


The Pediatric Evaluation of Disability Inventory (PEDI)

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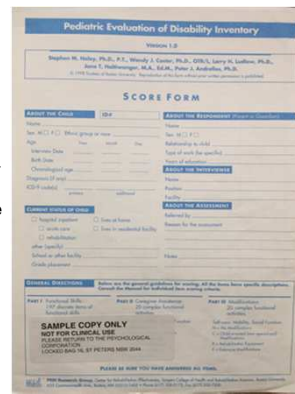



PEDI
Pediatric Evaluation of Disability Inventory (PEDI)
Development, Standardization and Administration Manual

PEDI Research Group
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What is the PEDI?

- Judgement-based parent questionnaire
- Takes 45-60 mins
- Samples key functional capabilities and performance across a range of skill areas
- For ages 0:6 – 7:6
- Can be completed by professional(s) or as a parent interview
- Measures **capability and performance** in
 - Self-Care
 - Mobility
 - Social Function
- Includes:
 - Examiner's Manual
 - Score Forms







Administering the PEDI

Part 1 (Functional Skills)

- 197 items
- Parent completes independently or via interview.
- Can also be completed by professionals who know the child well.
- Scored as:
 - Unable to perform: 0
 - Able to perform: 1
- If the child has progressed beyond a skill, score '1' (e.g. items related to nappies for toilet-trained children).
- If the child is *able* to complete a skill but often chooses not to, they should be scored '1'.






Administering the PEDI

Part 1 (Functional Skills): Areas Covered

Self-Care Domain	Mobility Domain	Social Domain
Food Textures Use of Utensils & Cups Toothbrushing & Hairbrushing Nose Care Hand, Body & Face Washing Dressing (tops, bottoms, fasteners, shoes, socks) Toileting (management of tasks, bladder & bowel)	Toilet & Tub Transfers Chair & Bed Transfers Car Transfers Indoor Locomotion (methods, distance, speed and object carry) Outdoor Locomotion (methods, distance, speed, surfaces) Stairs	Comprehension (word & sentence) Functional Communication Expression Problem-Resolution Play (adults, peers, objects) Self-Information Time Orientation Household Chores Self Protection Community Function



