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# To explore the content validity of the six levels of mediation for the **Structured Observational Test of Function**

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**Occupational Therapy Programme**

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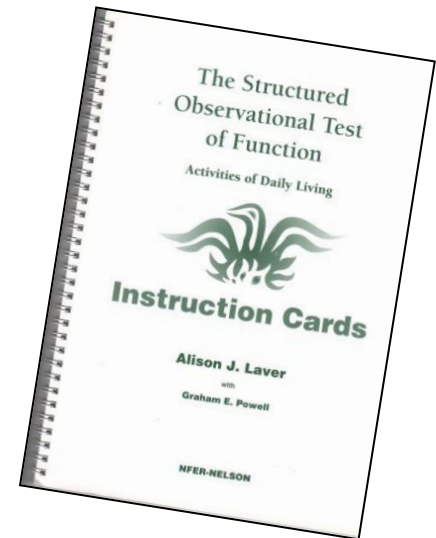
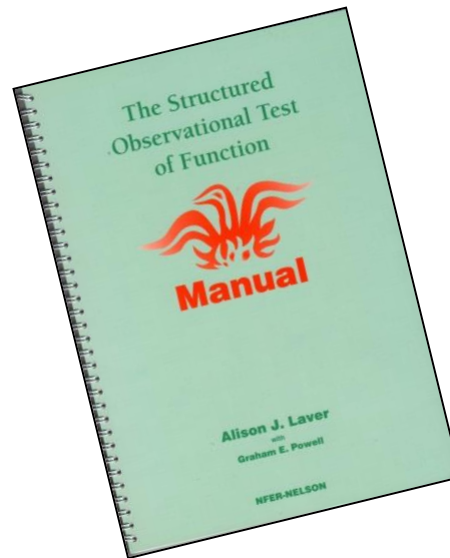
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# Introduction to SOTOF

- The Structured Observational Test of Function is a standardised occupational therapy assessment (Laver and Powell, 1995)
- Enables the occupational therapist to assess the patient's performance in activities of daily living gathering information on:
  - perception
  - cognition
  - sensory
  - motor



Sub-test	Furniture	• Equipment	• Materials & (consumables)
Screening Assessment	Table and 2 chairs	<ul style="list-style-type: none"> <li>• Cup</li> </ul>	<ul style="list-style-type: none"> <li>• None required</li> </ul>
Eating task	Table and 2 chairs 	<ul style="list-style-type: none"> <li>• Bowl</li> <li>• Non-slip mat</li> <li>• Spoon</li> </ul>	<ul style="list-style-type: none"> <li>• Food</li> </ul> 
Washing task	Table and 2 chairs 	<ul style="list-style-type: none"> <li>• Washing bowl</li> <li>• Hand towel</li> <li>• Non-slip mat</li> </ul>	<ul style="list-style-type: none"> <li>• Warm water to <math>\frac{3}{4}</math> fill washing bowl</li> <li>• Soap</li> </ul> 
Pouring and Drinking task	Table and 2 chairs 	<ul style="list-style-type: none"> <li>• Jug</li> <li>• Cup</li> <li>• Non-slip mat</li> </ul>	<ul style="list-style-type: none"> <li>• Cold drink to <math>\frac{1}{2}</math> fill jug</li> </ul> 
Dressing task	Table, chair for tester, bed, plinth or chair for client. 	<ul style="list-style-type: none"> <li>• Front fastening (buttons or zip) long-sleeved garment such as a shirt, blouse, cardigan or jacket of suitable size and type for client.</li> <li>• Large bright coloured button.</li> </ul>	<ul style="list-style-type: none"> <li>• None required</li> </ul> 

## SOTOF (2<sup>nd</sup> edition): Task 1 Eating revised instruction cards

Standardised  
instructions for  
administration



To aid diagnostic  
reasoning you also have  
suggestions for possible  
areas of deficit linked  
to each test item



Graduated prompt  
protocol specific  
test item  
examples



Suggestions for  
further  
prompts, cues  
and assessment



### TASK 1: Eating Task and instruction

### Possible area of deficit

### Graduated prompt protocol examples

### Further suggested assessment

2.

