

World Health Organization Quality of Life – BREF (WHOQOL-BREF)

Assessment Overview

Assessment Area

ICF Domain:

Quality of Life

Subscales (domains):

Physical Health (7 items)

Psychological Health (6 items)

Social Relationships (3 items)

Environment (8 items)

You Will Need

Length:

10-15 minutes, 24+2 items

Scoring:

Items scored 1-5. Raw domain score is the sum of respective item scores. All domain scores are then normalized to a range of 0-100. Refer to user manual for scoring algorithm.

SPSS algorithm available for automatic scoring.

Summary

The World Health Organization Quality of Life – BREF (WHOQOL-BREF) is a self-report questionnaire which assesses 4 domains of quality of life (QOL): physical health, psychological health, social relationships, and environment. In addition, there are 2 items that measure overall QOL and general health. The assessment conceptually fits with the WHO definition of QOL.

The WHOQOL-BREF was developed by extracting 1 item from each of the 24 facets and 2 of the 4 general items from WHOQOL-100. WHOQOL-BREF can provide data for both research and clinical purposes. Although it is a relatively brief instrument, its structure allows one to acquire specific information covering many aspects of life.

This scale was not developed for people with SCI, therefore, it is possible that there are some questions in the scale that are not relevant.

Availability

Worksheet: Worksheet in English can be found [here](#).

Languages: More than 60 languages are available [here](#).

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Standard Error of Measurement:

Overall QOL/General Health: 7.8

Physical Health: 5.2

Psychological: 2.4

Social Relationships: 6.4

Environment: 5.1

Minimal Detectable Change:

General Health: 21.5

Physical Health: 14.4

Psychological: 6.6

Social Relationships: 17.9

Environment: 14.1

(Lin et al. 2007; n=187; 151 males, 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury = 7.4 years)

Typical Values

Mean (SD) Scores:

Overall QOL/General Health: 52.4 (19.4)

Physical Health: 56.1 (19.6)

Psychological: 53.7 (16.9)

Social Relationships: 58.9 (16.1)

Environment: 53.1 (15.3)

(Lin et al. 2007; n=187; 151 males, 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury = 7.4 years)

Measurement Properties

Validity – **Low** to **High**

Moderate or higher correlation between WHOQOL-BREF subscales and the Short Form-36 (SF-36) subscales measuring similar constructs:

$r > 0.4$

(Lin et al. 2007; n=187; 151 males, 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury = 7.4 years)

Low to **High** correlation between WHOQOL-BREF subscales and the Impact of Participation and Autonomy Questionnaire (IPAQ) subscales:

$r = -0.30$ to -0.65

(Suttiwong et al. 2013; n=139; 110 males, 29 females; 49 quadriplegia, 90 paraplegia; mean (SD) time since injury = 10.6 (7.1) years)

Number of studies reporting validity data: 6

Reliability – **Moderate** to **High**

Moderate to **High** Inter-rater Reliability:

ICC = 0.56-0.95

High Intra-rater Reliability:

ICC = 0.84-0.93

(Lin et al. 2007; n=187; 151 males, 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury = 7.4 years)

(Salvador-De La Barrera et al. 2018; n=54; 44 males; mean age (SD): 45.5 (13.2); 20 CSCI, 28 TSCI, 6 LSCI)

Low to **High** Internal Consistency:

Overall $\alpha = 0.73$ -0.89

Physical Health Domain $\alpha = 0.73$ -0.87

Psychological Domain $\alpha = 0.74$ -0.86

Social Relationship Domain $\alpha = 0.54$ -0.75

Environment Domain $\alpha = 0.65$ -0.86

(Lin et al. 2007; n=187; 151 males, 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury = 7.4 years)

(Salvador-De La Barrera et al. 2018; n=54; 44 males; mean age (SD): 45.5 (13.2); 20 CSCI, 28 TSCI, 6 LSCI)

(Xavier de Franca et al. 2011; n=47; 91.5% males; mean age (SD): 42.95 (14.12))

(Jang et al. 2004; n=111; Mmean age (SD): 40 (13); Complete tetraplegia=23, Incomplete tetraplegia=28, Complete paraplegia=43, Incomplete paraplegia=17)

(Miller et al. 2008; n=161; 77% males; mean age (SD): 46.88 (15.52) years)

Low to **Moderate** Internal Consistency:

Cronbach's $\alpha = 0.70$

Social Domain $\alpha = 0.59$

(Chang et al. 2022; n=249; 165 males, 84 females; age 18-70 years; injury level: 78 cervical, 123 thoracic, 48 lumbosacral; 149 complete, 100 incomplete)

Number of studies reporting reliability data: 6

Responsiveness

Floor/Ceiling Effect:

0.0%-1.3% at floor

0.0%-0.4% at ceiling

(Subscale values; Lin et al. 2007; n=187; 151 males, 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury = 7.4 years)

Effect Size:

Overall QOL & general health domain (combined): 1.01

Physical Health: 1.83

Psychological Health: 0.78

Social Relationship: 1.16

Environment: 0.78

(Lin et al. 2007; n=187; 151 males, 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury = 7.4 years)

Number of studies reporting responsiveness data: 2