APPENDIX 5

RUDAS Administration Guide

Introduction

The Rowland Universal Dementia Assessment Scale (RUDAS) - Storey J, Rowland J, Basic D, Conforti D, Dickson H, 2002 is a short cognitive screening instrument designed to minimise the effects of cultural learning and language diversity on the assessment of baseline cognitive performance.

When administering the RUDAS it is important that the respondent is encouraged to communicate in the language with which they are most competent and comfortable.

Test administrators should read the following instructions carefully before using the RUDAS.

The Assessment Context – General Guidelines:

Test Anxiety

> Make sure the test taker is as relaxed as possible, as test anxiety can interfere with performance on cognitive tests.

Hearing

> Conduct the RUDAS in a quiet area and make sure the test taker can hear clearly. It is important to identify at the beginning of the assessment if the test taker has impaired hearing and accommodate for this as much as possible by speaking slowly and clearly. Encourage the test taker to wear any hearing aids. Be careful not to speak too loudly as this may result in distortion. (There is a large print version of the RUDAS for test takers with severe hearing impairment).

Vision

> Ensure that the test taker is using reading glasses where necessary and that there is sufficient light in the room.

Seating

> Sit opposite the test taker. This is important for communication reasons as well as controlling for the difficulty of some items on the RUDAS. Do not sit behind a desk, as this will inhibit the giving of instructions for some items on the RUDAS and may also be intimidating for the test taker.

Recording Responses

> It is important to record the test taker's full response to each item.

Physical Disability

> For test takers who have a physical disability (e.g. vision, hearing, hemiparesis, amputee, stroke, aphasia) which may affect their ability to perform certain items on the RUDAS, it is important to complete the RUDAS as fully as possible but to interpret any total score less then 22 with caution (further research is necessary to assess validity of the RUDAS in this sub-group of patients)

The Language / Cultural Context:

Using a Professional Interpreter

If you are utilising a professional interpreter to administer the RUDAS it is important to consider the following:

1. Interpreters should be used in all situations where the test taker's preferred language is not spoken fluently by the test administrator.

2. Make sure that the language spoken by the interpreter (including the dialect) is the same one with which the test taker is familiar.

3. It is important to explain to the test taker that the interpreter is the facilitator and that you will be asking the questions. This may help to avoid confusion during the assessment.

4. It is better for the interpreter to sit next to the test administrator while the test taker sits opposite. This will reinforce the adjunctive role of the interpreter and make it easier for the test taker to synthesise the non-verbal cues from the test administrator and the verbal cues from the interpreter.

(Interpreter) — (Test Administrator)

(Test Taker)
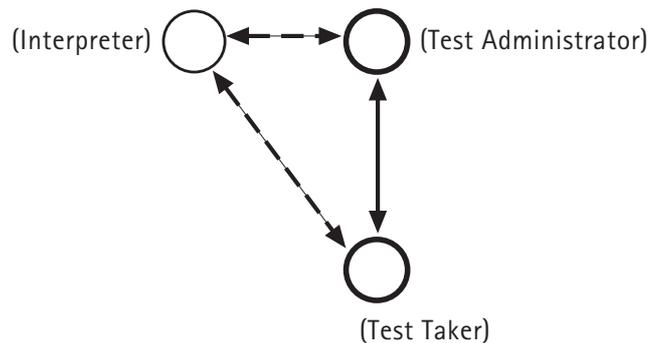
5. It is important to brief the interpreter before starting the assessment:

> The interpreter should be aware of the general nature of the interaction i.e. that it is a cognitive assessment.

> Remind the interpreter of the importance of concurrent and precise interpreting. Explain that your instructions and the test taker's responses should be interpreted as exactly as possible.

> Ask the interpreter to take note of any instances during the assessment where the test taker's performance may have been affected by subtle or unintended changes to the meaning of the test instructions due to language or cultural factors.

> Inform the interpreter that it may be necessary at the end of the test for you to clarify a concept covered in the assessment to further make the distinction between the test taker's actual cognitive capacity and potential cultural bias which may arise as a result of the translation process.