(EL) Ask: 'What can you see on the table?'  
(ED) Ask: 'Which is the... bowl, mat, spoon?'

Note if person:

- Scans table for objects;
- Fixes gaze on objects;
- Recognizes objects by (EL) naming of (ED) pointing.

- Visual scanning
- Visual field loss
- Visual attention
- Visual agnosia
- Figure-ground discrimination

1. General prompt: 'Have a good look around the table'.
2. Gestural Cue: Point to an area of the table they have missed.
3. Specific feedback/cue: 'You have not named all the items...have another look'.
4. Physical Assistance/modifications: Move the objects around the table/ in front of the person.

Assess for visual field loss, such as hemianopia.

Assess visual fixation: point to an object and ask the client to look at the object for five seconds.

(EL) Ask the person to describe what she can see.

0	Independent	The person is independent completing the task. No prompting or assistance is required from the clinician.
1	General prompt	This could be a statement (Katz et al., 2011) e.g. 'take your time' or could be a general question e.g. 'what do you think is the next step?' or 'what else might you need to complete this task?' (Baum and Wolf, 2013 p.3). This is not an action or telling the person what to do.
2	Gestural Cue	This could be miming the action that is required to complete the particular task or a movement that may guide the participant. This may include pointing to where they might find an item or pointing to equipment they may need to complete the task (Baum and Wolf, 2013).
3	Specific feedback / cue	This is a verbal cue. It may be feedback (Katz et al., 2011) such as 'there is a mistake, can you try and correct it' or a command such as 'pick up the cup' (Baum and Wolf, 2013 p.3).
4	Physical assistance / Co-active assistance / modifications	This clinician physically supports the person to complete an action, e.g. hold the shirt whilst the person puts his / her first arm in the sleeve (Baum and Wolf, 2013). The clinician reduces the amount of stimuli or modifies the environment to reduce the task demand (e.g. changing the physical environment; Katz et al., 2011). The clinician may also do the action in order for the person to copy (Katz et al., 2011). The person should still be attending to the task (Baum and Wolf, 2013). The clinician physically guides the movement but allowing the person to lead and withdraws the physical assistance if the person takes over the movement (Sanderson and Gitsham, 1991).
5	Do for the person	The person is unable to complete the task so the clinician completes the task, or the part of the task, for the person.

## SOTOF (2<sup>nd</sup> edition): revised level of independence rating

Occupational Performance	Independent	Needed General Prompt	Needed Gestural Cue	Needed Specific Feedback/ Cue	Needed Physical Assistance	Do for client
Eating: Client's ability to eat independently from a bowl.						
Washing: Client's ability to wash and dry hands.						
Pouring and Drinking: Client's ability to pour from a jug and to drink from a cup.						
Dressing: Client's ability to put on a front-fastening, long-sleeved garment.						



# Aim

The SOTOF was revised to include a formalised dynamic aspect of the tool.

The six levels of mediation protocol and gather an accurate measurement of the patient's ability through use of prompts from the therapist (Laver – Fawcett, and Marrison, 2015).

To explore the content validity of the SOTOF 2<sup>nd</sup> edition which has included the formalisation of the dynamic assessment with the addition of a six level graduated mediation protocol





# Objectives

- Elicit the views of a panel of experts in order to evaluate the formalised dynamic assessment element of SOTOF 2<sup>nd</sup> edition.
- Explore the expert panel's views and evaluation with regards to the SOTOF's dynamic assessment instructions.
- Study the division and content of levels in the six-level mediation protocol and its relevance to occupational therapy profession.
- Consider if the six-level graduated mediation protocol has relevant prompt suggestions for a variety of cultures.

# Benefits of quality assessment tools

Ensure that each professional can:

- Demonstrate their cost effective impact by identifying a patient's particular need for intervention. Therefore, save on vital resources by relieving pressure on the care system.
- Highlight the importance of Occupational Therapy to other professionals and government leaders (Hon, Austen, 2014).
- Evaluate the effectiveness of interventions for commissioners and service evaluation.



