

TOWARDS AN INCLUSIVE SOCIETY THROUGH SPORTS

INCLUSIVE SPORT CONFERENCE 2021

DATE & TIME
16 TO 18 MARCH 2021
9AM - 5PM



Host



Ministry of Culture, Community and Youth



Co-host



Mental Health In Individuals With Neurodevelopmental Disorders: Importance Of Sports & Physical Activities

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Developmental Psychiatry, Institute of Mental Health (IMH)



DEPARTMENT OF DEVELOPMENTAL PSYCHIATRY

Adult Neurodevelopmental Services (ANDS)



- Neurodevelopmental disorders– ID, ASD, Pervasive Developmental Disorder
- Assessment and treatment of the co-occurring psychiatric disorder and/or problem behaviours

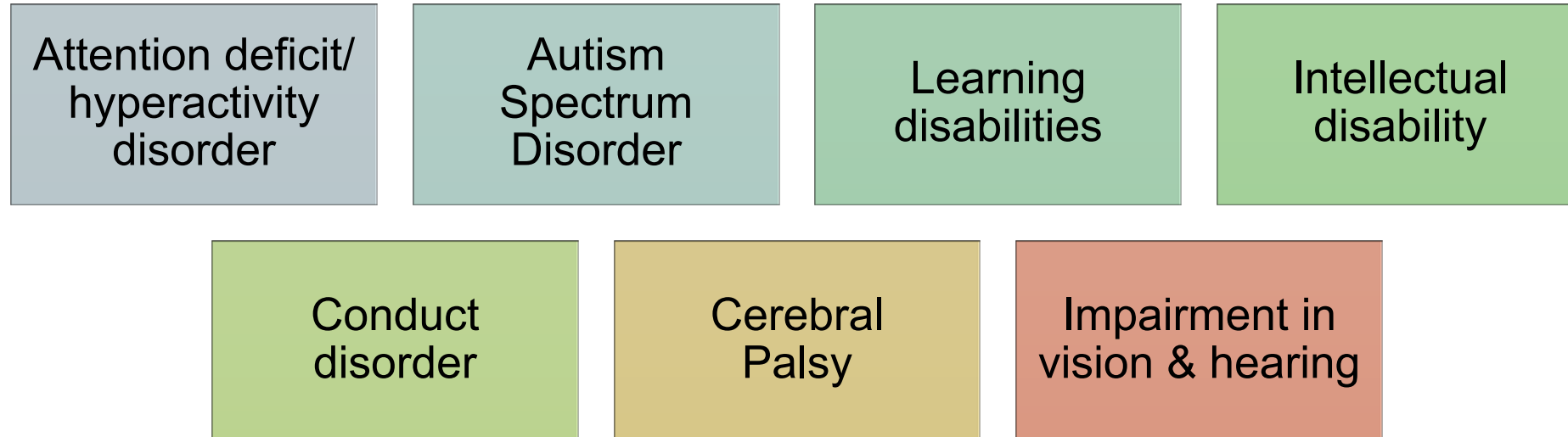
Department of Child Adolescent Psychiatry



- Neurobehavioral Clinic (NBC) - Autism & ADHD Services
- The Mood & Anxiety Clinic (MAC)
- Forensic Rehabilitation, Intervention, Evaluation & Network Development Services (FRIENDS)

NEURODEVELOPMENTAL DISORDERS (NDD)

- Disabilities associated primarily with the functioning of the neurological system and brain



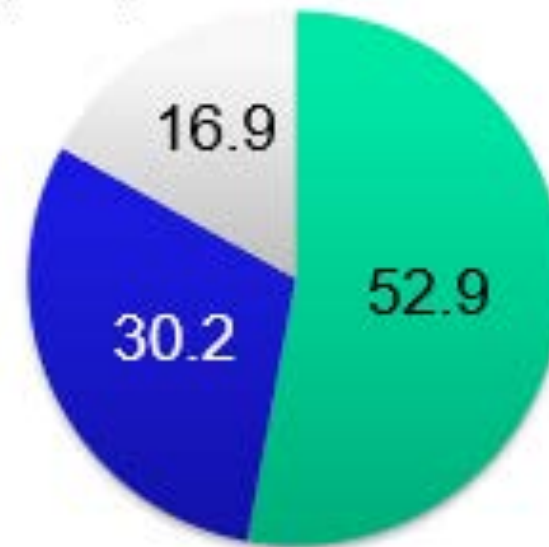
(Axelrad et al., 2013; King, 2016)

