**Self-Other Dynamics (SOD): A Transtheoretical Coding Manual**

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**Abstract**

Building on both modern and classical psychotherapy theories, I propose the Self-Other Dynamics (SOD) approach. This transtheoretical approach integrates key elements of patients' self-states, therapists' interventions, and their dyadic interactions, with the goal of identifying adaptive and maladaptive dynamics associated with psychotherapy outcomes. The vast number of self-states, the dynamic contexts in which they may emerge, and interventions that therapists may utilize to address them, has presented a formidable challenge that research methodologies have struggled to tackle until recently. Recent advancements in artificial intelligence (AI), particularly the development of large language models (LLMs), offer substantial promise in addressing this challenge. The goal of this project is to leverage LLM capabilities to automatically detect a patient's self-state and recommend the most appropriate intervention to enhance their well-being. To achieve this goal, I developed the SOD coding scheme, which integrates micro-level processes of patients, therapists, and dyads that are considered central according to a wide range of therapeutic approaches. Using this scheme, patient-therapist dialogues will be annotated speech turn by speech turn. Initially, a subset of the data will be manually annotated using the SOD coding scheme. Subsequently, LLMs will be trained to automatically annotate a larger dataset, enabling the scaling up of categories and providing clinical insights into adaptive and maladaptive self-other dynamics. This paper describes the work in progress, beginning with the background of the SOD theoretical approach, followed by detailed guidelines for the coding scheme. Preliminary experiments indicate that LLMs can reliably annotate psychotherapy data at a level comparable to human reliability.

 *Keywords*: self-other dynamics, coding manual, large language models, psychotherapy

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Clinical science has become increasingly dissatisfied with the existing diagnostic systems and their failure to capture the heterogeneous, multifactorial, and dynamic nature of mental distress (Bickman, 2020; Hofmann & Hayes, 2019). In real-world clinical practice, clinicians go beyond general categories (like depression or anxiety) and pay close attention to moment-by-moment information to guide their actions. Notably, therapists vary widely in their effectiveness (Wampold & Owen, 2021). Expert therapists, or "supershrinks," can swiftly and flexibly tailor their interventions to meet their patients' immediate needs, leading to superior treatment outcomes. Uncovering the mechanisms that enable these "supershrinks" is likely to significantly contribute to the development of more effective therapeutic strategies.

The pressing need to optimize mental healthcare practices has led many researchers to investigate the mechanisms that underlie therapeutic change (Constantino et al., 2021). However, these efforts are constrained by several key limitations. Most previous studies rely on self-report measures. Although subjective measures are vital in psychotherapy research, they are limited by patients’ self-awareness, motivation, and restricted scope of potential predictors (Kazdin, 2008). Vast amounts of data from intake interviews and psychotherapy sessions, including both verbal and non-verbal behaviors of patients and therapists, remain largely untapped. Utilizing this data could significantly enhance diagnostic and treatment procedures, improve intervention selection, and deepen our understanding of the mechanisms driving therapeutic change.

To tap what occurs within psychotherapy sessions, researchers have developed numerous observer coding systems (e.g., Pascual-Leone & Greenberg, 2005). However, since observational human coding is very labor-intensive and expensive to implement, these studies have typically focused on a small number of therapeutic components in a relatively small sample of patients and at limited time points, which considerably limits progress in studying complex processes in psychotherapy (Crits-Christoph & Gibbons, 2021). Additionally, efforts to determine which patient characteristics are associated with treatment outcomes have often yielded inconclusive results, possibly due to an emphasis on pre-treatment evaluations and insufficient attention to the multifaceted and dynamic nature of mental distress (Constantino et al., 2021). Similarly, attempts to identify what makes therapists' interventions effective have produced inconclusive results, likely due to a focus on single techniques and their association with treatment outcomes, which may oversimplify the therapeutic process (Hill & Norcross, 2023).

To truly understand what works for whom and when in psychotherapy, it is critical to consider the dynamic nature of the therapeutic interaction and the diverse contexts in which interventions are implemented (Hill & Norcross, 2023). However, given the heterogeneous nature of mental distress and the vast array of potential interventions available to therapists at any given time, this goal remains a formidable challenge that current research approaches struggle to address.

Recent breakthroughs in artificial intelligence (AI), particularly the emergence of large language models (LLMs), carry tremendous promise to significantly advance precision in taking the individual’s specific needs into consideration when creating interventions for mental health treatments (Cohen et al., 2021). I suggest that the study of the mechanisms of change in psychotherapy can be dramatically enhanced by a synergetic integration between theoretical innovations in clinical science and recent developments in AI.

**The Self-Other Dynamics (SOD) Approach**

I propose the self-other dynamic (SOD) approach to assessment and intervention that moves away from categorical classification of trait-like psychopathology to a data-driven typology of modifiable self-states, and from manualized disorder-focused treatments to dynamic, interactive interventions tailored to patients' needs at specific moments. This approach draws on existing theories that view human experience as configured of multiple self-states that fluctuate and change over time (e.g., Beck et al., 2021; Bromberg, 2004; Stiles, 2001). *Self-states* constitute identifiable units characterized by specific combinations of **A**ffect, **B**ehavior, **C**ognition, and **D**esire (ABCD; Revelle, 2007) that tend to be coactivated in a meaningful manner for limited periods of time (Lazarus & Rafaeli, 2023). At any given moment, a particular self-state may dominate a person's experience, with individuals varying in their dominant self-state and their ability to reflect and foster internal dialogue among self-states (Bromberg, 1996). Frequently, patients seek therapy when they find themselves caught up in a rigid self-state where rather than a dialogue among diverse self-states (or internal voices), one dominant self-state tends to dictate the experience. Specific self-states tend to elicit a complementary response from the interacting partner, thus creating a cyclical pattern of self-other responses. Some of these dynamics are adaptive and lead to a positive self-other experience, whereas other dynamics are maladaptive for the individual and for the relationship. Understanding the critical role of self-other dynamics has many implications for understanding the factors that maintain psychopathology (e.g., reverberating negative feedback loops about the self and the other) and for determining the focus in psychotherapy (e.g., shifting maladaptive self-other states into more adaptive ones and expanding the dialogue between self-states). Table 1 provides a brief overview of the ABCD self-states that are part of the SOD coding categories.

The SOD approach is consonant with modern calls to develop a transtheoretical consensual knowledge base that integrates evidence-based interventions and processes that are considered central across a wide range of therapeutic approaches (Gaines & Goldfried, 2021; Hofmann & Hayes, 2019; Lutz & Rief, 2024). In place of the horse race between different schools of psychotherapy that characterized the field for decades, the current trend is to search for common factors and to integrate empirical evidence to establish a common language among different schools of psychotherapy (Castonguay et al., 2021).

The SOD approach has two central assumptions: first, it assumes that individuals manifest a finite and identifiable set of self-states. Identifying these self-states and helping patients amplify more adaptive ones and dampen less adaptive ones may greatly enhance psychotherapy outcomes. Second, the SOD approach assumes that expert therapists understand the ever-shifting self-states of each specific patient and adeptly tailor their interventions to meet the patient’s immediate needs.

