Patient coordination style during the first session of therapy: relationship with early alliance, patient’s characteristics and outcomes

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Summary


In the past two decades, psychotherapy researchers and clinicians postulated that the therapeutic alliance is a key component in psychotherapy. Meta-analyses confirm this assumption and conclude that alliance is a powerful predictor of therapeutic outcome for various forms of treatments, problems and patients. In the literature, various measures of alliance are mentioned but not much is known about the behavioural correlates and the nature of this process. The coordination construct is a way to analyse the micro-process involved in the interactional process. Defined by Westerman and Foote (Psychotherapy 1995;32:222–32) as “how well a patient relates his or her contributions in the exchange to the therapist’s contributions and to the patient’s own contributions at other points in time”, the patient’s coordination style (PCS) focuses on the complex interaction process and defensive pattern involved in the problematic patient’s behaviour. Our hypothesis is that the coordination construct involves conversational collaboration needed to create a strong alliance.

The aim of the study is to investigate this hypothesis by analysing the interaction between patient and therapist. Furthermore, the influence of patient’s characteristic on patient’s coordination style at the beginning of the therapy is explored. Moreover, in line with findings in the alliance literature, we expect to find a relationship between coordination style and therapeutic outcome.

The data consisted in 60 self-referred outpatients with anxiety and depressive disorders (with/without cluster C personality disorders) that completed the Brief Psychodynamic Intervention in the Adult Psychiatry outpatient unit of the University of Lausanne (Switzerland). Coordination style was assessed at the first session by means of the coordination scales and alliance was measured by the Helping Alliance Questionnaire (Haq-I), patient’s version administrated after each session of treatment. Patient’s characteristics are measured in terms of global symptomatic distress (SCL-90), social adjustment (SAS), interpersonal problems (IIP) and overall level of defensive functioning (DMRS). Outcome of treatment consists of reduction in symptomatic distress (SCL-90, HAMA, HDRS) and positive evolution of social adjustment.

As predicted, patient coordination style was closely related to the therapeutic alliance as assessed by the patient. Furthermore, patient’s coordination style in the first session was a good predictor of the development of the alliance during early sessions of Brief Psychodynamic Intervention. Results showed that coordination was largely influenced by patient’s characteristics. The global symptomatic distress, the level of social maladjustment and specific interpersonal problems (hostility and domineering) were correlated to a non-coordinated style. However, coordination was not related to outcome in Brief Psychodynamic Intervention. With regard to these results, the specific roles of therapist and patient in developing early alliance are discussed.

Keywords: therapeutic alliance; interactive behaviour; brief psychotherapy

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Introduction

As defined in the scientific and clinical literature, alliance refers to a collaborative relationship characterised by an involvement in the therapy process based on the agreement on both the tasks and goals of the therapy and a positive personal bond that includes issues such as confidence, trust and mutual approval [1–3]. This collaboration depends not only on the patient’s or therapist’s characteristics, but also involves the relationship between them [4].

However, we do not yet know how this collaboration manifests itself during interaction [5] nor what types of behaviour lead to its establishment and development. This question is of great importance since it is first and foremost through interaction that we can understand how therapist and patient either do – or do not – contribute to a collaborative exchange or alternatively undertake reparative actions to remedy for momentary ruptures.

As Sexton et al. [6] showed in their sequential analytic study of Brief Therapy that working alliance was largely formed within the first session, this study aims at exploring interpersonal processes reflecting patient’s active collaboration from the very beginning of the treatment. Empirical studies have highlighted two fundamental behavioural dimensions which are thought to reflect inter-individual collaboration: (a) the partners’ involvement – with each other and with the situation [6]; and (b) the partners’ coordination [7–9].

Westerman et al. [10] developed the patient coordination style (PCS) construct in order to study the conversational aspect of this process. Coordination refers to how a patient relates his or her contributions in the exchange to the therapist’s contributions and to the patient’s own contributions at other points in time [9]. As such, it examines how the conversation is organised over time, and it addresses the verbal regulation between both partners which is necessary for clearly and mutually defined themes to emerge. In other words, PCS addresses the degree of fit of the patient’s speech with the therapist intervention. PCS construct was guided by interest in psychodynamic concepts such as resistance, defences and transference, and in discourse processes.