Part I: Functional Skills

Item	0	1
A. Food Textures		
1. Eats pureed/blended/strained foods	<input type="checkbox"/>	<input type="checkbox"/>
2. Eats ground/lumpy foods	<input type="checkbox"/>	<input type="checkbox"/>
3. Eats cut up/chunky/diced foods	<input type="checkbox"/>	<input type="checkbox"/>
4. Eats all textures of table food	<input type="checkbox"/>	<input type="checkbox"/>
B. Use of Utensils		
5. Finger foods	<input type="checkbox"/>	<input type="checkbox"/>
6. Scoops with a spoon and brings to mouth	<input type="checkbox"/>	<input type="checkbox"/>
7. Uses a spoon well	<input type="checkbox"/>	<input type="checkbox"/>
8. Uses a fork well	<input type="checkbox"/>	<input type="checkbox"/>
9. Uses a knife to butter bread, cut soft foods	<input type="checkbox"/>	<input type="checkbox"/>
C. Use of Drinking Containers		
10. Holds bottle or sippy cup	<input type="checkbox"/>	<input type="checkbox"/>
11. Lifts cup to drink, but cup may tip	<input type="checkbox"/>	<input type="checkbox"/>
12. Lifts open cup securely with two hands	<input type="checkbox"/>	<input type="checkbox"/>
13. Lifts open cup securely with one hand	<input type="checkbox"/>	<input type="checkbox"/>
14. Pours liquid from carton or pitcher	<input type="checkbox"/>	<input type="checkbox"/>
D. Toothbrushing		
15. Opens mouth for teeth to be brushed	<input type="checkbox"/>	<input type="checkbox"/>
16. Holds toothbrush	<input type="checkbox"/>	<input type="checkbox"/>
17. Brushes teeth, but not a thorough job	<input type="checkbox"/>	<input type="checkbox"/>
18. Thoroughly brushes teeth	<input type="checkbox"/>	<input type="checkbox"/>
19. Prepares toothbrush with toothpaste	<input type="checkbox"/>	<input type="checkbox"/>
E. Hairbrushing		
20. Holds head in position while hair is combed	<input type="checkbox"/>	<input type="checkbox"/>
21. Brings brush or comb to hair	<input type="checkbox"/>	<input type="checkbox"/>
22. Brushes or combs hair	<input type="checkbox"/>	<input type="checkbox"/>
F. Fasteners		
23. Tries to assist with fasteners	<input type="checkbox"/>	<input type="checkbox"/>
24. Zips and unrips, doesn't separate or hook zipper	<input type="checkbox"/>	<input type="checkbox"/>
25. Seals and unseals	<input type="checkbox"/>	<input type="checkbox"/>
26. Buttons and unbuttons	<input type="checkbox"/>	<input type="checkbox"/>
27. Zips and unrips, separates and hooks zipper	<input type="checkbox"/>	<input type="checkbox"/>
G. Pants		
28. Assists, such as pushing legs through pants	<input type="checkbox"/>	<input type="checkbox"/>
29. Removes pants with elastic waist	<input type="checkbox"/>	<input type="checkbox"/>
30. Puts on pants with elastic waist	<input type="checkbox"/>	<input type="checkbox"/>
31. Puts on pants with fasteners	<input type="checkbox"/>	<input type="checkbox"/>
32. Removes pants, including unfastening	<input type="checkbox"/>	<input type="checkbox"/>
33. Puts on pants, including fastening	<input type="checkbox"/>	<input type="checkbox"/>
H. Shoes/Socks		
34. Removes socks and untied shoes	<input type="checkbox"/>	<input type="checkbox"/>
35. Puts on untied shoes	<input type="checkbox"/>	<input type="checkbox"/>
36. Puts on socks	<input type="checkbox"/>	<input type="checkbox"/>
37. Puts shoes on correct feet; manages velcro fasteners	<input type="checkbox"/>	<input type="checkbox"/>
38. Ties shoelaces	<input type="checkbox"/>	<input type="checkbox"/>
I. Toileting Tasks (clothes, toilet management, and wiping only)		
39. Assists with clothing management	<input type="checkbox"/>	<input type="checkbox"/>
40. Tries to wipe self after toileting	<input type="checkbox"/>	<input type="checkbox"/>
41. Manages toilet seat, gets toilet paper and flushes toilet	<input type="checkbox"/>	<input type="checkbox"/>
42. Manages clothes before and after toileting	<input type="checkbox"/>	<input type="checkbox"/>
43. Wipes self thoroughly after bowel movements	<input type="checkbox"/>	<input type="checkbox"/>
J. Management of Bladder (Score = 1 if child has previously mastered skill)		
44. Indicates when wet in diapers or training pants	<input type="checkbox"/>	<input type="checkbox"/>
45. Occasionally indicates need to urinate (daytime)	<input type="checkbox"/>	<input type="checkbox"/>
46. Consistently indicates need to urinate with times to	<input type="checkbox"/>	<input type="checkbox"/>


CHAPTER 7. SCORING CRITERIA FOR THE FUNCTIONAL SKILLS SCALES

Self-care Domain

The self-care domain samples eating, grooming, dressing, bathing, and toileting skills.

A. Types of food textures: (Physical help may be given to bring food to mouth but not to close the mouth or swallow). Although the child may not like certain of the food listed, this item addresses the child's capability to eat the specified types of food without choking and with minimal, if any, spillage. These items give an indication of the maturity of the child's swallowing mechanism and degree of oral-motor control.

