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Change processes in psychotherapy for patients presenting with histrionic personality disorder

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Abstract

Objective: Histrionic personality disorder (HPD) with a lifetime prevalence rate of 1,8% is an under-researched psychiatric diagnosis. The present study therefore aimed to investigate both the processes and outcomes of psychotherapy for HPD in a non-controlled study. **Methods:** A total of 159 patients diagnosed with HPD were recruited and received Clarification-Oriented Psychotherapy. Sessions 15, 20, and 25 were video-recorded and analyzed using the Process-Content-Relationship Scale. Therapy outcome was assessed with symptom measures at intake and discharge. Hierarchical Linear Modelling was applied to estimate the changes in the psychotherapeutic outcome and associations with patient and therapist process developments. **Results:** Improvements in relationship processes of patients and therapists were systematically related to outcome while only partial relationships were found on the levels of process and content. **Conclusion:** The present study represents the first systematic insight into core changes in patients with HPD undergoing psychotherapy.

Key Practitioner Message

This study suggests that Clarification-Oriented Psychotherapy is effective in reducing the general and disorder-specific symptoms of patients with histrionic personality disorder.

Improvements in relationship processes of patients and therapists during treatment were systematically associated with psychotherapy outcome and may be the change processes that drive symptom reduction.

Only partial relationships were found on the levels of process and content with outcome.

The present study demonstrates the centrality of the therapeutic relationship in explaining psychotherapy outcome for patients with histrionic personality disorder.

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Personality disorders (PDs) are described as relationship or interactional disorders and problematic interpersonal behavior is agreed to be at the heart of these disorders (Clarkin, 2012; Livesley & Larstone, 2018). In the case of individuals with histrionic personality disorder (HPD) behavior is characterized by self-dramatization, suggestibility and attention-seeking (Dilling & Freyberger, 2014). Theatricality, shallowness, egocentricity, and being easily hurt are other descriptions of patients presenting HPD (Dilling & Freyberger, 2014). Furthermore, individuals belonging to that particular diagnostic group often show a tendency towards sexually provocative behavior (Sorokowski et al., 2016). In the short run, patients with HPD may provoke attention from their interaction partners using the above-mentioned disruptive behaviors. However, in the long run, this behavior may lead to the withdrawal and ultimately relationship termination by the interaction partner. HPD patients may use border-crossing behaviors also in the therapeutic relationship, for example by presenting as particularly needy and asking their therapists for extraordinary treatment. This may have the function of (a) testing the stability of the relationship (see Gazzillo et al., 2019; 2021) and/or (b) deterring attention from the core content of therapeutic work (Sachse, 2020). The challenge posed on therapists in such situations is to satisfy the basic human need for recognition in their HPD patients without reinforcing the involved dysfunctional behavior to obtain it.

Depending on the source, prevalence rates of HPD vary between 0,6% (Winsper et al., 2019) and 1-3% (Bakkevig & Karterud, 2010) in the general population and Hasin and Grant (2015) report a lifetime prevalence rate of 1,8%. Although there is an ongoing debate about the validity of the diagnosis (Blashfield, Reynolds, & Stennet, 2012), overall, patients with HPD-consistent features show signs of heavy distress and the need for treatment: A higher rate of major depression, anxiety disorders, somatic disorders, and substance-related addictions

(Sachse et al., 2012). In a longitudinal study, histrionic symptoms during adolescence were also related to a higher risk of developing binge-eating disorder and recurring purging behavior during mid-adult age (Johnson et al., 2006). Moreover, significant comorbidities with other personality disorders, mostly narcissistic, dependent, and borderline PD were found (Bakkevig & Karterud, 2010).

