



PAL INSTRUMENT

POWERED BY **QCS** Quality Compliance Systems

The Pool Activity Level (PAL) Instrument



Jackie Pool

Dementia Care Champion

QCS Quality Compliance Systems

What is the Pool Activity Level Instrument?

- ✓ Developed by Jackie Pool, an Occupational Therapist specialist in dementia and Dementia Care Champion at QCS
- ✓ A reliable and valid assessment and guide to support individuals at different stages of dementia and other cognitive impairments to experience meaningful and enriching lives
- ✓ Recognised by NICE in the Clinical Guidelines for dementia (CG42, 2006)
- ✓ Guides professional and informal care givers in HOW to support an individual



Assessing the validity and reliability of the Pool Activity Level (PAL) Checklist for use with older people with dementia

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Activity is key to maintaining physical and mental health and well-being. However, as dementia affects the ability to engage in activity, care-givers can find it difficult to provide appropriate activities. The Pool Activity Level (PAL) Checklist guides the selection of appropriate, personally meaningful activities. The aim of this study was to assess the reliability and validity of the PAL Checklist when used with older people with dementia. A postal questionnaire sent to activity providers assessed content validity. Validity and reliability were measured in a sample of 60 older people with dementia. The questionnaire response rate was 83% (102/122). Most respondents felt no important items were missing. Seven of the nine activities were ranked as 'very important' or 'essential' by at least 77% of the sample, indicating very good content validity. Correlation with measures of cognition, severity of dementia and activity performance demonstrated strong concurrent validity. Inter-item correlation indicated strong construct validity. Cronbach's alpha coefficient measured internal consistency as excellent (0.95). All items achieved acceptable test-retest reliability, and the majority demonstrated acceptable inter-rater reliability. We conclude that the PAL Checklist demonstrates adequate validity and reliability when used with older people with dementia and appears a useful tool for a variety of care settings.

The PAL Instrument Checklist is a reliable and valid tool for use with people with dementia . It is used around the world in Hospitals, Care Homes and other care settings as well as in research

The PAL Instrument was recognised by NICE as a tool to support therapeutic interventions for people with dementia

A NICE–SCIE Guideline on supporting people with dementia and their carers in health and social care

National Clinical Practice Guideline Number 42
National Collaborating Centre for Mental Health

commissioned by the

**Social Care Institute for Excellence
National Institute for Health and Clinical Excellence**

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7. THERAPEUTIC INTERVENTIONS FOR PEOPLE WITH DEMENTIA– COGNITIVE SYMPTOMS AND MAINTENANCE OF FUNCTIONING