PCS departs from approaches of alliance that assess mainly the patient’s positive attitudes toward the therapist and includes such aspects as expressing and managing disagreement and conflict. As suggested by Westerman et al. [9], disagreement or momentary hostile behaviour can reflect a defensive stance that does not jeopardise alliance and patient’s trust in therapy. As reported by Horowitz et al. [11] verbal avoidance during discourse, “diselaboration”, may be a sign of an approaching intrapsychic conflict. Hence, coordination implies that the patient can remain active in establishing, exploring and negotiating different themes, even during more conflictual moments. On the other hand, non-coordination is related to a lack of participation and cooperative efforts [12] and to negativism, distrust, hostility in interpersonal behaviour [13].

Previous investigations show substantial overlapping (0.71 in initial phase and 0.56 in middle phase of treatment) between PCS and Working Alliance Inventory [14]. Therefore, PCS was considered as a behavioural measure of patient’s contribution to alliance. PCS evolves in a curvilinear trajectory in Brief Treatment [15] and is related with outcome in various brief therapeutic approaches [10, 16].

Influence of patient’s characteristics on PCS is not clear. As showed by the meta-analysis of Horvath and Luborsky [17], patient’s interpersonal and intra-personal characteristics influence with a similar impact the formation of a positive alliance (r = 0.30 and 0.32, respectively). Patients characterised by low quality of object relations [18], hostile-dominant problems [19], problems in social adjustment and defensiveness [20], tend to develop weak alliance. The influence of psychopathology showed mixed results [21]. Westerman et al. [16] showed that outpatients were better coordinated than inpatients, PCS explaining 21% of variance.

Development of techniques about treatment of patients with borderline-narcissistic spectrum of personality disorders put the working alliance as a basic but critical condition for the success of the psychotherapy [22]. Difficulties in establishing and maintaining a trusting relationship with these patients are probably related to negative therapeutic reaction, envy, hostile dependency, idealisation and splitting [23].

The goals of this study are twofold. First, it investigates the relation between PCS during the first therapy session and the early alliance building process. Second, it examines the influence of patient psychopathology on PCS. As such, it is a further contribution to the questions raised by Westerman and Foote [9] regarding the discriminant validity of the PCS instrument.

Methods

The data consisted of recordings (48 video and 12 audio) of the first therapy session as well as transcripts.
Sample

Sixty (n = 60) outpatients (37 female and 23 male) from the outpatient clinic of the Adult Psychiatry Department (University of Lausanne) were included in this study. The patients were between 18 and 60 years of age (M = 28.8, SD = 9.21). The majority (63%) had college level education, and 38% were university level students. All subjects gave written informed consent to participate in the study. Patients were seeking help for either a depressive episode (37%), social or specific phobias (21%) or generalised anxiety disorder (18%). Close to half (44%) presented a Cluster C personality disorder. Although no patient met the complete criteria for borderline personality disorder (BPD), 21% showed several BPD traits. Subjects with organic or delirium disorders, substantial alcohol or drug dependence, psychotic or bipolar disorders, mental retardation and antisocial personality disorder were excluded from the study.

Therapists

Patients were randomly assigned to 10 therapists (3 women and 7 men) who had extensive experience in psychodynamic psychotherapy (M = 19 years of practice, range = 8–32 years).

Treatment

All patients began treatment with a four-session Brief Psychodynamic Investigation (BPI), a formalised, manual-based investigation guided by psychodynamic principles [24]. The therapist’s goal during the initial interview is to elaborate a psychodynamic hypothesis regarding the patient’s present crisis and to communicate an initial interpretation to the patient. This initial interpretation must also take into consideration the personality organisation and patient’s core conflict relationship theme. The following two sessions are used to work through and elaborate this hypothesis. Finally, the last session serves to discuss possible further psychotherapeutic treatment and to choose an adequate therapeutic approach.