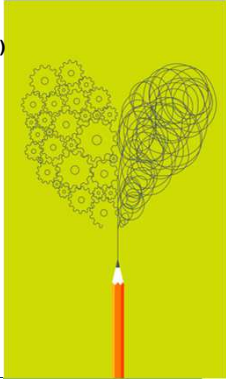
1. Eats pureed/blended/strained foods (baby foods, yogurt, apple sauce), some spilling out of mouth.	Other examples include ice cream, strained cream soups, puddings, oatmeal.
2. Eats ground/lumpy foods (scrambled eggs, cottage cheese).	The food is of fairly consistent and cohesive texture. Specific examples might be grilled chicken, mashed potatoes, hamburger, beef, macaroni and cheese, smooth peanut butter, crackers, meat mixed with mayonnaise. The child can keep ground/lumpy textured foods contained in his or her mouth.
3. Eats cut-up/hard foods (chopped vegetables, small pieces of meat), no spilling from mouth.	Sometimes called "cut-up" or "semi-solid", this level requires the ability to bite and break the food into smaller parts, and also manage the smaller parts by forcing food into a chunk (bolus) of manageable swallowing size. Eating difficult foods such as broccoli or pork chops is not required to receive credit on this item.
4. Eats all textures of table food such as soup and adult bite-sized unground meat (steak, chicken), no spilling from mouth.	The child can manage even difficult foods such as meat and vegetable soup, which contains several different textures to be managed at once and requires a quicker reflexive ability to manage liquid.



Administering the PEDI

Parts 2 & 3 (Caregiver Assistance & Modification)

- 20 items
- Ideally administered as parent interview
- **Caregiver Assistance** scored as:
 - Independent: 5
 - Supervision: 4
 - Minimal Assistance: 3
 - Moderate Assistance: 2
 - Maximal Assistance: 1
 - Total Assistance (Dependent): 0
- **Modification** scored as:
 - None: N
 - Child-oriented: C
 - Rehabilitation Equipment: R
 - Extensive Modifications: E




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Administering the PEDI Continued

Parts 2 & 3 (Caregiver Assistance & Modification)

- For Caregiver Assistance, ratings are based on the level of help the parent actually and routinely gives, regardless of what the child is able to do.
- The Modifications section does not contribute to the scores but still provides good information.
- Modifications should only be counted when the child needs the equipment as opposed to a child who prefers the equipment but can do the skill without it.



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Administering the PEDI

Parts 2 & 3 (Caregiver Assistance & Modifications): Areas Covered

Self-Care Domain	Mobility Domain	Social Domain
Eating Grooming Bathing Dressing (upper & lower body) Toileting Bladder Management Bowel Management	Chair/Toilet Transfers Car Transfers Bed Transfers Tub Transfers Outdoor Locomotion Outdoor Locomotion Stairs	Functional Comprehension Functional Expression Joint Problem Solving Peer Play Safety

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Parts II and III: Caregiver Assistance and Modification

Circle the appropriate score for Caregiver Assistance and Modifications for each item.

SELF-CARE DOMAIN	Caregiver Assistance Scale					Modification Scale				
	Independent	Supervision	Minimal Assistance	Moderate Assistance	Maximal Assistance	Total Assistance	None	Child-oriented	Rehab. Equip.	Extensive
A. Eating: eating and drinking regular meal; do not include cutting, steak, opening containers or serving food from serving dishes	5	4	3	2	1	0	N	C	R	E
B. Grooming: brushing teeth, brushing or combing hair and caring for nose	5	4	3	2	1	0	N	C	R	E
C. Bathing: washing and drying face and hands, taking a bath or shower; do not include getting in and out of a tub or shower, water preparation, or washing back or hair	5	4	3	2	1	0	N	C	R	E
D. Dressing Upper Body: all indoor clothes; not including back fasteners; include help putting on or taking off splint or artificial limb; do not include getting clothes from closet or drawers	5	4	3	2	1	0	N	C	R	E
E. Dressing Lower Body: all indoor clothes; include putting on or taking off brace or artificial limb; do not include getting clothes from closet or drawers	5	4	3	2	1	0	N	C	R	E
F. Toileting: clothes, toilet management or external device use, and hygiene; do not include toilet transfers, monitoring schedule, or cleaning up after accidents	5	4	3	2	1	0	N	C	R	E
G. Bladder Management: control of bladder day and night, clean-up after accidents, monitoring schedule	5	4	3	2	1	0	N	C	R	E
H. Bowel Management: control of bowel day and night, clean-up after accidents, monitoring schedule	5	4	3	2	1	0	N	C	R	E
Self-Care Totals					SELF-CARE SUM					Self-Care Modification Frequencies
MOBILITY DOMAIN										
A. Chair/Toilet Transfers: child's wheelchair, adult-sized chair, adult-sized toilet	5	4	3	2	1	0	N	C	R	E
B. Car Transfers: mobility within car/van, seat belt use, transfers, and opening and closing doors	5	4	3	2	1	0	N	C	R	E