7.2.2 Interventions for promoting independence

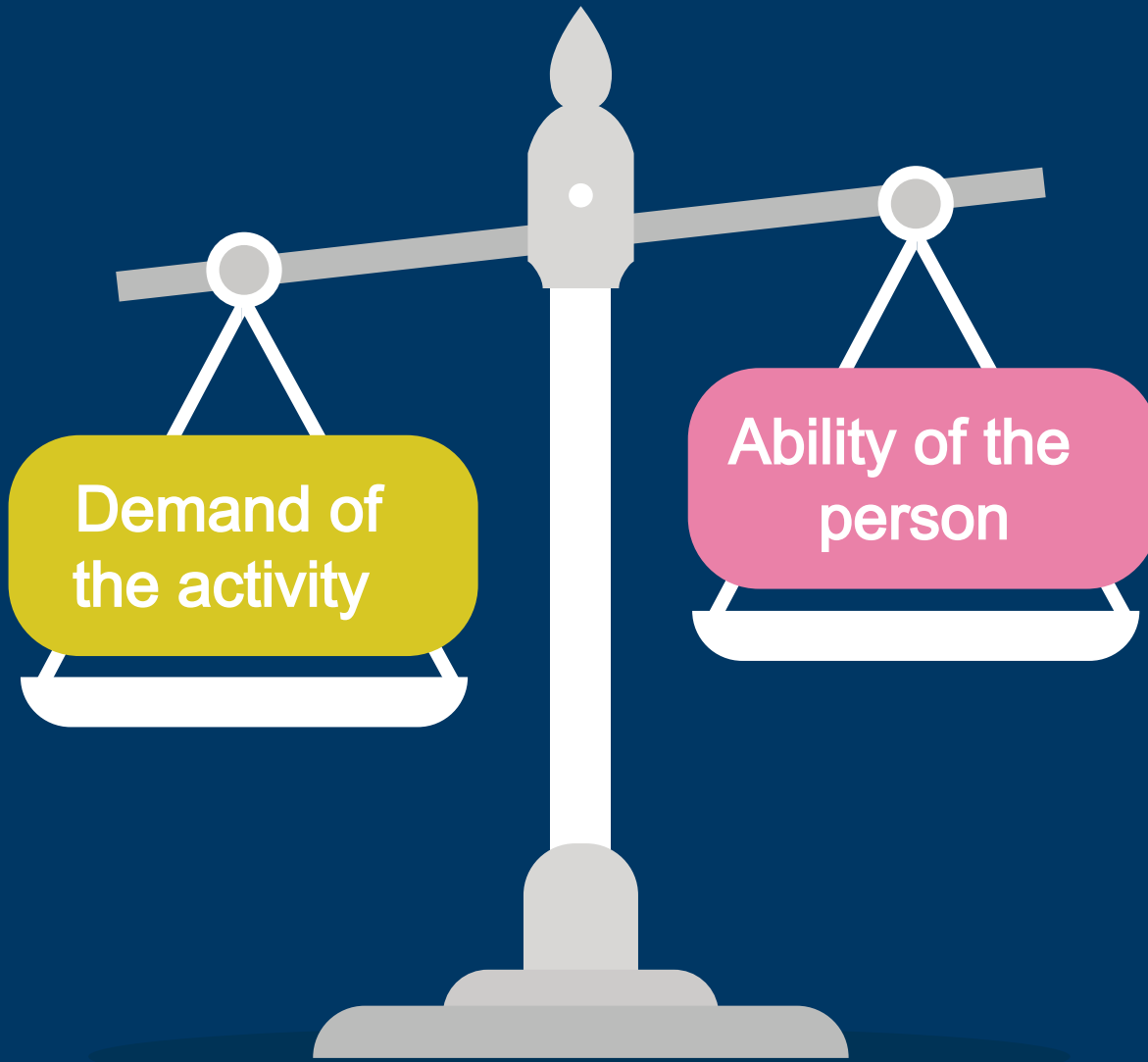
Activity planning

The principles of ADL skill training can be applied
across various a

Identifying the person's strengths and challenges and
his o to plans for establishing a wider range of
activities. should also consider preferences, interests
plans

(Kolanowski et al., 2005; Pool, 2012)

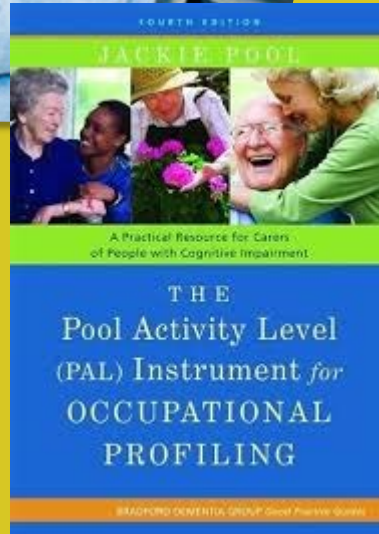
Page 167



**Meaningful
Engagement:**
Facilitating the 'just
right' challenge

The PAL Instrument

- ✓ Assesses cognitive functional ability
- ✓ Helps people with dementia and other forms of cognitive difficulty to do personal, domestic and leisure activities



The easy -to -complete electronic PAL Instrument Checklist automatically works out the level of cognitive and functional ability of the individual at 4 possible levels of ability



PLANNED



EXPLORATORY



SENSORY



REFLEX

Theory of PAL Levels

	Reflex	Sensory	Exploratory	Planned		
Allen's levels	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Sensory cues	Subliminal	Proprioceptive	Tactile	Visible	Related	Symbolic
Information Processing	Reflex	Effect on body	Effect on environment	Several actions	Overt trial and error	Covert trial and error
Motor actions	Automatic	Postural	Manual	Goal-directed	Exploratory	Planned
Reason for Response	Arousal	Comfort/Movement	Interest Touching	Compliance Seeing	Self-control Reasoning	Reflection Reasoning
Perception of Objects	Penetrate Subliminal state	Own body	Exterior surfaces	Colour Shape	Space and depth	Intangible
Setting of Objects	Reflex zones	Range of motion	Arms reach	Visual field	Task environment	Potential task environment
Use of Objects	Stimulated body Part	Spontaneous use of body part	Chance use of found objects	Hand tools as a Means to an end	Hand tools used to vary means and ends	Tool making
Verbal directions	Verbs	Pronouns Names of body parts	Names of material objects	Adjectives Adverbs	Prepositions Explanations	Conjunctions Conjectures
Demonstrated directions	Physical contact	Guided movements	Action on an object	Each step in a series	Each step & precautions for errors	Not required

Allen CK, Earheart CA, Blue T (1992) *Occupational Therapy Treatment Goals for the Physically and Cognitively Disabled*.

