

Occupational Development

- “A systematic process of change in occupational behaviors across time marked by the changes in the specific occupations that an individual **can** and **does** perform over the course of life” (Davis & Polatajko, 2006, p.138)
- Process of gradual changes to occupational behaviors that occur as children mature and interact with their environment (Wiseman, Davis, & Polatajko, 2005)

Occupational Development (cont.)



The Problem

- Pediatric occupational therapists are tasked with enabling the occupational development of the children they serve.
 - To do this, therapists need
 - to understand the children's needs;
 - to evaluate the occupational repertoire development of the children;
 - an occupational repertoire development tool

The Solution

- ORDM-P fuses notions of developmental sequence and person X environment interactions - informed by, but not determined by, child's developmental age and stage
- The creation of a measure that would assist in identifying children who require occupational therapy services and in planning interventions: Occupational Repertoire Development Measure-Parent (ORDM-P)

Test Construction: What Has Been Done?

	Phase 1	Phase 2	Phase 3
Goal specification	✓		
Construct specification	✓		
Measurement specification		✓	
Item identification	✓		
Item generation		✓	
Item refinement			✓
Scale generation		✓	
Item validation			✓
Scale validation			
Psychometric properties			✓
Publication			
Dissemination			

1. Goal Specification

To create a measure of early childhood occupational development at the level of:

- The occupation: occupational competence
- The individual: occupational repertoire

(Davis & Polatajko, 2010)

2. Construct Specification (cont.)

- **Occupational development**

“A systematic process of change in occupational behaviors across time...marked by the changes in the specific occupations that an individual **can** and **does** perform over the course of life” (Davis & Polatajko, 2006, p. 138)

- **Occupational competence**

“Adequacy or sufficiency in an occupational skill, meeting all requirements of an environment” (Townsend & Polatajko, 2007, glossary)

- **Occupational repertoire**

“The set of occupations an individual has at a specific point in the life course” (Davis & Polatajko, 2006, p. 137)

3. Item Identification

- Seventeen potential markers or behaviors of children's occupational development were uncovered across nine developmental measures
- Method:
 - Occupational behaviors from pre-existing assessments extracted into an Excel spreadsheet
 - Occupational behaviours categorized using the Taxonomic Code for Occupational Performance (TCOP)

TCOP: Categorizing Behaviours

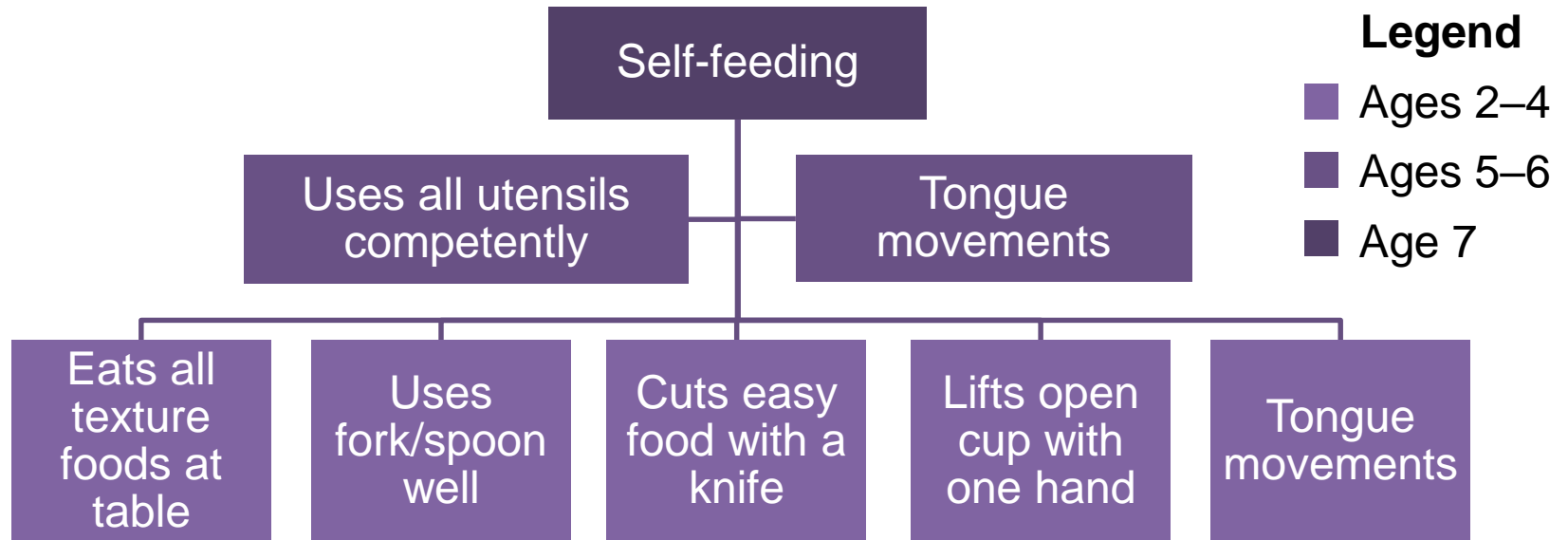
Figure 1.1 The Taxonomic Code of Occupational Performance¹ (TCOP)