PREVALENCE OF NDD IN IMH

- Majority of the cases were diagnosed with intellectual disability (52.9%) followed by those with autism spectrum disorder (30.2%) and finally those with both ID and ASD (16.9%)

Adult New Cases in 2015-2016

- Intellectual Disability (ID)
- Autism Spectrum Disorder (ASD)



(Moon et al., 2020)

MENTAL HEALTH IN NDD



- Higher rates of physical and psychiatric comorbidities than typically developing individuals
- Common co-occurring conditions includes depression, anxiety disorders and psychotic disorders
- Presentation of mental health issues can be seen in challenging behaviours

(Moon et al., 2020)

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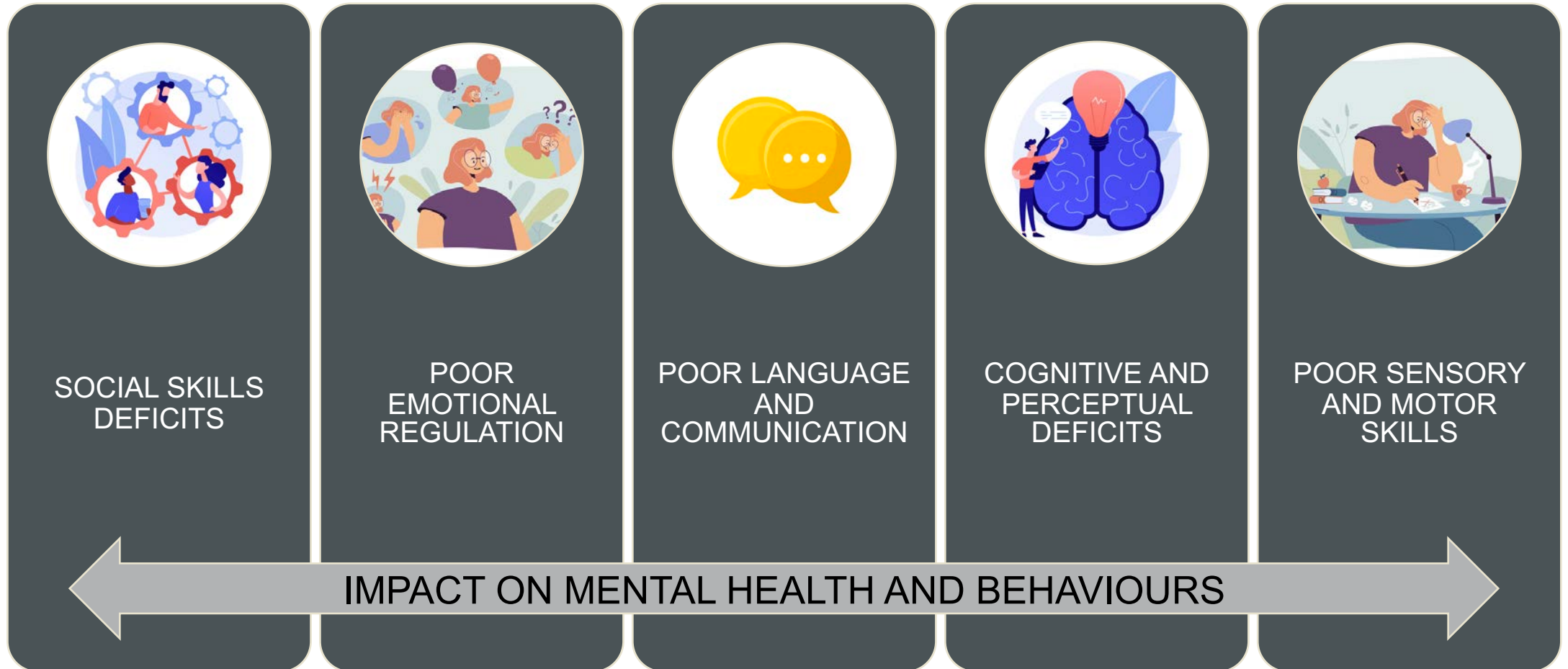
FUNCTION OF CHALLENGING BEHAVIOURS

