Is there a relationship between therapist language use, patient defensive functioning and therapeutic alliance?: A pilot study of in-session processes

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Summary

Aim: Interpretations are a key technique that distinguishes psychodynamic therapies from many other treatment modalities [1,37]. Research has explored elements of interpretations (e.g., accuracy, timing, depth) and their impact on various variables such as patient defensive functioning, therapeutic alliance and treatment outcome. However, while there is a universal agreement among psychodynamic scholars and clinicians [e.g., 4,5,35] that therapists should refrain from using psychological jargon and overly technical language when making interpretations, this question had not yet been investigated empirically.

Method: This study examined 32 psychotherapy sessions (15 high alliance and 17 low alliance) of 17 students in therapy at a university counselling center and aimed to examine the relationship between the therapists' verbosity when interpreting defenses, patient defensive functioning and therapeutic alliance. Three components of therapist verbosity in interpretation of defenses (TVID) were explored: average length of interpretation, average word length per interpretation, and total number of technical words in interpretations, to determine their relationship to – therapeutic alliance and patient defensive functioning.

Results: Results indicated no significant differences between different components of TVID and therapeutic alliance. However, average word length of therapist interpretations was negatively associated with overall patient defensive functioning.

Discussion: While few associations were found between the language used by the therapist and patient functioning, this study suggests that interpretations need to be stated in a concise manner so that patients are able to process them more easily [6]. Clinical implications of these results, and directions for future research are discussed.

defense mechanisms, interpretation, therapist language, therapist technique, psychodynamic therapy, therapeutic alliance

In order to be effective clinicians, therapists must understand what their patients are suffering from, and effectively communicate that understanding to their patients. Perhaps no oth-

er therapy endeavour focuses on the therapist's verbal ability more than psychodynamic psychotherapy, given the central focus and unique place that interpretations have within psychodynamic psychotherapy [1]. In a survey of psychoanalysts' practices, Glover [2] found "almost complete agreement" (p. 291) for avoiding the use of technical language when constructing interpretations. More recently, a systematic

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review of psychodynamic literature examining recommendations on how therapists should effectively work with patient defense mechanisms [3], found that numerous scholars emphasized that therapists should refrain from using overly technical and/or excessively long interpretations when addressing a patient's defense mechanisms [4-5]. These suggestions are in line with research conducted by Sachse [6] that highlights the importance of the ways in which therapists deliver verbal interventions. Working within a client-centered psychotherapy framework, Sachse [6] examined the phrasing of therapist interventions and its impact on the therapeutic process, and found that when therapists used brief, clear, and not overly complex words, there was a higher chance that patients would be able to process, comprehend, and integrate the intervention in a meaningful way.

Interpretations, Patient Defensive Functioning, and Therapeutic Alliance

Research has shown that a key indicator of successful psychodynamic psychotherapy is when patients use more adaptive defenses and less maladaptive defenses by the end of treatment [e.g., 7-12]. Research also indicates that improvement in patient defensive functioning is related to improved patient mental health years after treatment, reduced dropout rates, and successful outcomes [e.g., 10]. In addition to this, research has demonstrated that in psychodynamic therapy, therapist verbal interventions, including interpretations, are positively related to numerous therapeutic processes and patient outcomes [e.g., 10-16]. For example, Winston et al. [17] found that the use of therapist techniques, including interpretations, aimed at addressing patient defenses was correlated with less maladaptive defense use and improved treatment outcome. Other research has shown that addressing patient defenses can impact therapeutic alliance. For example, Siefert and colleagues [18] examined the relationship between the use of therapist defense interpretations, therapeutic alliance, and defensive functioning in short-term psychodynamic psychotherapy. They found that the therapist's use of both psychodynamic and cognitive interventions was influenced by the patient's level of defensive functioning and those patients who exhibited less adaptive defenses received more psychodynamic interventions.

Studies hence provide support for the relationship between therapeutic alliance, patient defensive functioning and therapist interpretative activity. Yet, to our knowledge, there have been no empirical examinations of therapists' verbosity in interpretations of defenses (TVID) in psychodynamic psychotherapy and its relationship to therapeutic alliance, overall patient defensive functioning, and patient symptomatic functioning. This study therefore focused on the identification of three components of TVID, including: 1) the average word length of interpretations; 2) the average length of words in an interpretation; and 3) the number of technically complicated, psychological-sounding words which are found in therapist interpretations in session. These three components of TVID were compared across different alliance sessions (e.g., higher or lower alliance) for each therapist/patient dyad, and patient overall defensive functioning, to determine the relationship between the varying types of interpretations and the process of psychodynamic psychotherapy.

