

The London Handicap Scale

Overview: The London Handicap Scale can be used to determine the effect of chronic disorders on a person's functional ability using a self-completion questionnaire. The authors are from the Royal Free Hospital in London.

Development:

- Each degree of handicap along a 6-point interval was assigned a scale weight.
- The scale weights were assigned using conjoint analysis with the derivation process described on page 12.

Parameters:

(1) mobility: "getting around"

(2) physical independence: "looking after yourself"

(3) occupation: "work and leisure activities"

(4) social integration: "getting on with people"

(5) orientation: "awareness of your surroundings"

(6) economic self-sufficiency: "affording the things you need"

Parameter	Finding	Value
mobility	no disadvantage	0.071
	minimal disadvantage	0.038
	mild disadvantage	0.000
	moderate disadvantage	-0.036
	severe disadvantage	-0.072
	most severe disadvantage	-0.108
physical independence	no disadvantage	0.102
	minimal disadvantage	0.011
	mild disadvantage	-0.021
	moderate disadvantage	-0.053
	severe disadvantage	-0.057
	most severe disadvantage	-0.061
occupation	no disadvantage	0.099

	minimal disadvantage	-0.004
	mild disadvantage	-0.014
	moderate disadvantage	-0.024
	severe disadvantage	-0.035
	most severe disadvantage	-0.060
social integration	no disadvantage	0.063
	minimal disadvantage	0.035
	mild disadvantage	0.007
	moderate disadvantage	-0.022
	severe disadvantage	-0.029
	most severe disadvantage	-0.041
orientation	no disadvantage	0.109
	minimal disadvantage	-0.008
	mild disadvantage	-0.038
	moderate disadvantage	-0.051
	severe disadvantage	-0.063
	most severe disadvantage	-0.075
economic self sufficiency	no disadvantage	0.100
	minimal disadvantage	0.067
	mild disadvantage	0.033
	moderate disadvantage	-0.023
	severe disadvantage	-0.067
	most severe disadvantage	-0.111

from Table 1 page 13

London handicap scale = SUM(all 6 utility values) + 0.456

where:

- The sum of all "no disadvantage" values is 0.544 which when added to 0.456 gives 1.00.
- The sum of all "most severe disadvantage" values is -0.456 which when added to 0.456 gives 0.00.

Interpretation:

- minimum scale value: 0
- maximum scale value: 1.00
- The scale value corresponds to residual function with 1.00 indicating normal function and 0.00 indicating total disability.

Performance:

- Pearson's correlation coefficient between predicted and measured values: 0.98
- Kendall's coefficient of concordance (tau): 1.00

References:

Harwood RH Rogers A et al. Measuring handicap: the London handicap scale a new outcome measure for chronic disease. *Quality in Health Care*. 1994; 3: 11-16.