The goal of the SOD approach is to identify adaptive and maladaptive self-states (within the individual, i.e., patient) and self-other dynamics (between conversing partners; i.e., patient-therapist)

**Table 1**

*Brief Overview of the Self-Other Dynamic (SOD) Coding Categories*

| **Category**  | **Sub-Categories** | **Scale** |
| --- | --- | --- |
| **Patient Codes** | **Adaptive Examples** | **Maladaptive Examples** |  |
| **A** | **Affect** Type of emotion expressed by a patient | CalmVigorHopeless | AnxiousApathyHopeful | 1=*Highly maladaptive* to 5=*Highly adaptive* |
| **B** | **Behavior of the self with the Other (BO)\*** The patient’s main behavior(s) toward the other | BO1. Relating behaviorBO3. Autonomous behavior | BO2. Fight or flight behaviorBO4. Overcontrolled or controlling behavior | 1=*Highly maladaptive* to 5=*Highly adaptive* |
|  | **Behavior toward the Self (BS)**The patient’s main behavior(s) toward the self | BS1. Self-care | BS2. Self-harm/self-neglect | 1=*Highly maladaptive* to 5=*Highly adaptive* |
| **C** | **Cognition of the Other (CO)\***The patient’s main perceptions of the other  | CO1. The other as relatedCO3. The other facilitates needs | CO2. The other as detachedCO4. The other blocks needs | 1=*Highly maladaptive* to 5=*Highly adaptive* |
|  | **Cognition of the Self (CS)**The patient’s main self-perceptions | CS1. Self-acceptance | CS2. Self-criticism | 1=*Highly maladaptive* to 5=*Highly adaptive* |
| **D** | **Desire** The patient’s main desire, expectation, need, intention, or fear | D1. Relatedness needsD3. Autonomy needsD5. Competence needs | D2. Relatedness not metD4. Autonomy not metD6. Competence not met | 1=*Highly maladaptive* to 5=*Highly adaptive* |
| **E** | **Emotional Experiencing and Regulation** The patient’s level of adaptiveness of emotional experience and regulation |  |  | 1=*Highly maladaptive* to 5=*Highly adaptive* |
| **F** | **Functioning** The patient’s general functioning level |  |  | 0=L*ow functioning* to 10=H*igh functioning* |
| **G** | **Gaining Insight**The patient’s level of self-understanding |  |  | 1=*No recognition* to 5=*Excellent recognition of repetitive patterns* |
| **Therapist Codes** | **Adaptive Examples** | **Maladaptive Examples** | **Scale** |
| **E** | **Empathy** | E1. Empathy for the adaptive self-state | E2. Empathy for the maladaptive self-state | 1=*Poor quality* to 5=*Excellent quality* |
| **M** | **Meaning Making** | M1. Providing meaning for adaptive states | M2. Providing meaning for maladaptive states | 1=*Poor quality* to 5=*Excellent quality* |
| **E** | **Exploration** | E1. Exploration of adaptive self-states  | E2. Exploration of maladaptive self-states | 1=*Poor quality* to 5=*Excellent quality* |
| **R** | **Regulation** | R1. Amplification of the adaptive states | R2. Dampening of the maladaptive states | 1=*Poor quality* to 5=*Excellent quality* |
| **G** | **Guidance** | G1. Guiding the patient to increase adaptive self-states | G1. Guiding the patient to decrease maladaptive self-states | 1=*Poor quality* to 5=*Excellent quality* |
| **Patient-Therapist Dyad Codes** |  | **Scale** |
|  | **Alliance/Reciprocity** |  |  | 1=*Very low alliance* to 5=*Very high alliance* |
|  | **Rupture** | Confrontational RuptureWithdrawal RuptureOther | 1=*No tension* to 5=*Extreme tension* |
|  | **Patient Affective Response to the Therapist** |  |  | 1=*Very negative affective response* to 5=*Very positive affective response*  |
|  | **Therapist's Affective Response to the Patient** |  |  | 1=*Very negative affective response* to 5=*Very positive affective response* |

that are associated with better well-being. For this purpose, I developed a transtheoretical coding scheme composed of well-established scales measuring key elements of patients’ self-states, therapists’ interventions, and the dyadic interaction between them.

Many existing coding schemes capture important elements of the therapeutic interaction that have been shown to be associated with treatment outcomes, such as patients’ affect (e.g., Greenberg, 2012); patients’ cognitions and behaviors (e.g., Luborsky & Crits-Christoph, 1998), patients’ micro-level outcomes such as emotional experiencing and self-understanding (e.g., McCullough et al., 2003), therapists’ interventions types (e.g., McCullough, 1988); central dyadic concepts such as the therapeutic alliance (Bordin, 1979) and the existence of a rupture (Safran et al., 2011). However, these elements seem to capture isolated phenomena that lead to piecemeal glimpses of how a patient and therapist interact in ways that help patients achieve better therapeutic outcomes.

The SOD approach takes a transtheoretical approach to illuminate how ABCD elements cluster into composite self-states, and how self-states ebb and flow within a patient affecting their experiencing (E), functioning (F), and gaining insight about oneself (G) either positively or negatively. Additionally, it aims to capture the dynamic interactions between patient and therapist that facilitate the patient's movement toward improved well-being.

Given the large number of potential combinations of elements within each self-state, the dynamic contexts in which they may emerge, and the interventions therapists may use to address them, there is a need for analytic methods capable of capturing such complexity. Recent progress in AI and the emergence of LLMs that can emulate human interaction can be harnessed to analyze large-scale corpora of psychotherapy data, identify patients' states, therapists' discrete interventions, and recommend the interventions most likely to be effective in the context of specific states.

The ultimate goal of this project is to automatically detect and monitor individuals over time and generate automated support systems that can enhance clinicians' efforts to help patients transition from maladaptive to adaptive self-other dynamics. To achieve this goal, I developed the SOD coding scheme, which integrates the micro-level processes of patients, therapists, and dyads that are considered central by a wide range of therapeutic approaches. This coding scheme will allow an initial subset of transcribed psychotherapy session data to be manually annotated. Then, LLMs will be trained to automatically annotate a larger dataset, enabling us to leverage the scaled-up categories to gain clinical insights into adaptive and maladaptive self-other dynamics.

**The SOD Coding Scheme**

The SOD coding scheme is designed to measure moment-by-moment intrapersonal (patient) and interpersonal (patient-therapist) dynamics and the extent to which they help the individual (the patient) move and change to a more adaptive state. The coding scheme contains patient, therapist, and dyadic subscales, each of which represents common factors according to a wide range of therapeutic approaches. Table 1 provides a broad overview of the three units of analysis (i.e., patient, therapist, dyad), coding categories and sub-categories, and the rating scale to be used. Some categories are annotated at the speech-turn level, and some are annotated at the 5-minute segment level.