To date and to our best knowledge, no studies investigating the effects of psychological treatments in HPD samples exist (Leichsenring et al., 2016). There are some case and single-subject studies in which patients with HPD exhibited improvements after functional analytic therapy (Callaghan, Summers, & Weidman, 2003) as well as Clarification-Oriented Psychotherapy (COP; Sachse & Sachse, 2016). Taking the current state of psychotherapy research on HPD into account, it is crucial not only to develop and evaluate effective treatments for HPD but also to better understand the underlying processes of change in this diagnostic group. The former may be realized by means of outcome research whereas the latter may be achieved using process research. Using process-outcome research may be the most meaningful way to study treatments for HPD. As Kazdin (2009) states, one of the main identifiers of a mechanism of change in psychotherapy is the relationship between the amount of change in the processes and the amount of change in symptoms. He emphasizes the importance of a better understanding of the key processes and mechanisms that lead to change in therapy, not only to obtain scientific explanations of how therapy works but also to directly enhance clinical change in patients. Understanding the mechanisms of change would help a clinician to select appropriate interventions for each individual, foster specific in-session processes, know what to do when, and assist the therapist with productively dealing with interpersonally challenging interactions and situations.

COP is a frequently practiced integrative treatment for PDs in Europe (Kramer et al., 2016), with a focus on clarification. Clarification is an empirically well-established mechanism

of change in psychotherapy that emphasizes the patients understanding of himself, his own experience and behavior with regard to theit motivational basis (Grawe, 2004). COP particularly aims at interpersonal clarification, which means to increase patients' awareness of their own contribution to interactional problems (Sachse et al., 2012). The COP approach focuses on self-regulation and motivation in interpersonal interactions and relationships (Sachse, 2020). By identifying motives and schemas of their patients, therapists can understand and manage the complexity of patients' internal and interpersonal functioning (Sachse, 2020).

COP, represents a general treatment model for PDs comprised of five phases (Sachse et al., 2012): phase I essentially serves the establishment of the therapeutic relationship; phase II is used to develop motivation for change by confronting the patient with their dysfunctional interpersonal strategies and their negative consequences; phase III fosters the clarification of schemes, persistent patterns of thoughts or behaviors, and represents the foundation for therapeutic change (also referred to as central working phase); phase IV refers to the restructuring of such schemes; and phase V focuses on the transfer of alternative behaviors into interactions in every-day life. COP further represents a psychologically-based model for interventions and case formulations offering specific and distinct content for each PD and individualization possibilities also based on comorbid PDs a particular patient may be presenting. It is comprised of three levels (Sachse et al., 2012): the level of relationships, the level of schemes, and the level of interactional maneuvers. The level of relationships includes the central relationship motives, in the case of HPD those are assumed to be "importance", "reliability" and "solidarity". According to Sachse (2019c), relationship motives frustrated in childhood remain high in the hierarchy of needs in patients with HPD. Consequently, beliefs about oneself and relationships are being formed. This corresponds to the level of schemes, divided into self-schemes and relationship-schemes. In HPD patients, *self-schemes* cover assumptions such as "I am not important", "I am boring", or "I am not attractive" and

relationship schemes include beliefs such as "In relationships I am invisible" or "In relationships I am not respected". There are three relevant components to the level of interactional maneuvers: One, the compensatory schemes, either addressing standards of own behavior (for HPD, e.g., "Be the most important" or "Be the center of attention"), or rules of others' behavior (such as "Partners are to give me their undivided attention"). Two, it is assumed that patients with HPD use strategic actions (e.g., positive ones as for example "Be entertaining" or negative ones like "Be whining") by which they get others to satisfy their specific interactional needs (Sachse et al., 2012). Three, HPD patients conduct relationship tests because they don't trust the positive relationship messages by the therapist (for example by violating the professional boundaries of therapy or devaluating the therapist, expecting not to be given attention or not being respected as a response).

Budge et al. (2013) in their meta-analysis of 30 studies examining the relative efficacy of evidence-based treatments (EBT) when compared to treatment-as-usual (TAU) for adults with a personality disorder (including potentially HPD) found that EBTs were superior to TAU. Previous studies have also examined the effects of COP on psychotherapy outcome. In their randomized controlled trial, Bamelis et al. (2014) compared the effects of Schema-Focused Therapy (SFT), COP and treatment as usual (TAU) on recovery- and dropout rates in a sample of mixed PDs. They reported recovery rates of about 80% for SFT, 60% for COP and 50% for TAU over three years of treatment with comparable drop-out rates for SFT (15%) and COP (20%) but not TAU (over 40%). It is important to note, however, that therapists in the COP treatment condition did not receive supervision and adherence was not checked for, which must be interpreted as important methodological limitations. Maillard et al. (2020) found a significant decrease in depression severity, psychological distress, and interpersonal problems over the course of COP in a naturalistic sample of N=161 patients with narcissistic PD. In a reanalysis of this data, Kramer et al. (2020) found that optimal process quality was linked with

the intensity of narcissistic symptoms and suboptimal process quality with a variety of general symptom loads and problematic personality traits. Further, Maccaferri et al. (2020) demonstrated the effectiveness of COP in a naturalistic sample of N=74 patients with dependent PD on symptom severity of depression, self-efficacy, interpersonal problems and dependent personality style.