“ Behaviours perceived as challenging serve a purpose for the child or young person, such as producing sensory stimulation, attracting attention, and avoiding demand”



(Green et al., 2018)

TOWARDS AN INCLUSIVE SOCIETY THROUGH SPORTS



EXAMPLES OF CHALLENGING BEHAVIORS

Aggression & Destruction

- Biting
- Scratching
- Hitting
- Pushing
- Kicking
- Property destruction
- Yelling and shouting

Self injurious

- Head banging
- Biting hands
- Pinching self
- Poking self in the eye
- Mouthing or swallowing objects causing bodily harm

Stereotypical behaviours

- Repetitive movements
- Rocking
- Jumping
- Spinning
- Repeated and unusual vocalization

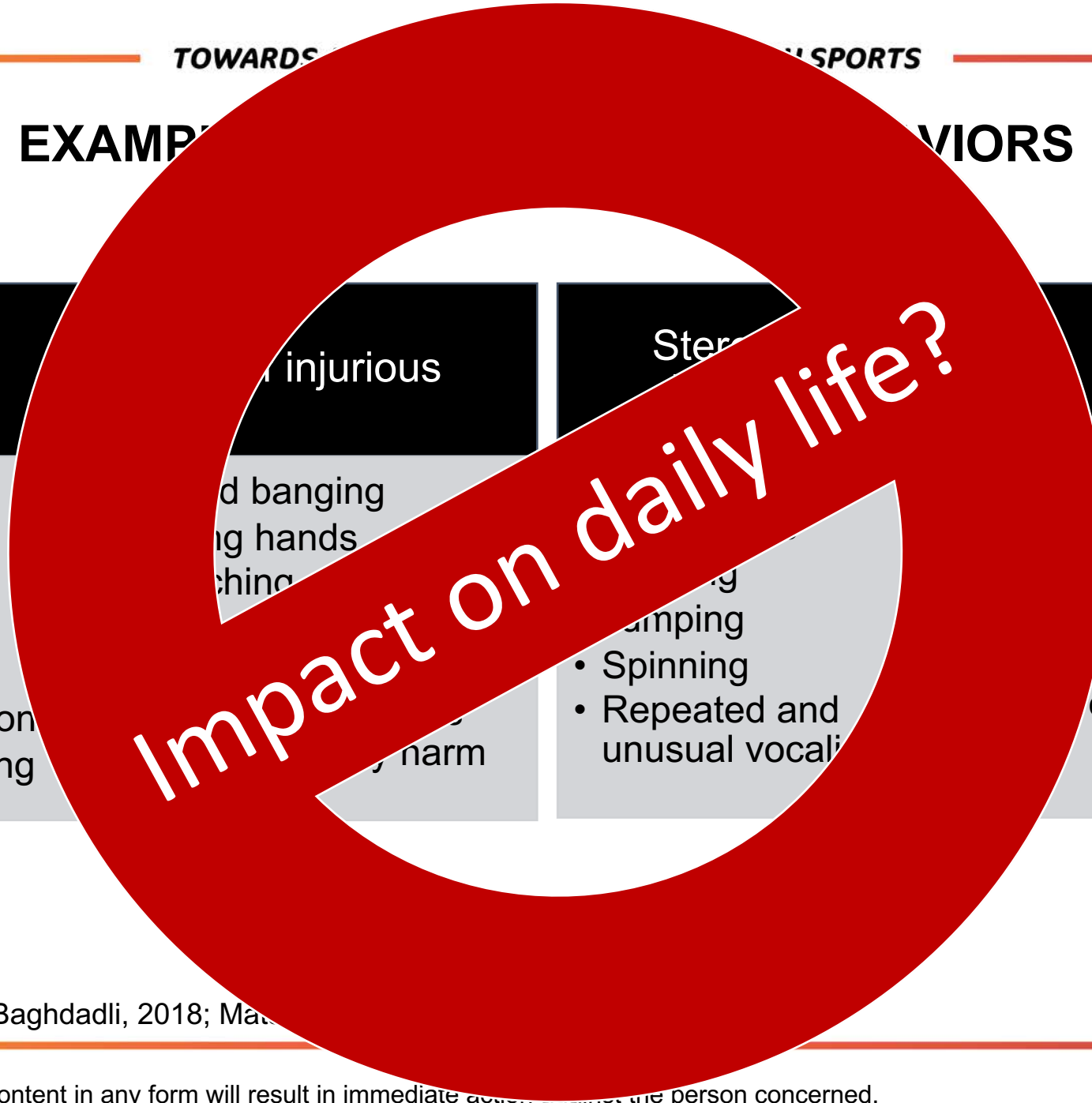
Disruptive behaviour

- Removal of clothing
- Inappropriate sexual behaviour
- Smearing faeces on the wall
- Defecating in public

