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Personality, Personality Disorders and the Process of Change

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RUNNING HEAD : Process of Change in Personality Disorders

Personality, personality disorders and the process of change

Abstract

The present paper elaborates a process perspective of change in psychotherapy for personality disorders. Firstly, the paper reviews the literature of mechanisms of change in treatments of personality disorder, with a main focus on emotional processing and socio-cognitive processing. Secondly, it proposes an illustrative case-series analysis of eight cases, drawn from a mediation analysis conducted within the context of a randomized controlled trial for borderline personality disorder (BPD). As such, cases with good and poor outcomes are compared, as are cases with poor and good intake features and cases with poor and good process markers across treatment. The results illustrate possible pathways to healthy change over the course of four months of treatment, and possible pathways of absence of change. These results are discussed with regard to three main research perspectives: The combination of qualitative and quantitative methodology in psychotherapy research may be applied to case study research, a neurobehavioral perspective on change may incorporate the individualized experience in the laboratory and therapist responsiveness to patient characteristics may be a core feature of fostering change.

Key-Words: Personality; Personality Disorder; Process; Mechanisms of Change; Case Studies

PERSONALITY, PERSONALITY DISORDERS, AND THE PROCESS OF CHANGE

The present paper aims at describing, in a synthetic fashion, the processes of change in treatments for personality disorders. In doing so, I will adopt a conceptually integrative and empirical-critical approach. After a contemporary review of the concepts, I will propose a multiple-single-case study comparing poor with good intake features, therapy processes and outcomes. This in-depth reexamination of clinical material stemming from a randomized controlled trial is thought to be exploratory and descriptive in nature, and should be the starting point for further research, testing our observations on larger samples.

The notion of personality has provoked a great number of theoretical elaborations in the past. A dimensional approach to personality proposed five underlying dimensions related to personality and personality pathology (Saulsman & Page, 2004). Whereas these broad dimensions may capture some of the self-descriptions of patients' behaviors, their clinical relevance seems somewhat limited. A contemporary conception of personality conceptualization and assessment includes the degree of severity of personality disorders, operationalized on five dimensions, such as integration of identity, self-control, relational resources, responsibility and social concordance (Verheul, Andrea, Berghout, Dolan, Busschbach, van der Kroft et al., 2008).

In parallel to dimensional approaches to personality and personality pathology, clinical theory has elaborated categorical approaches to personality disorders. Based on case observations and elaborating the clinical theory, scholars have differentiated a dozen of categories related to distinct so-called personality organizations (Bergeret, 1985; Kernberg, 1975) which have proven of clinical utility in terms of psychodiagnostics. However, this theory-based approach was criticized by behavioral researchers, on the grounds of not being applicable

to the broader community of therapists and researchers. The emergence of behaviorally-defined observations as part of a dozen categories of personality disorders, such as the current consensus substantiated in the DSM-5 may somewhat reflect the state of the art of the categorical systems today, together with reliable assessment schedules.

Emerging criticism of the categorical approach to personality disorders has contributed to the (re-) emergence of several contemporary dimensional formulations, such as the neurocognitive model of personality dysfunction (Mischel & Shoda, 2008). The CAPS (Cognitive-Affective Personality System) model defines personality as a pattern of cognitive-affective representations which is supposed to be activated in the interpersonal encounters. In addition to the mental representations, the patterns consist of behavioral responses, perceptions of the self and features of the context. This model may help to conceptualize the complexity of personality and personality disorders on a continuum in a much more differentiated manner than classical dimensional approaches (Clarkin, 2006). Dimensional approaches have the advantage of providing a conceptual framework of underlying aspects of personality functioning, both healthy and pathological. Despite their interest for research, it remains unclear whether dimensional approaches are suitable for explaining psychotherapeutic change in a clinically relevant manner. Or to put it even more radically with Gendlin (1964, p. 101): "The contents and patterns in the [personality] theories are a *type of explanatory concept* which renders change impossible" (emphasis in original). Limitations related to the self-report approaches to measurement should be noted here and apply to all dimensional conceptions discussed. Such self-descriptions may rather measure the representation the individual has of his/her functioning, rather than the functioning itself (e.g., Nisbett & Wilson, 1977) and remain limited when one is interested in the actual process or mechanism of change.

Categorical systems are most consistent with the medical model of psychotherapy (Wampold & Imel, 2015), underlining the unicity of a category, but neglecting contextual influences and the constructivist and relativist nature of a diagnosis. As such, they – implicitly or explicitly – assume that patients within one category resemble each other and treatment process within one category may be similar, whereas, empirical evidence rather points into the direction of a great heterogeneity of patients within personality disorder (PD) diagnoses (Clarkin, 2006) and of a great heterogeneity of the change trajectories, within one particular therapy approach and across approaches. Given these observations, it is rather surprising that the field has used randomized controlled trials to answer research questions like: "Is therapy A more effective than therapy B to treat a particular category of PD?" or "Does this therapy A produce the expected effect in patients with PD?", fundamentally neglecting the interest in understanding the individual's process of change (Budge, Moore, Del Re, Wampold, Baardseth, & Nienhaus, 2013; Clarkin, 2014; Kealy & Ogrodniczuk, 2017).

From a broader perspective, some of these criticisms have been at the origin of NIMH's recent formulation of Research Domain Criteria (RDoC; Insel & Gogtay, 2014), favoring translational science in mental health. Such research should focus on the underlying neuro-behavioral dimensions (i.e., appraisal, regulation) of a clinical phenomenon, rather than the categorical disorder. These dimensions should be studied on a variety of levels, including genetic, endocrinological, neurofunctional, physiological and behavioral. Psychotherapy researchers have pointed out that such a dimensional conception may have a major (and unduely negative) impact on the conception of change in psychotherapy, may favor pharmacological – over psychological – approaches to treatment and may be theoretically limited (Goldfried, 2015). Research on the process of change in treatments for personality disorders is particularly

concerned by this debate. Personality disorders research is marked by a theoretical plurality, a debate on dimensional vs categorical conceptions of the clinical phenomena and a clear insufficiency of pharmacological approaches to the treatment of the clinical phenomena (in particular for borderline personality disorder; BPD; Herpertz, Rudolf, & Lieb, 2016).

A process perspective on personality and personality disorders

The process perspective on personality and personality disorders is characterized by a number of assumptions. Firstly, the process perspective on personality and personality disorders assumes change in specific (dys-)functions. Central variables – such as emotional processing or socio-cognitive processing – potentially explaining change in personality disorders are not static, but they are dynamic, situation-dependent, fluid states that are fundamentally malleable to psychotherapy intervention. The study of symptom change is only the first step related to this perspective. Contrary to the idea of personality disorder as a chronic and stable impairment, recent research was able to show that, at least for patients with BPD, its symptoms are fluidly adaptive manifestations over time (Zanarini, Frankenburg, Reich, & Fitzmaurice, 2016). On a more fine-grained level, ecological momentary assessment was able to corroborate the notion of fluidity of symptoms and functions – such as emotion processing – related with BPD (Santangelo, Bohus, & Ebner-Priemer, 2014). Secondly, the process of change may be observed independently of diagnoses and dimensions, but may be studied in their contexts. This assumption places the process perspective in a post-modern dialectic with regard to the dimensional-categorical debate. Process transcends this debate: it is the observed change that is the unit of analysis. Thirdly, the focus on function-related processes incorporates the knowledge of psychological factors contributing to the emergence and maintenance of the mental disorder. It is meaningful to know the developmental origins of the functions which are expected to change

throughout therapy (Ehrenthal, Levy, Scott & Granger, 2018; Herpertz, 2013; Sharp & Kalkpakci, 2015), however, the core psychotherapeutic change may not necessarily take place on the developmental factors which have contributed to the disorder (Kramer, 2018). This implies that the process perspective does not aim to formulate a new theory of personality, but rather aims at uncovering "laws of change" in central processes. Fourth, in order to be as closest as possible to the clinical reality, therapy process is optimally being observed from an (independent) observer's perspective on raw video-, audio- or transcript material of psychotherapy sessions, and should follow an explanatory approach. Or to quote Greenberg (1999, p. 1467): "We need to *observe* the process of change to provide us with the kind of *explanation* that involves a new understanding of what actually occurs rather than rely on automatic theoretical explanations from our favorite, often too strongly held, theory."