Method

Participants

The sample was collected at the University of Lausanne, Switzerland, as part of a psychotherapy process study in psychodynamic psychotherapy and included 17 female students between the ages of 18 and 30 years ($M = 24.63$, $SD = 3.63$), who received one to two weekly sessions of manualised (19) Short-Term Dynamic Psychotherapy (STDP), ranging from 8 to 40 sessions ($M = 30.6$ sessions, $SD = 10.40$).

All participants were outpatients requiring psychotherapy at the University outpatient clinic. Written informed consent was collected from each participant and ethics approval was issued by the University Ethics Commission (*Commission d'éthique de la recherche clinique, sous-commission III (Psychiatrie), Université de Lausanne*). All participants had to be at least 18 years old and diagnosed with an anxiety disorder, depressive disorder, or personality disorder that satisfied

DSM-IV-TR criteria [20]. Exclusion criteria included: organic or delirium disorder, alcohol or drug dependence, schizophrenia or other psychotic disorders, bipolar disorder, mental retardation, and antisocial personality disorder. All therapy sessions (and subsequent ratings) were conducted in French; nine (6 male and 3 female) STDP clinicians with over ten years of experience in this clinical model provided treatment to an average of two patients each.

Measures

Alliance. The Helping Alliance Questionnaire (HAq-I: 21) was used to rate alliance strength for individual therapy sessions. The HA-q demonstrates acceptable levels of reliability and validity in comparison to other measures of alliance in psychotherapy research [21]. For each participant, high therapeutic alliance and low therapeutic alliance sessions were determined based on the individual participant's alliance score. High alliance sessions were defined as a HA-q score 1.5 standard deviation above the mean alliance score for that individual patient, while a low alliance session was defined as a HA-q score 1.5 standard deviation below the participant's mean alliance. This approach hence emphasises within-participant variations.

Defense mechanisms. Defense mechanisms were assessed using the observer-rated Defense Mechanism Rating Scales (DMRS: 23). The DMRS requires trained raters to rate 30 defenses based on a seven-level hierarchy. The DMRS has strong reliability [e.g., 24-26] and validity [e.g., 11,25]. There are three levels of scoring on the DMRS: a patient's *overall defensive functioning* (ODF), a patient's *defense level*, and a patient's *individual defense score*. For the purpose of this study, only the ODF scores were used for analysis. A patient's ODF is calculated by taking the weighted mean of each defense mechanism scored by level. The interrater reliability for the DMRS for the current study was based on a larger sample used by Kramer et al. [27], who examined 20% of all transcripts [Intra-class correlation (ICC 2, 1)] and reported reliability on the ODF that varied between .81 and .95 ($M = .88$; $SD = .03$).

Therapist interventions. The Psychodynamic Intervention Rating Scale (PIRS: 28) was used in this study to categorize the in-session therapist activities (e.g., questions, interpretations, etc.). The PIRS consists of ten types of interventions along a continuum that can be clustered into two broad categories: interpretive interventions (defense interpretations, transference interpretations), and supportive interventions (clarifications, reflections, associations, support strategies, questions, contractual arrangements, work-enhancing strategies, acknowledgments). Interpretive interventions (transference and defense) can be additionally organized into levels or depths of interpretation from one to five.

Raters are trained to examine written transcripts of psychotherapy sessions and categorize applied verbal interventions according to intervention types outlined above. When a rater scores an interpretative intervention he or she is also required to note the depth level of the interpretation. Interrater reliability is conducted on 20% of the sample and disagreements are resolved by means of a consensus meeting.

The PIRS is a reliable measure of therapist interventions in psychodynamic psychotherapy [e.g., 29-30] that has been utilized in numerous psychotherapy process studies [e.g., 14,29,31,36]. In this study, only interpretive interventions (i.e., defense interpretations) were considered for analysis. For this sample, the mean intra-class correlation coefficients (ICC 2, 1) for all PIRS categories were .77 (range = .65-.94; also see 32).

Therapist verbosity in interpreting defenses. TVID was divided into three components: "average length of interpretation", "average word length per interpretation", and "number of technical words". Please see Table 1 for details regarding the means and standard deviations for the three components of TVID.

