

Background

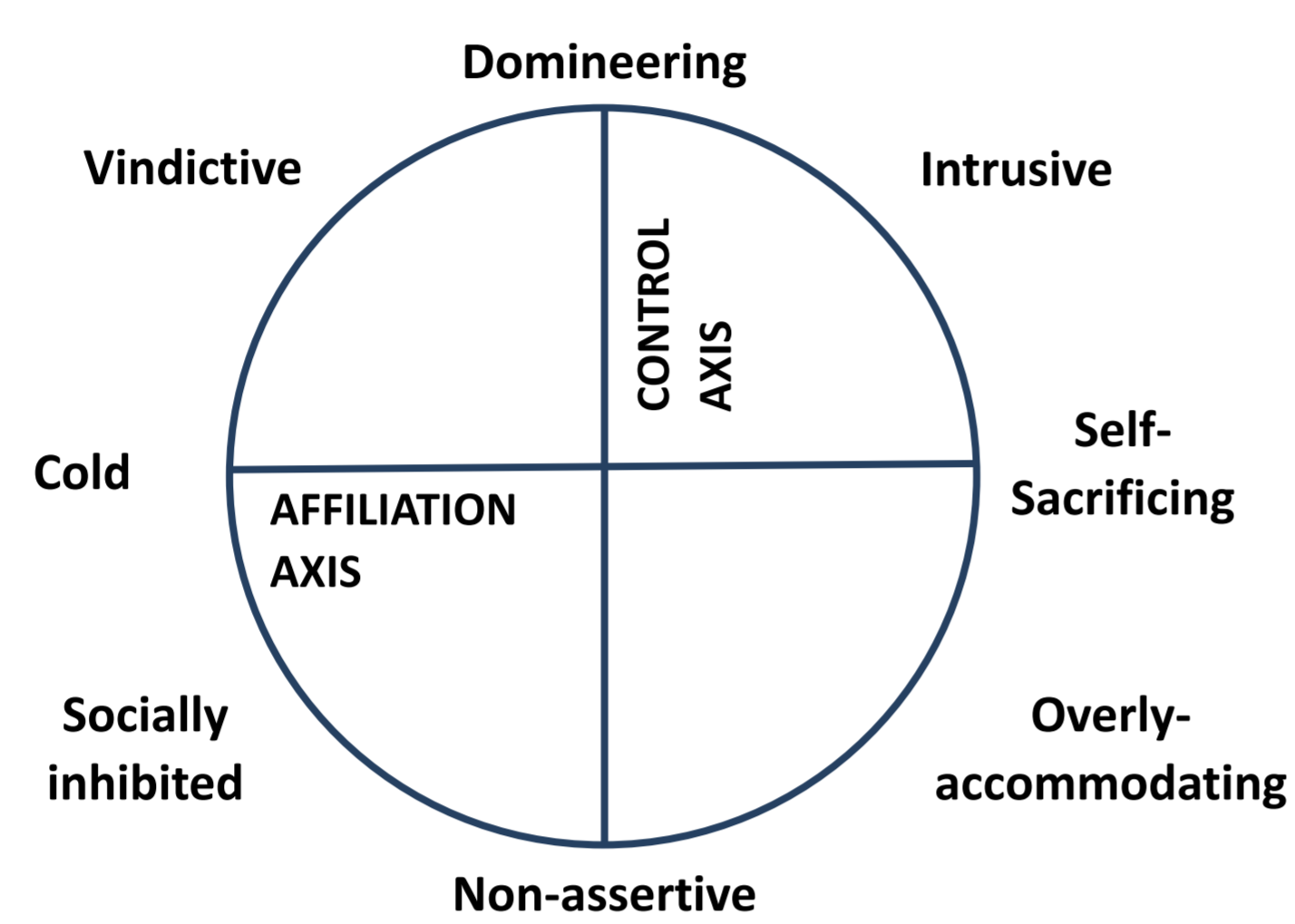
Interpersonal difficulties in major depression

Interpersonal dysfunction is a core component of depressive illness. Interpersonal dysfunction impacts on social functioning; a key outcome for psychiatric neurosurgery.

The IIP-64¹ is a self-report measure of difficulties that people experience in their social relationships. It consists of 39 items relating to interpersonal behaviours that respondents find hard to express and 25 items addressing behaviours that they find difficult to inhibit.

Interpersonal circumplex

The IIP-64 measures difficulties in 8 areas relating to 'control' and 'affiliation', known as the 'interpersonal circumplex' (see right).



Methods

The IIP-64 assesses interpersonal problems in eight specific domains of interpersonal functioning. The Total T-score reflects the overall burden of difficulties.

Sixteen patients undergoing ACING completed the IIP-64 at baseline and 12-months following surgery. This group was compared to 42 patients with chronic depression who underwent a course of psychological therapy (CBASP). All patients had diagnosis confirmed using the MINI semi-structured interview.

The outcome measure in both groups was the 17-item Hamilton Rating Scale for Depression (HRSD-17). Response was defined as $\geq 50\%$ improvement from baseline score.

We compared changes in scores on the IIP-64 in relation to changes in symptom burden and response to both treatments. Total T-scores post-treatment were compared between responders and non-responders for both groups.