There are several implications of a process perspective. The therapy process may be conceptualized in an individualized way: each patient-therapist dyad is potentially characterized by their idiosyncratic change process and nomothetically derived categories may try to capture, always approximatively, this idiosyncrasy of the interaction. The process perspective is a fundamentally integrative approach. Therapy-theory-consistent functions may be studied, but concepts from different therapy approaches help to explain, illuminate and delineate therapeutic change in a cross-fertilizing fashion. The process perspective focusing on change in (dys-) function incorporates the patient's limitations and resources in an optimal and articulated manner. The process perspective on change in (dys-) functions is consistent, to some extent, with the RDoC (Insel & Gogtay, 2014) requirements, as it explicitly incorporates observed processes measured from a neurobiological perspective, while at the same time maintaining theoretical pluralism.

Theoretical account of the process of change in treatments of personality disorders

Generally, contributions to change fall into four different categories of mechanisms of change: patient, therapist, relationship, technique and integrative (Gunderson, 2017).

Fernandez-Alvarez, Clarkin, del Carmen Salgueiro and Critchfield (2006) synthesized the patients' and therapists' contributions to mechanisms of change and note that outcomes in treatments of patients with PDs depend on the patient's willingness and ability to engage in treatment and history of positive attachment relationships, along with the therapist's open-minded and flexible approach to therapy, his/her comfort with emotionally intense relationships and tolerance for his/her own negative feelings, his/her patience and a specific training in treating patients with personality disorders. With regard to the relationship factors explaining outcome, Smith, Barrett, Benjamin and Barber (2006) mentioned a good alliance between the patient and therapist, a therapist behavior that sets limits and is described as interpersonally active and structuring, a good group cohesiveness (for group therapies), the presence and joint elaboration of accurate relational interpretations and a therapist who takes into account possible destructive alliance ruptures, by skillfully addressing occurring ruptures or avoiding them and who is particularly flexible in his/her approach to treatment. With regards to techniques which should be related with outcome, Linehan, Davison, Lynch and Sanderson (2006) suggested that a non-directive, but focused approach to intervention is useful, as is the directive teaching of needed skills. They also suggested for a therapist to move constantly between the patient's internal and interpersonal world, in order to increase effectiveness of the intervention and underlined the complementarity between a focus on skills building and an insight-oriented therapy focus.

Empirical account of patient mechanisms of change in treatments for personality disorders

In order to define a mechanism of change, Kazdin (2009) summarized six principles: (1) the process variable is related with symptom change (Association); (2) the change on the mechanism needs to be completed before the measurement of the outcome (Time-sensitivity); (3) theory predicts change and its role for outcome (Plausibility); (4) the observed change is sufficiently specific and differentiated from other constructs (Specificity); (5) the amount of change in the mechanism maps onto the amount of symptom change (Gradient); (6) Consistency: the results are consistently positive across studies (Consistency); (7) the change holds true under controlled experimental conditions (Experimental manipulation). It appears that according to Kazdin (2009), the demonstration of (partial or full) mediation is an important, but not the only, step in mechanisms of change research. I will mostly focus on patient function-related processes of change, which has been the focus on my work, among them patient's emotional processing, change in socio-cognitive processing and changes in the therapeutic alliance. This selection is underpinned by the radical adoption of a process perspective on personality change: two threads of change processes have been identified as substantiating personality change in humans; Gendlin (1964) refers to them as a) the feeling process and b) the personal relationship process. Today, and in the context of research on personality disorders, we would redefine these two threads in the following way, on different – neuro-behavioral – conceptual bases (Schnell & Herpertz, 2018). The first change process – which at the same time may describe a core dysfunction associated with the disorders – is emotional processing (Dixon-Gordon, Peters, Fertuk & Yen, 2016). The second change process, also describing a core dysfunction related with the disorders, is socio-cognitive processing (Herpertz, 2013). Finally, in the psychotherapy context, it becomes apparent that these processes interact with each other, and are relevant

process characteristics interacting with – and impacting – therapist personality, selection of technique and relationship offer; the notion of therapist responsiveness captures these interactional dynamics (Kramer & Stiles, 2015; Stiles, 2009). We assume that this minimal theoretical context of core mechanisms of change may explain, through interactions of the basic constructs with each other, the manyfold symptoms and problems associated with personality disorders, both from an intrapersonal and interpersonal perspective.

Emotional processing: down-regulating intense affective experiences

Emotional processing may be defined as the absorption of problematic affective experiences, promoting the individual's progress towards more adaptive emotional experiences. This broad definition encompasses operations, such as emotion awareness, regulation and transformation (Greenberg & Pascual-Leone, 2006).

More effective emotion regulation was associated with symptom change in Dialectical-Behavior Therapy (DBT). The patient's use of specific coping skills to regulate emotion in daily life fully mediated several outcomes after DBT (Neacsiu, Rizvi & Linehan, 2010). Cognitive problem solving and emotional balance increase across DBT as correlate of treatment (McMain, Links, Guimond, Wnuk, Eynan, Bergmans et al., 2013). Change in coping skills use in the therapy hour was studied by two of our studies by using validated observer-rater methodology based on session transcript analysis. In the first study, we showed for DBT skills group that these patients specifically used more – observer-rated in-session – productive relatedness coping after treatment (e.g., self-reliance), along with less unproductive autonomy coping (e.g., opposition) after treatment (Kramer, 2017). These changes were related with symptom change. Effective coping is built up in DBT skills and represents a core pathway to health for patients with BPD.

Change in patient's coping with stress is not only central in behavioral treatments, such as DBT, but in other types of treatment, as well. Our second study is one of the first to examine observer-rated in-session coping in psychiatric treatments for patients with BPD. We assessed the process of change and outcome in brief psychiatric-psychodynamic treatments, based on the model by Gunderson and Links (2014), at three time-points, at session one, at session five and at session 9 (process; or 10 for outcome). As such, the design enabled to study change on in-session coping use and symptom change in two completely independent time-frames. We showed that the very early decrease in behavioral coping – between sessions 1 and 5 – partially mediated effects found for the treatment which were manifest between sessions 5 and 10 (Kramer, Keller, Caspar, de Roten, Despland & Kolly, 2017; *N* = 57). Behavioral coping was defined as overt way of dealing with stress – patterns of behaviors taken to modulate the individual's core affects – rather than adopting more cognitive or emotion-based strategies to modulate affects. For patients with BPD, behavioral coping may involve not only acting out, but also repetitive behavioral attempts of problem solving and oppositional responses. This type of research has direct clinical implications (Aafjes-van Doorn & Barber, 2018): clinicians may monitor change in such behavioral ways of coping very early in therapy with patients with BPD and may adjust to the observed lack of change in behavioral coping with additional interventions.