(Rattaz, Michelon, Munir, & Baghdadli, 2018; Matson & Rivet, 2008; Green et al., 2018)

EXAMPLES OF BEHAVIOURS

Aggression & Destruction	Injurious	Stereotyping	Disruptive behaviour
<ul style="list-style-type: none"> • Biting • Scratching • Hitting • Pushing • Kicking • Property destruction • Yelling and shouting 	<ul style="list-style-type: none"> • Head banging • Slapping hands • Throwing objects • Self-harm 	<ul style="list-style-type: none"> • Spinning • Repeated and unusual vocalizations 	<ul style="list-style-type: none"> • Removal of clothing • Inappropriate sexual behaviour • Spitting • Throwing faeces on the wall • Defecating in public



(Rattaz, Michelon, Munir, & Baghdadli, 2018; Ma...



ACTIVITY TIME



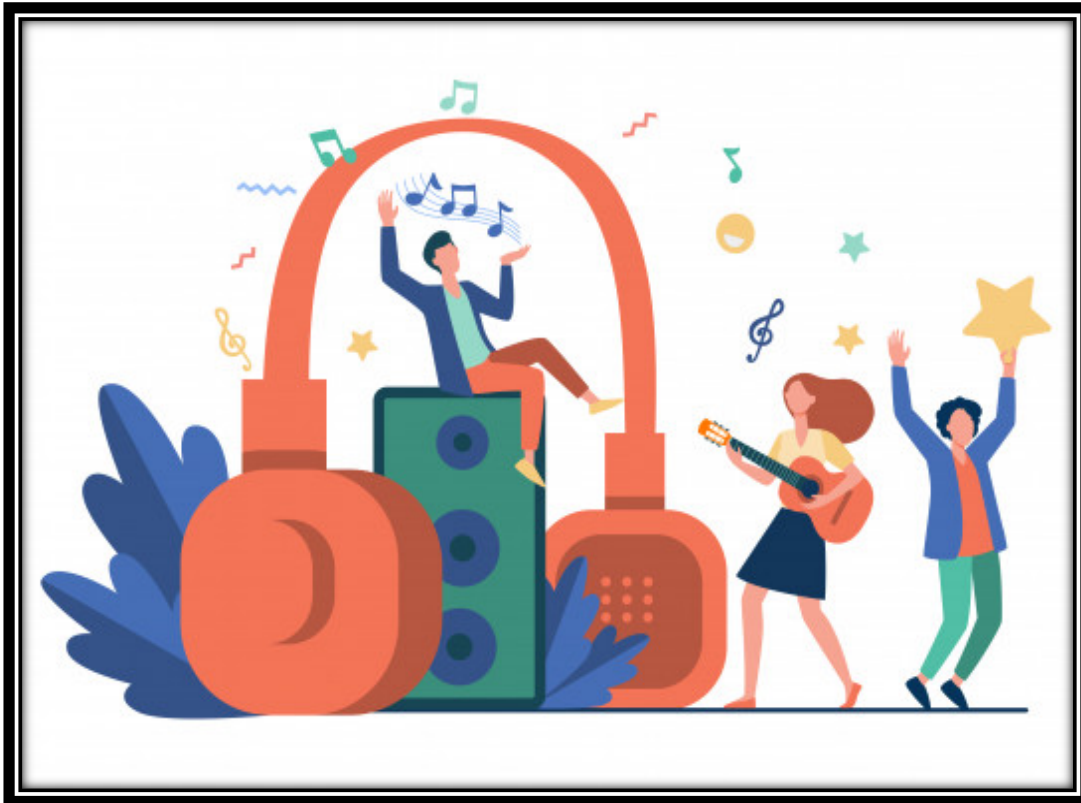
WHAT KEEPS YOU ALERT/AWAKE THROUGHOUT THE DAY?



