Parkinson's Timed Upper Limb Assessment Validation

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Parkinson's

- Affects 4 in 1000 Australians (Chan, et.al., 2001)
- Challenges in all areas of function (Lees, et. al., 2009; Foster, 2014)
- OTs assess upper limb function (Homann, et. al., 2000; Proud, et. al., 2013)
- Ax's not standardised or quantifiable
- No common guidelines specific to OT

Test Item	Time	Comments	Time	Comments
1. Unscrew jar Lids				
2. Phone dialling				
3. Page turning				
4. Writing name/ Sentence				
5. Money handling				
6. Tablet handling				
7. Doing up buttons				
8. Pouring liquids				
9. Buttering bread				
10. Cutting bread				
General Comments				

MR (OPH) 61K TIMED UPPER LIMB ASSESSMENT

Timed Upper Limb Assessment

- Uses
- 10 items
- Standardised instructions
- Standardised layout

Method

QUESTIONS:

1. Inter-rater reliability?
2. Norms?
3. Clinical value in PD?
4. Differentiate ?

METHOD:

Cross-sectional research design (Whitall, et. al., 2009)

ANALYSIS:

- Inter-rater correlation
- Independent groups t-test.

Results

RESULTS:
- ✓ agreement between assessors
- ✓ Correlation coefficients between r=.96 to r=.998.
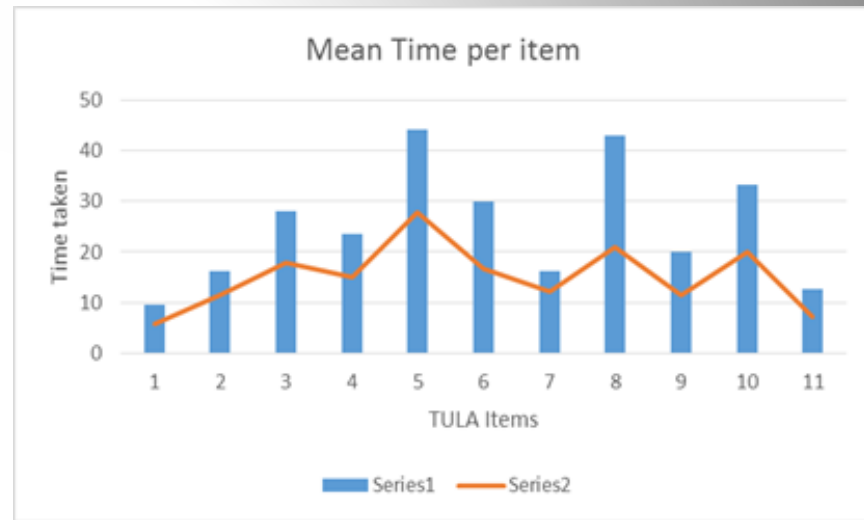
Surveys:
- ✓ all items relevant

Mean scores:
Between Parkinson's (*n*=15) and control group (*n*=77) → **significant differences** with t= 2.65 to t= 7.46; p< .00

Group Statistics						
Task	Group	N	Mean	SD	Min	Max
Unscrew Jar Lids	PD	15	9.64	3.43	6.28	19.38
	Typically aging	77	5.74	1.80	3.00	10.20
Phone dialling	PD	15	16.11	3.75	11.00	23.94
	Typically aging	77	11.48	3.88	6.44	32.50
Page turning	PD	15	27.92	11.61	11.28	56.70
	Typically aging	77	17.84	6.24	7.87	44.19
writing name	PD	15	23.44	7.23	12.97	35.16
	Typically aging	77	15.13	4.97	5.89	41.06
Writing sentence	PD	13	44.09	12.01	27.09	68.22
	Typically aging	77	27.83	9.21	13.62	76.32
Money Handling	PD	15	30.04	12.94	14.95	66.25
	Typically aging	77	16.62	4.15	8.37	50.37
Tablet Handling	PD	15	16.28	5.83	9.35	26.91
	Typically aging	77	12.26	5.28	6.01	45.15
Doing up buttons	PD	14	43.00	34.41	13.53	137.25
	Typically aging	77	20.96	6.82	10.93	47.40
Pouring Liquid	PD	15	20.06	11.94	12.03	59.65
	Typically aging	77	11.40	2.68	6.00	18.50
Buttering bread	PD	15	33.31	12.29	23.53	71.07
	Typically aging	77	20.00	7.18	9.38	50.81
Cutting Bread	PD	15	12.75	5.72	7.19	28.21
	Typically aging	77	7.32	3.54	3.63	24.92

Implications:

- Potential updates
- Accurate Ax of upper limb function
- Application
- Further research → Normative data

Mean Time per item

Thank you

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