

Social Networks: Change in Patients with Social Anxiety Disorder



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Background

Social relationships have a significant effect on the maintenance and restoration of the psychological and physical health.^{1,2}

Objective

To examine change in social networks in the context of psychotherapy.

Hierarchical network mapping technique (HNMT)³

We used a disorder-specific HMNT version.⁴ **Support social networks (SN)** included (groups of) individuals who support patients to cope with everyday life situations in a confident and secure manner. **Anxiety social networks (AN)** included (groups of) individuals who stimulate anxious feelings or represent situations in which persons feel anxious. Patients placed wooden blocks before and at the end of psychotherapy (T1, T5) for as many (groups of) people as they perceived of importance in their social life (Figure 1, 2; for anxiety networks).

Sample

33 patients with SAD (SCID): 80% women; $M = 34$ years, $SD = 14$; 42% college degree; 88% employed/studying; 55% married/partnership; 40% at least one child. Comorbidities: 51% with at least one SCID-I and 63% with at least one additional SCID-II diagnoses.

RQ1: Change in network characteristics in SN and AN

Table 1 Change in network characteristics

	T1		T5		t(32)	p	d
	M	SD	M	SD			
Network total size							
SN	11.85	8.11	10.81	9.49	-0.59	.557	0.13
AN	175.44	366.52	40.16	97.67	-2.53	.017	0.50
Network composition (% of size)							
SN Private systems	81.45	22.14	89.26	17.60	1.60	.120	0.39
SN Professional systems	11.24	17.48	6.24	13.81	-1.05	.303	0.32
AN Private systems	39.07	31.61	24.90	32.94	-2.07	.047	0.44
AN Professional systems	28.80	29.34	45.26	39.09	2.42	.022	0.48
Network sustainability (months)							
SN	71.92	87.82	76.28	76.59	1.26	.217	0.05
AN	21.48	49.14	22.96	41.57	0.13	.898	0.03

Note. SN = Support Network; AN = Anxiety Network.

RQ2: Change in social support in SN and AN

Table 2 Positive and negative social support

	T1		T5		t(34)	p	d
	M	SD	M	SD			
Positive social support (total network)							
SN	2.54	0.44	2.43	0.44	-0.63	.532	0.25
AN	2.56	0.33	2.41	0.32	-2.83	.013	0.46
Negative social support (total network)							
SN	1.29	0.27	1.08	0.21	-4.24	.000	0.87
AN	2.64	0.29	2.44	0.32	-4.02	.001	0.65

Note. SN = Support Network: 1 = not at all; 4 = very much; AN = Anxiety Network: 1 = not at all; 4 = very much.

RQ3: Moderation of change in network characteristics and social anxiety by social support

There was only one moderation analysis that revealed significance: the **moderation of change in network total size and social anxiety by negative social support in the SN**; with the precondition of reduction in negative social support on or above average (≥ 1 SD), but not when the reduction of negative social support was below average.

Table 3 Moderation analysis

	β	LSAS-SR		
		SE	p	95%-CI
SN (network total size)	-1.27	0.34	.001	[-1.98;-0.57]
Negative social support (total network)	-25.87	19.99	.207	[-67.05;-15.30]
Interaction	-6.19	2.25	.011	[-10.83;-1.55]

Note. β = standardised regression coefficient, $F(3,25) = 8.29$, $p < .001$, $R^2 = .29$.

Discussion

HNMT can detect change in network characteristics and perceived social support over the course of psychotherapy. Meaningful change in perceived negative social support in the SN can moderate the association between change in network total size and the reduction of social anxiety. The decrease of negative social interaction with significant others appears of higher importance for individuals' mental health compared to an increase of positive social interactions. **Clinical implications:** HNMT appears as a fruitful tool for social network analyses. **Limitations:** Self-report design, small sample size, no control intervention (e.g. wait-list; different mental disorder). **Future research:** Replications with control samples, validation with external measures and different assessments of mental health.