Multilingual Test Administrators

If, as the test administrator, you are multilingual it is important to consider all of the same issues which are relevant to the use of a professional interpreter, as well as the following:

- You may need to be careful when translating the RUDAS questions as you might find it more difficult when you have to read in one language and speak in another.

- It is important that you translate the RUDAS questions precisely. Be aware of the differences between formal and informal word usage when translating the RUDAS instructions and recording the test taker's responses.

Item 1 | Memory

Grocery List

1. I want you to imagine that we are going shopping. Here is a list of grocery items. I would like you to remember the following items which we need to get from the shop. When we get to the shop in about 5 minutes time I will ask you what it is that we have to buy. You must remember the list for me.

   Tea
   Cooking Oil
   Eggs
   Soap

   Please repeat this list for me (Ask person to repeat the list 3 times). (If person did not repeat all four words, repeat the list until the person has learned them and can repeat them, or, up to a maximum of five times.)

Notes:

> It is important to give enough learning trials so that test taker registers and retains the list as well as they can (max. of 5 learning trials)

> Ask the test taker to repeat the list back to you at least three times until they can repeat it correctly or as well as they are going to

> Use realistic nature of the scenario and a little humour (if appropriate) to build rapport and make the task less confrontational i.e. WE are going shopping; I am relying on YOU to remember the list FOR ME, so don't forget. When WE get to the shop . . .

> To facilitate learning of the list, use your fingers to list off items on the list when teaching it to the test taker to make the task as concrete as possible e.g. thumb = tea, index finger = cooking oil etc.

Scoring:

This is the learning part of the memory question. There are no points for this part of the question but the memory recall component later in the test has a maximum score of 8 points.

Item 2 | Body Orientation

Body Orientation

2. I am going to ask you to identify/show me different parts of the body. *(Correct = 1, Incorrect = 0).* Once the person correctly answers 5 parts of this question, do not continue as the maximum score is 5.		
(1) show me your right foot	1	
(2) show me your left hand	1	
(3) with your right hand touch your left shoulder	1	
(4) with your left hand touch your right ear	1	
(5) which is (point to/indicate) my left knee	1	
(6) which is (point to/indicate) my right elbow	1	
(7) with your right hand point to/indicate my left eye	1	
(8) with your left hand point to/indicate my left foot	1	
		............/5

Notes:

> It is important to sit opposite the test taker (controls for difficulty of the tasks).

> There doesn't need to be a lot of explanation before starting, just say "I am going to ask you to indicate various parts of the body . . ." – the task is explicit as it evolves.

Scoring:

> Although there are 8 parts, this item has a maximum score of 5 points. Once the test taker has 5 correct answers there is no need to continue.

> Be careful with scoring – remember you are sitting opposite the test taker – it is easy to make mistakes so concentrate to make sure you score the person accurately.

> There are no half marks, the test taker must get each task 100% correct to be marked correct (e.g. if test taker is asked "with your right hand indicate my left eye" and they use their left hand but still point to your left eye – mark as incorrect).

Item 3 | Praxis

Fist / Palm

3. I am going to show you an action/exercise with my hand. I want you to watch me and copy what I do. Copy me when I do this . . . (i.e. demonstrate – put one hand in a fist, and the other hand palm down on the table or your knees and then alternate simultaneously.) **Now do it with me. I would like you to keep doing this action at this pace until I tell you to stop** - approximately 10 seconds or 5 – 6 sequences. (Demonstrate at moderate walking pace).			
Score as:			
Normal	*= 2*	*(very few if any errors; self-corrected; progressively better; good maintenance; only very slight lack of synchrony between hands)*	
Partially Adequate	*= 1*	*(noticeable errors with some attempt to self-correct; some attempt at maintenance; poor synchrony)*	
Failed	*= 0*	*(cannot do the task; no maintenance; no attempt whatsoever)*	
			......./2

Notes:

> It is important to sit opposite the test taker (controls for difficulty of the task)

> When teaching the task use the following steps:

Step 1: I want you to put your hands on your knees like this (i.e. put both your hands palm down on your knees (i.e. if no table surface).