WHAT HELPS YOU FOCUS IN A MEETING OR PRESENTATION?



HOW DO YOU LIKE TO MOVE?



SUMMARY OF ACTIVITY

- Different activities/strategies help us regulate our emotions and our level or alertness
- Everyone is unique with different sensory needs and preferences, which can influence our choices.

WHY ARE PHYSICAL ACTIVITIES IMPORTANT?



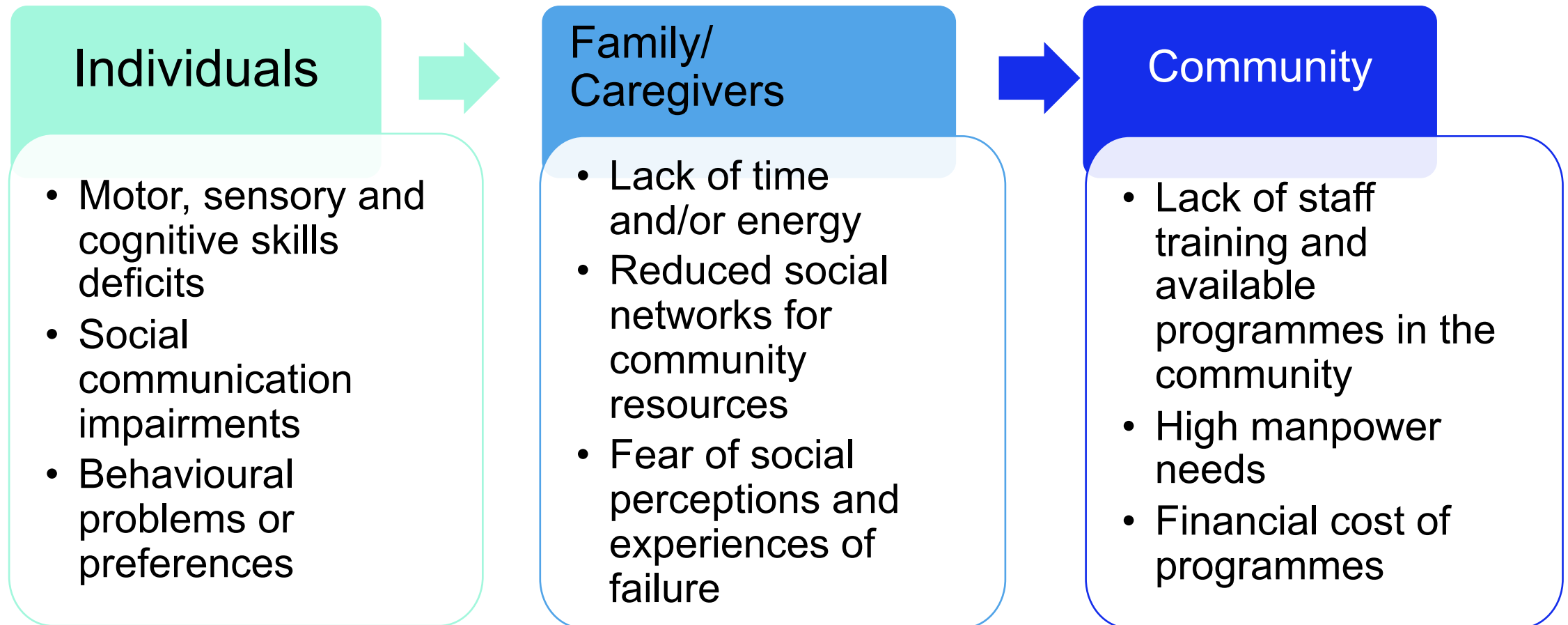
- Improve emotional state & regulation
- Reduce aggressive behaviors
- Manage self-injurious behaviors
- Decrease self stimulatory behaviors
- Improve motor skills and fitness
- Skills development and self confidence

