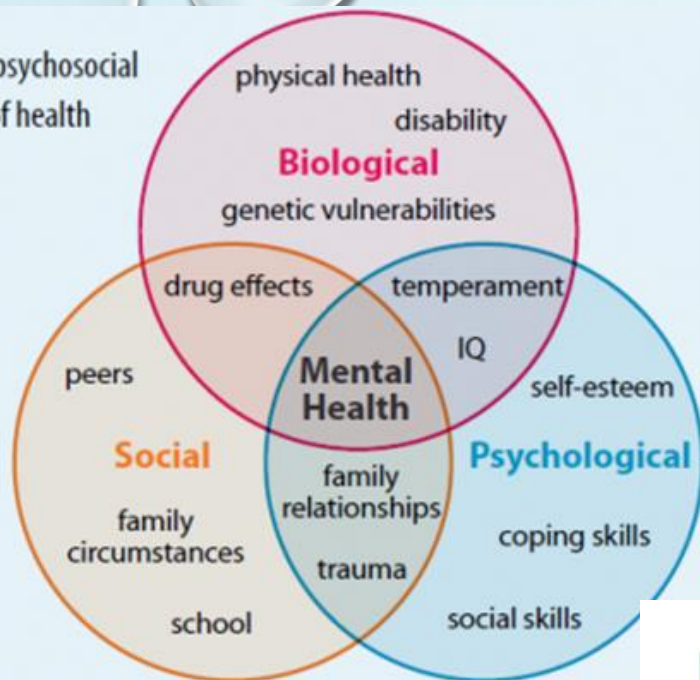
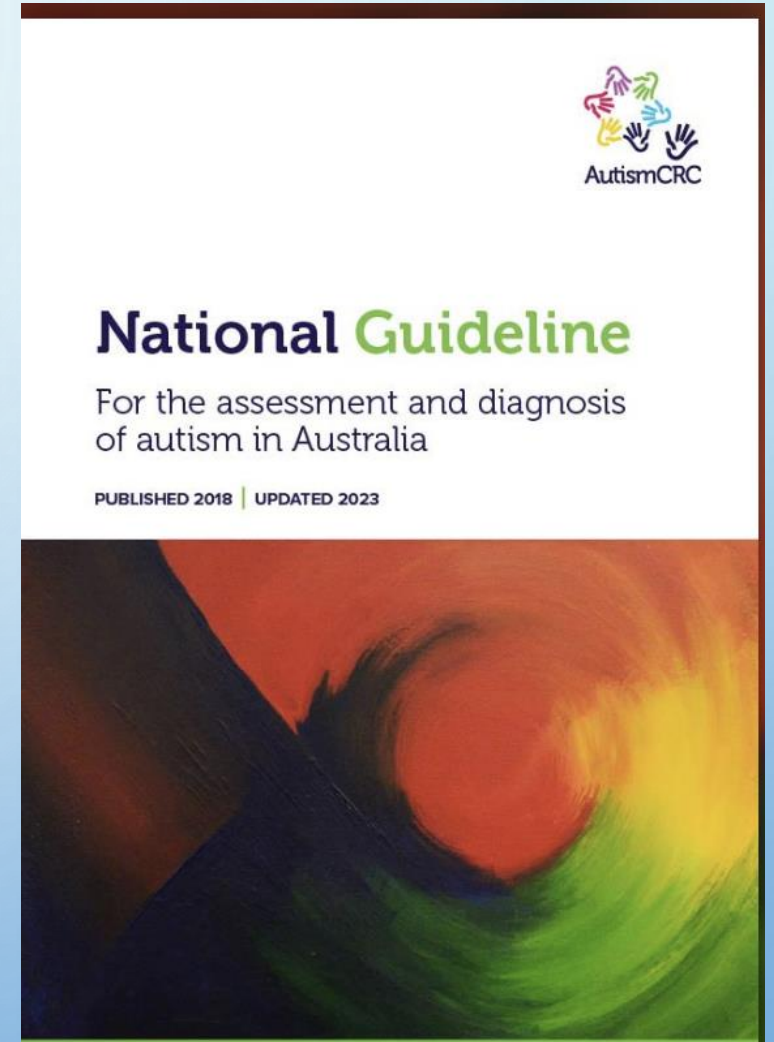


Figure 2: Neurobiological and experiential influences on signs of autism, mental health, and life outcomes across development  
 ADHD=attention-deficit hyperactivity disorder.