Previously the following process changes were shown in COP for other PDs and predicted treatment outcome: For client contribution to the clarification process, relationship changes as well as changes in content (Maillard et al., 2020) and process (Kramer et al., 2020; Maillard et al., 2020). For therapist contributions to the in-session clarification process, process guidance (Kramer et al., 2018; Maccaferri et al., 2020), understanding of content (Maccaferri et al., 2020), and relationship variables (Maccaferri et al., 2020).

The present study aims at determining the effects of potential processes of change in the psychotherapy for HPD and their effects on treatment outcome. The processes of change are examined on three levels: the *relationship* (e.g., to what extent does the therapist make a relationship offer?; to what extent does the patient shape the relationship with the therapist?), the *process* (e.g., to what extent does the therapist influence the conversation?; to what extent does the patient agree to work on the problem or does the patient avoid?), and the *content* (e.g., to what extent does the therapist understand the patient?; to what extent does the patient have a presenting problem to be treated therapeutically?). We focus on change processes during phase III of COP as it is the main working phase of treatment which essentially fosters the clarification of schemes, persistent patterns of thoughts or behaviors, and represents the foundation for therapeutic change. We are interested in this particular moment of therapy, and as early as possible. Therefore, we selected three sessions from the early part of the working phase, assuming that phases I and II end between session 10 and 15. Outcome is measured both as specific HPD severity and symptom severity overall.

The following hypotheses were tested:

1. The psychotherapeutic in-session processes assessed from patient and therapist perspective (on the levels of content, process, and relationship) will improve over the central working-phase of therapy. This means that we assume that content is increasingly central, process is less marked by avoidance and relationship is more and more trustworthy and positive.

2. Such improvements will predict therapy outcome with respect to reductions in specific HPD severity and overall symptomatology.

Methods

Participants

Patients. A total of 159 patients diagnosed with HPD were included in the present naturalistic study. One hundred thirty-one (82.4 %) were female and 28 (17.6 %) male. Their mean age was 39.14 years ($SD = 12.42$; ranging from 19 to 67). Eighty-one patients also fulfilled criteria for one additional PD (6 avoidant PD, 30 dependent PD, 43 narcissistic PD, 2 obsessive compulsive PD) and seven of those for a third PD (1 avoidant PD, 3 dependent PD, 2 narcissistic PD, 1 passive-aggressive PD). All patients were in treatment at a German center specialized in the treatment of PDs. HPD patients made up 30% of a larger naturalistic trial sample of PDs ($N = 517$), which took five years to be recruited. It is worth mentioning, that those with a primary diagnosis of HPD were fewer (N=120; 23%). These numbers are in line with Blashfield and Davis (1993) who report a HPD prevalence rate of up to 24% in psychiatric populations. More recent studies report smaller prevalence rates of 1-6% in clinical outpatient samples (Keown, Holloway, & Kuipers, 2002; Ranger et al., 2004; Zimmermann, Rothschild, & Chelminski, 2005), however, it should be taken into account, that the present sample was recruited at a center specialized in the treatment of PD patients and is thus not representative of the average clinical population. Other specific PDs of the larger naturalistic trial that we draw from have been investigated in separate studies (e.g. Maillard et al., 2019; Maccaferri,

2020). The patients' diagnostic status and inclusion criterion at baseline was assessed with an interview of about one hour conducted by trained raters (therapists in training) using the Structured Clinical Interview for DSM-IV for personality disorders (SCID-II; First & Gibbon, 2004). The quality of the SCID-II diagnoses was ensured by clinical supervision at the center which encompassed 100% of the cases included in the study. All patients were German-speaking and provided written informed consent concerning the use of their data. The study was approved by the relevant ethics instances.