Change in emotion regulation has neurobiological underpinnings. Schnell and Herpertz (2007) reported on neural correlates of emotional processing in patients undergoing DBT, with lessening of activation in the left amygdala and both hippocampi (i.e., when the patient is exposed to negative stimuli), effects which were associated with treatment response. These results are consistent with a decrease in amygdala reactivity after treatment reported by Goodman, Carpenter, Tang, Goldstein, Avedon, Fernandez et al. (2014) and also with a greater

neuronal connectivity, after treatment, between pre-frontal areas and the amygdala found by Schmitt, Winter, Niedtfeld, Herpertz and Schmahl (2016), suggesting systematic evidence for neurofunctional underpinnings when the person is effectively reappraising emotional stimuli. Change in dorsolateral pre-frontal activation was demonstrated in patients with BPD presenting self-harming behaviors undergoing DBT (Ruocco, Rodrigo, McMain, Page-Gould, Ayaz et al., 2016). Interestingly, when these researchers linked these neurobiological changes with symptom change, the link was significant and they showed that parts of the neurobiological change are independent from symptom change and remained significant when controlled for the latter. Again, it is important to study the mechanism of change in other treatments, such as Transference-Focused Psychotherapy (TFP): Perez, Vago, Pan, Root, Tuescher, Fuchs et al. (2015) demonstrated that a decrease in affective lability was associated with a decrease in activation in orbito-frontal regions, as well as in the striatum after treatment.

Emotional processing: transformation of affect-meaning states

Whereas very few research has been conducted so far on change in emotion awareness in treatments of patients with PDs (Ogrodniczuk, Joyce, & Piper, 2013), our research has contributed to understand emotion transformation in treatments for PDs. Pascual-Leone (2009; in press) defines emotion transformation as the sequential ordering of emotion states, as observed in the therapy hour, from the rather shallow emotional experience of undifferentiated global distress to the core primary adaptive emotional experiences (such as grief or assertive anger) where emotion is changed with another emotion in the process.

Global distress as the starting point of the emotion transformation process changes in a brief psychiatric treatment for BPD; these changes interact with therapist intervention type. In a

secondary analysis of a randomized controlled trial, Berthoud, Pascual-Leone, Caspar, Tissot, Keller, Rohde et al. (2017) showed that 74% of the patients with BPD experienced unresolved global distress at the first session of therapy ($N = 50$), as assessed by validated observer-rated methodology based on video/audio session analysis. The mean frequency of global distress decreased for all patients over the first four months of treatment. When differentiating between a standard psychiatric treatment and an individualized treatment (see below for more detail), the same study was able to secure that the frequency of global distress experienced at session five into the treatment predicted interpersonal outcomes at session 10 in particular for the patients who received the individualized treatment. The expression of global distress is productive for symptom reduction, if this expression takes place in a responsive therapeutic interaction. This study underscored the complexity of the interaction between patient changing process and therapist relationship variables, when explaining therapy outcome for patients with PD.

Anger transformation is at the core of brief behavioral treatments for BPD. According to the differentiated view of the transformation perspective on emotional change, different types of anger may be differentiated. Firstly, rejecting anger is a secondary state of intense and often times ill regulated expression of emotion, aiming at getting rid of a content or a process; secondly, assertive anger is a transformed, primary state of intense, but regulated experience of limit-setting and affirmation of one's needs. In the context of a randomized controlled trial on 20 session-long DBT skills training, we showed that patients who underwent the DBT (vs wait-list control) had higher frequencies of assertive anger after treatment, as assessed in an external clinical interview, compared to pre-treatment (Kramer, Pascual-Leone, Berthoud, de Roten, Marquet, Kolly et al., 2016; $N = 41$). Rejecting anger remained stable in all conditions. Increase in assertive anger partially mediated the reduction of problems in the social, family and

professional realms. Experientially accessing one's need and standing up for oneself in an angry healthy fashion may therefore be a process-marker of good evolution in BPD and explain part of the therapeutic outcome.

Emotion transformation is central in treatments for other PD categories. For patients with mostly narcissistic and histrionic personality disorders, the in-session emergence of self-compassion and rejecting anger (Kramer, Pascual-Leone, Rohde, & Sachse, 2016) was related with good outcome; this study also showed links between specific therapeutic techniques and in-session emotional change: therapists using process-directivity favored the emergence of central fear or shame. Emotion transformation – the change of emotion by other emotion – is central for outcome in psychotherapy for several categories of PDs.

Socio-cognitive processing: integrating core interpersonal information

Change in the patient's social cognitive capacities is central in treatments for PDs (Choi-Kain & Gunderson, 2008; Fonagy, Luyten & Bateman, 2015). Levy, Meehan, Kelly, Reynoso, Weber, Clarkin et al. (2006) found that Transference-Focused Psychotherapy (TFP) was linked with the increase of reflective function in BPD, along with development of more secure attachment patterns for some patients; this results was not observed in DBT nor in supportive therapy. Consistent results were presented by Fischer-Kern, Doering, Taubner, Hörz, Zimmermann, Rentrop et al. (2015) for BPD, as well as by de Meulemeester, Vansteelandt, Luyten and Lowyck (2017) in the context of a hospital-based treatment for BPD. Research as these helps to flesh out the centrality and the delineation of each of the concepts's impact on outcome in treatments for PDs.

From a meta-cognitive theoretical perspective, Dimaggio, Procacci, Nicolo, Popolo, Semerari, Carcione et al. (2007) found consistent results for narcissistic and avoidant PDs for a treatment based on an integrative conceptualization. From a linguistic-cognitive perspective, Arntz, Hawke, Bamelis, Spinhoven and Molendijk (2012) observed a decrease in in-session frequency of words used for the description of negative emotions in two types of treatments for a wide range of PD categories. In a study on biased thinking over the course of short-term treatment, we were able to demonstrate a systematic decrease in biases towards the negative at the end of treatment (Keller, Stelmaszczyk, Kolly, de Roten, Despland, Caspar, et al., 2018), whereas meta-cognitive capacities increased over the course of short-term psychiatric treatment (Maillard, Dimaggio, de Roten, Berthoud, Despland & Kramer, 2017). Interestingly, these changes did not differ between different conditions, and remained unrelated with symptom change. Change in socio-cognitive processing seems quite robust across studies, as is the finding that these changes do not affect treatment outcomes in a direct way. However, consistent evidence points towards the idea that socio-cognitive processing may function as a moderator of change, an intake feature affecting the trajectory of change over treatment (Antonsen, Johansen, Rø, Kvarstein, & Wilberg, 2016; Gullestad, Johansen, Hoglend, Karterud & Wilberg, 2013).

In order to address the complexity of interacting variables – patient, therapist and relationship contributing to change - , research adopting an interaction perspective is needed. As such, research has started to focus on the possible mechanisms underlying the micro-changes – ruptures and resolutions (Safran & Muran, 2000) – in the therapeutic alliance. Cash, Hardy, Kellett and Parry (2013) showed moment-by-moment changes in the therapeutic alliance in treatments for patients with BPD. Boritz, Barnhart, Eubanks and McMain (2018) studied ruptures and repairs and showed that alliance ruptures are common in these treatments and that

interpersonal retreat was a particularly challenging situation for the further alliance development and outcome. In order to be able to take into account the idiosyncrasy of the patient's processes, interacting with the therapist and context, individualized treatments for PDs may be used.

