

Outcome Measure	Quality of Life After Brain Injury (QOLIBRI)
Sensitivity to Change	Yes
Population	Adult
Domain	Health-Related Quality of Life
Type of Measure	Self-report
ICF-Code/s	b1, d1-d9
Description	<p>The QOLIBRI (Quality of Life after Brain Injury; von Steinbuchel et al., 2010) is a novel health-related quality-of-life (HRQoL) instrument specifically developed for traumatic brain injury (TBI). The conceptual model for the QOLIBRI was developed on the basis of a TBI literature review and consensus meetings of an international consortium (later referred to as “the QOLIBRI Task Force”; hereafter the Group).</p> <p>The QOLIBRI instrument consists of 37 items in four satisfaction scales:</p> <ol style="list-style-type: none"> (1) “Cognition” (7 items), (2) “Self” (7 items), (3) “Daily Life and Autonomy” (7 items), and (4) “Social Relationships” (6 items), <p>and two bothered scales,</p> <ol style="list-style-type: none"> (5) “Emotions” (5 items), and (6) “Physical Problems” (5 items). <p>Responses to the ‘satisfaction’ items are coded on a 1 to 5 scale, where 1= “not at all satisfied” and 5= “very satisfied”. Responses to the ‘bothered’ items are reverse scored to correspond with the satisfaction items, where 1= “very bothered” and 5= “not at all bothered”.</p> <p>The scale means are converted to the 0-100 scale by subtracting 1 from the mean and then multiplying by 25. This produces scale scores which have a lowest possible value of 0 (worst possible quality of life) and a maximum value of 100 (best possible quality of life). The scale takes around 7-10 mins to complete.</p>
Properties	<p>See (von Steinbuchel et al., 2010)</p> <p>Cronbach's α ranges from 0.75 (“Physical problems”) to 0.89 (“Cognition” and “Self”). The total QOLIBRI score provides a reliable assessment at the level of the individual with Cronbach's α of 0.95, ranging from 0.92 (French; n = 147) to 0.97 (English; n = 96).</p> <p>In general, most scales show test-retest reliability (ICC = .77 to .81 for the subscales and .91 for overall scales. These values were lower for those with low MMSE scores (> .68).</p> <p>Both PCA and Rasch analysis indicate there is a unidimensional component to the scale. Items in the first three scales demonstrate good fit, whereas the items from the last three scales, with the two exceptions (poorly fitting items), have moderate fit. The SEM model with six factors showed substantial intercorrelation of latent factors (range of $r = .469-.796$).</p>

Advantages	<p>Brevity, multi-dimensional, many resources available: http://www.qolibrinet.com/</p> <p>(cut and paste)</p> <p>Once registered, the QOLIBRI is free for researchers, clinicians, and non-profit organisations. Languages: Dutch, English, Finnish, French, German, and Italian. Versions in Russian, Chinese, Portuguese, and Norwegian are in the process of validation.</p> <ul style="list-style-type: none"> - Was developed specifically for people with TBI - Has a comprehensive coverage of pertinent domains - In particular, inclusion of 7 cognitive items is a distinct advance over other QOL scales, this being a fundamental premise that is important to include in people with brain injury - Actively and appropriately addresses the QOL construct, as opposed to health status measure (e.g., SF36)
Disadvantages	<p>Limited use in the Australian context – although see Hawthorne, Kaye, Gruen, Houseman, Bauer (2011):</p> <ul style="list-style-type: none"> - The Quality of Life after Brain Injury (QOLIBRI) is a new international instrument for assessing quality of life after traumatic brain injury (TBI). - Correlations with the Assessment of Quality of Life, Short Form-36 version 2 and the Satisfaction with Life Scale were moderate. The QOLIBRI was sensitive to the Glasgow Outcome Scale - Extended scores, Hospital Anxiety and Depression scale, and measures of social isolation (Friendship Scale). - There was evidence that further refinement may improve the QOLIBRI. The QOLIBRI should be considered as an outcome measure by clinicians and researchers conducting treatment trials, rehabilitation studies or epidemiological surveys into the treatment or sequelae of trauma. <p>Additionally:</p> <ul style="list-style-type: none"> - Although not yet widely used outside Europe, it is only a recently developed instrument (2010) - Validity data could be improved
Additional Information	<p>The QOLIBRI is an Emerging measure in the Perceived Generic and Disease-Specific Health-Related Quality of Life Domain in Wilde et al (2010).</p> <p>TBI Pubs (not updated since 2011 by the looks)</p> <ul style="list-style-type: none"> • Bullinger, M., & The TBI Consensus Group (2002). Quality of life in patients with traumatic brain injury - basic issues, assessment and recommendations. <i>Restorative Neurology and Neuroscience</i>, 20, 111-124. • von Steinbüchel, N., Petersen, C., Bullinger, M., & the QOLIBRI Task Force (2005a). Assessment of health-related quality of life in persons after traumatic brain injury – development of the Qolibri, a specific measure. <i>Acta Neurochirurgica</i>, S93, 43-49. • von Steinbüchel, N., Richter, S., Morawetz, C., & Riemsma, R. (2005b). Assessment of subjective health and health-related quality of life in

	<p>persons with acquired or degenerative brain injury. <i>Current Opinion in Neurology</i>, 18, 681-691.</p> <ul style="list-style-type: none"> • Truelle, J. L., von Wild, K., Höfer, S., Neugebauer, E., Lischetzke, T., von Steinbüchel, N., & the QOLIBRI Group (2008). The QOLIBRI – towards a quality of life tool after traumatic brain injury: Current development in Asia. <i>Acta Neurochirurgica</i>, S101, 125-129. • von Steinbüchel, N., Wilson, L., Gibbons, H., Hawthorne, G., Höfer, S., Schmidt, S., et al. (2010a). Quality of Life after Brain Injury (QOLIBRI): Scale validity and correlates of quality of life. <i>Journal of Neurotrauma</i>, 27, 1157-1165. • von Steinbüchel, N., Wilson, L., Gibbons, H., Hawthorne, G., Höfer, S., Schmidt, S., et al. (2010b). Quality of Life after Brain Injury (QOLIBRI): Scale development and metric properties. <i>Journal of Neurotrauma</i>, 27, 7, 1167-1185. • Hawthorne G, Kaye AH, Gruen R, Houseman D, Bauer I. (in press) Traumatic brain injury and quality of life: initial Australian validation of the QOLIBRI. <i>Journal of Clinical Neuroscience</i>. • Truelle JL, Koskinen S, Hawthorne G, Sarajuuri J, Formisano R, von Wild K, et al. (in press) Quality of life after traumatic brain injury: the clinical use of the QOLIBRI, a novel disease-specific instrument. <i>Brain Injury</i>.
Reviewers	Tamara Ownsworth (RT)

Reference

- Hawthorne G, Kaye AH, Gruen R, Houseman D, Bauer I. (2011) Traumatic brain injury and quality of life: initial Australian validation of the QOLIBRI. *Journal of Clinical Neuroscience*, 18(2):197-202.
- Von Steinbüchel, N., Wilson, L., Gibbons, H., Hawthorne, G., Höfer, S., Schmidt, S., ... & Truelle, J. L. (2010). Quality of Life after Brain Injury (QOLIBRI): scale development and metric properties. *Journal of Neurotrauma*, 27(7), 1167-1185.