# AUTISM DIAGNOSIS

- AUTISM COOPERATIVE RESEARCH CENTRE NATIONAL GUIDELINES.
  - UPDATED 2023
  - ASSISTANCE IN DIAGNOSIS AND MANAGEMENT
  - DEVELOPED BY HEALTH PROFESSIONALS, THOSE WITH LIVED EXPERIENCE, EDUCATION PROFESSIONALS AND RESEARCH BACKGROUNDS.
- STRENGTHS-BASED, NEURO-AFFIRMING APPROACH.
- EMPHASISES HOLISTIC, EQUITABLE APPROACH.
  - AIMS TO ADDRESS BARRIERS INCLUDING WAITLISTS, PATHWAYS, ACCESSIBILITY.
- SHIFT FROM MULTI-DISCIPLINARY DIAGNOSIS TO DIAGNOSIS BASED ON INDIVIDUAL FACTORS AND VARYING APPROACHES.

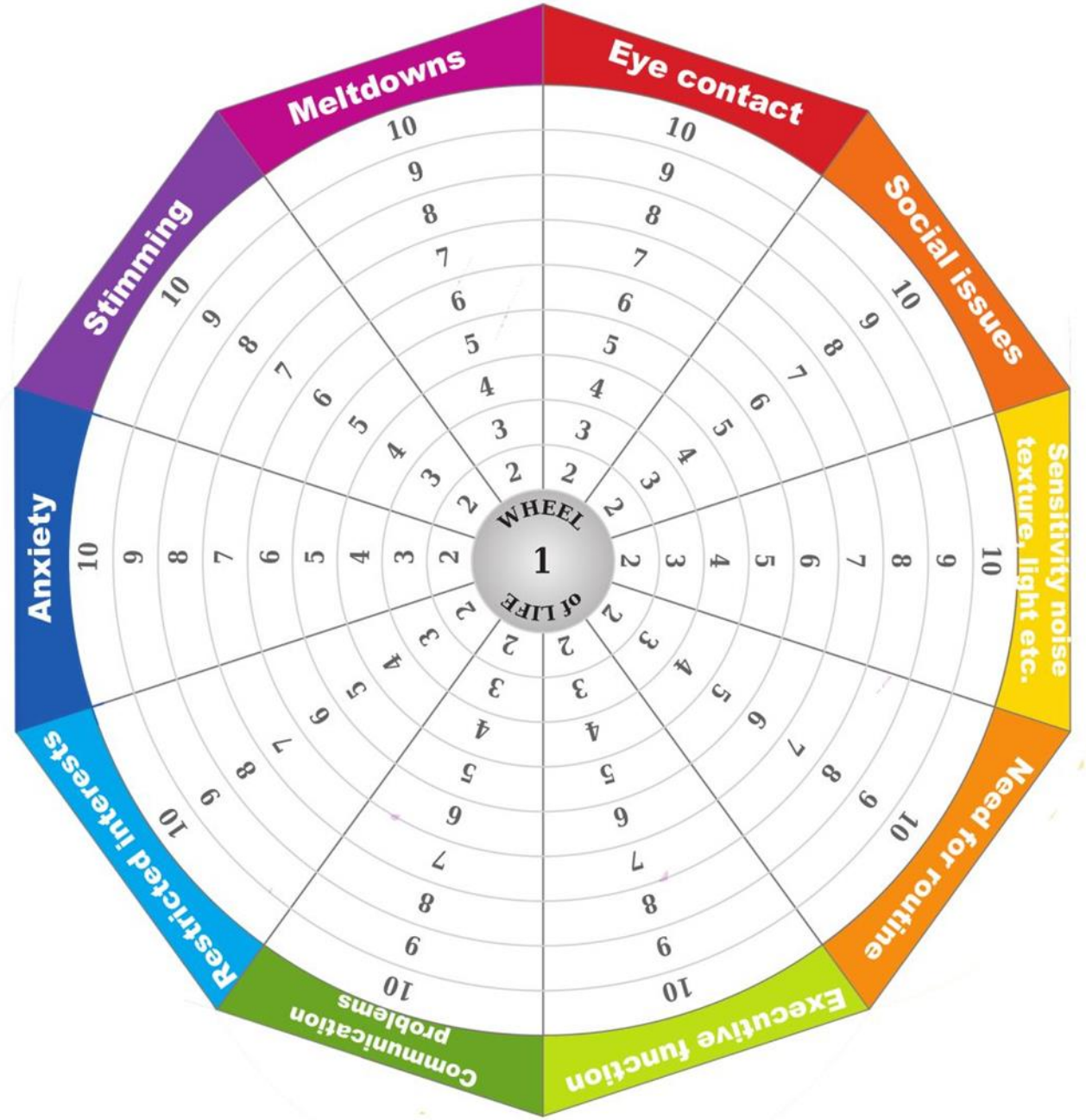


# COMPLEXITIES IN DIAGNOSIS

- HETEROGENEITY OF SYMPTOMS.
- DEVELOPMENTAL VARIABILITY.
- CULTURAL AND LINGUISTIC FACTORS.
- NEED FOR COMPREHENSIVE, MULTI-INFORMANT EVALUATION.
- SOCIAL-DETERMINANTS EG ACCESS, FUNDING, GEOGRAPHY.
- DIFFERING LANGUAGE AND IDENTIFICATION EG TRAITS, DISORDER, DIAGNOSIS, AUTISTIC.