Annotators are asked to read the whole session but to annotate only the working phase of the session. The *working phase* is defined as the 15 minutes before the last 5 minutes of the session (Auszra et al., 2013). This phase is considered to be the part of treatment in which patients are likely to be the most engaged in therapeutic work.

**Patient Categories**

The patient categories include four core elements: *Affect*, *Behaviors*, *Cognitions,* and *Desires* (**ABCD**). Affect is annotated using a modified version of the Profile of Mood States (POMS; McNair et al., 1992), assessing specific emotions (e.g., sadness, anger, joy) that can be summed up to assess global valence (i.e., negative and positive affect) and global arousal (i.e., low and high arousal). Behaviors, Cognitions, and Desires are annotated using a modified version of the Core Conflictual Relationship Theme (CCRT; Luborsky & Crits-Christoph, 1998), a well-established method for conceptualizing and assessing patients’ behaviors and perceptions. The CCRT has been utilized in numerous studies from a wide range of therapeutic approaches (e.g., Atzil-Slonim et al., 2013; Grenyer & Marceau, 2022).

The patient **ABCD** elements are organized around the **D** (desire) element. This decision is based on contemporary psychological theories that consider motivation as the cornerstone of human psychology (e.g., Carver & Scheier; Deci & Ryan, 2000; Dweck, 2017). These theories suggest that understanding motivation is crucial for comprehending why people initiate and sustain behaviors and cognition within themselves and in their interactions with others. They propose that satisfied needs are key determinants of adaptive well-being, whereas frustrated needs lead to poor psychological well-being. Specifically, following one of the most well-known and comprehensive theories of human motivation—self-determination theory (SDT; Deci & Ryan, 2000)—the patient desire (D) categories include the three basic needs: (i) the need for relatedness, (ii) the need for autonomy, and (iii) the need for competence. Additionally, there are categories that address the complementary expectations when these needs are frustrated: the expectation that relatedness, autonomy, and competence needs will not be met. Similarly, the cognitions and behaviors of others toward the self, of the self toward others, and of the self toward the self are organized around whether they enhance or thwart the fulfillment of these basic needs (e.g., perception of the other as related; perception of the other as detached or over attached).

Table 2 includes the patient coding categories that are to be annotated at every speech turn. Each of the core ABCD elements are organized such that odd-numbered categories reference adaptive affect, behaviors, cognitions, or desires (see Table 1). Corresponding even-numbered categories reference the maladaptive version of the affect, behavior, cognition, or desire. For example, category D1 includes relatedness needs, such as the need to belong (D1-a), the feel safe (D1-b), the need to be appreciated (D1-c), and so on. Category D2, in contrast, focuses on expectations that relatedness needs will *not* be met. Here, for example, the codes focus on expectations of not belonging (D2-a), not feeling safe (D2-b), not being appreciated (D2-c), and so on.

Annotators are asked to identify types of ABCD elements in every patient’s speech turn and to rate the level of adaptiveness of each of these elements. Levels of the adaptivity scale range from 1 = *highly maladaptive* through 5 = *highly adaptive*.

**Patient Self-States**

At the segment level (every 5 minutes), annotators are asked to code the dominant self-state of the patient (and the ABCD elements composing it) and an additional self-state if present (minimum one self-state, maximum two) as well as to rate the level of adaptivity of these states. Table 3 includes the patient self-state coding categories. In addition, annotators code the following micro-level outcomes presented in Table 4: Emotional experiencing and regulation (**E**), based on a single item adapted from the Achievement of Therapeutic Objectives Scale (ATOS; McCullough, 2003); overall Functioning (**F**), using the general well-being item from the outcome rating scale (ORS; Miller & Duncan, 2003); and Gaining insight (**G**) based on a single item adapted from the ATOS (McCullough, 2003). Thus, overall, the patient’s categories include **ABCDEFG** elements.

**Therapist Categories**

The therapist’s categories include six intervention types that are considered central across therapeutic approaches: **E**mpathy, **M**eaning-making, **E**xploration, **R**egulation, and **G**uidance (**EMERG**), using an adapted version of the Psychotherapy Interactional Coding system (PIC; McCullough, 1988).

The EMERG categories are organized around their focus on the patients’ adaptive or maladaptive self-states (e.g., empathy to the adaptive state or elements or understanding of the maladaptive state or elements). Annotators are asked to identify the EMERG interventions in every therapist’s speech turn and to rate the level of helpfulness of each of these interventions. Table 5 includes the therapist coding categories that are annotated ate very speech-turn.

At the segment level, annotators are asked to code the therapist’s dominant intervention choice(s) and an additional intervention if present (maximum two) as well as the level of helpfulness of each of these interventions (see Table 6).

**Dyadic Categories**

The dyadic categories include two categories of the therapeutic relationship that are considered central across therapeutic approaches: the therapeutic alliance using an adaptation of the Segmented Working Alliance Inventory Observer Measure (Berk et al., 2013), and therapeutic rupture using the one item from the post-session questionnaire (Muran et al., 2009).

Annotators are asked to identify a rupture at the speech turn level (if there exists one). The therapeutic alliance is annotated at the segment level.

Additionally, at the end of each segment annotators are asked to generate short, structured summaries of the segment content (Table 8).

The following clinical scenario demonstrates the application of the SOD and illustrates a patient's transition from a maladaptive to a more adaptive self-state (see Figure 1 for detailed annotations). Sharon (a pseudonym), in her late twenties, has been diagnosed with MDD, attributing the current episode to a recent breakup. This is her eighth session; at its outset (minutes 0-5), she recounts a recent incident where she abruptly ended a phone call with a man who showed interest in dating her, believing he was insincere. She expresses disinterest in any relationship, stating she doesn’t need anyone at the moment and feels indifferent about the call. In coding the ABCD elements, the annotations indicate a self-state characterized by blunted affect (A), behavior (B) of avoiding others, cognition (C) that others are not genuinely concerned about her, and an expectation/desire (D) to manage on her own. Later in the session (minutes 20-25), as Sharon shares her unease with dating, the therapist highlights the contrast between her initial stated disinterest and her current acknowledged anxiety (Meaning-making). This discussion enables Sharon to vocalize her painful feelings of abandonment (A) following the breakup and her wish (D) not to be abandoned again. The therapist acknowledges Sharon's fears based on her past (Empathy) but challenges the idea that one instance of abandonment signifies a pattern of everyone leaving her (Meaning-making). In response, Sharon begins to consider the possibility that the man’s intentions might be genuine (C) and contemplates giving him a chance (B). This transition from a maladaptive to an adaptive self-state is reflected in Sharon's enhanced experiencing level (E) functioning (F) and insight gaining (G) from one segment to the next, as evidenced by both the clinicians’ assessment (segment level) and the patient’s self-report (session level).