Therapists. The therapists (n = 77) were psychologists and psychiatrists in post-graduate psychotherapy training to become psychotherapists according to the German law. Eighty percent were female, with a mean age of 31.3 years (range = 28-36 years). They were all trained in the institution were data for this study was collected and supervised by the developers of COP.

Treatment

COP is an integrative treatment for patients with PDs, based on client-centered psychotherapy (Sachse et al., 2011). It promotes the clarification of core schemes, fosters the modification of interactional behavior, and helps develop the construction of new representations and fosters new experiences. In the present study, treatments were supervised by the developers of COP and lasted between 48 and 78 sessions. Research supports the notion that PDs may require more extended psychotherapy than acute disorders and that time may be a critical ingredient for improvement (Gabbard, 2000). Duration of treatment was determined individually, based on clinical indication.

Instruments

Process-Content-Relationship Scale (PCRS). This measure is an observer-rated instrument assessing the psychotherapeutic processes in patients and therapists on the levels of content, process and relationship (Sachse, Schirm, & Kramer, 2015; Sachse et al., 2011). It is

comprised of 54 items arranged on nine subscales. Each item is rated on a 7-point Likert scale, from 0 (not at all) to 6 (to a great extend). Three subscales concern the patient: 1. *Content* (7 items; e.g., "does the patient have a presenting problem to be treated therapeutically?"), 2. *Process* (7 items: e.g., "does the patient agree to work on the problem or does the patient avoid?"), 3. *Relationship* (6 items: e.g., "does the patient shape the relationship with the therapist?"). Six subscales concern the therapist: 1. *Therapist relationship* (6 items: e.g., "to what extent does the therapist make a relationship offer?"), 2. *Therapist understanding* (6 items: e.g., "to what extent does the therapist understand the patient?"), 3. *Therapist process guidance* (8 items: e.g., "to what extent does the therapist influence the conversation?"), 4. *Treatment of patient avoidance* (2 items: e.g., "to what extent does the therapist deal with the patient avoidance?"), 5. *Treatment of interactional games* (6 items: e.g., "to what extent does the therapist react to relationship tests of the patient?"), and 6. *Treatment of schemes* (6 items: e.g., "to what extent does the therapist work on patient schemes?"). The last three scales were not used in the present study. The *Treatment of patient avoidance* and the *Treatment of interactional games* are two clinically helpful subscales, however, in the present study they suffer from a selection bias as only patients with a specific score on process and relationship subscales were rated on these therapist subscales. The power in these two is therefore insufficient. Since the present study focused on the working phase of COP, which emphasizes the process of clarification itself and does not focus on working on schemes, the *Treatment of schemes* was also not considered.

Concerning the interrater reliability, a total of six pairs of raters scored 60 cases (37% of the total sample). Video- or audio-recordings of ten minutes (between minute 10 and 20) were used for both patient and therapist ratings. A validation study of the first version of the PCRS has shown that the central minutes between 10 and 30 best represent a session, and particularly the minutes 10-20 (Sachse, Schülken, & Leich, 2006). This short period of the

session was therefore chosen in the present study to mirror in-session processes. Raters were blind to which session they were observing. The total mean of *Intra-Class Coefficients* was .74 (SD = .10, range = .54-.83).

Brief Symptom Inventory (BSI). This instrument is a self-report measure that evaluates psychological distress and symptoms (Franke, 2000). It is composed of 53 items and 9 dimensions (somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism). Each item is rated on a 5-point Likert scale, from 0 (not at all), to 4 (extremely). In this study, we used the Global Severity Index (GSI), which is the mean for all rated items. The German version presented adequate psychometric properties (Cronbach's alpha =.70-.89; Franke, 2000).

Personality Style and Disorder Inventory (PSSI). This inventory is a self-report instrument measuring the relative manifestation of personality styles as non-pathological equivalents to personality disorders conceptualized in the DSM-5 and ICD-10. The inventory encompasses 140 items and 14 subscales: willful / paranoid (PN), spontaneous / borderline (BL), reserved / schizoid (SZ), ambitious / narcissistic (NA), loyal/dependent (AB), critical / negativistic (NT), intuitive / schizotypal (ST), self-critical / avoidant (SU), passive / depressive (DP), assertive / antisocial (AS), charming / histrionic (HI), optimistic / rhapsodic (RH), conscientious / compulsive (ZW). Each item is rated on a 4-point Likert scale, from 0 (does not apply at all) to 3 (fully applies). The German version of the inventory presented good psychometric properties (Cronbach's alpha = .73 - .85, Kuhl & Kazén, 2009).