# Methodology

- A literature review of content validity, expert panel studies found 4 relevant studies which informed the method for this study
- Three of the four studies reviewed utilised a mixed method design.
- Studies utilised convenience, purposive and snowball sampling.
- Likert scales and qualitative questions used.
- It was not clear if either of the studies conducted a pilot of these questions prior to sending to the expert panel.
- Ethics approval obtained from York St John University ethics committee.

# Sampling: identifying Panel Members

To achieve the aim and objectives researchers found panel members purposively from two books, the internet and authors cited in the SOTOF 1<sup>st</sup> edition.

Rubio et al (2003) established that samples should range between 3 and 10 experts for content validity studies.

Panel members must have developed an assessment tool relating to

- Stroke
- ADL
- Perception
- Cognition
- Have expertise occupational therapy

22 experts potential experts were located and approached via email.

They were invited to suggest other panel members (snowball sampling)



# The Survey



- The researchers developed an online survey and utilised the Bristol Online survey (BOS) tool to distribute to the experts.
- A three point Likert scale was utilised with open and closed questions.
- Utilising the BOS enabled the researchers to gather data in a time effective manner and analyse the information accordingly (Fowler, 2014). A pilot study was conducted to ensure that the BOS survey was user friendly and questions were relevant and a high response rate could be achieved (Creswell, 2014)

# The questions and time scales

Researchers:

- Followed-up emails with reminders
- Sufficient time scales to allow experts to give full and clear feedback.
- Extended the deadline.

Fowler (2014) suggests that response rates can be improved with appropriate follow-up.



# Expert panel sample



The sample comprised five participants from four countries:

- Australia
- Canada
- Ireland
- USA



They had an average of 39 years (range 27 to 50 years) experience as occupational therapists

Qualifications: PhD (n=3); Professional Doctorate (n=1); and MRes (n=1)

Questions 6 -12	Responses from experts
<b>Do you think all the levels are easy to interpret?</b>	<p>4 – Easy to interpret</p> <p>1 – Not easy</p>
<b>Are the instructions for applying the SOTOF graduated mediation protocol appropriate for application by occupational therapists?</b>	<p>4 – Appropriate</p> <p>1 – Unsure</p>
<b>Level 4 has multiple options including Physical assistance, Co-Active assistance, Modifications and Demonstration. Do you think these options for mediation should be separated?</b>	<p>2– separate</p> <p>2 – unsure</p> <p>1 – No answer given</p>
<b>The SOTOF has been design to be used internationally with clients from different cultures. Do you think the six levels of the graduated mediation protocol would be applicable to people from different cultures?</b>	<p>3 – Applicable</p> <p>2 – Unsure</p>



**In the Instruction cards for each SOTOF task item examples for suggested mediation for levels 1 to 4 of the graduated mediation protocol are provided for that specific test item. Are these examples useful to guide the occupational therapist to apply the graduated mediation protocol?**

4 – Useful

1 – Unsure

**Do you anticipate any challenges or problems for occupational therapists applying the six level mediation protocol to the SOTOF test items?**

2 – Problems anticipated

2 – Unsure

1 – No problems anticipated

**If you have any further comments and / or suggestions, please provide them here:**

2 – Comments

3 – No Comments



- 4 out of 5 participants agreed that the SOTOF 2<sup>nd</sup> edition is easy to interpret and appropriate for use within occupational therapy
- Responses have suggested some useful ideas for improving SOTOF further.

Online Survey  
Results

# Strengths, Limitations and future research

## Strengths

- The use of a pilot prior to the survey being sent to the experts, allowing time efficiency
- Experienced panel members

## Limitations

- Small sample size
- Limited international spread

## Future Research

- A normative study was undertaken with SOTOF (Laver and Powell, 1995) and could be repeated with the 2<sup>nd</sup> edition.
- Test-retest and inter-rater reliability
- Face validity



# Questions



# For a copy of SOTOF contact..

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