Finally, we attempted to relate change in depressive symptoms to changes in interpersonal functioning. Statistical analysis was performed using R.²

Results

Baseline demographics

	ACING (N=16)	CBASP (N=42)
Age (mean \pm SD)	48.9 \pm 8.3	51.0 \pm 9.8
M:F	1:15	9:33
Baseline HRSD (mean \pm SD)	28.6 \pm 4.9	20.5 \pm 4.7

There was a statistically-significant difference between baseline scores in the two groups, with greater depression severity in the ACING group ($P < 0.001$).

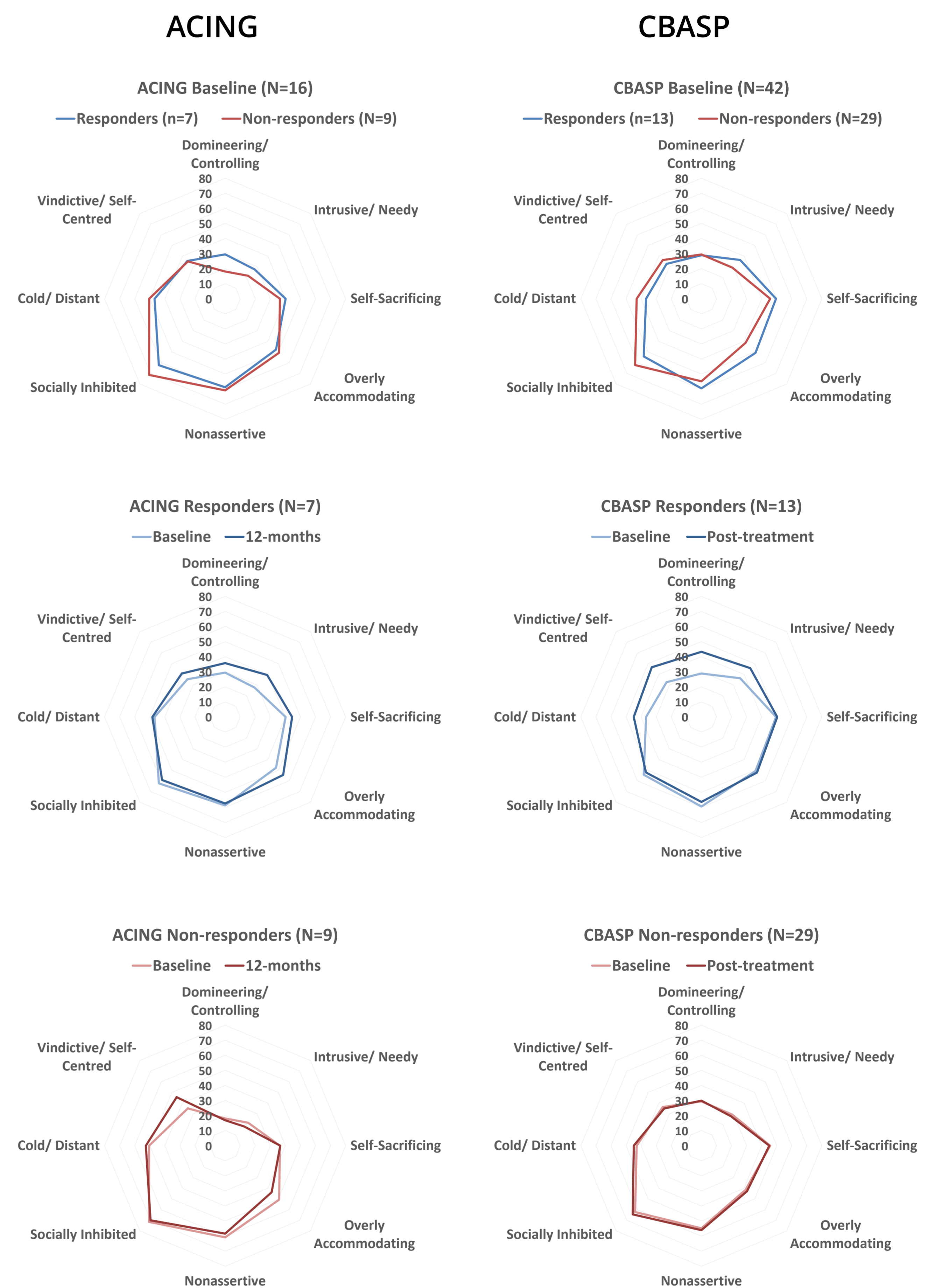
There was no statistically-significant difference between groups in terms of total T scores ($P = 0.334$). Two domains were statistically lower in the ACING group than the CBASP group: 'Intrusive-Needy'; and 'Self-sacrificing'.

Response rates

In the ACING group, 7 (43.8%) were responders at 12-months. In the CBASP group, 13 (31.0%) were responders at 12-months.

IIP-64 scores pre- and post-treatment

Pre- and post-treatment scores for both ACING and CBASP are shown below.



In responders, there was a statistically-significant correlation between change in HRSD-17 score and change in IIP-64 total score: ACING (Pearson's $r = 0.896$, $P = 0.006$); CBASP (Pearson's $r = 0.599$, $P = 0.03$).

Conclusion

Following both neurosurgery and psychological therapy, responders show changes in interpersonal functioning that are not seen in non-responders.

In responders, there is a relationship between change in symptoms and change in interpersonal functioning.

There was no evidence of deterioration in interpersonal functioning following ACING; even in non-responders.

It is likely that improvements in interpersonal functioning following cingulotomy and psychological therapy are mediated by a common factor: improvement in depressive symptoms.