The American Occupational Therapy Association, Inc. Rockville, MD

Planned Level of Ability



Can use cognitive skills to complete an activity (but may have difficulty with problem solving)

Aware of needs of others

Can follow simplified speech and language

Can carry out activities independently with 'stand -by' assistance

Exploratory Level of Ability

Can carry out familiar and simple activities in familiar surroundings

Spontaneous and creative

Will find simple directions and memory aids helpful



Sensory Level of Ability



Concerned with sensations

Can carry out single step activities

May need a demonstration of actions

Reflex Level of Ability

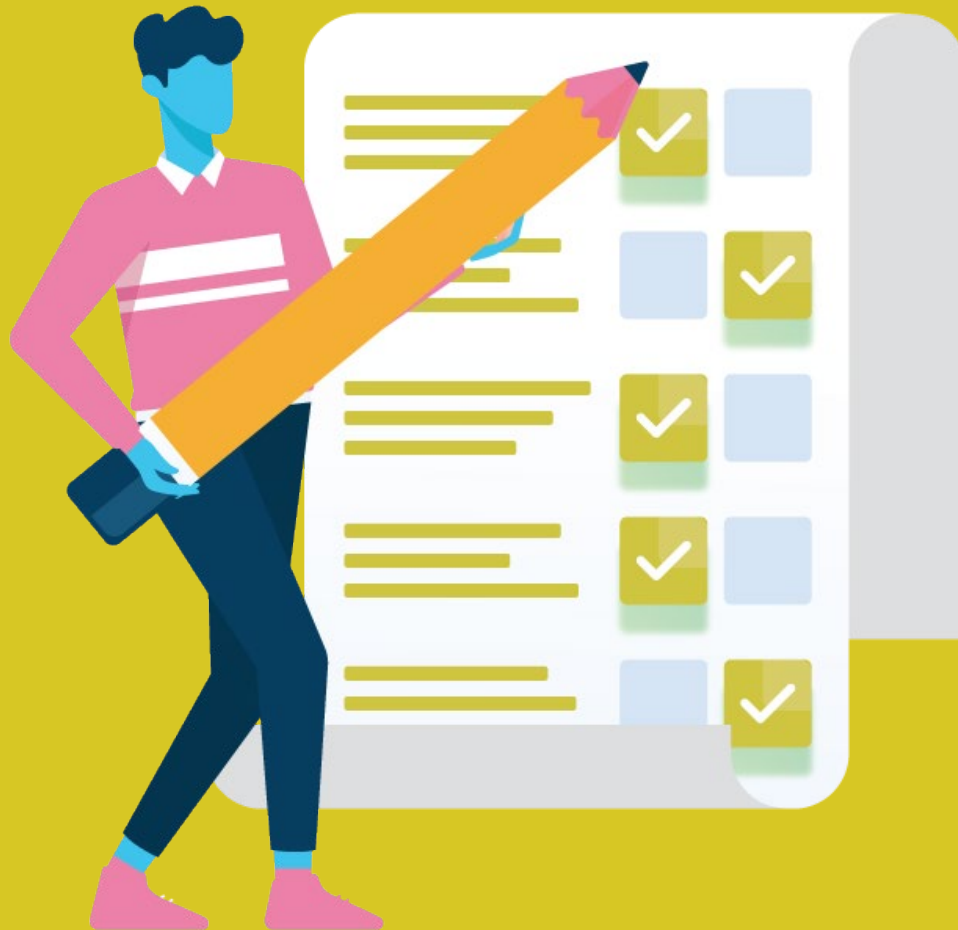
Movement is a reflex response to sensation

Responds best to single sensations

Needs opportunity to receive information through the range of senses

Can develop therapeutic relationships through the use of sensitive communication skills





The Pool Activity Level (PAL) Instrument Checklist

Completing the PAL Checklist

You can choose to complete the PAL Checklist digitally or manually – it is available at the QCS website: https://www.qcs.co.uk/digital_-pool_-activity_-level_-pal_-instrument/

You can download and print the Pool Activity Level (PAL) Checklist so that you can save it as a record of the individual's ability at the date of your completion. You will then be able to compare progression of the person's ability at future dates.