Therapist responsiveness: the virtue of individualizing treatments

Whereas tailoring treatment to the individual patient may be commonplace for many clinicians, it still represents a challenge for many psychotherapy researchers. Explicitly individualizing treatments may be particularly of relevance for patients with PDs. Therapy approaches using the core conflictual relationship theme (Luborsky & Crits-Christoph, 1998), case formulation in cognitive-analytic therapy (McCutcheon, Kerr & Chanen, 2018) and interpersonal reconstructive therapy (Critchfield & Benjamin, 2018) are just a few promising examples of the centrality and, for some, demonstrated effectiveness, of individualized formulations to treatment of patients with PDs. My research has focused on one specific way of individualizing treatments using a structured case formulation: the Plan Analysis and the motive-oriented therapeutic relationship (MOTR; Caspar, 2007). In this method of case formulation, idiographic information is integrated and understood from an instrumental perspective, determining the individual's Plans "behind" an observed (verbal or non-verbal) behavior or experience. A Plan structure will then help the therapist synthesizing the information, and developing therapist heuristics which should be both responding to underlying motives and be as specific to a particular patient as possible. As such, the motivational basis of activated problematic interpersonal patterns is thought to be taken away: when MOTR is used, these patterns should lessen in the therapy process and in everyday life (Caspar, 2007). In doing so, Plan Analysis and MOTR may be one way of operationalizing therapist responsiveness, the fluid therapist responding to patient's changing process characteristics (Stiles, 2009). Early research

has observed that these hypotheses may be accurate (Grawe, Caspar & Ambühl, 1990), but no randomized controlled trial had examined effects of MOTR, in particular for patients with PD. Such a study would help to assert more clearly whether individualizing treatments is useful and effective. We randomized N = 85 patients with BPD to two versions of a brief psychiatric-psychodynamic treatment (lasting four months): (a) a standard treatment (Gunderson & Links, 2014), (b) the same treatment with an individualized case formulation according to Plan Analysis and MOTR (Caspar, 2007). We demonstrated adherence to both treatment methods in a cross-sectional fashion: as expected, both treatments had equally high adherence to principles of psychiatric treatment, however, as expected, MOTR treatments presented with higher adherence to the MOTR principle than the standard treatments. We showed specific outcome advantages for the individualized condition after 10 sessions for general distress, but not for borderline symptoms (for which both conditions did equally well; Kramer, Kolly, Berthoud, Keller, Preisig, Caspar et al., 2014). The session-by-session progression of the therapeutic alliance did not differ between the two conditions for the patient ratings, but they did for the therapist ratings: therapists using the MOTR progressively rated the alliance more positively, compared to their standard counterparts; MOTR patients's alliance ratings correlated stronger with outcome than the standard patients' alliance ratings (Kramer, Flückiger, Kolly, Caspar, Marquet, Despland et al., 2014). The effects observed favoring MOTR were only partially maintained at six month follow-up: Whereas the MOTR patients still had lower levels of symptoms, compared to the standard-treatment patients, this difference was not significant (Kramer, Stulz, Berthoud, Caspar, Marquet, Kolly et al., 2017); we found that the treatment density explained symptom level at follow-up: more time between sessions until session 10 was related with better outcome. Therapists using individualized case formulations might develop more proactive strategies to

understand and treat patient's missing sessions which tends to have a positive impact until six month later. Individualizing treatments for patients with PDs impacts process and outcome and more research should aim to understand the patient's individual pathways of change.

Learning lessons from lose ends in psychotherapy research: eight paradigmatic case studies

The aim of the empirical part of the present paper is to illustrate prototypical process or pathways of change in patients with BPD, based on the sample included in the mediation analysis by Kramer et al. (2017; $N = 57$). We selected a sub-sample of $N = 8$ patients, in a 2x2x2 design. As such, this paper is a case study series, conducted in the context of psychotherapy research trials, integrating quantitative and qualitative research paradigms. I aim to explore four individual pathways to healthy change and four individual pathways of remaining unchanged. As such, $n = 4$ patients from the $N = 57$ patients included in the Kramer and colleagues (2017) study are good-outcome cases (clinically significant change on the OQ-45 total score between sessions 5 and 10), and $n = 4$ patients are poor-outcome cases (no clinically significant change between sessions 5 and 10). I defined two additional process variables based on the coping variable used in the study: (1) overall coping profile (overall coping functioning; OCF; Perry et al., 2005) at the very beginning of treatment as possible moderator of therapeutic change, and (2) change in behavioral coping (see definition above) between session 1 and 5 as possible mechanism of therapeutic change. Defined by Perry and colleagues (2005), OCF describes the overall coping functioning of patient, based on its in-session discourse. Coping is assessed using the Coping Action Pattern Rating Scale (Perry et al., 2005; Starrs & Perry, 2018), and OCF is the relative frequency of adaptive coping (divided by all coping strategies per session; number of words

emitted controlled for). More methodological details are to be found in the parent study (Kramer et al., 2017).

Table 1 summarizes the raw data for each of the 8 patients. Cases presenting a pathway of change/non-change consistent with the mediation analysis presented by Kramer et al. (2017) receive very few attention (Paula, Elizabeth, Grace and Daniel), and cases presenting a pathway of change/non-change inconsistent with the mediation analysis receive more attention (Ava, Emily, Jack and Lily). (Note that all personal information is changed and some minor details of the cases were amended, in order to preserve the anonymity.) Board of ethics approved the research and all patients gave explicit consent to use their data for research.

Illustrating the results of the mediation analysis: Paula, Elizabeth, Grace and Daniel

The first four cases serve as illustration of the results of the mediation analysis (Kramer et al., 2017). As such, we will show that irrespective the quality of the individual's coping at intake, stability (for Elizabeth) or increase (for Grace) in behavioral coping is associated with poor outcome, and decrease in behavioral coping (for both Paula and Daniel) is associated with good outcome. These cases are confirming our hypothesis. For the good outcome cases (Paula and Daniel), the impact of the initial coping functioning is overridden by the impact of the decrease in behavioral coping very early in therapy, for the poor outcome cases, Grace's poor initial coping functioning limited the effect of the treatment and Elizabeth's strong initial coping functioning helped her to assert more over time, which did not impact the level of symptoms.

Elizabeth presents with strong coping functioning, stability in behavioral coping and poor outcome. She receives 10 sessions of psychiatric treatment. At the 9th session, Elizabeth mentions that she has made some progress and explains that she was able to assert herself in an

interpersonal situation at work. Grace presents with poor coping functioning, increase in behavioral coping and poor outcome. She receives 10 sessions of psychiatric treatment. At session 9, Grace states that she has taken a resolution to not get so angry all the time. Paula presents with strong coping functioning, decrease in behavioral coping and good outcome. She received 10 sessions of brief intervention, to which the motive-oriented therapeutic relationship (Caspar, 2007) was added. At session 9, Paula informs the therapist that, in order to protect herself from the mistreatment from her separated partner, she has changed her cell phone number and she has interrupted contact with some of the common friends the couple had. Daniel presents with poor coping functioning, decrease in behavioral coping and good outcome. Daniel received 10 sessions of psychiatric treatment with the motive-oriented therapeutic relationship. At session 9, Daniel elaborates on him being still unemployed and trying to find a new job.

Contradicting the results of the mediation analysis: Ava, Emily, Jack and Lily

The four following selected cases illustrate the possible contradiction with the results of nomothetic analysis. Irrespective of the quality of the coping at intake, Emily and Jack present with unfruitful change in behavioral coping, but still garnered a significant clinical change at session 10 into the treatment, while Ava and Lily present with decrease in behavioral coping which did not affect positively the outcome.

Emily: strong coping functioning, stability in behavioral coping, good outcome

Emily is 37 years old and explains that she has had previous psychotherapy for problems related with her interpersonal behavior. Emily mentions that she lies repetitively, at the same time, she appears to have difficulty in trusting other people. She feels controlled by her mother – “a great manipulator” – when she took over the care of Emily’s five-year old son, during a period

when Emily was not doing well. Emily receives 10 sessions of psychiatric treatment with the motive-oriented therapeutic relationship. At session 5, Emily presents at times as happy having had her son for the past week-end, and at times as particularly charged: “This year is a bad year, between January and now, June, I am doing a bit better, but still, I am in a lethargic state. My friend told me: ‘you have never been like this before’.” At session 9, Emily describes her commitment with John, her new boyfriend: “I said to John, I need a man who is stable, who is healthy and who knows what he wants. Someone who is not afraid to face me and who wants to go through tough situations with me. He said ‘same here’.” Emily is a good outcome case.