**Inter-Rater Reliability**

Previous studies, including ours, have shown moderate to high inter-rater reliability for each of the above-mentioned scales. For example, Mayer et al. (2024) found a Cohen's kappa of 0.65 and 0.62 for therapist interventions and patient affect in a study of 196 psychotherapy sessions. Atzil-Slonim et al. (2013) reported intraclass correlations of 0.87 to 0.90 for the CCRT in 216 segments from 72 participants. Similar reliability levels were observed for the ATOS (McCullough et al., 2003), the S-WAI-O (Berk et al., 2013), and the PSQ (Muran et al., 2009). Whereas earlier studies coded individual categories in isolation, we are currently running a pilot project in which multiple codes are annotated simultaneously. This approach will provide us with considerable flexibility in subsequent phases because it will offer a comprehensive structure for understanding the therapeutic interaction.

**Figure 1**

*An Illustration of the Annotation Coding Scheme in One Psychotherapy Session*



**Automatic Annotation**

A preliminary analysis demonstrated the capability of AI-based models to automatically annotate psychotherapy sessions. For example, in a recent study by Mayer et al. (2024), our dataset consisted of 872 transcribed sessions from 68 clients. A subsample of 196 sessions was manually annotated for therapists’ interventions and patients’ emotions. A transformer-based approach was then used to automatically annotate the remaining 676 sessions. Consistent with previous studies using natural language processing (NLP) techniques to automatically annotate psychotherapy data (e.g., Tanana et al., 2021), we evaluated the model's results using the F1 micro score. The F1 score, which calculates the harmonic mean of precision and recall, provides a single value representing the model’s performance (Hossin & Sulaiman, 2015). Precision is the proportion of predicted instances that are truly relevant, and recall is the proportion of relevant instances correctly predicted (Powers, 2020). Our results showed a micro F1 score of 0.64 for intervention prediction and 0.66 for emotion recognition. These scores suggest that our models were comparable to human annotators in terms of inter-rater reliability for these categories. In another study (Tsakalidis et al., 2021), we used the same dataset to automatically identify ruptures within sessions. The results indicated that our models achieved an F1 of 0.7 (accuracy of 83%). These results are comparable to previous studies that have used computational learning methods for similar purposes (e.g. Tanana et al., 2021). We believe that the development of larger language models in recent years will enable even better models’ performance.

**Annotation Guidelines:**

Step 1: Read the session from the beginning until the working phase.

Step 2: Speech-turn-level annotations first round - start annotating the first 5 minutes of the working phase, speech-turn by speech-turn, and provide evidence (i.e., highlighting the relevant text as a justification for the codes) for your annotations. At the speech-turn level, the categories are: (a) patient’s ABCD elements and their adaptiveness level; (b) therapist’s interventions and its helpfulness level; (c) ruptures (if occurred).

Step 3: Segment-level annotations - At the end of the 5-minute segment annotate the segment-level categories: (a) the patient's primary self-state and the ABCD elements composing it (include only the elements that appeared in the segment); the secondary self-state (if there is an additional one). Rate the typicality and adaptiveness of each self-state (minimum one self-state, maximum two); (B). the patient’s micro-level outcome; (b). the therapist's central interventions, their typicality and quality (maximum two); (c). dyadic categories. (e) summarize the segment in free text according to the scheme shown in the table.

Step 4: Speech-turn-level annotations second round - return to the beginning of the segment and refine your speech-turn-level annotations. The goal of this step is to refine the previous annotations, and specifically to search for evidence for the elements that compose the self-states and interventions that were annotated in step 3. Similar to step 2, annotate speech turn-by-speech-turn and provide evidence for your annotations for the following categories: (a) patient’s ABCD elements and their adaptiveness level; (b) therapist’s interventions and their helpfulness level; (c) ruptures (if occurred).

Step 5: Proceed to the next segment and repeat steps 2-4.

The annotation process ends when you complete three 5-minute segments in the working phase.

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**Table 2**

*Patient Coding Categories Annotated at Every Speech Turn*

| Category Notes | Subcategories and Examples | Scale |
| --- | --- | --- |
| **Desire (D):** The patient’s main desire, need, intention, expectation, or fear |
| **D1. Relatedness needs***The need for relatedness is foundational in self-determination theory* | **D1-a. To belong:** To be close; To be loved; To love; To be understood; To understand others; To open; To be open up to; To be cared for; To care; To be helped; To help others; To be liked by the other; To be like the other; To feel attractive; To be attracted to the other; To depend; To show vulnerability.**D1-b. To feel safe and secure:** To have security; To have trust; To have stability; To have optimal predictability; To not be hurt by the other; To not hurt others; To not be abandoned.**D1-c. To be appreciated:** To be respected; To be appreciated; To be unique; To respect others.**D1-d. To be regulated with the other:** To be soothed; To soothe the other; To be calmed; To be excited. | 1-*Highly maladaptive*Expectation or fear that basic needs will not be met. Avoidance or discomfort of expressing needs or of expressing the need in an overly demanding or aggressive way. High self-criticism and low acceptance of the legitimacy to feel the need.2-*Very maladaptive*3- *Moderately adaptive*Moderate levels of expression of basic need in ways that enhance its fulfillment. Moderate level of acceptance of the need’s legitimacy.4-*Very adaptive*5-*Highly adaptive*Expression of basic needs. Very good communication of needs in a clear, direct, and effective way. High acceptance and legitimacy to feel the need(s). |
| **D2. Expectation that relatedness needs will not be met** | **D2-a. To not belong:** To be rejected; To be disliked; To be neglected; To be abandoned; To be hurt; To hurt the other; To not like the other; To be distant; To not help; To manage on my own; To be distant; To be alone; To not need anyone; To not care; To not be attractive; To not be attracted to the other; To feel hopelessness regarding relationships; To not depend on others; To not show vulnerability.**D2-b. To not feel safe and secure:** To not feel secure; To lack trust; To have instability; To have unpredictability; To feel hurt by others; To hurt others; To be abandoned.**D2-c. To not be appreciated:** Feelings that the other will devalue me; The other will criticize me; The other will blame me; The other will see the flaws in me; Expectations that I will not respect the other.**D2-d. To not be regulated with the other:** The other upsets me; The other bores me; To avoid feeling; To manage on my own; To be distant; To be alone; To not need anyone; To not show vulnerability; To be overwhelmed by the other’s demands. |
| **D3. Autonomy and adaptive control needs***The need for autonomy is foundational in self-determination theory* | **D3-a. To have autonomy:** To have freedom and choice; To have independence; To assert the self; To have my own identity; To have space; To listen to the inner self; To not feel controlled; To lead; To protect; and To provide guidance.**D3-b. To follow without being controlled:** To compromise; To be coordinated with the other without being controlled**;** To learn from other; To depend; To follow the other’s guidance without being controlled. |  |
| **D4. Expectation that autonomy needs will *not* be met** | **D4-a. To be controlled:** To be submissive; To not be responsible; To avoid conflict; To be compliant; To be punished; To be humiliated.**D4-b. To control the other:** To be dominant; To oppose others; To put down; To humiliate; To be in conflict; To hurt the other. | 1-*Highly maladaptive*Expectation or fear that basic needs will not be met. Avoidance or discomfort of expressing needs or of expressing the need in an overly demanding or aggressive way. High self-criticism and low acceptance of the legitimacy of feeling the need.2-*Very maladaptive*3- *Moderately adaptive*Moderate levels of expression of basic need in ways that enhance its fulfillment. Moderate level of acceptance of the need’s legitimacy.4-*Very adaptive*5-*Highly adaptive*Expression of basic needs. Very good communication of needs in a clear, direct, and effective way. High acceptance and legitimacy to feel the need(s). |
| **D5. Competence, self-esteem, and self-care needs***The need for competence is foundational in self-determination theory* | **D5-a. To better myself and have self-esteem:**To succeed; To achieve; To have self-esteem; To have self-confidence; To feel competent; To be good; To feel or be excited; To not hold my feelings; To compete; To feel hopefulness regarding the self.**D5-b. To be well and take care:**To be healthy; To take care of myself; To avoid sickness; and To be in good shape. **D5-c. To self-regulate:**To have self-control; To have self-regulation; To allow myself to feel and experience. **D5-d. To have realistic expectations of the self:** To set realistic expectations; To not push myself too hard; To set achievable goals. |
| **D6. Expectation that competence needs will *not* be met** | **D6-a. To not succeed or have self-esteem:**To not succeed; To fail; To not have self-esteem; To not have self-confidence; To not feel competent; To not feel or be excited; To not have ambition; and To feel hopelessness regarding the self.**D6-b. To not be well or self-harm:**To not be healthy; To not take care of myself; To allow myself to become ill; To be unfit.**D6-b. To not self-regulate:**To not have self-control; To not self-regulate; To not allow myself to feel and experience.**D6-d. To have unrealistic expectations of the self:** To be perfect; To be omnipotent; To have overly high expectations from the self; To push myself too hard; To set unachievable goals. |