(Sowa & Meulenbroek, 2012; Bass, Duchowny & Llabre 2009; Lochbaum & Crews, 2003)

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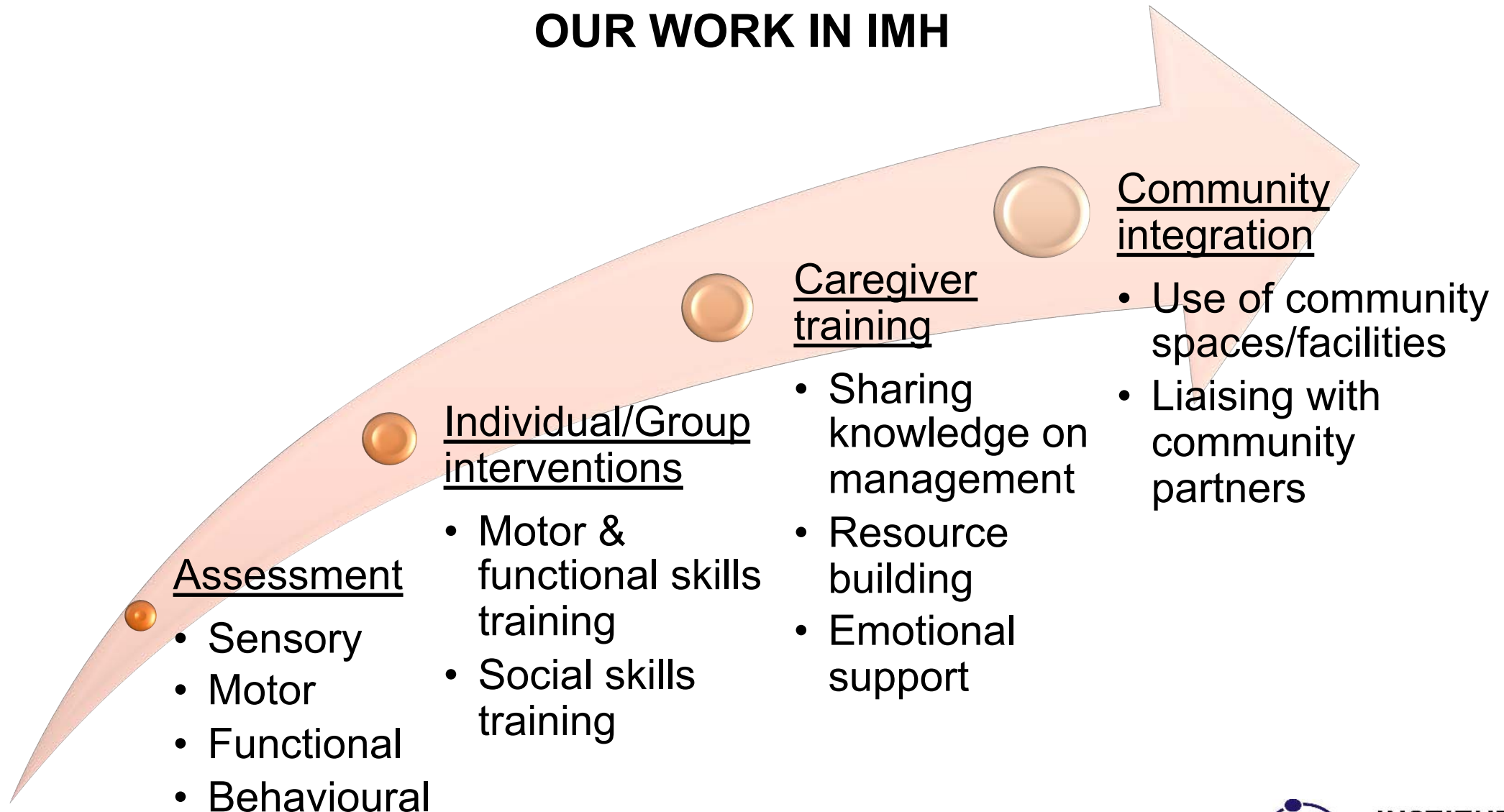
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BARRIERS TO PARTICIPATION FOR INDIVIDUALS WITH NDD AND MENTAL HEALTH DISORDERS