Level of complexity	Definition	Example
Occupation	An activity or set of activities that is performed with some consistency and regularity, that brings structure, and is given value and meaning by individuals and a culture	Accountancy
Activity	A set of tasks with a specific end point or outcome that is greater than that of any constituent task	Financial report writing
Task	A set of actions having an end point or a specific outcome	Printing the report
Action	A set of voluntary movements or mental processes that form a recognizable and purposeful pattern (such as grasping, holding, pulling, pushing, turning, kneeling, standing, walking, thinking, remembering, smiling, chewing, winking, etc.)	Folding, remembering the meaning of numbers
Voluntary movement or mental processes	A simple voluntary muscle or mental activation (such as flexion, extension, adduction, abduction, rotation, supination, pronation, blinking, memory, attention, focusing, scanning, etc.)	Flexing, attending

¹All levels of performance are subserved by *cognitive, physical, and affective* performance components. *Spirituality* pervades.

(adapted from Polatajko et al., 2004; and Zimmerman, Purdie, Davis, & Polatajko, 2006)

Behaviors Merged to Create Item



Item Verification With Literature

Current Assessments

- Feeding
- Grooming
- Bathing
- Dressing
- Toileting
- Play
- Crafts
- Watching TV/listening to music
- Attending social events
- Household chores
- Reading/writing/drawing
- Shopping
- Mobility
- Money management
- Engaging in a hobby
- **Using the telephone**

Literature

- Feeding
- Grooming
- Bathing
- Dressing
- Toileting
- Play
- Crafts
- Watching TV/listening to music
- Attending social events
- Household chores
- Reading/writing/drawing
- Shopping
- Mobility
- Money management
- Engaging in a hobby
- **Communication technologies**
- **Work (paid employment, volunteer)**
- **Health management**
- **Sports/bands/drama clubs**
- **Sleep**

4. Measure Specification

Criteria/features

- Ages: 2 to 12 years
- Criterion-referenced
- Quick and easy use
- Caregiver report/caregiver friendly
- Incorporate the concept of opportunity
- Results communicated via a visual profile score
- Informative towards further assessment and occupational goals