Procedure

In this study, patients were treated with COP by psychologists and psychiatrists in post-graduate psychotherapy training. All therapy sessions were video- or audio- recorded. Three sessions (15, 20 and 25) from the central working phase of psychotherapy were selected for

each patient to apply the Process-Content-Relationship Scale. Outcome measures were assessed at baseline and treatment termination.

Analytic strategy

Considering the multilevel structure of the data with repeated measures (level 1) nested within patients (level 2) nested within therapists (level 3), in order to estimate the rate of changes in the targeting processes we used Hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002) computing Empirical Bayes (EB) estimates for the rates of change in the targeted psychotherapy processes (process, content, relationship).

We then ran separate three-level models, including time (in sessions) as the only level 1 predictor (centered at session 25) and including process, content, and relationship of both, patients (process = PP; content = CP; relationship = RP1 & RP2) and therapists (process = PT; content = CT; relationship = RT) as outcome variables in the separate models. Based on these time-as only predictor models, we computed the individual EBs representing patient-specific estimated rates of change in each outcome variable. Besides the computation of EBs, these models allow to calculate intraclass correlations (ICCs), which decompose the amount of variability in content, process and relationship accounted for by the therapist and by the individual patient.

The equation for these three-level models with time as the only predictor was as follows:

Level-1 Model

$$PP/CP/RP1/RP2/PT/CT/RT_{ijk} = \pi_{0jk} + \pi_{1jk}*(TIME25_{ijk}) + e_{ijk}.$$

Level 2 Model

$$\pi_{0jk} = \beta_{00k} + r_{0jk}$$
$$\pi_{1jk} = \beta_{10k} + r_{1jk}.$$

Level 3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$
$$\beta_{10k} = \gamma_{100} + u_{10k}.$$

At level 1, the model estimated the scores in the outcome variable (i.e., PP/CP/RP1/RP2/PT/CT/RT) at moment i for patient j treated by therapist k, as a function of the level of the dependent variable at session 25 (π_0) and its rate of change during the ten sessions analyzed (π_1) for patient j seen by therapist k. The random effect e_{ijk} allowed patient j treated by therapist k to deviate from its estimated score at time i.

At level 2, these coefficients dropped down to be predicted by the average of the dependent variable at session 25 (β_{00}) and the average change over the course of the ten sessions (β_{10}) for patients treated by therapist k. Random effects at level 2 (r_0 and r_0) allowed patient j's level at session 25 and rate of change in the dependent variable to vary around therapist k's patients mean.

At level 3, therapists' k average level at session 25 and rate of change during the ten sessions in the dependent variable dropped down to be predicted by the sample's average level at session 25 (γ_{000}) and rate of change in the dependent variable (γ_{100}) across all therapists. Random effects at level 3 (u_{00} and u_{10}) allowed therapist k's average level at session 25 and rate of change during the ten sessions in the dependent variable to vary across all patients estimated average values.

Once we computed individual patient-specific EBs of the levels at session 25 (i.e., π_{0jk}) and the rate of change during the ten targeted sessions (i.e., π_{1jk}), we ran separate three-level HLM models for each of the outcome variables of the study (GSI and PSSI_HIST) including the EBs as predictors. First, we ran a time-as-only predictor model including time as a level-1 predictor, centered at treatment termination (baseline = -1, post-treatment = 0; i.e., representing the change produced during the whole therapy). In order to allow the model to converge with only two assessment points of outcome variables, we did not include random effects of time

neither at level-2 nor at level-3; however, we included random effects for the intercept both in the level-2 and level-3 equations. Second, we ran main effect models including as level-2 predictors (grand mean centered) the estimated patient-specific values at session 25 (π_{0jk}) and the rate of change during the ten targeted sessions (π_{1jk}) (i.e., the EBs computed in the first model), as predictors of both the intercept (estimated value of the outcome variable at the end of treatment) and the slope (change in the outcome variable during treatment).