Step 2: Now watch carefully as I do this (put one hand in a fist in the vertical position and leave the other hand palm down) – I want you to do this just like I did.

Step 3: Watch me again now as I am doing this (alternate hands simultaneously – one in a fist and the other palm down and keep alternating for 5 - 6 trials).

Step 4: Ask test taker to copy exactly what you are doing. If test taker is confused and has not learned the task successfully then repeat Steps 1, 2 and 3.

Step 5: Once test taker has learned the task (i.e. understands as well as possible what they are meant to do – regardless of whether or not they can do it 100%), ask them to repeat the exercise at the pace you demonstrate until you tell them to stop (now demonstrate task – intervals between change of hands should reflect moderate walking pace). Do not allow the test taker to copy you when scoring – must demonstrate the task independently.

APPENDIX 5 *(continued)*

Scoring:

This question has a maximum score of 2 points.

In order to help distinguish between the three levels of competence, refer to the following:

Score	Fist / Palm Integrity	No. of Errors	Fluency	Ability to Self-Correct	Progressive Improvement	Synchrony
Normal	Good adherence to 'palm down' and 'fist' actions with few intrusions or incorrect variations	Minimal	Good	Good	Clearly evident	Only very slight lack of synchrony
Partially Adequate	Obvious intrusions and incorrect variations in 'palm down' and 'fist' actions	Notice-able	Some attempt to maintain	Some attempt	Some indication	May be noticeable lack of synchrony
Failed	Barely able to identify correct 'palm down' and 'fist' actions because of many intrusions and incorrect variations	Many	Poor or none	None	Very little or none	Little or no synchrony

Normal

A person who performs normally on this task should exhibit signs of intact learning and should be able to replicate clearly, the 'fist in the vertical position' and 'palm down' actions. Their performance on the task should improve with progressive learning trials to a point where they can do the task fluently with minimal errors. The test taker should demonstrate the ability to self-correct, show progressive improvement over the course of the task and have only very slight lack of synchrony between the hands.

Partially Adequate

A person whose response is partially adequate will make noticeable errors e.g. occasionally places palm up instead of palm down or may place palm up instead of converting to the fist or may form the fist in the horizontal position. They may have to stop occasionally in order to self-correct but even if they are unable to perform the task perfectly there should be some evidence that they have learned the task, some attempt to self-correct and some indication of an attempt to maintain the fluency of the alternating hands. There may be a noticeable lack of synchrony between the hands.

Failed

A person who fails this task shows very little if no ability to understand and execute the task. There are many errors, very little or no evidence of improvement, inability to self-correct, poor maintenance, and obvious inability to emulate correct hand positions and to perform the simultaneous changing of hands with any synchrony. A person who fails may not be able to form a fist or distinguish between palm up and palm down, may not alternate the actions across hands and may not be able to use both hands together at all.

Item 4 | Drawing

Visuo–Constructional Cube Drawing
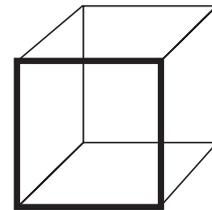
4. Please draw this picture exactly as it looks to you (Show cube on App 2 – Page 15). *(Yes = 1; No = 0)*		
Score as:		
(1) Has person drawn a picture based on a square?	1	
(2) Do all internal lines appear in person's drawing?	1	
(3) Do all external lines appear in person's drawing?	1	
		......../3
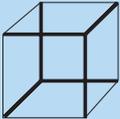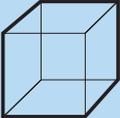
Notes:

This question has a maximum of 3 points.