*Note*. \*The *other* is defined as the central character in the interaction described by the patient. D2 is the mirror of category D1; D4 is the mirror of category D3; D6 is the mirror of category D5.

*Table 2 (Continued)*

|  |  |  |
| --- | --- | --- |
| Category Notes | Subcategories and Examples | Scale |
|  **Cognition of the Other (CO):** The patient’s main perceptions of the other\* |
| **CO1. Perception of the other as related** | **CO1-a. Liking/Caring:** The other likes/loves me; I like/love the other; The other cares; The other helps; The other understands; The other is empathetic; I understand the other; The other is open/warm; The other listens to me; The other is attracted to me; I am attracted to the other; The other is enjoyable.**CO1-b. Trust:** The other is trustworthy; The other trusts me; The other provides security; The other provides stability.**CO1-c. Acceptance:** The other accepts me (despite limitations); I accept the other (despite limitations); The other respects me; I respect the other; The other recognizes my abilities and good qualities; The other is pleased with me; The other has good qualities.**CO1-d. Regulation:** The other is regulated; The other soothes me; The other helps me calm down; The other excites me; The other interests me.**CO1-e. Dependence**: I can depend on the other; the other can depend on me.**CO1-f. Valuation:** The other values me; I value the other. | 1-*Highly maladaptive*The other is perceived as blocking adaptive needs. Little or no compassion, empathy, or acceptance between self and other. A great deal of devaluation, idealization, or splitting. Very limited ability to see the other as complex, and a tendency to perceive the other as either all good or bad. High level of projection.2-*Very maladaptive*3- *Moderately adaptive*The other is perceived as moderately enhancing adaptive needs. Moderate compassion/acceptance/trust between self and other. Moderate ability to see the other as complex.4-*Very adaptive*5-*Highly adaptive*The other is perceived as significantly enhancing adaptive needs. A great deal of compassion/acceptance/trust in others; little or no idealization or devaluation. Capacity to recognize the multifaceted nature of others, encompassing both their positive and negative attributes. Ability to perceive the other as a separate person. Low projection level. |
| **CO2. Perception of the other as detached or over-attached** | **CO2-a. Disliking/Uncaring:** The other dislikes/hates me; I dislike/hate the other; The other does not care; The other does not help; The other is distant/cold; The other ignores me; The other doesn’t understand me; The other doesn’t listen to me; The other abandons me; The other hurts me; The other uses me.**CO2-b. No trust:** The other is not trustworthy; The other doesn’t trust me; The other does not provide security or stability.**CO2-c. No acceptance:** The other does not accept me; I do not accept the other; The other does not respect me; I do not respect the other; The other devaluates me; The other is critical; The other is dismissive or blaming; I don’t appreciate the other; The other is bad; The other is damaged.**CO2-d. No regulation:** The other is upset; The other upsets me; The other is bored or emotionless; The other bores me.**CO2-e. Overdependence:** The other is overly dependent on me; The other is clingy or needy; I am overly dependent on the other.**CO2-f. Overvaluation/Idealization:** The other idealizes me; The other sees me as perfect; I see the other as perfect. |
| **CO3. Perception of the other as facilitating autonomy needs** | **CO3-a. The other provides autonomy:** The other gives me independence; The other is autonomous.**CO3-b. The other leads/instructs:** The other leads; The other teaches; The other suggests directions; The other lets me lead. |
| **CO4. Perception of the other as blocking autonomy needs** | **CO4-a. The other is overly controlling:** The other is strict; The other opposes me; The other blocks my will; The other is unfair; The other is punitive. **CO4-b. The other is submissive:** The other is weak; The other is out of control; The other is defensive. |

*Note*. \*The *other* is defined as the central character in the interaction described by the patient. CO2 is the mirror category of CO1; CO4 is the mirror category of CO3.

*Table 2 (Continued)*

|  |  |  |
| --- | --- | --- |
| Category Notes | Subcategories and Examples | Scale |
| **Cognition of the Self (CS):** The patient’s main self-perceptions |
| **CS1. Self-acceptance and self-compassion** | **CS1-a. Self-compassion:**I like myself; I accept myself; I am self-compassionate; I recognize my strengths and weaknesses; I engage in positive self-talk.**CS1-b. Self-identity:**I listen to my inner self; I know what I want; I know who I am.**CS1-c. Self-autonomy:**I feel free to explore; I let go; I am independent.**CS1-d. Self-confidence:**I am confident; I believe in my ability to grow and learn; I set achievable goals for myself. | 1-*Highly maladaptive*Little or no compassion, no self-acceptance. High self-criticism. Perceiving the self as incompetent, no experience of agency and autonomy, or excessive unrealistic grandiosity. Overly self-controlled. 2-*Very maladaptive*3- *Moderately adaptive*Moderate acceptance. Moderate experience of agency and ability to change. Moderate sense of identity, autonomy, and competence. 4-*Very adaptive*5-*Highly adaptive*Highly adaptive self-perception. Compassion and acceptance of strengths and vulnerabilities. Experience of agency about one’s own ability to influence one’s own reality. A good balance between acceptance and ability to change. Strong sense of identity, autonomy, and competence. |
| **CS2. Self-criticism** | **CS2-a. Self-criticism:**I hate myself; I do not accept myself; I do not have self-compassion; I have self-defeating thoughts; I have no self-worth; I feel worthless; I engage in negative self-talk; I engage in self-blame; I am self-punitive; I am overdemanding toward myself; I have self-doubt.**CS2-b. Lack of self-identity:**I don’t listen to my inner self; I don’t know what I want; I don’t know who I am.**CS2-c. Lack of self-autonomy:**I am overly self-controlled; I perseverate; I am not independent.**CS2-d. Lack of self-confidence:**I have no confidence in myself; I have no confidence in my ability to grow or learn; I set unachievable goals for myself. |

*Note*. CS2 is the mirror category of CS1.