Results

For the time as only predictor models, patients decreased significantly by 3.64 units in the PSSI_HIST ($\gamma_{100} = -3.65$; $SE = .63$; CI_{95} [-4.88, -2.42]; $t(101) = 5.76$; $p < .001$) and by 1.84 units in the GSI ($\gamma_{100} = -1.835$; $SE = .13$; CI_{95} [-2.09, -1.58]; $t(101) = 14.17$; $p < .001$) from intake to termination.

Results of the conditional models can be found in Table 1.

For the models analyzing the effects of patients' relationship processes (RC1 and RC2), we found significant effects of the slope, i.e., change during treatment on the rate of change in PSSI_HIST and GSI. Results revealed that a one-unit increase in RC1 from session 15 to 25 was associated with a significant reduction of .776 units in PSSI_HIST and .159 units in GSI from pre- to post. When patients increasingly play the part of the client, trust the therapist, and can be confronted by the therapist from sessions 15 to 25, they improve more in general and HPS specific symptomatology from intake to termination. In the case of RC2, a one-unit increase of the predictor was related to a decrease of .641 units in PSSI_HIST and of .13 units in GSI during treatment. When patients decreasingly send images and appeals to the therapist and try to control their therapist less from sessions 15 to 25, they improve more in symptomatology over the course of treatment. The same models analyzing the effects of content (CC) and process (PC) from the patient's perspective did not reveal significant results.

For the model analyzing the effects of therapists' relationship processes (RT), we found a significant effect of the slope, i.e., change during treatment on the rate of change in PSSI_HIST but not GSI. A one-unit increase in RT from session 15 to 25 was associated with a significant reduction of 1.215 units in PSSI_HIST from intake to termination. When therapists increasingly accept and respect the client, are warm, authentic, real, transparent, competent, and believe in their client's ability to change from sessions 15 to 25, clients improve more in HPD specific symptomatology from intake to termination. The same model analyzing the effect of content (CT) from the therapist's perspective did not reveal significant results. Finally, when analyzing the effects of the process (PT), we found a significant effect of the slope on the rate of change in PSSI_HIST but not on GSI. An increase of one unit in PT during the ten targeted sessions was associated with a reduction of .855 units in PSSI_HIST during therapy. When therapists increasingly guide the therapy process, internalize the client's perspective, deepen, help the client clarify and explicate schemata from sessions 15 to 25, clients improve more in the disorder-specific symptomatology over the course of treatment.

We did not find any significant results of the estimated values of process variables in session 25 on the intercept or slope of of the outcome variables.

Discussion

The purpose of this study was to determine the effects of potential processes of change in the working-phase of COP and its effects on treatment outcome in a large sample of HPD patients. In a first step, we observed change in these processes, and in a second step, we tested if such changes were related to treatment outcome. In short, the results of this study were mixed. In line with hypothesis one, our results suggest that in-session processes on the levels of the content, process, and relationship do improve during the central working-phase of therapy. Partially in contradiction with hypothesis two, however, it was only the improvement of clients' contributions to relationship processes (when patients increasingly play the part of

the client, trust the therapist, and can be confronted by the therapist and decreasingly send images and appeals to the therapist and try to control their therapist less) that predicted general symptom reduction. Again, improvements of clients' contributions to relationship processes as well as improvement of therapists' contributions to relationship processes (when therapists increasingly accept and respect the client, are warm, authentic, real, transparent, competent, and believe in their client's ability to change) and process directivity (when therapists increasingly guide the therapy process, internalize the client's perspective, deepen, help the client clarify and explicate schemata) predicted the reduction in histrionic symptoms. In a study looking at change processes of COP in patients with narcissistic PD (Maillard, et al., 2019), patient improvement on the three levels of processes was systematically related to a reduction in general and depressive symptoms as well as interpersonal problems. Only partial relationships were found between therapist process improvements and outcome, i.e., therapist relationship change was linked with changes in depressive symptoms and therapist process guidance change was linked with general symptom change. In a study looking at change processes of COP in patients with dependent PD (Maccaferri et al., 2020), patient processes were not related to outcome, whereas changes in therapist relationship offer, understanding, and process directivity were related to symptom change in disorder-specific dependency traits. Taken together, results suggest that improvements in therapist processes may be particularly important for a reduction of PD-specific symptomatology.