Jack: poor coping functioning, stability in behavioral coping, good outcome

Jack is 37 years old and consulted for marital problems, an impulsivity and aggressiveness, impulsive alcohol and drug consumption, depressive mood, identity problems, suicidal impulses and problems with anger. Jack enters his first session by declaring that he does not want to talk to the current (male) therapist, because he cannot trust men in general. He says: “If you make me do these ten sessions, I will obey, but I really hate doing this. I don’t want to talk to you right now. I will not talk to you. I will not open up with you.” Jack received 10 sessions of psychiatric treatment with the motive-oriented therapeutic relationship. At session 5, Jack describes that his wife has cancer and admits that he has, by a neglectful action in the car, tried to harm or kill her, whereas he admits also that “if I am still alive it is thanks to her. She called the ambulance when I tried to kill myself some months ago. She did it… She has always been next to me, helped me. But me, I have almost killed her.” After this major incident, the marital relationship, as well as Jack’s wife’s physical health, deteriorated in a dramatic way, which contributed to the patient’s motivation to consult. At session 9, Jack acknowledges that these few sessions with the current therapist were helpful: “I was like in a dream and you have

helped me to see the reality." (Therapist: "Which is…?") "That I have problems myself which are really serious. I realize that I am unable to commit to the relationship with my wife. This is serious and dangerous for her and for me." Jack was a good outcome case and, despite his opening statements at session 1, wished further therapy with this therapist after session 10.

Ava: strong coping functioning, decrease in behavioral coping, poor outcome

Ava is a 34 years old woman who consulted for marital violence, suicide threats and behaviors, impulsivity and interpersonal problems. Ava describes that she has been repeatedly hit by her partner with whom she still shares her apartment at that time. In the first session, she describes as being "dead" inside, after being hit all over her body two days before the session (while she says so, she shows the hurt body parts to the therapist). Ava describes major interpersonal problems at work and states that she has been put on a leave the second time in a few months. She feels that she has been treated unfairly. Ava receives 10 sessions of psychiatric treatment with the motive-oriented therapeutic relationship. At the fifth session, Ava has achieved to some extent inner distance with the conflictual marital situation and describes that she has found a new work position. Ava describes her anger towards her partner and how it relates to her own experience, "being angry most of the time already". It appears that Ava was able to contain and reduce the frequency of her behavioral coping in session 5. In her 9th session, Ava complains about her therapist not being sufficiently available. She feels that she is not making enough progress in therapy and accuses the therapist of this observation. After this interaction, Ava makes a self-observing statement and says "this is me, sometimes, when I want to say something, I don't find the right tone of voice", and then, she continues: "I need to learn how to say things, say things in a calmer way, otherwise I could be very very angry, (…) while I

say ‘no, I don’t agree’.” Ava was a poor outcome case, however, at the 10th session, she accepted the therapist’s offer for further psychotherapy.

Lily: poor coping functioning, decrease in behavioral coping, poor outcome

Lily is 32 years old and consults for depressive mood, impulsive and aggressive behaviors, marital problems, suicide threats, identity problems and anger management. Lily describes that she has always been “different”, and “depressed”, since her adolescence, and admits her recurrent problems with stealing. She also describes physical violence at home. Recently, Lily needed inpatient treatment, because “I had a knife in my hand and threatened my husband”. Lily received 10 sessions of psychiatric treatment. At session 5, Lily explains that after a fight with her husband, which happened two days before the session, she tried to commit suicide, by taking medication, but was interrupted by her son. She explains “I felt so bad. Bad like a dog, really, so the only solution seemed death. But I was so happy to see my son who asked me ‘Mummy, what are you doing?’. I needed to cry immediately and regretted so much what I intended to do”. At session 9, Lily describes another conflict with her husband. Both partners insulted each other, but did not fight physically. Lily is a poor outcome case and accepted, with some relief, the therapist’s offer for further psychiatric treatment.

Discussion: Quo vadis?

In the present synthetic account, we developed the notions of personality and personality disorders (PD) from a process perspective. We have argued that patient features are not static dimensions, but malleable, fluid processes in constant interaction among each other and with the interpersonal world, including the therapist. As such, therapy process in patients with PDs may at times be unpredictable – similar to Peter’s anxious question to Jesus where he intends to go

(“Quo Vadis Domine”), just before Peter’s dramatic crucifixion upon his arrival in Rome –, but it is the task of psychotherapy process research to study possible “laws of change” using a variety of conceptual and methodological lenses. A renewal of multi-level methodology, integrative conceptualizations and empirical research, together with solid knowledge of the clinical phenomenon is required. I will discuss three fruitful research perspectives: a) systematic case study research within trials of patients with PDs, b) neuro-behavioral change principles as mechanisms of change in treatments of patients with PDs, c) therapist responsiveness as integrative principle of change.

Systematic case study research is possible within controlled trials, as recently demonstrated by Levy and collaborators (2017) and Starrs and Perry (2018), a rather new paradigm proposes to integrate qualitatively “thick” descriptions of cases with the rigor of quantitative assessments of therapeutic change. Despite recurrent criticisms addressed at the single case paradigm – with regard to confirmation and selection biases, both applicable to the present illustrative cases –, the systematic embedding within the quantitative approach partially compensates for these problems. In the current account, I focused on one particular variable – coping change –, which is embedded in theoretical accounts (Dixon-Gordon et al., 2016; McMain et al., 2010) and our earlier research (Kramer et al., 2017). In particular, I focused on vignettes contradicting the results from the nomothetic research paradigm. Emily and Jack are good outcome cases, despite unfruitful change in behavioral coping. Other central mechanisms of change may be at play in these brief treatments and drive the initial problem reduction. For Emily, we hypothesize that her therapy-extraneous positive encounter with John contributed to the good outcome, and for Jack, the transformative therapeutic relationship, supported by the individualized case formulation, may have helped him to progress. Ava and Lily are poor

outcome cases, despite fruitful change in behavioral coping. For Ava, we hypothesize that her lack of interpersonal skill, as part of her intake features, undermined process and outcome and for Lily, we may assume that the psycho-social situation related with divorce contributed to maintain a high level of problems and symptoms. Such a situation-specific understanding of each case helps to develop new research questions. What is the minute-by-minute process of the relationship transformation (as observed in the case of Jack)? How can interpersonal factors at intake, the quality of mentalizing, or other features, interfere with progress in therapy (as observed in the case of Ava, e.g., Kramer, Signer, Estermann, Sachse, & Caspar, 2017)? How can we take into account therapy-extraneous factors (life events, contextual factors, daily life dynamics, as observed in the cases of Emily and Lily; e.g., Scala, Levy, Johnson, Kivity, Ellison, Pincus, et al., 2017)? We need to acknowledge that these case studies are based on a narrow time-frame – three months – and the study of these hypotheses in long-term treatments is needed. Also, such questions need to be posed at treatments on other PD categories.

