

Manual Wayfinding Questionnaire (version 1.1)

© Michiel Claessen, Anne Visser-Meily, Nicolien de Rooij en Ineke van der Ham, 2019

Objective:

A significant proportion of people with acquired brain injury complain of difficulty finding their way around. Among patients with mild stroke, for example, almost 30% were found to suffer from this. The Wayfinding Questionnaire (WQ) was developed to enable an assessment to be made of the severity of these complaints. The WQ is a self-reporting instrument. The patient indicates how he or she feels about their own navigational abilities on the basis of 22 statements.

Administration:

The statements should be answered on a Likert scale from 1 to 7. For statements 1 to 11 and 15 to 22, 1 means “not applicable at all” and 7 means “fully applicable”. For statements 12 to 14, 1 means “not uncomfortable at all” and 7 means “very uncomfortable”. The WQ takes 5 to 10 minutes to complete. We recommend asking the patient whether the navigation difficulties arose after the brain injury or were already present before. It is also important to ask whether the navigation difficulties lead to limitations in daily life.

Scoring and interpretation:

Research into the internal structure of the WQ has shown that the statements should be divided into three sub-scales (Claessen et al., 2016). The first sub-scale, 'Navigation and Orientation' (1-3, 6, 7, 16, 18-22) relates to the cognitive skills needed to find one's way. The second subscale, “Spatial Anxiety” (8-15), measures the degree of anxiety when performing navigation tasks and getting lost. Finally, the subscale “Distance Estimation” (4, 5, 17) assesses the specific skill of estimating distances. Research into clinical validity has shown that patients who score low on one or more sub-scales (i.e. a score that falls in the lowest 5% of the score distribution of the healthy control group) also score lower on an objective navigation test than patients with normal scores on the three WQ subscales (De Rooij et al., 2019).

To facilitate the scoring and interpretation of the WQ, you can download the Excel file “Scoring Wayfinding Questionnaire”. When you enter the patient's scores in this file, it indicates for each of the three subscales whether the score is above or below the cut-off point (Navigation and Orientation ≤ 32 , Spatial Anxiety ≥ 44 , Distance Estimation ≤ 6). One or more subscale scores below the cut-off point are indicative of substantial navigation complaints. In that case, further investigation into the nature of the navigation problems is recommended. You can use the

practical tools we have described in an article in the Dutch Journal of Rehabilitation Medicine (Claessen et al., 2018).

Literature:

- Claessen, M.H.G., van der Ham, I. J. M., de Rooij, N. K., & Visser-Meily, J. M. A. (2018). De weg kwijt na een beroerte: Screening, diagnostiek en behandeling. *Nederlands Tijdschrift voor Revalidatiegeneeskunde*, 40, 48-51.
- Claessen, M. H. G., Visser-Meily, J. M. A., de Rooij, N. K., Postma, A., & van der Ham, I. J. M. (2016). The Wayfinding Questionnaire as a self-report screening instrument for navigation-related complaints after stroke: Internal validity in healthy respondents and chronic mild stroke patients. *Archives of Clinical Neuropsychology*, 31, 839–854.
- de Rooij, N. K., Claessen, M. H. G., van der Ham, I. J. M., Post, M. W. M., & Visser-Meily, J. M. A. (2019). The Wayfinding Questionnaire: A clinically useful self-report assessment instrument to identify navigation complaints for stroke patients. *Neuropsychological Rehabilitation*.