(Reynolds, Bendixen, Lawrence & Lane, 2011; Potvin et. Al., 2013; Obrusnikova & Miccinello, 2013)

OUR WORK IN IMH



UNDERSTANDING SPORTS FOR INDIVIDUALS WITH NDD



More supervision
and support

Task repetition in
skills development

They thrive better in
solitary physical based
activities i.e. cycling
than group activities

Task modification to
achieve 'just right
challenge' on the
level of difficulty

(Sowa & Meulenbroek, 2012; Nelson & Jepsen-Thomas, 2003)

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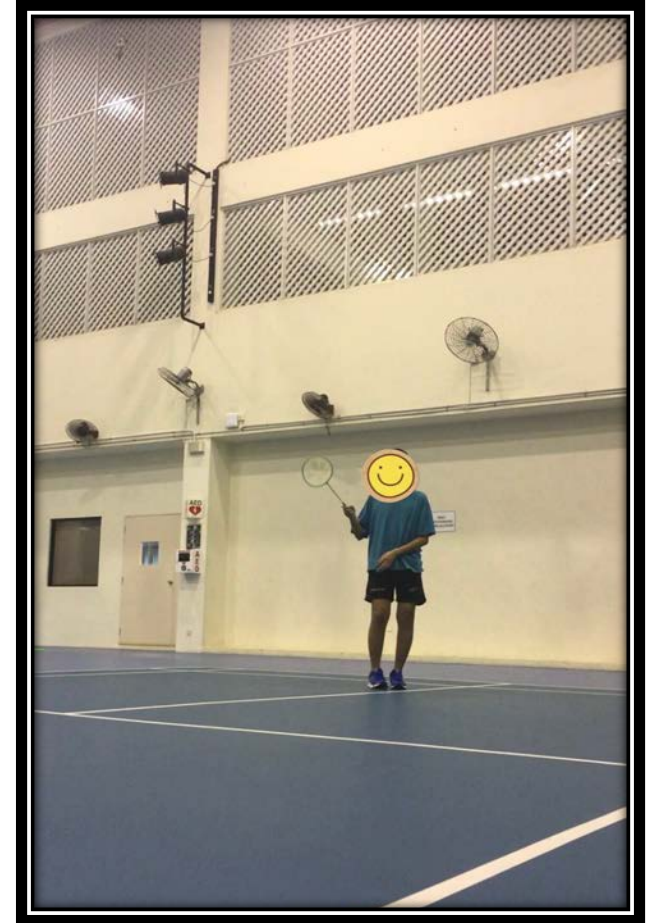
LIMITATIONS OF HOSPITAL ADMISSIONS

- ❖ Disruption to daily routines
- ❖ Healthy complications
 - Obesity
 - Deconditioning
 - Developing unwanted behaviours
i.e self stimulatory behaviours

EXAMPLE OF WARD SCHEDULE

	MON	TUE	WED	THURS	FRI	SAT	SUN
7 – 10am	Wake up, shower, breakfast, medications						
10 - 11am	Morning Exercise Group/ Outdoor Walking Group						
11 – 12pm	Art and Craft Group	Music and Movement Group	Tabletop Activities Group	Interactive Games Group	Household Chores Group	Sessions with volunteers/ weekend activities with nurses	
12 – 2pm	Lunch						
2 – 3pm	Sports Group	Meal Preparation Group	Sports Group	Meal Preparation Group	Art and Craft Group	Sessions with volunteers/ weekend activities with nurses	
3 – 4pm	Teabreak						
4 – 5pm	Interactive Games Group	Tabletop Activities Group	Household Chores Group	Music and Movement Group	Sports Group	Sessions with volunteers/ weekend activities with nurses	
5pm	Dinner						

