# Informing Strengths using Data Driven Decision Making

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### Learning Objectives

1) Participants will learn how to use data driven decision making (DDDM) to guide interpretation of assessment data to inform a child's strengths and intervention planning

2) Participants will develop language to communicate the link between strengths identified in assessment data with a child's participation and engagement

## Strength-Based Paradigm

People do not build their lives in any meaningful way on weaknesses, but rather their strengths, talents, and abilities (Patten Koenig & Shore, 2018)

#### Rooted in Self-Determination Theory (Ryan & Deci, 2000)

- Autonomy: Ability to freely choose things in your life and not being controlled
- Competence: Doing things you initiate and that make you grow and achieve mastery
- Relatedness: Choosing your relationships with others

### Why Strengths?

- Interventions in pediatric therapy build upon strengths
- Identifying strengths can lead to increased participation
- Helps caregivers see child in new light
- Leads to increased self-efficacy and self-determination for the child
- Critical for long-term outcomes including quality of life, well-being and the ability to live a self-determined life

(Patten Koenig & Shore, 2018; O'Brien & Kuhaneck, 2019)



### **Neuro-affirming Perspective**

Study of autistic adults (n=80) on how they characterized and utilized interests

- 87% of the participants wished when they were children that teachers and professionals would have used their interests in the classroom and therapy
- Only 12% reported their teachers used their interests to support their learning
- Participants reported their interests as
  - Positive
  - Helpful to calm them and mitigate stress
  - Were not interfering or anxiety producing
  - Should be utilized for learning and mastery
  - Supported their development and autonomy

(Patten Koenig & Williams, 2017)

### Why Strengths?

#### Occupational justice



- Understanding of strengths and areas of challenges help OTPs:
  - Support access to occupation
  - Provide adaptations
  - Suggest accommodations
  - Reframing behaviors and activity choices to support neurodiversity

### Why Strengths?

#### Included in OT Practice Framework (AOTA, 2020)

- Synthesis of evaluation process "Developing and refining hypotheses about the client's occupational performance **strengths** and deficits" (AOTA, 2020, p. 16)
- "...the therapist notes the client's strengths and supports in all areas because these can inform the intervention plan and targeting outcomes." AOTA, 2020, p. 22)
- Client-centered care Emphasis on client knowledge, autonomy, and strengths

### Strengths-Based Intervention Approaches

- Driven by client's interests
- Occupational therapy practitioner uses child's strengths to facilitate the just-right challenge
  - Just-right challenges
    - Match child's developmental skills and interests
    - Provide a reasonable challenge to current performance level
    - Engages and motivates the child
    - Can be masters with the child's focused effort

(O'Brien & Kuhaneck, 2019)

### Using Evaluation to Inform Strengths

Use standardized and nonstandardized evaluations Measures

- Tools to provide more in-depth understanding of **strengths** in parallel with **challenges**
- Goal to first identify strengths, then challenges

(Patten Koenig & Shore, 2018)

### **Data Driven Decision Making for Precision Therapy**

(Schaaf & Mailloux, 2015)



## **Conducting Assessment**

### **Direct vs. Indirect Measures**

#### **Direct Measures**

Direct assessment of performance

Often compared to a normative sample

Offers insight into skills and abilities in a moment in time

**Indirect Measures** 

Questionnaires

Observations

Often completed by someone who knows the child

Gives insight for how a child performs across environments

Can include rater bias

## Interviews

**Indirect Measures** 

# Identifying the Child's Strengths and Participation Challenges

• How do we identify these with our clients?

### Case Study: Dean

6 year, 6 month old boy

Diagnosis: ASD and anxiety

Interview:

"Dean is smart and knows what he likes (and doesn't like). He has a great memory, is loyal, and can be the absolute sweetest."



### Caregiver interview

Describe your child?

When at their best, what are they doing?

Tell me about daily routines - mealtime, bathtime, bedtime?

How does play go (alone and with peers)?

How is school - what do they enjoy, what is hard?

What does their teacher say about them?

### **Interview Questions**

- 1. What are their interests?
- 2. When they are at their best, what are they doing?
- 3. What type of play are they most comfortable taking part in?
- 4. Do they enjoy playing with friends and how many?
- 5. Do they enjoy sports and what types?
- 6. Do they have imaginary play?
- 7. Do they get along easily with other kids their own age?
- 8. How do they handle changes in activities?



#### Tell us about your child:

Favorite toys/activities:

Favorite Movie/TV shows:

Favorite Movie/TV characters:

Does your child like active/physical play or quiet/sit down play?

Does your child prefer playing in large groups or with 1-2 children?

Does your child enjoy imaginary play? If so, what does he/she like to play?