# PIE-CHART SPECTRUM RATHER THAN LINEAR





Passion & knowledge  
for chosen topics

Innovative  
& creative

Excellent long-  
term memory

Observation  
skills

**Autistic**

Honesty

Loyalty

**strengths**

Integrity

Analytical  
approach

Profound focus

Accepting &  
non-judgemental

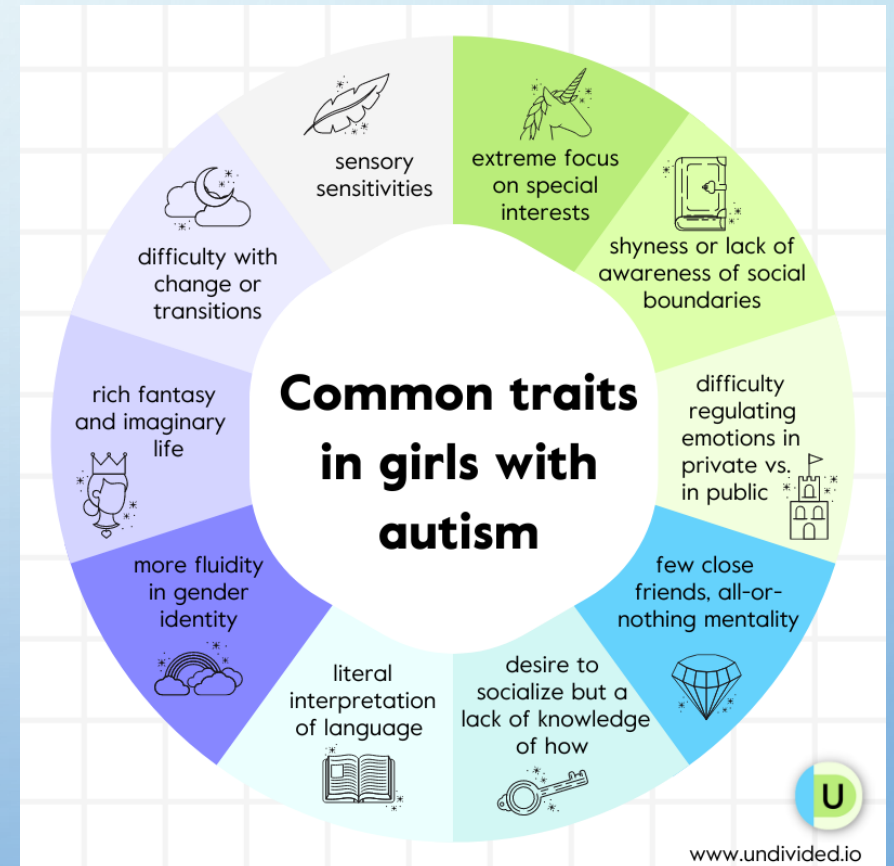
Strong focus  
on detail

Humour

Empathy

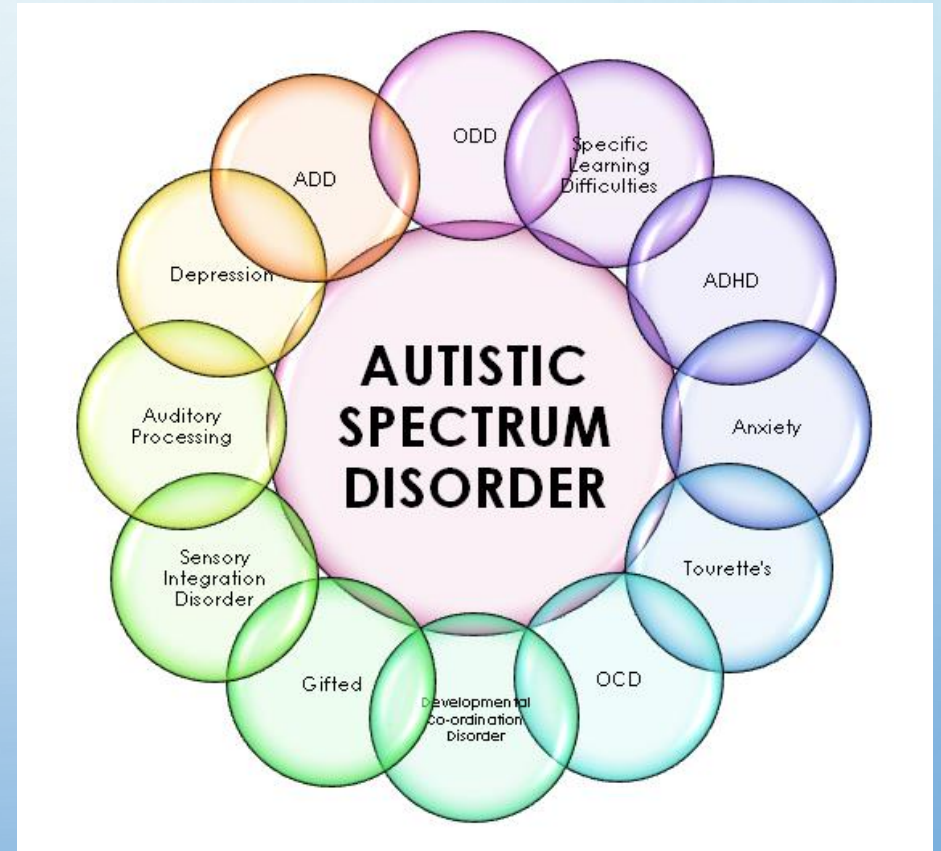
# GENDER DIFFERENCES

- GIRLS PRESENT DIFFERENTLY TO BOYS.
- FEWER STEREOTYPICAL SYMPTOMS.
- BETTER SOCIAL CAMOUFLAGING.
- LEADS TO MISDIAGNOSIS, UNDERDIAGNOSIS OR LATE DIAGNOSIS.



# CO-OCCURRING CONDITIONS

- MASKING OF SYMPTOMS EG ADHD.
- ATYPICAL PRESENTATION EG ID.
- DIAGNOSTIC OVERSHADOWING EG ANXIETY.
- COMPLEX CLINICAL PROFILES.
- OVERLAPPING OR INADEQUATE ASSESSMENT TOOLS EG ADOS-2.
- TREATMENT PLANNING.
- IMPACT ON PROGNOSIS AND OUTCOME.