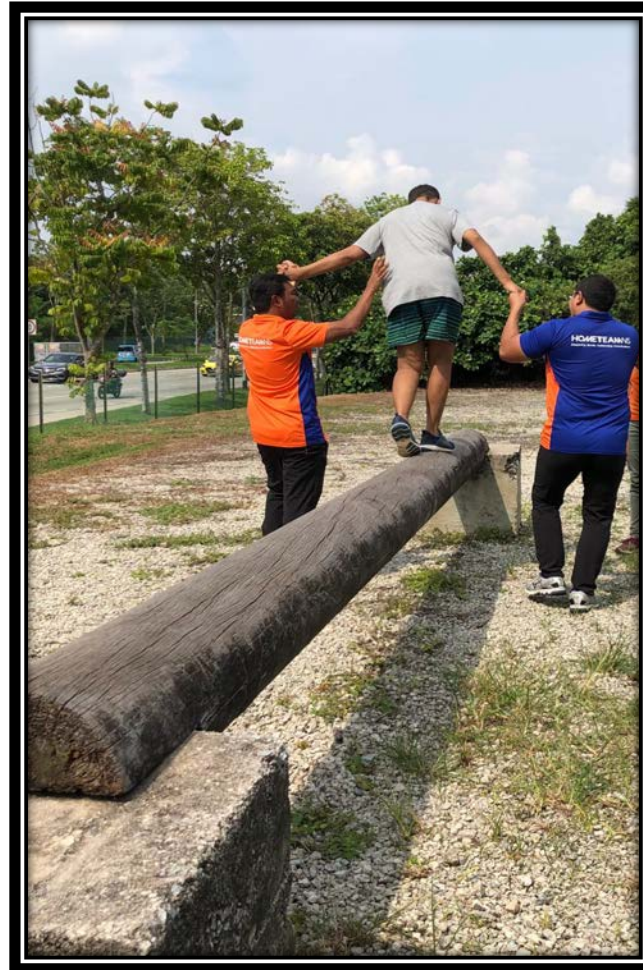
ACTIVE LEISURE & SPORTS



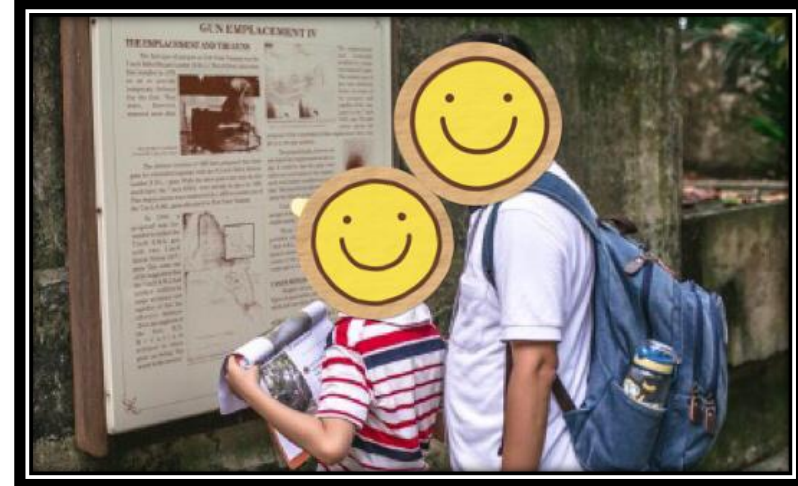
MODIFIED SPORTS



HIGH AND LOW ELEMENTS



NATURE WALKS



VIDEO: ADAPTIVE SPORTS OUTDOORS



<https://www.youtube.com/watch?v=Mvax30rtfWE>

CONCLUSION

- ✓ Physical activities and sports have shown to be beneficial to individuals with NDD and help improve mental wellbeing
- ✓ Having more support with task modifications encourage skill development
- ✓ Ongoing process of community integration and the role of advocacy for individuals with NDD

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