> Show test taker cue page of cube drawing

> Make sure that test taker can see the drawing clearly (check that they are wearing prescription glasses if applicable)

> Ask test taker to draw the picture of the cube as well as they can

Scoring**:**

Has test taker drawn a picture based on a square? (i.e. There is a square somewhere in the drawing)

YES / NO

*Do all internal lines (i.e. dark lines) appear in test taker's drawing?*

YES / NO

i.e.
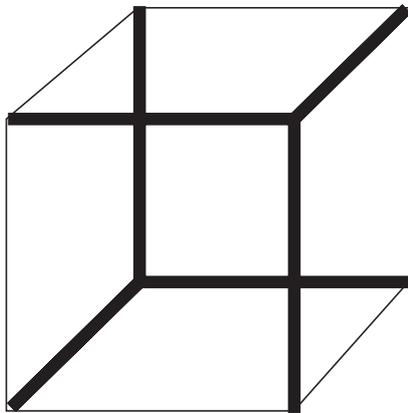
Do all external lines (i.e. dark lines) appear in test taker's drawing?

YES / NO

i.e.
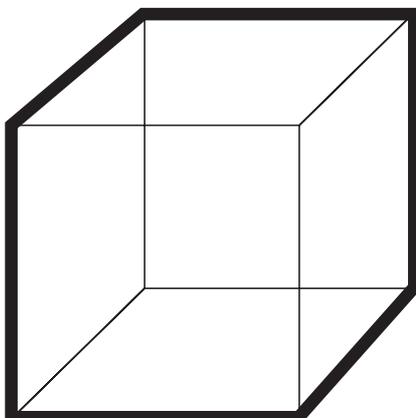
Item 5 | Judgement

Judgement – Crossing the Street

5. You are standing on the side of a busy street. There is no pedestrian crossing and no traffic lights. Tell me what you would do to get across to the other side of the street **safely.** (If person gives incomplete response that does not address both parts of answer, use prompt: "Is there anything else you would do?") Record exactly what patient says and circle all parts of response which were prompted.		
Score as:		
Did person indicate that they would look for traffic? *(YES = 2; YES PROMPTED = 1; NO = 0)*	2	
Did person make any additional safety proposals? *(YES = 2; YES PROMPTED = 1; NO = 0)*	2	
		......../4

Notes:

> If the test taker gives no response to the question or says "I don't know", then repeat the question once only.

> Except where the test taker answers both parts of the question on the first attempt, use the prompt 'Is there anything else you would do' in all situations. This is to gain as complete a response as possible from the test taker.

> Use only the general prompt 'Is there anything else you would do' – do not prompt the person in any other way.

> Record test taker's response to this question.

> Circle any part of test taker's response which was prompted and score accordingly.

> If the test taker says that they never cross the road by themselves (e.g. they are in a wheelchair or their eyesight is poor), then ask them the question again but modify as follows:

"What would anyone who wanted to cross the road have to do to get across safely?"

Scoring:

This item has a maximum score of 4 points. Each of the two parts:

1. look for traffic, and

2. additional safety proposal

has a total score of 2 points i.e. Yes = 2; Yes Prompted = 1; No = Zero

i.e.

> *Did test taker indicate that they would look for traffic?*

> YES / YES PROMPTED / NO
> 2   1   0

Examples of Correct Responses	Examples of Incorrect Responses
I would look for traffic.	Just go across.
Look left and right.	Put my hand up so the traffic knows I want to cross.
Check the cars.	Go to the corner and cross.
Check that it's clear.	Wave at the cars so they can see me.
Go across when there is nothing coming.	I wouldn't go across.

> *Did test taker make any additional safety proposals in road crossing scenario?*

> YES / YES PROMPTED / NO
> 2   1   0

Examples of Correct Responses	Examples of Incorrect Responses
Cross to the middle of the road and then look again to make sure there was no traffic before going right across.	Run as fast as I can.
Keep looking for traffic while crossing.	Cross when the walk sign is green.
Go across quickly but without running.	Cross at the crossing.
Be careful.	Just put my head down and go.
Wait till I could cross with some other people.	
Ask for help.	