*Table 2 (Continued)*

|  |  |  |
| --- | --- | --- |
| Category Notes | Subcategories and Examples | Scale |
| **Behavior of the Self with the Other (BO):** The patient’s main behaviors toward the other |
| **BO1. Relating behavior** | **BO1-a. Relating Behavior:** I approach the other; I am helpful; I like being helped; I am understanding; I am open/warm; I listen; I share needs; I express vulnerability; I discuss disagreements; I am caring; I am supporting; I express my sexuality**BO1-b. I express my respect and trust:**I express my respect for the other; I express my trust in the other; **BO1-c. I am regulated with the other:**I am regulated; I am soothed; I am calmed by the other; I express my interest/excitement; I express my feelings; I soothe the other; I downregulate myself or the other; I excite or upregulate myself or the other. | 1-*Highly maladaptive*Highly maladaptive behavior towards the other. Detachment, criticism, blaming, demanding, over-controlling or over-submissive behavior towards the other. Dysregulated behavior.2-*Very maladaptive*3- *Moderately adaptive*Moderate ability to adaptively relate, discuss disagreements, share needs, to trust and respect the other. Moderate ability for autonomous relationships. Moderate control or submissiveness. Moderately regulated behavior. 4-*Very adaptive*5-*Highly adaptive*Highly adaptive behavior towards the other. Approaching the other, discussing disagreements, sharing the needs, trusting and respecting the other. Autonomous relationships. Regulated behavior. |
| **BO2. Fight or flight behavior** | **BO2-a. Fight or Flight Behavior:** I flee from connectedness; I am distancing; I flee/escape/withdraw; I am not open; I don’t share my experience; I don’t care; I wall off; I do the opposite; I refuse assistance/care; I give up on the relationship; I am not listening; I am not helpful; I am not supportive; I do not express my sexuality.**BO2-c. I am critical toward the other**I express my distrust/disrespect; I am blaming; I express idealization toward the other.**BO2-c. Dysregulated behavior**I am out of control; I am upset/distressed/anxious; I am not excited; I am bored; I avoid expressing my feelings; I fight for connectedness;I demand closeness. |
| **BO3. Autonomous or adaptive control behavior** | **BO3-a. Autonomous behavior:**I make decisions; I express opinions; I manage responsibilities and activities; I lead; I teach others; I dominate; I solve problems; I feel in control of my relationships.**BO3-b. Following behavior:**I learn from the other; I follow; I learn from feedback; I compromise; I accept authority. |
| **BO4. Overcontrolled or controlling behavior** | **BO4-a. Overcontrolled behavior:**I let the other decide; I avoid expressing my opinion; I am submissive; I am controlled; I am not responsible; I avoid responsibilities; I sacrifice; I avoid conflict; I am compliant; I am over compensatory; I feel helpless in my relationships.**BO4-b. Controlling behavior:**I oppose others; I fight for control; I accuse or blame; I control others; I argue; I hurt the other; I am aggressive; I am defensive when receiving feedback; I do not compromise; I do not accept authority. |

*Note*. \*The *other* is defined as the central character in the interaction described by the patient.

*Table 2 (Continued)*

|  |  |  |
| --- | --- | --- |
| Category Notes | Subcategories and Examples | Scale |
| **Behavior toward the Self (BS):** The patient’s main behaviors toward the self |
| **BS1. Self-care** | **BS1-a. Self-care**I take care of my physical and mental health (getting adequate sleep, eating healthily, exercising, and engaging in fun and relaxing activities).**BS1-b. Self-improvement**I cope with difficulties; I work to improve myself; I exercise; I have hobbies; I practice my hobbies. | 1-*Highly maladaptive*Behaviors that block the self from fulfilling needs and goals. Self-harm and self-neglect behaviors.2-*Very maladaptive*3- *Moderately adaptive*Behaviors that moderately enhance fulfillment of needs and goals. Moderate levels of self-care and improvement.4-*Very adaptive*5-*Highly adaptive*Behaviors that clearly enhance fulfillment of needs and goals. High levels of self-care and improvement. |
| **BS2. Self-harm** | **BS2-a. Self-harm and self-neglect**I ignore my needs (such as not getting enough sleep, poor eating habits, or not seeking medical care when needed); I self-harm.**BS2-b. Self-sabotage**I block my potential to achieve; I engage in perfectionistic behavior; I sabotage my efforts to succeed. |

|  |  |  |
| --- | --- | --- |
| Category Notes | Subcategories and Examples | Scale |
| **Affect (A):** Type of Emotion Expressed by the Patient |
|  | **A1. Calm (laid back)****A2. Anxious (fearful, tense)****A3. Sad (emotional pain, grieving)****A4. Depressed (despair, hopeless)****A5. Happy (content, joyful, hopeful)****A6. Mania****A7. Vigor (energy)****A8. Apathic (don’t care, blunted affect)****A9. Justifiable anger (assertive anger, justifiable outrage)****A10. Angry (aggression, disgust, contempt)****A11. Proud****A12. Ashamed (guilty)****A13. Feeling loved (feelings of belongingness)****A14. Loneliness** | 1-*Highly maladaptive*Emotions that significantly impair an individual’s ability to function in daily life and fulfill adaptive needs.2-*Very maladaptive*3- *Moderately adaptive*Emotions that neither significantly hinder nor substantially aid in fulfilling adaptive needs; some expression of adaptive emotion, some holding back.4-*Very adaptive*5-*Highly adaptive*Emotions that strongly enhance an individual’s ability to fulfill adaptive needs. Full expression of vulnerable emotions. |

**Table 3**

*Patient Self-State Coding Categories Annotated at Every 5-minute segment*

|  |
| --- |
| **Self-State 1: The patient’s main self-states (minimum 1; maximum 2)** |
| **Patient Category** | **Typicality Scale** | **Adaptivity Scale** | **Level of Annotation** |
| D – Desire | 1-*Not present*2-*somewhat present*3- *Moderately present*4-*Very present*5-*Highly present* | 1-*Highly maladaptive*2-*Very maladaptive*3- *Moderately adaptive*4-*Very adaptive*5-*Highly adaptive* | Every 5-minute segment of the 15-minute *working phase*. |
| CO – Cognition of the Other |
| BO – Behavior of the Other | Every 5-minute segment of the 15-minute *working phase*. |
| CS – Cognition of the Self |
| BS – Behavior toward Self | Every 5-minute segment of the 15-minute *working phase*. |
| A – Affect |

|  |
| --- |
| **Self-State 2: The patient’s main self-states (minimum 1; maximum 2)** |
| **Patient Category** | **Typicality Scale** | **Adaptivity Scale** | **Level of Annotation** |
| D – Desire | 1-*Not present*2-*Somewhat present*3- *Moderately present*4-*Very present*5-*Highly present* | 1-*Highly maladaptive*2-*Very maladaptive*3- *Moderately adaptive*4-*Very adaptive*5-*Highly adaptive* | Every 5-minute segment of the 15-minute *working phase*. |
| CO – Cognition of the Other |
| BO – Behavior of the Other | Every 5-minute segment of the 15-minute *working phase*. |
| CS – Cognition of the Self |
| BS – Behavior toward Self | Every 5-minute segment of the 15-minute *working phase*. |
| A – Affect |