According to Kazdin (2009), a mechanism of change represents the theoretically anchored process that is responsible for the change, which is the link between the change in the studied variable and the amount of symptom change. In their review on how personality disorders change in psychotherapy, Kramer et al. (2020) acknowledge the centrality of the therapeutic relationship, especially the therapeutic alliance, therapist empathy, and responsiveness in explaining outcome across treatment modalities for PD. They further

emphasize the importance of observing the in-session processes, using independent researchers to code various aspects of the sessions. This research strategy sets the priority to study time-dependent process components as a mechanism of change that explains psychotherapy outcome. This is the methodological approach chosen in the present study, indeed suggesting for the therapeutic relationship to be a relevant mechanism of change in psychotherapy for HPD. An improvement in patient processes on the level of the relationship meaningfully increased the rate of change in both HPD-specific symptomatology and psychological distress overall. Improvements in the quality of the therapist relationship offer predicted an increase in the rate of change in histrionic symptoms but not general symptom severity. The breadth of this result may not be surprising, we would like to insist that a good therapeutic relationship is central for clients with histrionic features.

Clinically, our results suggest that it may be particularly helpful for therapists to intervene on histrionic (disorder-specific) symptoms by working on the quality of the relationship they can offer to the patient (e.g., by focusing on the central motive of importance which clients with HPD present), their reaction to relationship tests (e.g., Dimaggio et al., 2015; Sachse, 2019a), and by learning to use a process-directive position, as opposed to a more non-directive approach (e.g., Colli et al., 2014; Sachse, 2019b) while leaving the choice of the content of therapy to the patient.

We can conclude from this study, but of course more research is needed to understand the processes and outcomes of treatments for HPD. Our study was conducted in the naturalistic setting and without control group. Therefore, the results must be interpreted with some caution and should be replicated under controlled conditions. Although the study was realized in a naturalistic setting, we have reasons to believe that treatments were delivered adherent to the COP model. First, because therapists were supervised by the developers of COP, and second, because the high quality and improvement of patient processes found supports this assumption.

Since PDs do not usually occur alone but comorbid with other PDs, we decided to include all patients with a HPD diagnosis according to the SCID-II into our analyses to maintain a good ecological validity, sample size, and power. However, it should be considered that those with a primary diagnosis of HPD were fewer (N=120) and those with pure HPD were even fewer (N=78). Another limitation is that no formal inter-rater reliability for the diagnoses was measured. Conclusions from our study to these patient groups should be drawn with caution. Further methodological limitations have to be acknowledged: One being that patients in our sample were predominantly female (82%). This is in line with previous literature, stating that twice as many women than men present with HPD (e.g., Coolidge et al., 2011). Another possibility to explain the gender imbalance in the present sample could be the fact that women are more likely to seek treatment for their psychiatric disorder than men (e.g., WHO, 2020). Two, no disorder-specific questionnaire was included as outcome measures, such as the Brief Histrionic Personality Scale (BHPS; Ferguson & Negy, 2014), which should be implemented in future studies. We used the subscale for HPD of the PSSI, though it only comprises ten items which may not be sufficient to address all relevant aspects of this clinical population. Three, in order to assess the outcome, only self-report questionnaires were used while additional observer-rated outcome measures could benefit the validity, reliability, and objectivity of the study. Four, further studies could cover the assessment of changes in the SCID-II criteria for both HPD and other personality disorders at both treatment termination and follow-up. Along with the previous limitation, no reliability checks for the SCID-II diagnoses at treatment begin were conducted in the present study, which would be important in future studies.

If the present study represents a first step in the exploration of mechanisms of change in HPD and more broadly patients with personality pathology, future studies should focus on other criteria for the identification of change mechanisms. Kazdin (2009) proposes both specificity, showing that the observed change is sufficiently different from other constructs and

experimental manipulation, showing that the direct manipulation of the process has an effect on outcome. Future research should thus be directed at differentiating whether findings are specific to HPD patients, PD patients or psychiatric patients overall. It would be helpful to critically assess what the specific islands of processes in patients with histrionic features are, amidst an assumed ocean of generic effective processes of how psychotherapy works. Clarification is needed on whether a disorder-specific approach is needed or whether a more general, transdiagnostic approach would be efficient in treating patients with HPD.