It appears that personality, and its disorders, may be spinned around two major threads of process features: emotional and socio-cognitive processing. Whereas each of these concepts have sub-functions and they interact with each other forming what we may assume is a certain personality, or interaction, style – integrating intrapersonal and interpersonal (dys-) function –, it is helpful to differentiate them. Schnell and Herpertz (2018) suggested that insufficient social cognitive and emotion processing may be functions associated with BPD, and become the focus of systematic neuro-behavioral assessment of change treatments – taking into account the idiographic contents of the individual’s experience (Pascual-Leone, Herpertz & Kramer, 2016). Such research might be partially consistent with the RDoC (Insel & Gogtay, 2014) perspective of assessing change mechanisms from an integrated, neurobehavioral, perspective and at the same

time invite the individual's idiosyncratic experience back into the laboratory. Such more individualized assessments call for the inclusion of the moderators of the therapy effects. In particular, we may ask, a) for which kind of patient type a particular process of change and outcome pattern will be expected (see the impact of intake and contextual features in the case of Ava) and b) for which kind of treatment this particular process is most potent (see the discussion of the importance of change in reflective functioning in specific treatment forms; Levy et al., 2006). A nomothetic design articulating moderators and mediators will help to answer these questions.

Therapist effects have been demonstrated across several indicators of change in psychotherapy research (Castonguay & Hill, 2017). In particular facing patients with PDs, it seems that a dynamic-interactional perspective on the therapist's impacts is warranted, going clearly beyond unidimensional concepts of the quality of therapist impact or of collaboration. Instead of focusing on the static contributions of therapist variables, one of the most promising perspective, and the most adapted to the clinical reality of treatments with PDs – but probably also among the most challenging ones – is to focus on the fluid therapist responsiveness to ongoing in-session patient expressions: their timing, appropriateness, depth and potential for change. In this regard, we need to move beyond the analysis of static intake predictors, and include the therapist responsiveness to patient processes in our analyses. Responsiveness might be central for the explanation of outcome (Kramer & Stiles, 2015) which need to be tested in further research.

In conclusion, the present paper articulated a contemporary process perspective on change in personality and personality disorders. I argued that both quantitative and qualitative methodologies, and their combinations, may move the field of mechanisms of change in PD

treatment forward towards an in-depth and differentiated understanding of the central components of change in psychotherapy. The present account used clinical material from eight cases drawn from a mediation analysis, in order to develop an articulated case for further research, addressing challenges such as integrating idiographic and nomothetic variables, therapist responsiveness and the inclusion of neurobehavioral assessments. Prototypical pathways of change, related with emotional or socio-cognitive processing, should be studied in further research.

References

Aafjes-van Doorn, K., & Barber, J. P. (2018). Mechanisms of change in treatments of personality disorders: Discussion of the Special Section. *Journal of Personality Disorders.*

Antonsen, B.T., Johansen, M.S., Rø, F.G., Kvarstein, E.H., & Wilberg, T. (2016). Is reflective functioning associated with clinical symptoms and long-term course in patients with personality disorders? *Comprehensive Psychiatry*, *64*, 46-58.

Arntz, A., Hawke, L. D., Bamelis, L., Spinhoven, P., & Molendijk, M. L. (2012). Changes in natural language use as an indicator of psychotherapeutic change in personality disorders. *Behavior Research and Therapy, 50*, 191-202.

Bergeret, J. (1985). *La personnalité normale et pathologique : Les structures mentales, le caractère, les symptômes*. Paris. Dunod.

Berthoud, L., Pascual-Leone, A., Caspar, F., Tissot, H., Keller, S., Rohde, K. B., de Roten, Y., Despland, J.-N., & Kramer, U. (2017). Leaving distress behind: a randomized controlled study on change in emotional processing in borderline personality disorder. *Psychiatry: Interpersonal and Biological Processes, 80,* 139-154.. doi: 10.1080/00332747.2016.1220230.

Boritz, T., Barnhart, R., Eubanks, C., & McMain, S. (2018). Alliance rupture and resolution in dialectical behavior therapy for borderline personality disorder. *Journal of Personality Disorders.*

Budge, S., Moore, J. T., Del Re, A. C., Wampold, B. E., Baardseth, T. P, & Nienhaus, J. B. (2013). The effectiveness of evidence-based treatments for personality disorders when comparing treatment-as-usual and bona fide treatments. *Clinical Psychology Review, 33*(8), 1057-1066.

Cash, S. K., Hardy, G. E., Kellett, S., & Parry, G. (2014). Alliance ruptures and resolution during cognitive behavior therapy with patients with borderline personality disorders. *Psychotherapy Research, 24*(2), 132-145.

Caspar, F. (2007). Plan Analysis. In T. D. Eells (Ed.), *Handbook of Psychotherapy Case Formulations. Second Edition* (pp. 221-289). New York: Guilford Press.

Castonguay, L. G., & Hill, C. (2017). *How and why are some therapists better than others?*. Washington, D. C.: American Psychological Association.

Choi-Kain, L. W., & Gunderson, J. G. (2008). Mentalization: Ontogeny, assessment and application in the treatment of borderline personality disorder. *American Journal of Psychiatry, 165*(9), 1127-1135.

Clarkin, J. F. (2006). Conceptualization and treatment of personality disorders. *Psychotherapy Research, 16*(1), 1-11.

Clarkin, J. F. (2014). Raising the bar in the empirical investigation of psychotherapy. *Journal of American Psychiatry, 171*(10), 1027-1030.

Critchfield, K. L., & Benjamin, L. S. (2018). Identifying and applying key mechanisms of psychopathology and change in Interpersonal Reconstructive Therapy. In U. Kramer (Ed.), *Case Formulation for Personality Disorders: Tailoring Psychotherapy to the Individual Client.* Cambridge, MA: Elsevier.

Dimaggio, G., Procacci, M., Nicolo, G., Popolo, R., Semerari, A., Carcione, A. et al. (2007). Poor metacognition in narcissistic and avoidant personality disorders : Four psychotherapy patients analysed using the Metacognition Assessment Scale. *Clinical Psychology and Psychotherapy, 14*(5), 386-401.

Ehrenthal, J. C., Levy, K. N., Scott, L. N., & Granger, D. A. (2018). Attachment-related regulatory processes moderate the impact of adverse childhood experiences on stress reaction in borderline personality disorder. *Journal of Personality Disorders.*

Fernandez-Alvarez, H., Clarkin, J. F., Del Carmen Salgueiro, M., & Critchfield, K. L. (2006). Participant factors in treating personality disorders. In L. G. Castonguay & L. E. Beutler (Eds.), *Principles of therapeutic change that work* (pp. 203-218). Oxford: Oxford University Press.

Fischer-Kern, M., Doering, S., Taubner, S., Hörz, S., Zimmermann, J., Rentrop, M., Schuster, P., Buchheim, P., & Buchheim, A. (2015). Transference-focused psychotherapy for borderline personality disorder: change in reflective function. *British Journal of Psychiatry, 207*, 173-174.

Fonagy, P., Luyten, P., & Bateman, A. (2015). Translation: Mentalizing as treatment target in borderline personality disorder. *Personality Disorders: Theory, Research and Treatment, 6*(4), 380-392.

Gendlin, E. T. (1964). A theory of personality change. In P. Worchel & D. Byrne (Eds.), *Personality Change* (pp. 100-148). New York: Wiley.

Goldfried, M. R. (2015). On possible consequences of National Institute of Mental Health Funding for psychotherapy research and training. *Professional Psychology: Research and Practice*. Doi: 10.1037/pro0000034.

Goodman, M., Carpenter, D., Tang, C. Y., Goldstein, K. E., Avedon, J., Fernandez, N., Mascitelli, K. A., Blair, N. J., New, A. S., Triebwasser, J., Siever, L. J., & Hazlett, E. A. (2014). Dialectical behavior therapy alters emotion regulation and amygdale activity in patients with borderline personality disorder. *Journal of Psychiatric Research, 57*, 108-116.