# RECOMMENDATIONS POST ASSESSMENT

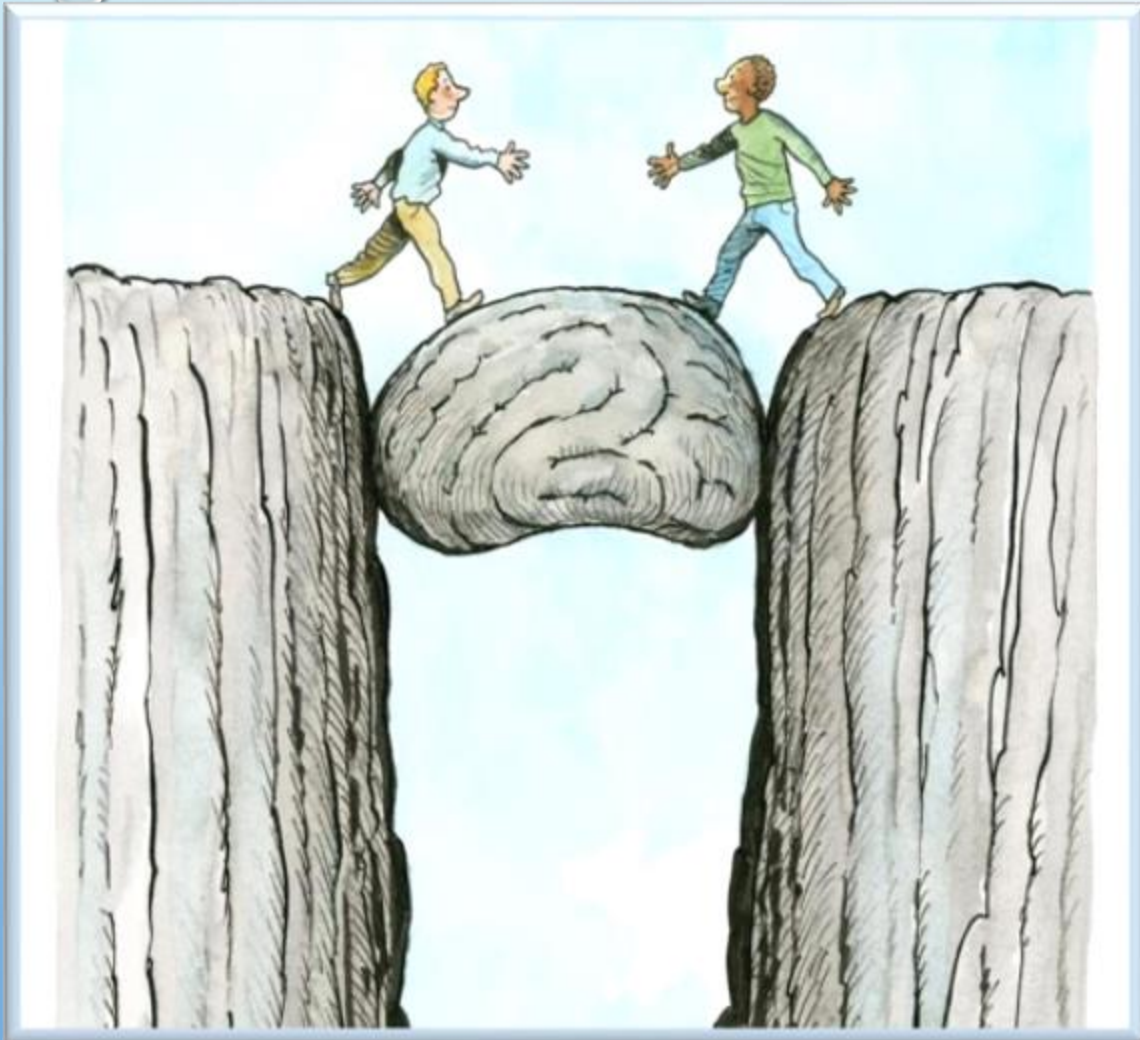
- FUNDING – NDIS, CENTRELINK, MEDICARE
  - COMPLEXITIES AROUND FUNDING AND PRESSURE FOR DIAGNOSIS.
- ALLIED HEALTH RECOMMENDATIONS.
- SUPPORTS THROUGH EDUCATION SYSTEM.
- FAMILY SUPPORTS.
- HEALTH FOLLOW-UP EG. SLEEP, NUTRITION, MENTAL HEALTH