5. Item Refinement

Analyzing the occupations

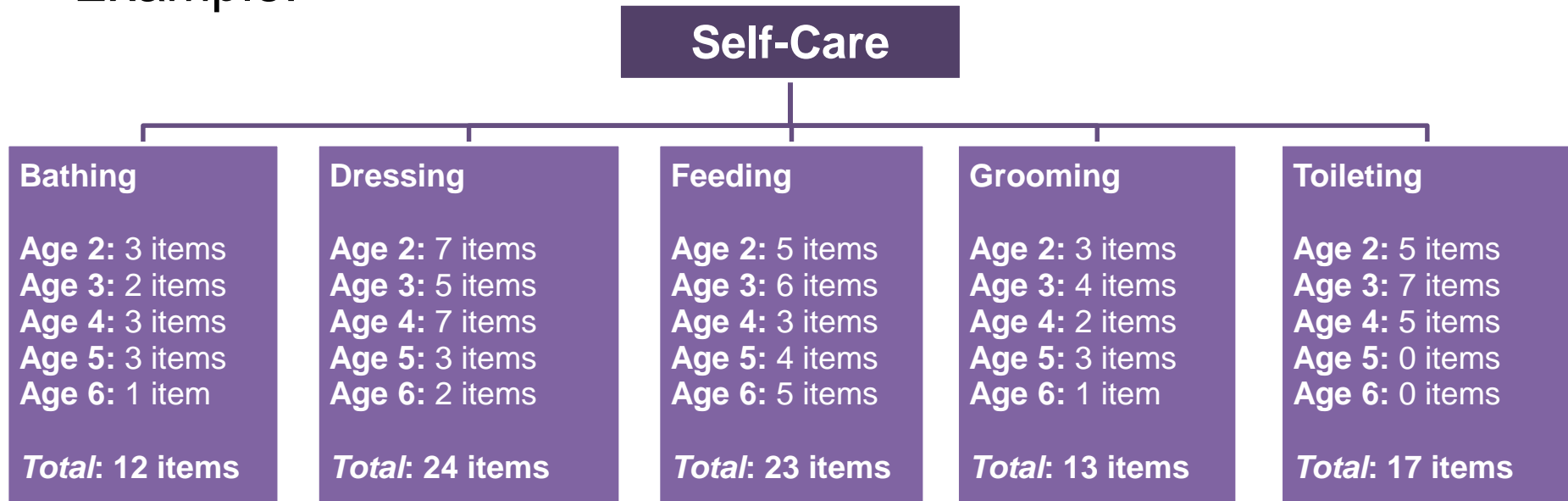
- **Item refinement**

- Eliminated occupations that did not include items for the year/age range
- Renamed occupations into caregiver/age appropriate language (e.g., money management → money awareness)
- Fourteen occupations with over 1,000 items

Self-Care	Productivity	Leisure
Bathing	Household chores	Play
Dressing	Shopping	Mobility/sports
Feeding	Money awareness	Crafts
Grooming	Reading	Talking on the phone
Toileting	Writing	

6. Item Representation

Example:



Self-care: 89 items

Productivity: 73 Items

Leisure: 155 items

Total: 317 items

7. Scale Generation

Self-Care

GROOMING

Occupation-level item	Does/can your child . . .	Does Do	Can Do	Can't Do	No Opportunity	Comments
Brushes/Combs Hair	Brush or comb his/her hair?					
Brushes Teeth	Brush his/her teeth?					
Showers/Bathes	Shower/bathe self?					
	Wash his/her body?					
	Wash his/her hands?					
	Wash his/her face?					

Performance Key

Can't do: the child cannot perform the item

Can do: the child can perform the item

Does do: the child can perform the item and it is part of his/her repertoire

N.O.: no opportunity

8. Scale Validation

- Ensure the ORDM-P is clear, logical, and coherent (determine face validity)
- Ensure the proposed items of the ORDM capture the breadth of occupations for children ages 2 to 12 (determine utility and comprehensiveness)

Method

- Electronic survey of 39 questions
 - Open-ended, closed-ended, and Likert scale
- 53 expert pediatric occupational therapists responded
 - Expert: at least six years' experience
- Participation: anonymous and voluntary
- Implied consent: through completion of the survey
- Analyses
 - Descriptive statistics
 - I-CVI score

Findings: Self-Care

Occupational Level Item	I-CVI Score
<i>Grooming:</i> Brushes/combs hair	1.00
<i>Grooming:</i> Brushes teeth	1.00
<i>Grooming:</i> Showers/bathes	1.00
<i>Toileting:</i> Uses toilet/potty Chair	1.00
<i>Dressing:</i> Dresses/undresses upper body	1.00
<i>Dressing:</i> Dresses/undresses lower body	1.00
<i>Dressing:</i> Puts on shoes	1.00
<i>Feeding:</i> Prepares meal/snack	0.91
<i>Feeding:</i> Eats food	0.91
<i>Feeding:</i> Drinks	0.91

Findings: Productivity

Occupational Level Item	I-CVI Score
<i>Household chores: Cleans personal space/rooms personal space/room</i>	0.83
<i>Household chores: Does laundry</i>	0.25
<i>Household chores: Makes bed/organizes sleeping area</i>	0.58
<i>Household chores: Sets table/eating area</i>	0.75
<i>Money management: Counts money</i>	0.75
<i>Money management: Does mathematics</i>	0.75
<i>Money management: Shops for items</i>	0.75
<i>Reading: Reads a book</i>	0.91
<i>Writing: Prints</i>	0.91
<i>Writing: Draws</i>	0.91

Findings: Leisure

Occupational Level Item	I-CVI Score
<i>Playing</i> : Plays games	0.91
<i>Playing</i> : Visits with friends	0.91
<i>Sports</i> : Rides a cycle	0.58
<i>Sports</i> : Plays sports	0.75

Discussion

- Important measure
- Some items need reconsideration
- Address competence in the measure
- Future steps

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