Grawe, K., Caspar, F., & Ambühl, H. (1990). Differenzielle Psychotherapieforschung: Vier Therapieformen im Vergleich: Die Berner Therapievergleichsstudie [Differential psychotherapy research: Comparing four forms of psychotherapies: The Bernese comparative trial]. *Zeitschrift für Klinische Psychologie, 19*, 294-376.

Greenberg, L. S. (1999). Ideal psychotherapy research. A study of significant change processes. *Journal of Clinical Psychology, 55*, 1467-1480.

Greenberg, L. S., & Pascual-Leone, A. (2006). Emotion in psychotherapy: A practice-friendly research review. *Journal of Clinical Psychology: In Session, 62*, 611-630. doi:10.1002/jclp.20252

Gullestad, F. S., Johansen, M. S., Hoglend, P., Karterud, S., & Wilberg, T. (2013). Mentalization as a moderator of treatment effects: Findings from a randomized clinical trial for personality disorders. *Psychotherapy Research, 23*(6), 674-689.

Gunderson, J. G. (2018). Discussion for the special section on mechanisms of change in the treatment of borderline personality disorder. *Journal of Personality Disorders.*

Gunderson, J. G., & Links, P. S. (2014). *Handbook of Good Psychiatric Management for borderline personality disorder*. Washington, D. C.: American Psychiatric Publishing.

Herpertz, S. C. (2013). The social-cognitive basis of personality disorders: Commentary on the Special Issue. *Journal of Personality Disorders, 27*(1), 113-124.

Herpertz, S. C., Rudolf, G., & Lieb, K. (2016). Borderline Persönlichkeitsstörungen. In S. C. Herpertz, F. Caspar, & K. Lieb (Eds.). *Psychotherapie. Funktions- und störungsorientiertes Vorgehen* (pp. 395-412). München: Elsevier.

Insel, T. R., & Gogtay, N. (2014). National Institute of Mental Health clinical trials: new opportunities, new expectations. *JAMA Psychiatry, 71,* 745-746.

Kazdin, A. E. (2009). Understanding how and why psychotherapy leads to change. *Psychotherapy Research, 19*(4-5), 418-428.

Kealy, D., & Ogrodniczuk, J. S. (2018). Emerging trends in personality disorder treatment research: Understanding what makes therapy work. *Journal of Personality Disorders.*

Keller, S., Stelmaszczyk, K., Kolly, S., de Roten, Y., Despland, J.-N., Caspar, F., Drapeau, M., & Kramer, U. (2018). Change in biased thinking in a treatment based on the motive-oriented therapeutic relationship for borderline personality disorder. *Journal of Personality Disorders.*

Kernberg, O. F. (1975). *Borderline conditions and pathological narcissism.* New York: Jason Aronson.

Kramer, U. (2018). Mechanisms of change in treatments of personality disorders: Introduction to the Special Section. *Journal of Personality Disorders.*

Kramer, U. (2017). The role of coping change in borderline personality disorder: A process-outcome analysis of Dialectical-Behavior Skills Training. *Clinical Psychology and Psychotherapy, 24*(2), 302-311. Doi: 10/1002/cpp.2017

Kramer, U., Flückiger, C., Kolly, S., Caspar, F., Marquet, P., Despland, J.-N., & de Roten, Y. (2014). Unpacking the effects of therapist responsiveness in borderline personality disorder: motive-oriented therapeutic relationship, patient in-session experience and the therapeutic alliance. *Psychotherapy and Psychosomatics, 83*, 386-287. Doi: 10.1159/000365400.

Kramer, U., Keller, S., Caspar, F., de Roten, Despland, J.-N., & Kolly, S. (2017). Early change in coping strategies in responsive treatments for borderline personality disorder. *Journal of Consulting and Clinical Psychology, 85*(5), 530-535. Doi: 10.1037/ccp0000196

Kramer, U., Kolly, S., Berthoud, L., Keller, S., Preisig, M., Caspar, F., Berger, T., de Roten, Y., Marquet, P., & Despland, J.-N. (2014). Effects of motive-oriented therapeutic relationship in a ten-session general psychiatric treatment of borderline personality disorder: a randomized controlled trial. *Psychotherapy and Psychosomatics, 83*, 176-186. Doi: 10.1159/000358528

Kramer, U., Pascual-Leone, A., Berthoud, L., de Roten, Y., Marquet, P., Kolly, S., Despland, J.-N., & Page, D. (2016). Assertive anger mediates effects of dialectical behavior-informed skills training for borderline personality disorder: a randomized controlled trial. *Clinical Psychology and Psychotherapy*. doi: 10.1002/cpp.1956.

Kramer, U., Pascual-Leone, A., Rohde, K. B., & Sachse, R. (2016). Emotional processing, interaction process, and outcome in clarification-oriented psychotherapy for personality disorders: A process-outcome analysis. *Journal of Personality Disorders, 30*(3), 373-394.

Kramer, U., Signer, S., Estermann, R., Sachse, R., & Caspar, F. (2017*). Social interaction patterns, therapist responsiveness and outcome in a short-term treatment for borderline personality disorder.* New York: Conference of the North American Society for the Study of Personality Disorders (NASSPD).

Kramer, U., Stiles, W. B. (2015). The responsiveness problem in psychotherapy: a review of proposed solutions. *Clinical Psychology: Science and Practice, 22,* 276-294.

Kramer, U., Stulz, N., Berthoud, L., Caspar, F., Marquet, P., Kolly, S., de Roten, Y., & Despland, J.-N. (2017). The shorter the better? A follow-up analysis of 10-session psychiatric treatment including the motive-oriented therapeutic relationship for borderline personality disorder. *Psychotherapy Research, 27*(3), 362-370. doi: 10.1080/10503307.2015.1110635.

Levy, K. N., Meehan, K. B., Clouthier, T. L., Yeomans, F. E., Lenzenweger, M. F., Clarkin, J. F., & Kernberg, O. F. (2017). Transference-focused psychotherapy for adult borderline personality disorder. In D. B. Fishman, S. B. Messer, D. J. A. Edwards, & F. M. Dattilio (Eds.). *Case studies within psychotherapy trials* (pp. 190-245). New York: Oxford University Press.

Levy, K. N., Meehan, K. B., Kelly, K. M. Reynoso, J. S., Weber, M., Clarkin, J. F., & Kernberg, O. F. (2006). Change in attachment patterns and reflective function in a randomized control trial of transference focused psychotherapy for borderline personality disorder. *Journal of Consulting and Clinical Psychology, 74*(6), 1027-1040.

Linehan, M. M., Davison, G. C., Lynch, T. R., & Sanderson, C. (2006). Technique factors in treating personality disorder. In L. G. Castonguay & L. E. Beutler (Eds.), *Principles of therapeutic change that work* (pp. 239-252). Oxford: Oxford University Press.

Livesley, W. J., Dimaggio, G., & Clarkin, J. F. (2016). *Integrated treatment for personality disorder. A modular approach.* New York: Guilford Press.

Luborsky, L., & Crits-Christoph, P. (1998). *Understanding transference. The Core Conflictual Relationship Theme Method. 2nd edition.* Washington, D. C.: APA.

Maillard, P., Dimaggio, G., de Roten, Y., Berthoud, L., Despland, J.-N., & Kramer, U. (in press). Metacognition as a Predictor of Change in Treatment for Borderline Personality Disorder: A Preliminary Pilot Study. *Journal of Psychotherapy Integration.*

McCutcheon, L. K., Kerr, I. B., & Chanen, A. M: (2018). Cognitive analytic therapy: A relational approach to young people with severe personality disorders. In U. Kramer (Ed.), *Case Formulation for Personality Disorders: Tailoring Psychotherapy to the Individual Client*. Cambridge, MA: Elsevier.