# SHIFT TOWARDS MIXED SUPPORT

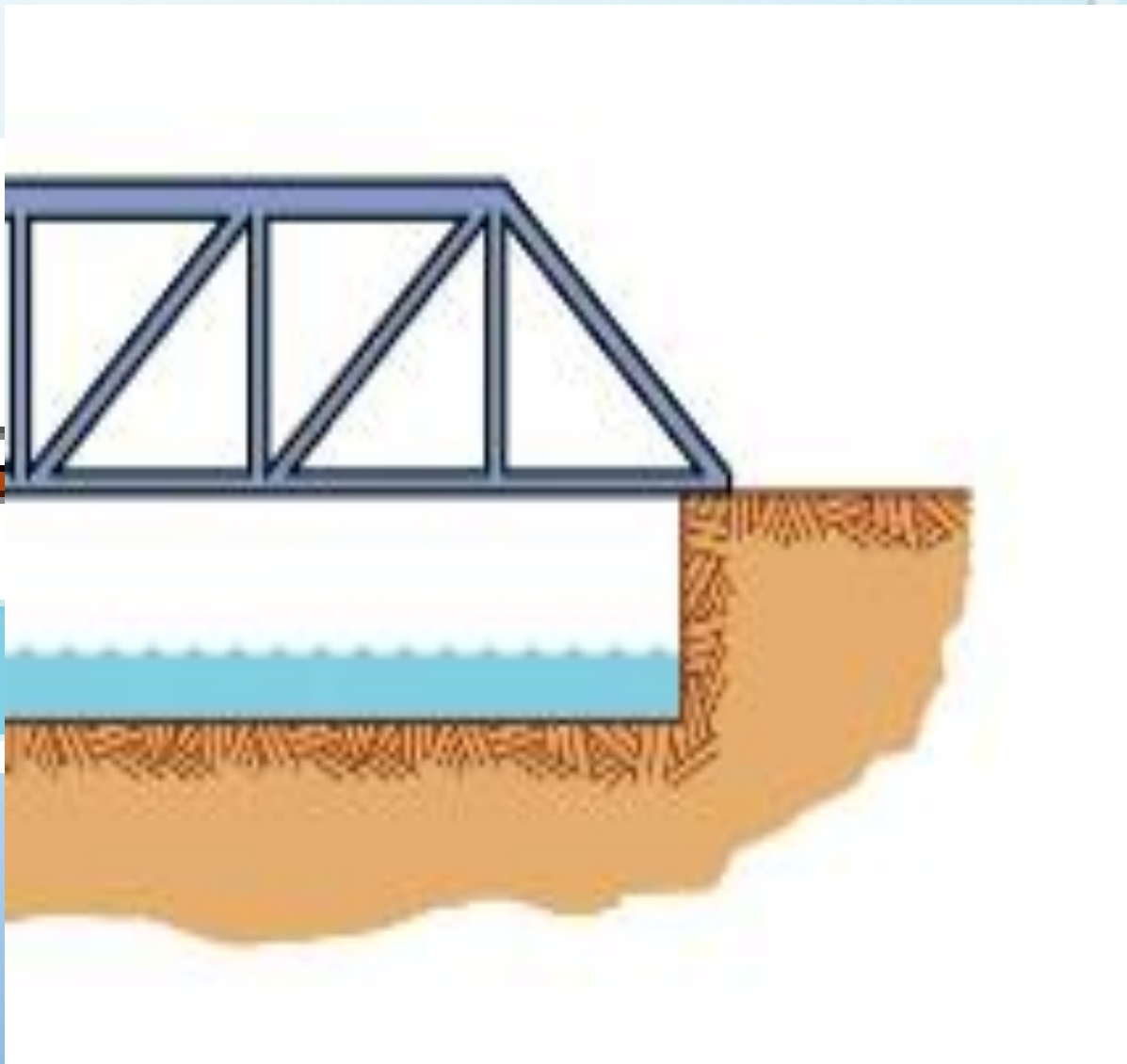
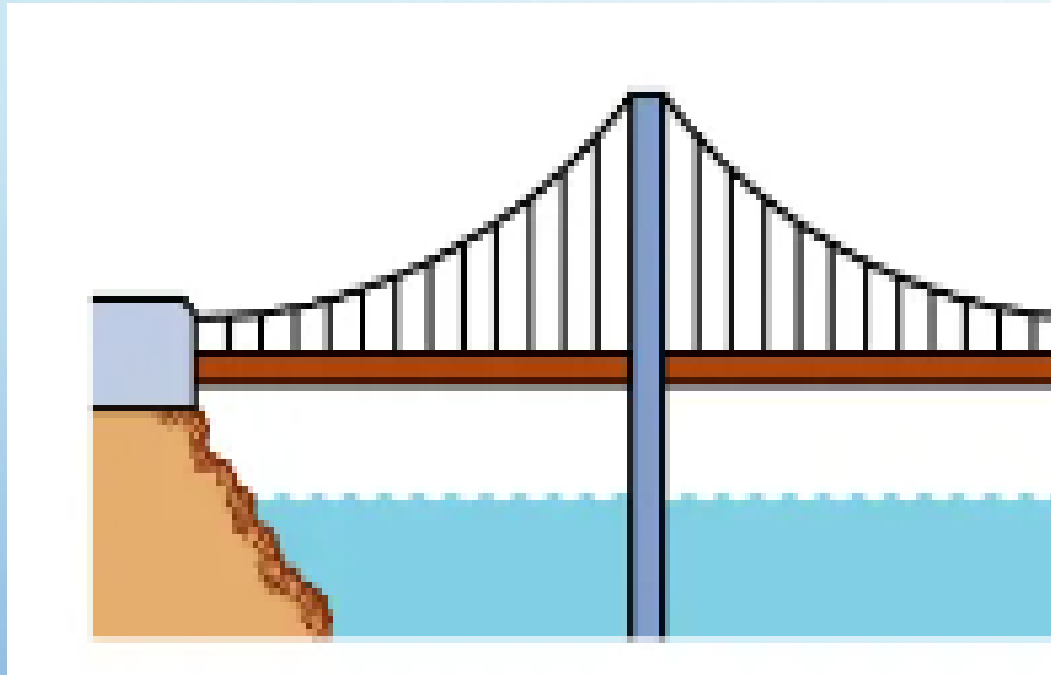
- EMBRACING INDIVIDUALITY AND STRENGTHS.
- ADOPTING BIOPSYCHOSOCIAL LENS.
- EARLY RECOGNITION AND SUPPORT.
- COLLABORATION WITH FAMILIES, THERAPISTS, EDUCATION PROFESSIONAL.
- ENGAGEMENT OF SOCIETY EG POLICIES, ADVOCACY, ACCEPTANCE, EMPOWERMENT.
- IMPROVING EQUITY AND ACCESSIBILITY.