You should copy the information from the manually completed PAL Checklist into the digital version in order to automatically produce the appropriate PAL Guide for you to support the person.

1. Bathing/Washing	P	E	S	R
Can bathe/wash independently, sometimes with a little help to start.	<input type="checkbox"/>			
Needs soap put on cloth and one step at a time directions to wash.		<input type="checkbox"/>		
Mainly relies on others but will wipe own face and hands if encouraged.			<input type="checkbox"/>	
Totally dependent and needs full assistance to wash or bathe.				<input type="checkbox"/>
2. Getting dressed	P	E	S	R
Plans what to wear, selects own clothing from the cupboards; dresses in correct order.	<input type="checkbox"/>			
Needs help to plan what to wear but recognises items and how to wear them; needs help with order of dressing.		<input type="checkbox"/>		
Needs help to plan and with order of dressing, but can carry out small activities if someone directs each step.			<input type="checkbox"/>	
Totally dependent on someone to plan, sequence and complete dressing; may move limbs to assist.				<input type="checkbox"/>
3. Eating	P	E	S	R
Eats independently and using the correct cutlery.	<input type="checkbox"/>			

Completing the digital PAL Checklist

Thinking of the last 2 weeks, click on the statement that represents the person's best ability in each of the 9 sections.

Where possible, complete the Checklist as a team so that the widest possible knowledge of the person's abilities is gathered

If no-one has observed the person completing any of the 9 activities, provide the person with the opportunity and record their ability

If you are interviewing a family member or other close person, be aware that their information might be affected by their own expectations or way of caring

Be aware that your selection should represent what the person CAN do, which might not be the same as what they ARE doing

There should only be ONE CLICK for each section.

You must click one statement for each section.

The number of clicks for each column will have been automatically calculated at the end of the Checklist and the person's PAL level of ability will have been identified

Welcome back!

What did you find out?

	Planned	Exploratory	Sensory	Reflex	Overall Level
Ken	6	3	0	0	Planned
Elsie	0	9	0	0	Exploratory
Irene	0	2	7	0	Sensory
Gertie	0	0	0	9	Reflex



The digital PAL Instrument Checklist automatically turns into the PAL Guide for supporting the person

bathing/showering/washing

getting dressed

dining

engaging with others

engaging in leisure activities

The user can add personal details about the individual's preferences, routines and likes or dislikes



Bathing, Showering & Washing QCS Quality Compliance Systems

Favourite Toiletries	Bathing Likes & Dislikes	Preferred Routine

My Likely Abilities

- Can bathe, shower or wash following usual routines and in familiar surroundings.
- Enjoys the experience of bathing, washing or showering more than the end result of being clean.
- Can complete the bathing, showering or washing activity if it is broken down into 2-3 step stages.

My Likely Limitations

- May not have the end result of getting clean in mind when bathing, showering or washing.
- May not recognise when the bathing, showering or washing activity is necessary or when it is completed.
- Relies on cues such as labels on toiletry bottles.

Care Giver's Role

- Enable me to enjoy the sensation of bathing/showering/washing rather than focusing on getting clean.
- Break down the activity into manageable steps:
- Suggest that I gather together items such as soap, shampoo, cloth and



You can use the PAL Guide
to plan treatment of the
person who is living with
dementia and to support
their family and other
carers .



You can also share the
PAL Guide with other
services so that they
understand how to
support the person



How can you measure and evidence that Meaningful Engagement is happening

Introducing the NEW QCS PAL Engagement Measure

Physical:

Stamina, balance, coordination, dexterity, range of movement, grip

Cognitive:

Thinking, reasoning, problem solving, speech and language, memory, learning, recall, concentration, attention

Social:

Interpersonal, communication, empathy, rapport

Emotional:


Wellbeing, illbeing

What is the QCS PAL Engagement Measure?

Research study demonstrated the utility of the Engagement Measure as good.