Measures

Patient coordination style

The coordination scales include seven items to be rated on a 7-point Likert-scale (from –3, non-coordinated, to +3, well coordinated). Our version of the instrument includes 4 subscales:

1. the verbal content with two items on establishing topic and orienting discussion themes;
2. the mode of participation with two items on patient’s coordination, either having an active and leading role in the interaction or in a passive and follower role in the interaction;
3. the therapeutic context with two items on coordination when the therapist is supportive or when he/she is expressive;
4. global rating, with one item on the global assessment of PCS.

A total score, which corresponds to the mean of the 7 items (global rating and PCS in establishing topic, orienting discussion, active mode, passive mode, when the therapist is supportive, when he/she is explorative), will also be used.

Examples of non-coordination include when the patient does not express his or her thoughts, frequently changes the subject without establishing any connections, contradicts him/herself, appears cooperative while being truly opposing, rejects an interpretation, answers different questions than those raised, avoids the topics brought up by the therapist or when a patient initiates a topic but then changes the subject. On the other hand, examples of coordination are when a patient contributes to establish a clear theme of discussion, expresses his or her thoughts, feelings and concerns in a responsive manner, and explores the therapist’s interventions.

The validity studies of Westerman et al. [10, 16] showed acceptable interrater reliability (r ranging from 0.68 to 0.93) and good internal consistency (α ranging from 0.63 to 0.98). Coordination measured at intake interview was predictive of outcome (r = 0.60) for a 10-session brief action-oriented therapy. PCS discriminates between in- and outpatients, and between non-professional and professional therapists.

As we were interested in differentiating between supportive and explorative therapist interventions (see [25]), we added ‘the therapeutic context’ subscale to the original coordination scales. Therapist interventions vary along a continuum, from most supportive (i.e. reformulation, advice, acknowledgment) to most expressive interventions (i.e. confrontation, interpretation). We assume that PCS assesses an interpersonal process which may be influenced by therapist style and technique.

In this study, the psychometric properties of the Coordination Scales were adequate (see table 1) and comparable to those reported by Westerman et al. [10]. Reliability on the four subscales level
Table 1: Interrater reliability and internal consistency of the PCS subscales.

<table>
<thead>
<tr>
<th>subscales</th>
<th>ICC*</th>
<th>α</th>
<th>range</th>
</tr>
</thead>
<tbody>
<tr>
<td>verbal content</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>topic establishment</td>
<td>0.87</td>
<td>0.68</td>
<td>0.62–0.82</td>
</tr>
<tr>
<td>topic forward movement</td>
<td>0.79</td>
<td>0.73</td>
<td>0.79–0.83</td>
</tr>
<tr>
<td>mode of participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>active participation</td>
<td>0.83</td>
<td>0.73</td>
<td>0.67–0.82</td>
</tr>
<tr>
<td>passive participation</td>
<td>0.90</td>
<td>0.70</td>
<td>0.65–0.77</td>
</tr>
<tr>
<td>therapeutic context</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>supportive</td>
<td>0.73</td>
<td>0.75</td>
<td>0.71–0.85</td>
</tr>
<tr>
<td>expressive</td>
<td>0.67</td>
<td>0.67</td>
<td>0.65–0.77</td>
</tr>
<tr>
<td>global rating</td>
<td>0.83</td>
<td>0.86</td>
<td>0.84–0.90</td>
</tr>
</tbody>
</table>

Note: n = 12; * ICC = Intra-Class Correlation coefficient; α = Cronbach’s alpha.

Therapeutic alliance
The Penn Helping Alliance questionnaire (HAq-I), patient version [26, 27], was used after the first and the fourth session of BPI. It is an 11-item self-report questionnaire rated on a 6-point Likert-scale (from −3, I strongly feel that it is not true, to +3, I strongly feel that is true). The instrument assessed two types of alliance: seven items assess patient’s experience to feel helped and supported by the therapist (HA 1) and four items assess patient’s experience of working together with the therapist in a joint effort in order to overcome the difficulties (HA 2). The HAq-I correlated to other well-validated instruments (0.74 to CALPAS and 0.74 to WAI according to Hatcher and Barens [28]). In a review of the validation studies, Luborsky [29] indicated that the instrument showed at least similar psychometric properties as other alliance instruments.