# “BRIDGING” RESTS ON UNDERSTANDING ANOTHER PERSON’S MINDSET



- EVERY AUTISTIC PERSON HAS UNIQUE SET OF SKILLS AND DIFFERENCES
- DEVELOPING AN UNDERSTANDING CAN BE IMPACTED BY
  - BEING OVERWHELMED IN CLASSROOM
  - AUTISTIC CHILD’S ABILITY TO UNDERSTAND AND REGULATE THEIR OWN EMOTIONS
  - HAVING SHARED WORDS FOR FEELINGS
  - DIFFERENCES IN FOCUS
  - DIFFERENCES IN MOTIVATION



# HOW THOSE WITH LIVED EXPERIENCE VIEW THE ISSUE

**STUDENTS:** FIRST HAND ACCOUNTS OF AUTISTIC PEOPLE OF HEIGHTENED ANXIETY, UNCERTAINTY AND CONFUSION IN NOVEL SOCIAL SETTINGS

- ~25% REPORT FEELING LONELY OR LEFT OUT AT SCHOOL, 40% REPORT DIFFICULTIES MAKING FRIENDS AT SCHOOL (ZEEDYK, COHEN 2016)

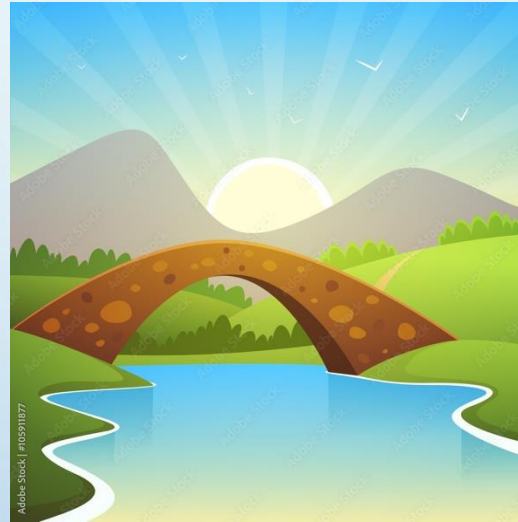
**TEACHERS:** TEACHERS REPORT LACK OF RESPECT FOR SOCIAL NORMS, UNUSUAL SOCIAL REACTIONS

- “THEY DON’T HAVE A GOOD LIFE IF WE KEEP THINKING THAT THEY’RE DOING IT ON PURPOSE!” – DANKER, STRNADOVA, CUMMING 2019 ON STUDENT WELLBEING

**CLINICIANS:** MENTAL HEALTH WORKERS AND PAEDIATRICIANS SEE LEARNING DIFFICULTIES, ANXIETY DISORDERS, SCHOOL REFUSAL, AGGRESSION

# PATHWAYS TO DEVELOPING A MUTUAL UNDERSTANDING..

- UNDERSTAND ONES OWN ROLE AND TRAINING
- UNDERSTAND ENVIRONMENT, CONTEXT AND CULTURAL INFLUENCE
- UNDERSTAND TIME FRAMES AND SPAN OF RELATIONSHIP
- INFORMATION FROM THE CHILD (PARENT/MIXED METHODS/SELF)



- INFORMATION FROM THE CHILD (PARENT/MIXED METHODS/SELF)
- INFORMATION FROM THE CHILD'S HISTORY
  - PARENT AND CARER'S OBSERVATIONS
  - INFORMATION FROM EARLY INTERVENTION
  - INFORMATION FROM ASSESSMENTS





# HOW DO HEALTH AND EDUCATION PROFESSIONALS WORK TOGETHER?

- COMMUNICATION BETWEEN DISCIPLINES.
- BUILDING ON KNOWLEDGE OF EACH DISCIPLINE AND COLLABORATION.
- CREATING INCLUSIVE SETTINGS AND ACCOMMODATION OF DIVERSE NEEDS.
- IDENTIFICATION EARLY.
- PROMOTING SKILLS OF SELF-ADVOCACY.
- INCORPORATING LIVED EXPERIENCE INTO SYSTEMS.
- FOSTERING NEURODIVERSITY AND EDUCATING FAMILIES AND COMMUNITIES.
- SHIFTING FROM INTERDISCIPLINARY TO TRANSDISCIPLINARY WORK.

# CHALLENGES

- BARRIERS TO IMPLEMENTATION
  - RESOURCES.
  - RESEARCH.
  - SYSTEMS AND POLICIES.
- BALANCING COMPETING PERSPECTIVES AND PRIORITIES.
- PROMOTING AWARENESS AND UNDERSTANDING AMONG STAFF, STUDENTS, FAMILIES.



THANK YOU

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