What extracurricular or community activities does your child attend (i.e soccer, dance class, scouts)?

What do you see as your child's strengths?	
In one sentence, how would you describe your child?	
Do you have any additional information that will help to better understand your child?	
What are your primary goals regarding this evaluation?	

### Interview: Strengths

Enjoys playing table games, Magnatiles, reading books with facts, and playing with science sets. His parents report that in general he prefers quiet, sit down play. With one person or in a small group, he enjoys playing more physical play. Dean prefers playing in groups of one to two peers or with an adult. He enjoys playing school and being the teacher. Dean currently participates in the following community-based activities: piano.



## Questionnaires

**Indirect Measures** 

### Questionnaires

Name	Туре	Type of information
Sensory Processing Measure-2/Sensory Profile	Caregiver/Teacher report Norm-referenced	Report of child's perceived experience
Developmental Profile - 4	Caregiver report Norm-referenced	Developmental skills
Adaptive Behavior Assessment System	Caregiver report Norm-referenced	Rating of adaptive skills
Family Life Impact Questionnaire	Caregiver report	Rating of ease of participation in daily life activities

# Performance Based Assessments

**Direct Measures** 

Name	Туре	Type of information
Bruininks-Oseretsky-4 (BOT-4)	Standardized/Norm-referenced	Fine, visual, and gross motor performance
Developmental Assessment of Young Children (DAY-C)	Standardized/Norm-referenced	Adaptive skills, Physical Skills, Communication Skills
Evaluation of Ayres Sensory Integration (EASI)	Standardized/Norm-referenced	Sensory Integration and Praxis related abilities
Peabody Developmental Motor Scales, 3rd ed. (PDMS-3)	Standardized/Norm-referenced	Gross and FIne Motor Skills

## **Reporting Strengths**

	Child 1
Participation Strengths	Visual Perception Enjoys telling jokes
Participation Challenges/Assessed Needs	Challenges in handwriting legibility Poor somatosensation
Intervention Planning	
Incorporating strengths	Developing a Joke Book and Comedy Club
Preparatory activities	Hide and seek in tactile bins or over varied surfaces.
Accommodations	Weighted pencil, raised line paper

	Child 2
Participation Strengths	Fine motor Likes airplanes and vehicles
Participation Challenges/Assessed Needs	Challenges in handwriting legibility Poor visual spatial/postural/ocular
Intervention Planning	
Incorporating strengths	Trace flight planes and planes. Make plane tickets
Preparatory activities	Movement opportunities including swinging and climbing
Accommodations	Slant board. Create target games- he is a pilot and can deliver "packages" using a scooter board and bean bags or a swing and dropping balls into buckets

### Case Study 2

Case: Stevan Age: 7 years 4 months Diagnosis: Autism

Caregiver Interview: "He is loving and generally happy. He is curious and likes to explore and be outdoors."

Testing Observations: Non verbal and inconsistent with use of a communication device. Unable to complete standardized testing. Switched to a developmental play-based assessment with structured clinical observations

	Stevan
Participation Strengths	Generally happy and active child that enjoys nature, swimming. Curious to explore his environment and engage in physical activities including swinging and climbing
Participation Challenge/Assessed Needs	Fine motor skills – Difficulty holding writing tools and utensils Self-help skills – Needs assistance for fasteners, orienting clothing, opening/closing his backpack Imitation and social skills Gross motor skills – Difficulty throwing/catching balls, accessing equipment without adult support Visual motor skills – Unable to copy shapes or letters
Intervention Planning	
Incorporating strengths	Incorporate body centered play cause and effect play with climbing and jumping; walks outside; use various natural tactile media (sand, dirt, leaves, water play)
Preparatory activities	Body centered sensory motor play to support arousal and regulation- swinging, climbing and jumping, wrapping him in a blanket or squeezes under pillows
Accommodations	Use visuals, including a schedule and checklists. Break down tasks into manageable chunks. Frequent movement breaks

### Strategies for Strength-Based Intervention

- Start therapy sessions focused on child's strengths and interests to facilitate engagement, joint attention, motivation, and learning
- Develop a collaborative relationship based on trust and respect
- Support arousal and regulation first before working on skills
- Introduce activities in a playful way (depending on the play style of the client)
  - Think about what is the child's preferred play?
- Scaffold intervention activities to find the "Just Right Challenge" to support the client's achievement and feeling of mastery

### **Application to Practice**

Ask Yourself

- Am I focusing on weaknesses in the absence of strengths?
- Am I offering activities and choices that are related to interests?
- Am I viewing specific/stereotyped interests as strengths versus motivators or treating them as maladaptive behaviors?
- Am I combining a strengths perspective with the challenges that are being addressed?

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