Assistance/Modifications scoring examples

CHAPTER 8: SCORING CRITERIA FOR THE CAREGIVER ASSISTANCE AND THE MODIFICATIONS SCALES

I. Self-care Domain

Modification Examples
Child-oriented: sport cap or straw, child-sized utensils, sponges, Velcro® closures, jumbo tapers
Rehabilitation equipment: universal cuff, splines, built-up handles, built-up brach, wrist
Extreme Modifications: suspension arm sling, adapted hosiery, custom-made clothing, catheter

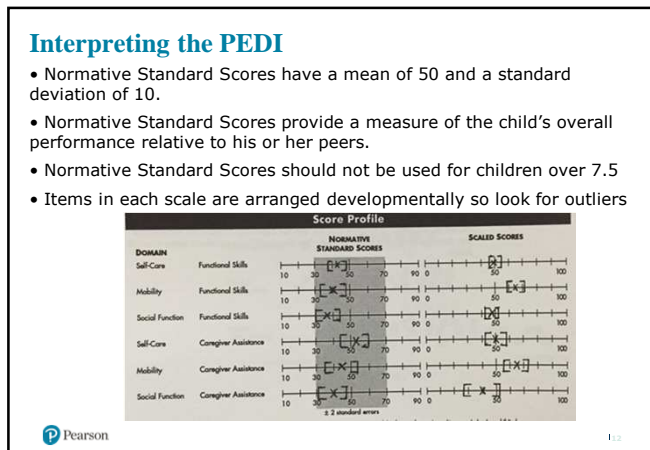
A. Eating
Does the child eat and drink a typical meal without help or supervision? (Include cutting with knife and pouring milk, but not cutting difficult foods such as steak.)

If NO, do you provide more or less than half the effort of feeding the child a regular meal?
If YES score is Independent

If you help with feeding the child less than half of a regular meal:
 Do you assist to be present only for safety, to give directions, or help with string?
If YES score is 4: Supervision/Help
If YES score is 3: Minimal Assistance
 Do you provide only a small amount of help?
If YES score is 2: Moderate Assistance

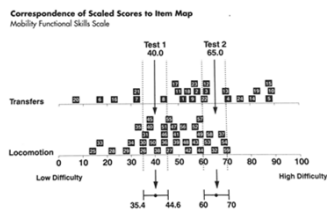
If you help with feeding the child more than half of a regular meal:
 Does the child provide any meaningful help?
If YES score is 1: Maximal Assistance
If NO score is 0: Total Assistance

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Interpreting the PEDI

- Scaled scores provide an estimate of the child's functional performance along the continuum of items that make up a particular scale.
- Scaled scores range from 0-100.
- Scaled scores provide a way to track progress, particularly is performance is severely delayed and the child will consistently score below average.
- Item maps can be used to identify which skills are likely to be within a child's ability and can assist with goal setting



Pros and Cons of the PEDI

Pros

- Top-down approach
- Sensitive to change even in severely delayed children through scaled scores
- Documents functional delay
- Promotes parent involvement
- Minimal training and low cost

Cons

- Lengthy administration
- Small normative sample size
- Doesn't measure quality of performance
- Skills are at the lower end of the continuum
- Items focused primarily on home-based activities



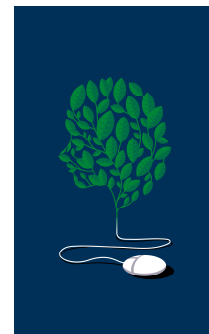
Clinical utility of the PEDI

- Detecting and quantifying a functional deficit or delay
- Identifying strengths and weaknesses in daily living skills
- Informs top down goal setting and intervention
- Evidence-based tool for demonstrating progress of child relative to him/herself
- Useful for children with developmental delays



PEDI-CAT

- Computer adaptive test (CAT): uses AI to select only the most relevant items to administer
- Age range birth – 21 years
- New items
- 'Responsibility' section
- Uses a 4-point scale
- Takes between 10-40 mins
- Available for PC and iPad



Thanks for your attention!

Any questions?



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ALWAYS LEARNING