Figure 1 Anxiety Network (T1)

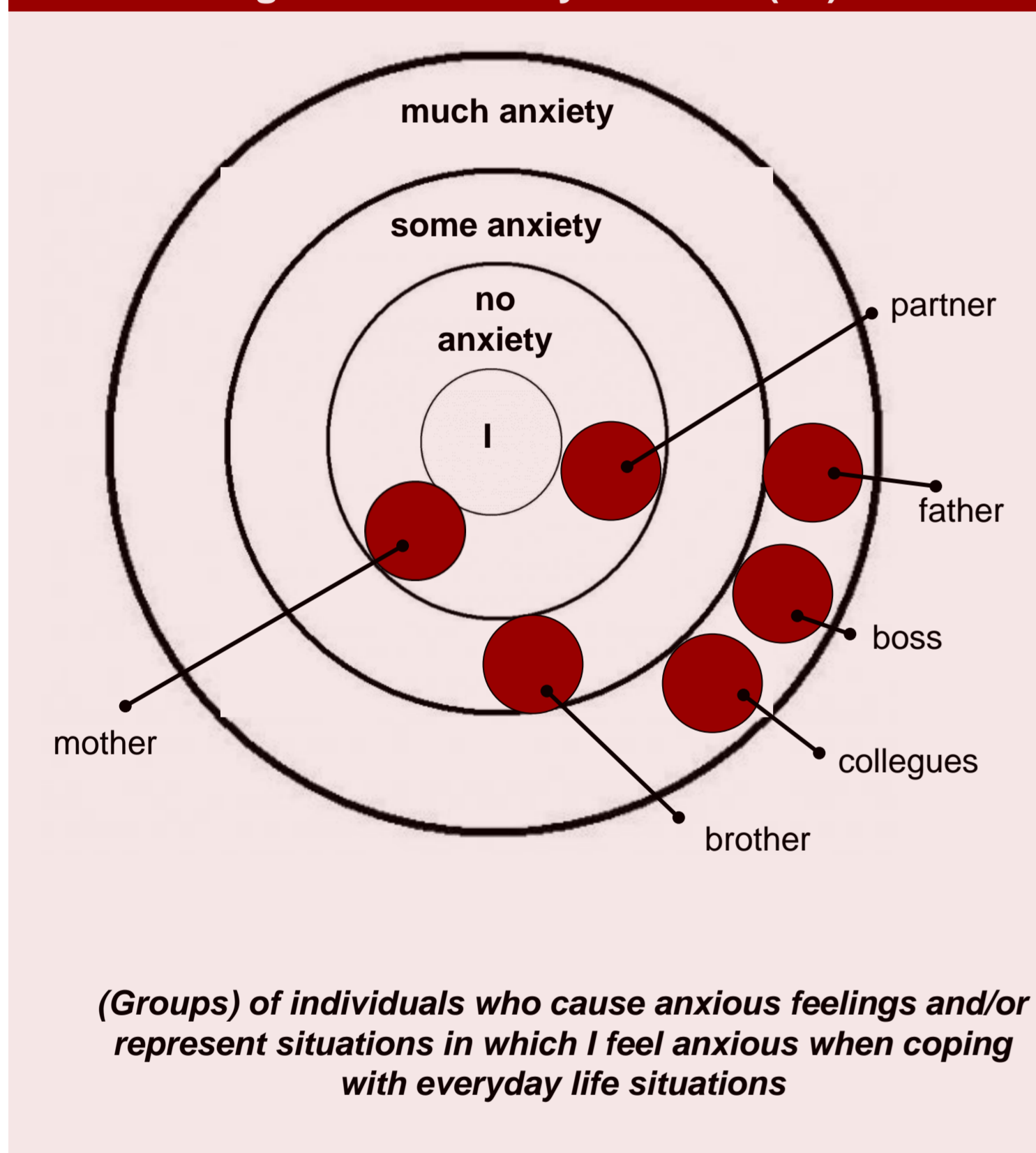
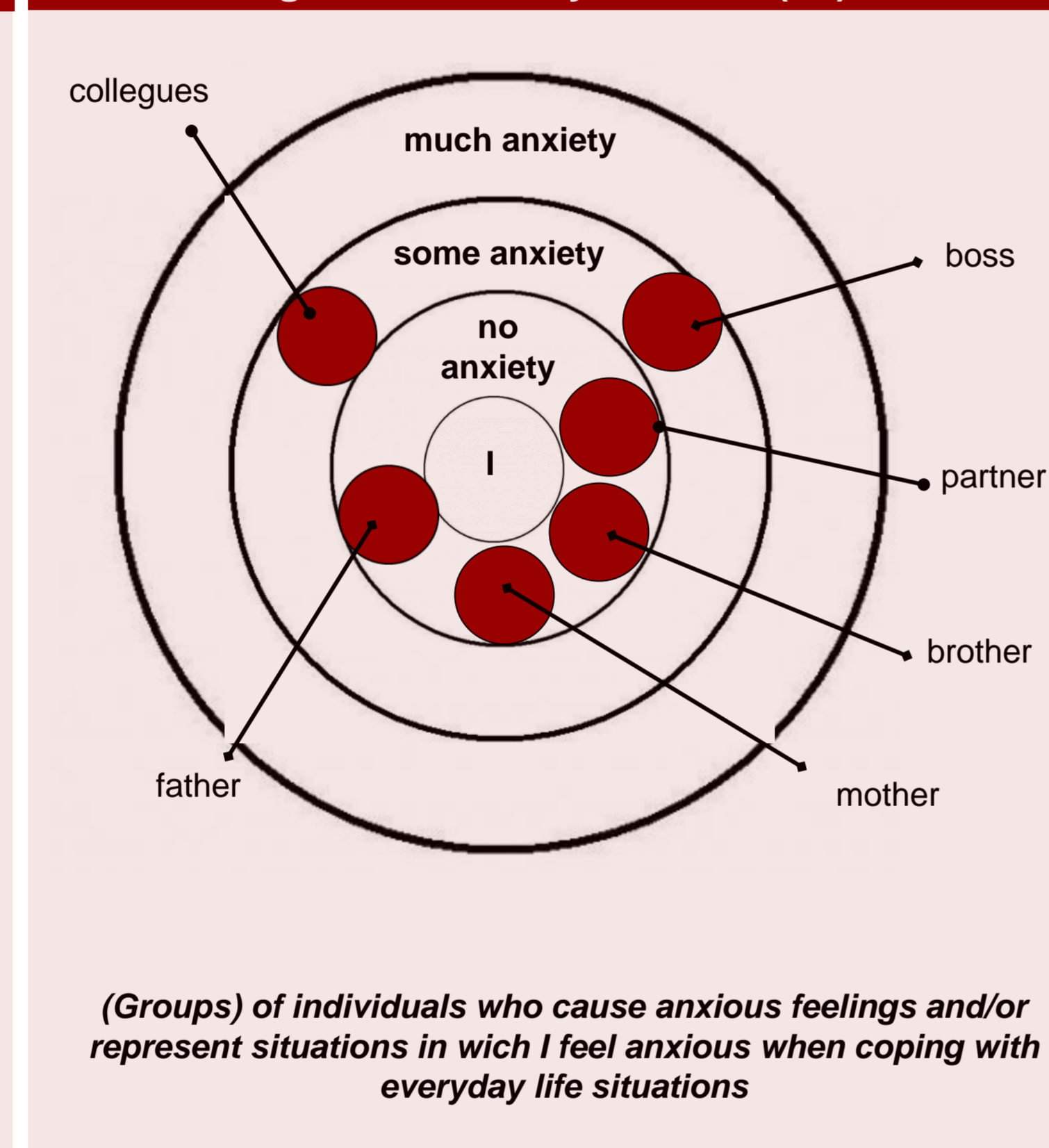


Figure 2 Anxiety Network (T5)



Research questions

- RQ1:** How do social network characteristics change over the course of psychotherapy?
- RQ2:** How does perceived social support change over the course of psychotherapy?
- RQ3:** How does change in perceived social support moderates the association between change in social network size and social anxiety?

Measures

SN and AN: HMNT.⁴ **Positive social support:** 3 items:^{5,6} e.g. „How much do you feel being understood by [person's name]?“; Cronbach's α_{T1} in SN = .41, AN = .55, and α_{T5} in SN = .70, AN = .32. **Negative social support:** 5 items:^{5,6} e.g. „How much do you feel criticized by [person's name]?“; Cronbach's α_{T1} in SN = .71, AN = .52, and α_{T5} in SN = .63, AN = .26. **Social anxiety:** Liebowitz Social Anxiety Scale (LSAS-SR)⁷; Cronbach's α_{T1} LSAS-SR = .94 and α_{T5} LSAS-SR = .97.

References

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