Patient characteristics
The Symptom Check-list (SCL-90-R) [30, 31] was used in order to assess the global psychiatric symptom distress at beginning and at the end of BPI. Only Global Severity Index (GSI) was used in this study. The psychometric proprieties of this instrument are well established. Derogatis [30] reported internal consistency ranging from 0.77 to 0.90 and test-retest reliability between 0.80 and 0.90 over one week interval.

Hamilton Depression (HDRS) and Anxiety (HAMA) Rating Scale was also used in order to assess depression and anxiety disorders.

General social performance and satisfaction was assessed with the Social Adjustment Scale (SAS) [32]. The SAS is a 54-item self-report questionnaire addressing an individual’s functioning and level of satisfaction in various social roles including work, social and leisure activities, extended family, children, intimate relationships and marital role, and economic situation. In a study of 207 patients with major depression, Waintraud et al. [33] reported that the French version of the scale has acceptable internal consistency (α ranging from 0.62 to 0.84), good concurrent validity and sensitivity to change.

Patients also completed the Inventory of Interpersonal Problems (IIP) ([34]; French translation done by ourselves), which is a 127-item self-report that measures the degree of distress from interpersonal problems on a 5-point Likert-scale. Authors reported test-retest reliability between 0.89 and 0.98 and internal consistency ranging from 0.89 to 0.94. We do not have data on the validation of the French translation. We used the total score and the eight subscales of the circumplex model (domaining, competitive, overly cold, socially avoidant, nonassertive, exploitable, overly nurturant and intrusive).

For dynamic psychotherapists, psychopathology refers more to personality organisation than to clinical phenomenology. Therefore, the Defense Mechanisms Rating Scale (DMRS) [35] was also used as an indicator of level of ego maturity functioning. The instrument’s latest edition includes a total of 30 defence mechanisms assigned to 7 hierarchical levels of defensive functioning known as mature, obsessive, other neurotic, narcissistic, disavowal, borderline and action defences. The Overall Defensive Functioning (ODF) score is calculated by multiplying each defence by a weight according to its place in the overall seven-point hierarchy of defences and taking the weighted average of all defences rated in the session. Many studies have supported the validity and reliability of the method (i.e. [36, 37]).

Procedure
Three raters, including two licensed psychologists and one PhD level psychologist, were intensively trained (about 25 hours) to use the coordination scale. Video (or audio) tapes were assessed based on listening to the complete sessions. Reliability assessment and consensus rating was done on over 20% of the cases (n = 12).
**Table 2** 
Correlations between PCS and alliance.

<table>
<thead>
<tr>
<th>patient coordination style</th>
<th>alliance (HAq-I)</th>
<th>session 1</th>
<th>session 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>verbal content</td>
<td>0.339</td>
<td>0.479**</td>
<td></td>
</tr>
<tr>
<td>mode of participation</td>
<td>0.441*</td>
<td>0.418*</td>
<td></td>
</tr>
<tr>
<td>therapeutic context</td>
<td>0.231</td>
<td>0.400*</td>
<td></td>
</tr>
<tr>
<td>global rating</td>
<td>0.390*</td>
<td>0.418*</td>
<td></td>
</tr>
<tr>
<td>total score</td>
<td>0.361*</td>
<td>0.466**</td>
<td></td>
</tr>
</tbody>
</table>

Note: n = 60; 
PCS = patient coordination style; 
* p <0.005; 
** p <0.0001 (following Bonferroni correction).

**Results**

**Patient coordination style and alliance**

The mean total score was slightly positive (M = 0.53, SD = 1.38), with scores ranging from –2.29 to 2.85. No differences were found between PCS and client’s sex and age.

Pearson correlations (two-tailed) were used to examine the relation PCS and alliance. Table 2 shows that PCS is correlated with alliance at session 1 (r = 0.36, p <0.005) and session 4 (r = 0.47, p<0.0001). Considering the two alliance types, PCS is correlated with HA 1. Patient’s experience of receiving help at session 1 (r = 0.39) is correlated with HA 2. Patient’s experience of being involved in a joint effort with the therapist at session 1 (r = 0.38) as well as session 4 (r = 0.51).

