

Outcome Measure	Patient Competency Rating Scale (PCRS)
Sensitivity to Change	Yes
Population	Adult
How to obtain	Available from the COMBI site Mayo-Portland Adaptability Inventory (tbims.org)
Domain	Measures of Self
Type of Measure	Self-report, relative-report, & clinician-rated scales
Time to administer	3-5 minutes
Description	<p>The primary purpose of the PCRS (developed in the 1980s by George Prigatano et al) (Prigatano & Altman, 1990) is to evaluate self-awareness (the ability to appraise one's current strengths and weaknesses) following TBI.</p> <p>The PCRS is a 30-item self-report instrument which asks the subject to use a 5-point Likert scale to rate his or her degree of difficulty in a variety of tasks and functions. The subject's responses are compared to those of a significant other (a relative or therapist) who rates the subject on the identical items. Impaired self-awareness may be inferred from discrepancies between the two ratings, such that the subject overestimates his/her abilities compared to the other informant. Awareness of deficit may also be examined separately for the various domains sampled by PCRS items. These include activities of daily living, behavioural and emotional function, cognitive abilities, and physical function. The Patient form plus at least one of the other forms must be used concurrently in order to produce a discrepancy score.</p> <p>A short form of 13 items was developed specifically for use in inpatient neurorehabilitation units. The shortened form was developed by excluding items that were either not relevant to the inpatient context or which did not cohere with others in a factor analysis (Borgaro & Prigatano, 2003).</p>
Properties	<p>Formal normative studies of the PCRS have not been conducted. A study using a control group of 131 New Zealanders (Leathem et al., 1998) grouped some of the PCRS items into 4 categories (ADL, emotional behaviour, interpersonal behaviour, and cognition) and reported mean control scores across items in each group. Means were between 4 ("fairly easy to do") and 5 ("can do with ease") with the exception of items relating to emotional control (mean = 3.81). Interestingly, informants rated control subjects higher on these items than the subjects rated themselves.</p> <p>Test-retest reliability of the PCRS has been reported as $r = .97$ for patients and $r = .92$ for relatives (Prigatano, Altman & O'Brien, 1990). One-week test-retest reliability for a group of uninjured college students was $.82$ (Heilbronner et al., 1993). Fleming et al. (1998) reported acceptable one-week test-retest reliability for patients with TBI using intraclass correlations (ICC $r = .85$). In the same study, internal consistency was strong for both patient ratings (Cronbach's $\alpha = .91$, $n = 55$) and relatives' ratings of patients (Cronbach's $\alpha = .93$, $n = 50$). Internal consistency for the brief version is also good. Cronbach's $\alpha = .82$, $n = 108$).</p> <p>PCRS discrepancy scores correlate significantly with indices of injury severity in some studies (Prigatano et al., 1998) but not others (Prigatano & Altman, 1990). Attempts to correlate the PCRS with specific neuropsychological findings have generally produced negative or equivocal results (Prigatano & Altman, 1990; Ranseen et al., 1990). In several studies PCRS discrepancy scores have correlated negatively with measures of depression or emotional distress (Ranseen et al., 1990; Fleming et al., 1998), lending support to the idea that emotional reactions to disability follow the onset of deficit awareness.</p> <p>Responsiveness: used to measure changes in awareness for different domains over time (Fleming & Strong, 1999) and response to intervention (Ownsworth et al., 2008). In the latter study, self and relative reports on the PCRS changes (indicating better functioning), whilst the discrepancy score did not significantly change.</p>
Advantages	<p>Brevity, available to the public (COMBI site), self, relative and clinician versions. Captures perceived current behavioural functioning across different domains – which is helpful separate to measuring awareness per se. Comparison with premorbid functioning is not required.</p>

Disadvantages	Usual concerns with discrepancy-based methods for awareness (does this reflect awareness deficits or relative's emotional state?) and the issue of interpreting change over time, which can arise from change in relative's score, not the shifting self-perceptions of the person with TBI.
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References

See COMBI site: <http://www.tbims.org/combi/pcrs/pcrsref.html>

Borgaro, S. R., & Prigatano, G. P. (2003). Modification of the Patient Competency Rating Scale for use on an acute neurorehabilitation unit: the PCRS-NR. *Brain Inj*, 17(10), 847-853.

Prigatano, G. P. & Altman, I. M. (1990). Impaired awareness of behavioral limitations after traumatic brain injury. *Archives of Physical Medicine and Rehabilitation*, 71, 1058-1064.