

Supplemental Material

Detailed patient information

All patients in the IPF group were treated by the same therapist, while patients in the noIPF group were treated by five therapists. In addition to psychotherapy, four patients of the IPF group received psychopharmacological treatment (1. patient: Fluoxetine, Amitriptyline, Methylphenidate, Candesartan, 2. patient: Escitalopram, 3. patient: St. John's wort, 4. patient: Quetiapine).

Table 1: *Sociodemographic and clinical information*

Variable	IPF group (N = 10)		noIPF group (N = 10)	
	M/N	SD/%	M/N	SD/%
Age at the time of contact	33.5	7.2	31.5	11.2
Female sex	8	80	7	70
ICD-10 diagnoses				
Mood [affective] disorders (F3)	4	40	8	80
Neurotic, stress-related and somatoform disorders (F4)	6	60	4	40
Behavioural syndromes associated with physiological disturbances and physical factors (F5)	5	50	3	30
Disorders of adult personality and behavior (F6)	9	90	0	0
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence (F9)	1	10	0	0
≥ 2 diagnoses	9	90	6	60

Note: ICD-10 number refers to patients with at least one diagnosis from the respective cluster, IPF =

Impairments in personality functioning, noIPF = Without impairments in personality functioning

Assessing the validity and IRR of the SPC

The convergent validity of the SPC was evaluated by comparisons with patient scores from the short version of the Inventory of Personality Organization (IPO-16; Zimmermann et al., 2015). The IPO-16 is a 16-item self-report questionnaire for the assessment of the severity of structural impairment in the personality organization. Zimmermann et al. (2015) recommend a cut-off value of > 2.00 for an increased risk of a personality disorder according to DSM-IV and a cut-off value of > 2.44 for an impaired personality organization according to OPD-2 (OPD Task Force, 2008) based on a representative German sample.

Five sessions of patients with high IPO-16 scores (> 2.44) and five sessions of patients with low IPO-16 scores (< 1.5) were selected. Questionnaires were answered by patients at the beginning of therapy. Convergent validity was reflected by extremely high correlations between both measures (Pearson's $r = .966$, $p < .001$). IRR was evaluated in a two-step approach. Since not all subscales of the SPC can be rated when applied to therapy sessions rather than to interviews, it was first checked to what extent two independent raters choose the same subscales. Substantial agreement was found for the 35 subscales of the SPC ($\kappa = .71$). In the second step, the extent to which the two independent raters agreed on the levels of impairment within selected subscales was examined ($n = 135$; 7-point scale). This resulted in an excellent agreement (ICC = .90). As SPC assessments based on therapy sessions rather than structured interviews do not cover the same SPC subscales for all patients, calculation of internal consistency was not possible. The reliability of the original SPC version is $\alpha = .84$ (Sundin et al., 1994).

Parameters in the position field (PF)

In the PF, especially human beings, i.e., animated self-propelled processors (OP; object processor) and inanimate cognitive elements (CEU) are distinguished. Animated objects indicate an affectualization of the dream complex (involvement) by already containing a latent model of the relational structure. Contrarily, inanimate objects display affect bonding (security) by not containing a model of an inherently communicative affect system. In comparison, specific attributes (ATTR) conform to a focus on the dream complex, whereas anonymizations (ANON) disguise the specific identity of cognitive elements. Static positioning of relations (POS REL), i.e., linkages of cognitive elements without interaction, represent relational representations that contain little potential for change. Such processes in the PF serve to regulate potentially subsequent interactions (captured in the IAF).

Parameters in the interaction field (IAF)

In the IA, different forms of interaction are distinguished. The structure of the represented interactivity (“representations interaction generalized”, RIG, Stern (1985)) can be of varying complexity (Moser & Hortig, 2019; Moser & von Zeppelin, 1996). A hierarchy of six levels of increasingly intense interactions is described below.

- 1) Kinesthetic interactions (IRC KIN; dream-ego with CEU): Relations between the dream ego and inanimate objects reflect an involvement that, compared to interpersonal relationships, demands less regulation, and can thus be controlled more strongly.
- 2) Displacement relations (IRD; the dream ego positions itself as a spectator of the event): Displacement relations have in common that the dream-ego connects with the interactive field only indirectly by identifying itself as a spectator. Thus, these processes serve to limit the involvement of the dream ego.