A linear regression with the alliance score as the dependent variable and the PCS total score as the independent variable, confirmed that coordination was related to alliance at session 1 (F [1, 59] = 8.6, p <0.01, R^2 = 0.130) and made a significant contribution to predict the evolution of alliance (F [1, 59] = 14.2, p <0.001, R^2 = 0.195).

**Patient coordination style and patient pretreatment characteristics**

Table 3 shows that GSI, SAS and ODF are correlated with PCS. All SCL-90 subscales, excepting phobias (r = –0.15, ns) and psychotic symptoms (r = –0.24, ns), were significantly associated to PCS with correlations ranging from 0.26 (somatisation) to 0.58 (hostility).

PCS was not correlated with IIP total score but it was correlated with ‘domineering’ (r = –0.380) and ‘vindicative’ (r = –0.297) subscales of the circumplex model.

**Table 3** 
Mean scores for patient pretreatment characteristics and correlations with PCS and alliance.

<table>
<thead>
<tr>
<th>characteristics</th>
<th>M</th>
<th>SD</th>
<th>r</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PCS</td>
<td>HAq S1</td>
<td>PCS</td>
<td>HAq S1</td>
<td></td>
</tr>
<tr>
<td>GSI</td>
<td>0.95</td>
<td>0.49</td>
<td>–0.474*</td>
<td>0.014</td>
<td></td>
</tr>
<tr>
<td>HAMA</td>
<td>9.61</td>
<td>6.11</td>
<td>–0.327</td>
<td>–0.039</td>
<td></td>
</tr>
<tr>
<td>HDRS</td>
<td>10.79</td>
<td>5.78</td>
<td>–0.337</td>
<td>–0.031</td>
<td></td>
</tr>
<tr>
<td>SAS</td>
<td>2.04</td>
<td>0.40</td>
<td>–0.401*</td>
<td>–0.040</td>
<td></td>
</tr>
<tr>
<td>ODF</td>
<td>4.35</td>
<td>0.56</td>
<td>0.362*</td>
<td>–0.143</td>
<td></td>
</tr>
<tr>
<td>IIP</td>
<td>11.66</td>
<td>4.61</td>
<td>–0.286</td>
<td>0.037</td>
<td></td>
</tr>
</tbody>
</table>

Note: n = 60; PCS = patient coordination style; HAq-I = Helping Alliance questionnaire-I, session 1; HAMA = Hamilton Anxiety; HDRS = Hamilton Depression Ratings Scale; GSI = Global Symptomatic Index (SCL-90); SAS = Social Adjustment Scale; ODF = Overall Defensive; IIP = Inventory of Interpersonal Problems (Global score); 
* p <0.004; ** p <0.0008 (following Bonferroni correction).

**Table 4** 
Mean scores for outcome and correlations with PCS and alliance.

<table>
<thead>
<tr>
<th>outcomes</th>
<th>M</th>
<th>SD</th>
<th>r</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PCS</td>
<td>HAq S4</td>
<td>PCS</td>
<td>HAq S4</td>
</tr>
<tr>
<td>GSI*</td>
<td>0.73</td>
<td>0.51</td>
<td>–0.055</td>
<td>–0.293</td>
</tr>
<tr>
<td>HAMA*</td>
<td>7.45</td>
<td>5.97</td>
<td>–0.227</td>
<td>–0.310</td>
</tr>
<tr>
<td>HDRS*</td>
<td>7.31</td>
<td>5.35</td>
<td>–0.082</td>
<td>–0.284</td>
</tr>
<tr>
<td>SAS*</td>
<td>1.90</td>
<td>0.47</td>
<td>–0.158</td>
<td>–0.274</td>
</tr>
</tbody>
</table>

Note: n = 60; * partial correlation controlling for intake level; HAq-I = Helping Alliance questionnaire-I, session 4; GSI = Global Symptomatic Index (SCL-90); HAMA = Hamilton Anxiety; HDRS = Hamilton Depression Ratings Scale; SAS = Social Adjustment Scale; * p <0.006 (following Bonferroni correction).
A linear multiple regression (stepwise) with the PCS score as the dependent variable and GSI, SAS, HAMA, HDRS, IIP and ODF as the independent variables showed that only GSI was entered into the model (F [1, 59] = 8.9, p < 0.01, R² = 0.301).