McMain, S. F., Links, P., Guimond, T., Wnuk, S., Eynan, R., Bergmans, Y., & Warwar, S. H. (2013). An exploratory study of the relationship between changes in emotion and cognitive processes, alliance, and treatment outcome in borderline personality disorder. *Psychotherapy Research, 23*, 658-673.

McMain, S. F., Pos, A. E., & Iwakabe, S. (2010). Facilitating emotion regulation: General principles for psychotherapy. *Psychotherapy Bulletin, 45*(3), 16-21.

Mischel, W., & Shoda, Y. (2008). Toward a unified theory of personality: Integrating dispositions and processing dynamics within the cognitive-affective processing system. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and Research* (3rd ed., pp. 208-241). New York, NY: Guilford Press.

Neacsiu, A. D., Rizvi, S. L., & Linehan, M. M. (2010). Dialectical behavior therapy skills use as a mediator and outcome of treatment for borderline personality disorder. *Behaviour Research and Therapy, 48*, 832839.

Nisbett, R., & Wilson, T. (1977). Telling more than we know: Verbal Reports on Mental Processes. *Psychological Review, 84*(3), 231-259.

Ogrodniczuk, J. S., Joyce, A. S., & Piper, W. E. (2013). Change in alexithymia in two psychodynamically informed individual psychotherapies. *Psychotherapy and Psychosomatics, 82,* 61-63.

Pascual-Leone, A. (2009). Dynamic emotional processing in experiential therapy: Two steps forward, one step back. *Journal of Consulting and Clinical Psychology, 77*, 113-126. doi:10.1037/a0014488.

Pascual-Leone, A. (in press). How clients “change emotion with emotion”: A programme of research on emotional processing. *Psychotherapy Research.* doi: 10.1080/10503307.2017.1349350

Pascual-Leone, A., Herpertz, S. C., & Kramer, U. (2016). Experimental designs and the “emotion-stimulus critique”: Hidden problems and potential solutions in the study of emotion. *Psychopathology, 49*, 60-68. doi: 10.1159/000442294.

Perez, D. L., Vago, D. R., Pan, H., Root, J., Tuescher, O., Fuchs, B. H., Leung, L., Epstein, J. Cain, N. M., Clarin, J. F., Lenzenweger, M. F., Kernberg, O. F., Levy, K. N., Silbersweig, D. A., & Stern, E. (2016). Frontolimbic neural circuit changes in emotional processing and inhibitory control associated with clinical improvement following Transference-Focused Psychotherapy in Borderline Personality Disorder. *Psychiatry and Clinical Neurosciences,70*(1), 51-61. Doi: 10.1111/pcn.12357

Perry, J. C., Drapeau, M., & Dunkley, D. (2005). *The Coping Action Patterns Rating System.* Montréal: McGill University.

Ruocco, A. C., Rodrigo, A. H., McMain, S. F., Page-Gould, E., Ayaz, H., & Links, P. S. (2016). Predicting treatment outcomes from prefrontal cortex activation for self-harming patients with borderline personality disorder: A preliminary study. *Frontiers of Human Neuroscience, 10*, 220. Doi: 10.3389/fnhum.2016.00220.

Santangelo, P., Bohus, M., & Ebner-Priemer, U. W. (2014). Ecological Momentary Assessment in borderline personality disorder: A review of recent findings and methodological challenges. *Journal of Personality Disorders, 28*(4), 555-576.

Safran, J. D., & Muran, J. C. (2000). Resolving therapeutic alliance ruptures: Diversity and integration. *Journal of Clinical Psychology, In Session: Psychotherapy in Practice, 56,* 233-243.

Saulsman, L., & Page, A. (2004). The five factor model and personality disorder empirical literature: A meta-analytic review. *Clinical Psychology Review, 23*, 1055-1085.

Scala, J. W., Levy, K. N., Johnson, B. J., Kivity, Y., Ellison, W. D., Pincus, A. L., Newman, M. G., & Wilson, S. (2018). The role of negative affect and self-concept clarity in predicting self-injurious urges in borderline personality disorder using ecological momentary assessment. *Journal of Personality Disorders.*

Schmitt, R., Winter, D., Niedtfeld, I., Herpertz, S. C., & Schmahl, C. (2016). Effects of Psychotherapy on Neuronal Correlates of Reappraisal in Female Patients With Borderline Personality Disorder. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 1*(6), 548-557. Doi: 10.1016/j.bpsc.2016.07.003.

Schnell, K., & Herpertz, S. C. (2007). Effects of dialectical-behavioral therapy on the neural correlates of affective hyperarousal in borderline personality disorder. *Journal of Psychiatric Research, 41*, 837-847.

Schnell, K., & Herpertz, S. C. (2018). Emotion regulation and social cognition as functional targets of mechanism-based psychotherapy in major depression and comorbid personality pathology. *Journal of Personality Disorders.*

Sharp, C., & Kalkpakci, A. (2015). Mentalization in borderline personality disorder: From bench to bedside. *Personality Disorders: Theory, Research and Treatment, 6*(4), 347-355.

Smith, T. L., Barrett, M. S., Benjamin, L. S., & Barber, J. P. (2006). Relationship factors in treating personality disorders. In L. G. Castonguay & L. E. Beutler (Eds.), *Principles of therapeutic change that work* (pp. 219-238). Oxford: Oxford University Press.

Starrs, C., & Perry, J. C. (2018). Coping action patterns as mechanisms of change across psychotherapies: Three case examples of personality disorders with recurrent depression. *Journal of Personality Disorders.*

Stiles, W. B. (2009). Responsiveness as an obstacle for psychotherapy outcome research : It's worse than you think. *Clinical Psychology : Science and Practice, 16*, 86-91.

Verheul, R., Andrea, H., Berghout, C., Dolan, Busschbach, van der Kroft et al. (2008). Severity Indices of Personality Problems (SIPP-118): Development, factor structure, reliability and validity. *Psychological Assessment, 20*, 23-34. Doi: 10.1037/1040-3590.20.1.23.

Wampold, B. E., & Imel, Z. E. (2015). *The great psychotherapy debate: The evidence for what makes psychotherapy work*. New York: Routledge.

Zanarini, M. C., Frankenburg, F. R., Reich, D. B., & Fitzmaurice, G. (2016). Fluidity of the subsyndromal phenomenology of borderline personality disorder over 16 years of prospective follow-up. *American Journal of Psychiatry, 173*, 688-694.

Table 1

Intake, process and outcome characteristics of the *N* = 8 selected patients with Borderline Personality Disorder

Case	OCF	Change in behavioral coping	Outcome
Consistent pattern[1]			
Paula	.66	-2.19	-4.00
Elizabeth	.67	-0.46	33.00
Grace	.47	2.13	19.00
Daniel	.41	-1.56	-22.00
Inconsistent pattern[1]			
Ava	.55	-2.47	4.00
Emily	.56	-0.73	-76.00
Jack	.20	-0.55	-25.00
Lily	.27	-2.67	0.00

Note. OCF: Overall Coping Functioning (from the Coping Action Pattern Rating Scale), assessed at intake; Change in behavioral coping (from the Coping Action Pattern Rating Scale), change assessed between sessions 1 and 5 (negative numbers indicate decrease in frequency of behavioral coping); Outcome (measured using the OQ-45 total score), change assessed between sessions 5 and 10 (negative numbers indicate decrease in problems).

[1] Consistent/Inconsistent pattern with mediation analysis presented by Kramer et al. (2017)