Table 4

Patient Micro-level outcome*Annotated at Every 5-minute segment*

| Microlevel Outcome Category  | Scale | Level of Annotation |
| --- | --- | --- |
| **Emotional Experiencing and Regulation** | **Emotional Experiencing (E) Scale** |  |
| Assess the patient’s level of adaptiveness of emotional experiencing and regulation. | 1 – *Highly maladaptive* emotional experiencing and regulationLow ability to experience, sustain, tolerate, and regulate emotions. Flat, dull experience of emotions or mainly experience of distress (anxiety, guilt, shame, uneasiness). No experience of relief. 2 – *Very maladaptive emotional experiencing and regulation* 3 – *Moderately adaptive emotional experiencing and regulation* Some expression of adaptive emotion, some holding back. Moderate ability to tolerate and regulate distress. Moderate relief.4 – *Very adaptive emotional experiencing and regulation*5 – *Highly adaptive emotional experiencing and regulation* High ability to experience, sustain, tolerate, and regulate emotions. Experience of relief. Full expression of vulnerable emotions; grief tenderness, full justifiable outrage, full joy. | Every 5-minute segment of the 15-minute *working phase*. |
| **Functioning** | **Functioning (F) Scale** |  |
| In terms ofthe segment, how does the patient feel right now? Assess the patient’s general functioning level as it was expressed in the segment. A higher score means higher functioning. | 0 – *Low functioning*12345 – *Moderate functioning* 678910 – *High functioning* | Every 5-minute segment of the 15-minute *working phase*. |
| **Gaining Insight** | **Gaining Insight (G) Scale** |  |
| Has the patient gained insight? Has the patient engaged in reflection, mindfulness, or understanding?Rate the patient’s level of self-understanding.  | 1 – *No recognition* The patient simply talks about events, ideas, or others, no awareness of maladaptive pattern, the dominant voice is present but without awareness, the subtle voice is not observed.2 – *Low recognition*3 – Moderate recognition Patient engages in an exploration of his or her inner experience or relationship but with moderate awareness/ insight. 4 – *Good recognition* 5 – *Excellent recognition of repetitive patterns*Reflection of the different voices and negotiation between them; excellent awareness/insight of the contradicting voices, excellent links to the past origin of behaviors, ongoing process of in-depth self-understanding which provides new perspectives to solve significant problems. The patient shifts from talking out of the dominant voice to being able to talk about the dominant voice and at the same time to express the subtle voice. Aha moment. | Every 5-minute segment of the 15-minute *working phase*. |