Scoring Examples:

Example 1

"I don't know. (Repeat the question).

"I'd look for the cars. ⬭ I can't think of anything else except be careful."

This response would score 3 points out of a total of 4 because the person said that they would look for the cars (2/2) and when prompted (i.e. circle indicates that it was prompted) said that they would be careful (1/2) i.e. 2/2 + 1/2 = 3/4

Example 2

"Just go across. ⬭ Check for the cars."

This response would score 1 point only out of a total of 4 because the first part of the answer 'just go across' was incorrect (0/2), and the second part of the answer 'check for the cars' while correct, was prompted (i.e. because it was circled to indicate that it was prompted) (1/2) i.e. 0/2 + 1/2 = 1/4

Example 3

"Put my hand up so the traffic knows I want to cross and then walk to the middle of the road before going right across."

This response would score 2 points out of a total of 4 because the first part of the answer is incorrect (0/2) and the second part of the answer 'then walk to the middle of the road before going right across' is correct (2/2) i.e. 0/2 + 2/2 = 2/4

Item 1 | Memory

Memory Recall (Item 1 Revisited – 4 Grocery Items)

1. (Recall) We have just arrived at the shop. Can you remember the list of groceries we need to buy? (Prompt: If person cannot recall any of the list, say "The first one was 'tea'." *(Score 2 points each for any item recalled which was not prompted – use only 'tea' as a prompt.)*		
Tea	2	
Cooking Oil	2	
Eggs	2	
Soap	2	
		......../8

Notes:

> Ask test taker to repeat the 4 items on the grocery list.

> If after 20 – 30 seconds the test taker cannot remember learning the list OR any of the items on the list then use the prompt – i.e. the first one was 'tea' and then circle 'tea' or write a 'P' in parentheses after it to indicate that it was prompted and score as zero.

> Use the prompt 'the first one was 'tea', only if the person cannot remember any of the grocery items.

> Do not use any other prompts in this task (e.g. if the person says 'cooking oil' but cannot remember any of the other grocery items on the list do not use the 'tea' prompt or any other prompt).

Scoring:

The recall component of the memory item has a maximum score of 8 points.

> There are no part marks, the person scores either zero or 2 points for each item on the grocery list.

> If 'tea' was used as a prompt then the maximum score the person can get on this task is 6/8.

> Mark as correct if the person says 'cooking oil' or ' oil'.

Item 6 | Language

Language Generativity – Animal Naming

6. I am going to time you for one minute. In that one minute, I would like you to tell me the names of as many different animals as you can. We'll see how many different animals you can name in one minute. (Repeat instructions if necessary). Maximum score for this item is 8. If person names 8 new animals in less than one minute there is no need to continue.		
1 ………………………………… 5 ………………………………… 2 ………………………………… 6 ………………………………… 3 ………………………………… 7 ………………………………… 4 ………………………………… 8 …………………………………		
		……./8

Notes:

This item has a maximum score of 8 points.

> Time the test taker for one minute ONLY - make sure that it is clear to the test taker when to start i.e. "When I say 'Go' you should start listing animals. Don't worry about me writing them down, say the animals as quickly as you can."

> If test taker does not speak English make sure that interpreter also understands the instructions and the importance of simultaneous interpreting.

Scoring:

> If test taker says for example – 'big horse' and 'little horse', then record these as two separate animal names. Then at the end of the assessment, if the person was born in a non-english speaking country, check with the interpreter that these two names actually represent different concepts in the relevant language (e.g. in English – 'big horse' and 'little horse' are not separate animal names therefore an english speaking person would score only one point (BUT, if the english speaking person had said 'horse' and 'foal' then these are two separate concepts and the person would score two points). A non-english speaking person depending on the language spoken may score two points if they used the correct two words for 'big horse' and 'little horse'. It is important here to distinguish between perseveration (i.e. repetition of the same animal name) and linguistic peculiarities of different languages which conceptualise/describe animals differently.

Cube Drawing