Patient coordination style and patient outcome

Partial correlation controlled by the initial level of symptom severity and social adjustment were performed to assess the relationship between outcome measures and PCS (see table 4). No significant correlation between PCS and outcome measures was found. There is also no correlation with HAg session 4 and session 1 (r ranging from 0.011 to –0.085).

Discussion

This study attempted to better understand the relationship between therapeutic alliance and patient coordination style. Results supported a relation between PCS and alliance, and confirm the general idea of Westerman et al. [10] that coordination involves interpersonal processes that are relevant in establishing a healthy and productive therapeutic relationship. For example, when there is a strong alliance between the patient and the therapist, the patient gets involved in productive self-exploration by initiating topics, contributing to the constructive forward movement on the issues at hand, making a productive use of the therapist’s contributions or bringing up significant contents. Furthermore, at times of disagreement, coordinated patients allow the therapist to take position in order for the discussion to remain constructive.

Non-coordination can often be observed when the alliance is weak. Non-coordinated patients tend to frequently change the topic of discussion, contradict themselves and are less capable of coming to an agreement with the therapist about the theme of discussion. Other examples of non-coordination include directly disagreeing with the therapist even when the therapist attempts to reach a compromise, rejecting accurate interventions or answering questions different from those actually raised. Problems in coordination can also be expressed through passive resistance. As such, a patient can become submissive rather than truly involved in the process.

These results are in agreement with findings of Sexton et al. [6] showing that low alliance cases are characterised by less involvement in therapy and more frequent changes in topic during the first session. In this context, Safran and Muran [38] recommend that one of the most important therapeutic skills is to be able to deal with this type of negative processes. As such, non-coordination during the first session is not always an indication of detrimental therapy processes. This is not surprising if alliance is considered to be a process of co-construction requiring time to develop.

Patient pretreatment characteristics, especially symptom severity and social maladjustment, influence patient’s coordination at the beginning of treatment. Moreover, PCS seems to be more sensitive than helping alliance to the crisis experienced by the patient, because this construct focuses on defensive patterns appearing prominently in clinical discussion of problematic patient behaviour, like problems in maintaining the focus of the discussion and hostile and defensive behaviours. However, other studies are needed to establish whether severity of pathology relates to PCS in the course of treatment. Indeed, therapeutic support and interventions can then help the patient to overcome the crisis and become better coordinated, hence favouring the development of alliance.

This raises the question of the therapist’s influence on this process. Findings of O’Malley et al. [39] suggest that productive and positive alliance by the third session in therapy is not solely a result of patient’s antecedent characteristic but seems to have developed over the first few sessions also according to therapist’s skills and interventions [40, 41]. For example, in another study, Despland et al. [42] have shown that therapist’s capacity to adjust her interventions according to the patient’s defensive functioning was related to a positive helping alliance. As stated by Henry and Strupp [4], alliance is an interpersonal process involving both the patient (in terms of active involvement in therapy) and the therapist (in terms of technical accuracy of the therapist’s interventions).

Surprisingly we did not replicate the findings from Westerman et al. [16] concerning the relation between PCS and outcome. This may be explained by differences concerning the treatment and the sample. The Brief Psychodynamic Investigation (BPI) is a rather short treatment (four sessions) and it could be that there is not enough improvement during BPI. However, in a controlled trial comparing 61 patients treated with BPI with 61 patients from a waiting-list Despland et al. [42] found significant improvement in GSI, HDRS, HAMA and SAS. Compared to the control group the treatment was efficient and accounted for (η²) 17% of the variance in outcome. As the subjects of our sample were high functioning psychiatric outpatients (Mean GSI = 0.95), it is likely that
the improvement was too small to correlate with PCS.

Finally, it has to be taken into account that this study has several limitations. The HAq-I has been criticised and revised (HAq-II), especially because about half of the items of the first version were explicitly assessing early symptomatic improvement [43]. This study only examined the first session, and it would be desirable to consider PCS over different therapy sessions. Nonetheless, these results suggest that further studies investigating the co-variation of coordination, patient characteristics and therapeutic technique, are warranted.

References