- 3) Verbal relations (VR; dream-ego with object): It is assumed that verbal interpersonal communication in dreams is under stronger affective control than events on the sensory concretistic level.
- 4) Constrained interactions (IRC constr; dream ego with restricted object): Interactions with affective restricted objects such as animals or personified non-persons (for example a talking tree) have a limited potential for affective exchange because of their asymmetrical character. The dream ego is often already affectively related, but the interaction lacks reciprocity.
- 5) Resonant interactions (IRC RES; dream-ego with human object linked by parallel behavior): Parallel interpersonal relations allow the dream ego to experience belonging, but specific wishes and motivations (by dream ego or object) that dominate the interaction remain hidden.
- 6) Responsive interactions (IRC RESP; circular interactions between dream-ego and human object): Circular interpersonal interactions require affective regulation of reciprocally related behavior. Accordingly, a shared model of the relationship is created, which indicates a high level of involvement.
- In addition, interpersonal interactions can be assessed in terms of whether the dream-ego experiences self-efficacy (subject feeling) or has the feeling of being part of the object's regulatory processes (object feeling). Being able to influence interpersonal interactions with regard to one's own wishes speaks for capacities of affect regulation.

Disruptive states

It can be assumed that an impaired ability to maintain a rudimentary organization of the self (as a basic requirement for conflict processing in dreams) is reflected in disruptive states in dreams (Moser & Hortig, 2019). Disruptive states were coded when dream content revealed

an explicit depiction of a threat to the physical integrity of the dream ego or another object, such as in the dream in Table 2 of the Supplement.

Table 2: *Dream coding example applying the Zurich Dream Process Coding System (IPF group)*

Segmentation:					
S1	My hand is made of bones and the skin over it is loose.				
--	And I am thinking, something is wrong there.				
S2	And then I put the skin of the ring finger on the index finger, the skin of the middle finger on the little finger. Then it does not work so right.				
--	I am thinking, I am sure, it is right like that, it all belongs there like this.				
S3	Then I tear and tug it so, with force, that it somehow fits,				
S4	but it totally tightens				
--	it's all completely wrong				
--	And then I am thinking, now I'm in a pickle				
--	And now I can no longer reverse it.				
Coding:					
	PF	LTM	IAF	VR	CP/AFF R
S1	SP (dream ego) SP part of 1 (hand) - ATTR def (of bones) SP part of 2 (skin) - ATTR bound (loose)				
--					CP RETRO
S2	SP (dream ego) SP part of 3 (ring finger) SP part of 4 (index finger) SP part of 5 (middle finger) SP part of 6 (little finger) SP part of 2 (skin)		IRS bod obj fail		
--					CP RETRO
S3	SP (dream ego)		IRS bod obj, c (with force)		
S4	SP (dream ego) SP part of 1 (hand) SP part of 2 (skin)		IRS bound (tightens)		
--					CP RETRO
--					CP
--					METAPHER
--					CP PROS

Note: PF = position field, LTM = loco time motion field, IAF = interaction field, VR = verbal relation field, CP/AFF R = cognitive processes or explicit affective reactions, SP = subject processor, ATTR = attribute, def = deficiency, bound = boundary, IRS = process of self-transformation, bod obj = body as an object, c = control, CP RETRO = retrospective reflection, CP METAPHER = metaphor, CP PROS = prospective reflection, IPF = Impairments in personality functioning

Notes on the coding: Central results of the study can be highlighted based on the present example. The dream ego is facing a sparsely equipped dream scene (PF). Except for a part of the dream ego's body (hand), no people, animals, objects, or scenarios are described. As a

result, there is no interaction, only self-preoccupation with one's own body, which fails. Furthermore, the capacities for affect regulation are limited. For example, the precarious situation cannot be coped with or put into perspective by means of movement or interactions. Nor can a new scenario be created that has the function of a reboot of the dream, for example, a complete change of location. It would also be conceivable that the deficient attribute became attached to an object (for example, a car with a loose tire). The only option for regulation left for the dream ego is to refer to the cognitive level (CP; cognitive process). Furthermore, the dream can be categorized as a core self-dream, as there is no interpersonal domain and the physical integrity of the dream ego is threatened