Table 5

*Therapist Coding Categories Annotated at Every Speech Turn*

| **Category Notes** | **Subcategories and Examples** | **Scale** |
| --- | --- | --- |
| **Empathy**The therapist expresses support, empathy, and closeness to the patient, and/or provides recognition of the patient's growth, improvement, feelings, or difficulties, and/or tries to express respect, affection, and acceptance towards the patient, and/or strengthens the patient's sense of worth and confidence in the patient's abilities to improve and change.  | **E1. Empathy for the adaptive self-state (or elements)**Understanding; Sharing experience; Synchrony; Warmth; Liking; Attuned; Providing appreciation; Providing acceptance; Providing acknowledgment;Echoing the adaptive voice**E2. Empathy for the maladaptive self-state (or elements)**Understanding; Sharing experience; Synchrony; Warmth; Liking; Attuned; Providing appreciation; Providing acceptance; Providing acknowledgment;Echoing the maladaptive voice | 1 – *Poor quality*The therapist's response inaccurately identifies a major aspect of the patient's experience. The therapist is not empathic, distant, lack of warmth or critical, judgmental, or defensive. Assign a rating of 1 if the response indicates a clear disregard for the patient’s experience.2 – *Below average quality*(The difference between 2 and 1 is a question of intensity.)3 *– Average quality* The therapist’s response includes support and/ or empathy to some extent but tends to focus on the more obvious aspects of the patient’s experience and concerns. 4 – *Above average quality* (The difference between 4 and 5 is a question of intensity.)5 – *Excellent quality* The therapist clearly demonstrates support, empathy, and warmth, precisely recognizing the patient’s experience and establishing a deep and close connection with the patient's experience. |
| **Meaning Making**The therapist adds new meaning to the patients' experiences, potentially broadening their self-understanding. They aim to understand and interpret the patient's primary conflicts or relationship patterns, whether these are conscious or unconscious. The therapist may provide meaning to the patient's desires, behaviors, cognitions, or emotions regarding themselves and their relationships with others, as well as how they express these experiences, whether in adaptive ways or not. They may challenge irrational thoughts or maladaptive behavior. They may also link past and current experiences and relationships, including the therapeutic relationship. | **M1. Providing meaning for adaptive states (or elements)**Providing insight and meaning for the adaptive ABCD elements, connecting current and past experiences; Sharing the formulation; Interpretation of the adaptive voice;Reflecting the conflict between the voices; Interpreting adaptive transference responses; and Providing psychoeducation regarding adaptive voices.**M2. Providing meaning for the maladaptive states (or elements)**Providing insight and meaning for the maladaptive ABCD elements; Challenging maladaptive ABCD elements (e.g., irrational thoughts, a legitimization of adaptive need); Cognitive restructuring; Interpreting maladaptive transference responses; Providing psychoeducation regarding maladaptive voices. | 1 – *Poor quality* The therapist fails to identify or understand the patient's self-states. The intervention lacks depth, coherence, or clarity, potentially resulting in the patient feeling invalidated or further confused about his/her feelings and experiences. There may be a logical flaw in the therapist’s explanation. Or the confrontation may be non-productive. 2– *Below average quality* 3 – *Average quality* Moderate quality of meaning-making. The therapist provides meaning but in a somewhat trivial manner. 4 – *Above average quality* 5 – *Excellent quality*An excellent, in-depth, and clear interpretation of the patient's self-voices and the dynamics between them. Excellent interpretation of the patient’s repetitive cognitive, emotional, or behavioral patterns (adaptive or maladaptive). Excellent formulation or confrontation. An in-depth interpretation that allows for a significant expansion of the patient's insights. An excellent explanation of the development of the patient's relationship patterns in the past and how they are manifested in the present. Allows the patient a significant expansion in insight, understanding, and creates a new meaning for the experience. |
| **Exploration**The therapist invites the patient to expand, explore, or uncover aspects of his/ her feelings, thoughts, memories, and experiences. The therapist asks questions and invites the patient to explore, find out, expand, detail, and give expression to additional self-voices, needs, wishes, concerns, barriers, feelings, and thoughts.  | **E1. Exploration of adaptive self-states (or elements)****E2. Exploration of maladaptive self-states (or elements)** | 1– *Poor quality*The therapist's attempts to engage the patient in exploration are minimal or ineffective. There is little to no invitation to the patient to delve deeper into his or her feelings, thoughts, or experiences. Questions may be closed-ended, leading to yes or no answers, with little follow-up or encouragement for the patient to express more of the internal world. 2– *Below average quality* (The difference between 2 and 1 is a question of intensity.)3– *Average quality* There is an average degree of invitation to expand and explore. 4– *Above average quality* (The difference between 4 and 5 is a question of intensity.)5– *Excellent quality* There is an excellent degree of expansion. The therapist invites the patient to explore, find out, expand, detail, and give expression to additional self-voices, needs, wishes, fears, barriers, feelings, and thoughts. The investigation has added value and prompts a significant deepening in the investigation of the patient’s own voices, experiences, thoughts, and feelings.  |
| **Regulation**The therapist amplifies/ downregulates the adaptive emotional, cognitive, behavioral, or motivational processes of the patient. The therapist encourages the patient in an adaptive direction, or the therapist dampens/ downregulates maladaptive emotional, cognitive, behavioral, or motivational processes of the patient. | **R1. Amplification of the adaptive states (or elements)****R2. Dampening of the maladaptive states (or elements)** | 1– *Poor quality*The therapist’s response does not help the patient amplify adaptive processes or dampen maladaptive processes. The therapist is anxious or does not productively downregulate the patient’s maladaptive experience, or the therapist is not emotionally connected and does not productively upregulate adaptive experiences.2– *Below average quality* (The difference between 2 and 1 is a question of intensity.)3– *Average quality* The therapist’s response only moderately helps the patient regulate his or her emotions, cognitions, behavior, or motivation in an adaptive way.4– *Above average quality* (The difference between 4 and 5 is a question of intensity.)5– *Excellent quality* The therapist’s response excellently helps the patient upregulate adaptive experiences, and/or downregulate maladaptive experiences. |
| **Guidance**The therapist instructs the patient to respond in a certain way (during or after the session). The therapist can teach the patient a new skill, encourage behavioral change, set an agenda, suggest exposure to things the patient is afraid of, challenge irrational thoughts, challenge thinking patterns, or give the patient a specific task. Alternatively, the therapist follows the patient’s lead, in a productive way. | **G1. Guiding the patient to increase adaptive self-states (or elements)**Teaching new skills and behaviors; Exposure to things the patient is afraid of; Encouraging behavioral, cognitive, or interpersonal change; Setting an agenda; Providing advice; Acceptance practices; Mindfulness practices.**G2. Guiding the patient to decrease maladaptive self-states (or elements)**Encouraging behavioral, cognitive, or interpersonal change; Setting an agenda; Providing advice;Acceptance practices; Mindfulness practices. | 1– *Poor quality*The therapist is over-controlling or directs the patient in a way that is not relevant to the needs or abilities of the patient. Alternatively, the therapist completely avoids guidance when the patient asks for it.2– *Below average quality* (The difference between 2 and 1 is a question of intensity.)3– *Average quality* The therapist gives average-quality advice. The therapist pushes the patient to behave differently or challenges thinking patterns and does so in a good but slightly trivial way.4– *Above average quality* (The difference between 4 and 5 is a question of intensity.)5– *Excellent quality* The therapist gives guidance or advice in an excellent way. The therapist helps the patient define an action plan for certain situations. The therapist's words are not trivial and guide the patient toward a new direction of thinking, behavior, emotion, or motivation. |
| Other |  |  |
| None |  |  |

Table 6

*Therapist Coding Categories for the Central Intervention out of the EMERG Annotated at Every 5-minute segment*

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| **Main Intervention 1: The Therapist’s Central Intervention (minimum 1; maximum 2)** |
| **Therapist Category** | **Intervention Focus** | **Typicality Scale** | **Quality Scale** | **Level of Annotation** |
| What was the therapist’s main intervention? | **Intervention focus on adaptive ABCD elements****Intervention focus on maladaptive ABCD elements** | Typicality refers to how dominant, typical, or present the intervention was in the segment.1-*Not present*2-*Somewhat present*3- *Moderately present*4-*Very present*5-*Highly Present* | 1-*Low quality*2-3- *Moderate quality*4-5-*High quality* | Every 5-minute segment of the 15-minute *working phase* |
| E – Empathy |
| M – Meaning-Making |
| E – Exploratory |
| R – Regulation |
| G – Guidance |

**Table 7**

*Coding Categories for the Patient-Therapist Dyadic Interaction Annotated at Every 5-minute segment*

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| **Category** | **Scale** |
| **Alliance/Reciprocity**Alliance is the reciprocity and collaboration of the dyad.The quality of the bond between the patient and the therapist and the extent to which they agree on the goals and tasks of treatment. | 1 – *Very low alliance*The bond between the patient and the therapist is poor. There is a sense of discomfort in the relationship. There may be a limited understanding and trust between the patient and the therapist. The therapist and the patient have a lower level of contentment in their interactions. Little to no warmth and intimacy are observed in the relationship. The patient may feel that the therapist is inattentive to his or her welfare. There is low agreement on tasks and goals. 2 – *Low alliance*3 – *Moderate alliance*A moderate alliance is observed. The bond between the patient and the therapist in the segment is moderately positive. There is moderate agreement on tasks and goals. 4 – *High alliance*5 – *Very high alliance*The bond between the patient and the therapist in the segment is highly positive. There is a very good understanding between the patient and the therapist, and there is mutual trust between them. The therapist and the patient relate to each other with contentment. There is warmth and intimacy between the patient and the therapist. The patient seem to feel that the therapist is attentive to his or her welfare and cares about him/her. There is very good agreement on tasks and goals.  |
| **Category** | **Subcategory** | **Scale** |
| **Rupture**A rupture in the therapeutic alliance occurs when negotiation breaks down or there is tension in the relationship | **1. Confrontational Rupture**The patient is taking a hostile, critical, angry, or accusatory stance toward the therapist or some aspect of the therapeutic process.**2. Withdrawal Rupture**The patient disengages from the therapist or the therapy process.**3. Other** | 1 – No *tension*2 – *Low tension*3 – *Moderate tension*4 – *High tension*5 – *Extreme tension* |
| **Category** | **Scale** |
| **Patient Affective Response to the Therapist** | 1 – *Very negative affective response*2 – *Negative affective response*3 – *Neutral* 4 – *Positive affective response*5 – *Very positive affective response*  |
| **Therapist Affective Response to the Patient** | 1 – *Very negative affective response*2 – *Negative affective response*3 – *Neutral* 4 – *Positive affective response*5 – *Very positive affective response*  |

**Table 8**

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