Future research should also be directed towards testing additional treatments for personality pathology, as the present study has been the first to investigate the effects of a psychological treatment on both the level of processes and outcomes. It is important to explore other therapeutic orientations such as psychodynamic treatments in order to develop a more precise understanding of the mechanisms at work in different psychotherapeutic approaches for HPD. Finally, to date no randomized control trials evaluating the effectiveness of different treatments for HPD in direct comparison exist (Leichsenring et al., 2016). This method represents the current gold-standard in assessing causality and should be used in future studies. Taken together, our study indicates the potential effectiveness of COP for HPD patients and for the predicted relationship between its processes and treatment outcome. Thereby, the present work contributes to a better understanding of potential mechanisms of change in psychotherapy which recently has been one of the most important means of psychotherapy research and speaks to the importance of the therapist contribution to the therapeutic relationship.

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Figure 1

Clarification-Oriented Psychotherapy model of histrionic personality disorder
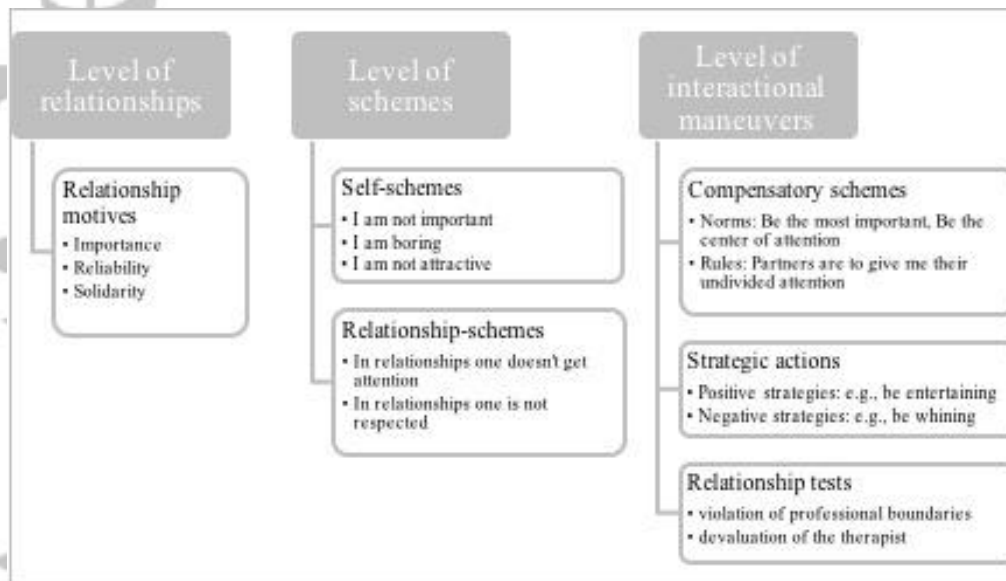
Table 1. Effects of changes in psychotherapy processes of patients and therapists on the rate

of change in outcome variables

	Intervention period PSSI				
	y110	SE	CI95	t(99)	p
Patient					
RC1	-0.776	.28	[-1.32, -.23]	2.73	.008**
RC2	-0.641	.31	[-1.25, -.03]	2.05	.043*
CC	-0.089	.1	[-.29, .11]	.89	.377
PC	-0.109	.16	[-.42, .20]	.68	.496
Therapist					
RT	-1.215	.47	[-2.14, -.29]	2.6	.011*
CT	-0.406	.23	[-.86, .04]	1.76	.082
PT	-0.855	.33	[-1.50, -.21]	2.56	.012*
	Intervention period GSI				
Patient					
RC1	-0.159	.06	[-.28, -.04]	2.71	.008**
RC2	-0.13	.06	[-.25, -.01]	2.02	.046*
CC	-0.04	.02	[-.08, .00]	1.95	.053
PC	-0.052	.03	[-.11, -.01]	1.59	.114
Therapist					
RT	-0.119	.1	[-.32, .08]	1.22	.224
CT	-0.036	.05	[-.13, .06]	0.75	.457
PT	-0.076	.02	[-.12, -.04]	1.1	.276