The Engagement Measure was sensitive to change and illustrated an improvement in engagement that was aligned with improvement in behaviour including relating to others, dexterity, and emotional interaction

Reference: Pool J and Collier L. Validity and Use Of The PAL Engagement Measure in Pool J 2022 (in press) The QCS Pool Activity Level Instrument (5th ed). Jessica Kingsley publishers, London

QCS PAL ENGAGEMENT MEASURE					 PAL INSTRUMENT <small>POWERED BY QCS Quality Compliance Systems</small>		
NAME:	Measure 1	Measure 2	Measure 3	Measure 4	NOT OBSERVED DURING THE ACTIVITY (0 Point)	OBSERVED AT TIMES (1 Point)	OBSERVED CONSISTENTLY (2 Points)
OBSERVED ACTIVITY:							
Date:							
COGNITIVE ABILITIES							
Goal aware					Has an end result in mind, can plan how to achieve and work towards this		
Initiates					Independently starts an action toward another person or object		
Attends					Notifies and focuses on a sensation		
Concentrates					Sustains attention on the activity, person or object		
Adjusts					Adapts actions to meet the demands of the activity		
Explores					Shows interest in and seeks to engage with environment, people or objects		
Responds					Reacts to sensations, verbal requests or prompts		
PHYSICAL ABILITIES							
Stabilises					Maintains balance and posture while moving, standing or sitting		
Manipulates					Uses tools and objects to achieve an end result. Handles an object in response to the sensation it generates		
Coordinates					Moves smoothly while negotiating obstacles of handling objects		
Grips objects					Uses appropriate strength to hold objects securely		
Releases objects					Independently and appropriately lets go of objects		
SOCIAL INTERACTION							
Aware of others					Notifies and responds directly or indirectly to the presence of others		
Shares					Offers and accepts objects to/from others		
Vocal interactions					Uses vocal sounds to make a connection with others		
Non-vocal interactions					Uses body language to make a connection with others		
EMOTIONAL WELL-BEING							
Hope					Shows a sense of optimism in engaging in the activity		
Agency					Shows a sense of purposefulness in carrying out the activity		
Self-confidence					Shows a sense of empowerment and autonomy when carrying out the activity		
Self-esteem					Shows a sense of fulfillment when carrying out an action completion of the activity		

What is the QCS PAL Engagement Measure?

QCS PAL ENGAGEMENT MEASURE					PAL INSTRUMENT POWERED BY QCS		
NAME:	Measure 1	Measure 2	Measure 3	Measure 4	NOT OBSERVED DURING THE ACTIVITY (0 Points)	OBSERVED AT TIMES (1 Point)	OBSERVED CONSISTENTLY (2 Points)
OBSERVED ACTIVITY:							
Date:							
COGNITIVE ABILITIES							
Goal aware	1	1	1	2	Has an end result in mind, can plan how to achieve and work towards this		
Initiates	1	1	1	1	Independently starts an action toward another person or object		
Attends	1	2	2	2	Notifies and focuses on a sensation		
Concentrates	2	2	2	2	Sustains attention on the activity, person or object		
Adjusts	1	2	2	2	Adapts actions to meet the demands of the activity		
Explores	1	1	1	2	Shows interest in and seeks to engage with environment, people or objects		
Responds	1	1	1	1	Reacts to sensations, verbal requests or prompts		
PHYSICAL ABILITIES							
Stabilises	0	0	1	1	Maintains balance and posture while moving, standing or sitting		
Manipulates	1	2	2	2	Uses tools and objects to achieve an end result. Handles an object in response to the sensation it generates		
Coordinates	1	2	2	2	Moves smoothly while negotiating obstacles of handling objects		
Grips objects	1	1	1	1	Uses appropriate strength to hold objects securely		
Releases objects	0	1	1	1	Independently and appropriately lets go of objects		
SOCIAL INTERACTION							
Aware of others	2	2	2	2	Notifies and responds directly or indirectly to the presence of others		
Shares	1	2	2	2	Offers and accepts objects to/from others		
Vocal interactions	2	2	2	2	Uses vocal sounds to make a connection with others		
Non-vocal interactions	2	2	2	2	Uses body language to make a connection with others		
EMOTIONAL WELL-BEING							
Hope	2	2	2	2	Shows a sense of optimism in engaging in the activity		
Agency	0	1	1	1	Shows a sense of purposefulness in carrying out the activity		
Self-confidence	1	1	2	2	Shows a sense of empowerment and autonomy when carrying out the activity		
Self-esteem	1	2	2	2	Shows a sense of fulfillment when carrying out an action completion of the activity		
% Engagement Achieved	55	75	80	85			



PAL INSTRUMENT

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PAL Instrument Ordering/Download Information

Visit: <https://www.qcs.co.uk/digital-pool-activity-level-pal-instrument/>
to download a **FREE** copy of the PAL Instrument and to keep in touch
with new developments

Visit: <https://www.qcs.co.uk/dementia-centre/>
to find out more about the range of Dementia Centre resources



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