

Poor awareness may be a general feature of human cognition which only becomes apparent when objective performance is clearly outside of the normal area, e.g., following acquired brain injury.

BRAIN JAM: Do We All Have “Impaired” Awareness of Our Abilities?

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INTRO

- In healthy and brain-injured individuals, subjective reports explain around 5% of the variance in objective performance on mental tasks. (see literature →)
- **We studied the awareness of changes in objective performance** to control for idiosyncratic effects

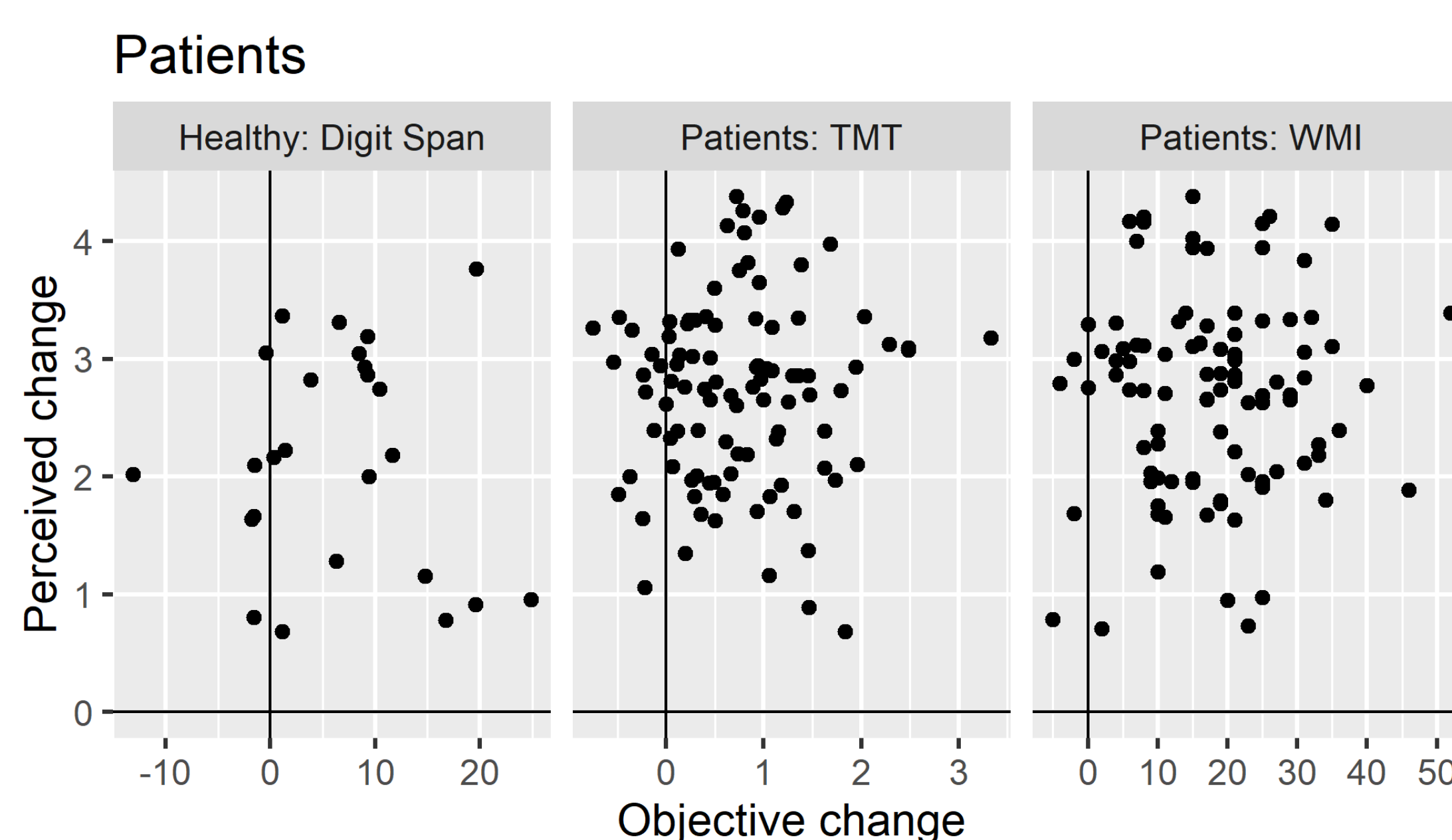
METHODS

1. N = 25 healthy and N = 68 brain-injured patients (two studies)
2. All were tested on WAIS subtasks.
3. Patients were tested five weeks apart during rehab. Healthy were tested three days apart.
4. Participants rated how much they changed from the previous test on a 5-point scale from “much worse” to “much better”.

RESULTS

Correlations between objective performance and subjective judgements showed **less than 1% awareness of objective change**:

- Healthy: $\tau = -.01$, $p = .57$, $BF_{01} = 5.89$
- Patients WMI: $r = 0.017$, $BF_{01} = 7.85$
- Patients TMT: $r = 0.047$, $BF_{01} = 7.15$



CONCLUSIONS

- Poor awareness of deficits may be **less pathological** than previously thought, though still a major problem in practice.
- Subjective reports (“I have a poor/good memory”) is no index of functioning.

Literature on level: Healthy

Crumley, Stetler, & Horhota (2014)
Schmidt, Berg, & Deelman (2001)
Zell & Krizan (2014),

Literature on level: Patients

Christodoulou et al. (2005)
Knight, Harnett, & Titov (2005)
Lannoo et al. (1998)
Sbordone, Seyranian, & Ruff (1998)
Schiehser et al. (2011)

Tests used:

Patients were tested on Wechsler Adult Intelligence Scale III (WAIS-III) – Working Memory index (WMI) (three subtasks) and the Trail Making Test (TMT).

Healthy were tested using WAIS-IV digit span.