Table 1. Means and Standard Deviation for Therapist Verbosity in Interpreting Defenses (TVID)

Category	Mean	Standard Deviation
Average length of interpretation		

Overall (N=32)	49.98	26.59
Low Alliance (N=15)	53.60	31.19
High Alliance (N=17)	47.40	23.48
Average length of word per interpretation		
Overall (N=32)	4.32	0.24
Low Alliance (N=15)	4.30	0.27
High Alliance (N=17)	4.34	0.22
Total number of technical words		
Overall (N=32)	5.17	5.03
Low Alliance (N=15)	5.50	6.43
High Alliance (N=17)	4.94	3.97

First, the "average length of interpretation" was calculated by adding up the total number of words per therapist interpretation in the session and dividing this number by the total number of interpretations per session. Second, adding the number of letters per word in an interpretation and dividing it by the total number of words in that interpretation calculated the "average word length" per interpretation. Then, each average word length per interpretation was added up and the sum was divided by the total number of interpretations in the session. Finally, a "technically complicated" word was defined as any word that could be construed as a psychological construct (e.g., defense, cognition, affect, interpersonal conflict, unconscious), which can be found in a standard psychology dictionary. A trained research assistant and a graduate student reviewed all the transcripts, highlighted these words in the interpretations and searched them in Corsini's [34] *Dictionary of Psychology* to determine if the word was considered a psychology term. Interrater reliability was conducted on 10% of the sample and indicated a high level of agreement with a mean Kappa = 0.94.

In total, 32 transcripts were included for analysis. Of those 32 sessions, a total of 15 were identified as low alliance, and 17 as high alliance sessions, based on the criteria described above. Two sessions were not included because they were not available for transcription and data analysis. Paired *t*-tests and Pearson correlations were used to examine the data.

RESULTS

TVID and Alliance

Average Length of Interpretation

Paired *t*-tests were used to compare the average length of interpretations in sessions between low and high alliance scores. No significant differences were found when comparing the average length of interpretations for sessions with low alliance (M = 53.6, SD = 31.19) and high alliance scores (M = 42.91, SD = 15.49), t (14) =1.31, p = .21.

Average Length of Words

Paired *t*-tests were used to compare the average word length per interpretation per session in high and low alliance groups. No significant differences were found when comparing the average word length per interpretation for sessions with low (M = 4.3, SD = 0.27) and high alliance scores (M = 4.39, SD = 0.22); t (14)= 1.11, p = .28.

Use of Technically Complicated Language

Paired *t*-tests were conducted to compare the number of technically complicated words per session in high and low alliance groups. No significant differences were found when comparing the total number of technical words used in interpretations for sessions with low alliance (M = 5.5, SD = 6.43) and high alliance scores (M = 5.5, SD = 4.03); t (14) = 0.38, p = .71.

TVID and Patient Overall Defensive Functioning (ODF)

Average Length of Interpretation

Pearson correlation coefficients showed no significant correlation between average length of interpretation and overall defensive functioning in sessions with low alliance scores ($r = 0.15$, $p = .59$) and sessions with high alliance scores ($r = -0.23$, $p = .33$).

Average Length of Words in Interpretation

Pearson correlation coefficients showed a significant negative correlation between the average length of words per interpretation and ODF in sessions with low alliance scores ($r = -0.41$, $p = .02$), but no significant correlation between average word length per interpretation and ODF ($r = -0.68$, $p = .08$) in sessions with high alliance scores.

Use of Technically Complicated Language in Interpretation

Also, there were no significant correlations between the total number of technical words and ODF in sessions with low alliance scores ($r = -0.99$, $p = .73$) and in sessions with high alliance scores ($r = -0.31$, $p = .22$).

DISCUSSION

Our findings indicate no differences in all three components of TVID in sessions with low and high alliance scores. Furthermore, there existed no relationship between two components of TVID (i.e., average length of interpretation and number of technical words) and patient overall defensive functioning in sessions. However, there was a significant negative relationship between one component of TVID – the therapists' use of longer words in their interpretations and patient ODF scores in sessions with low alliance.

This preliminary finding is important given the research that has found a relationship between overall defensive functioning, therapy process, and successful treatment outcomes [e.g., 10-12, 14-17]. What is more, within treat-

ment, patient ODF has been shown to predict treatment dropout [10].

Though the results of this study are preliminary, it is conceivable that future research may determine that TVID is a contributing variable in whether patients remain or drop out of treatment. Additionally, TVID may play a role in facilitating the shift from patients' use of less adaptive towards more adaptive defense strategies in-session, which in turn may result in better treatment outcomes. As such, it may be the case that TVID needs to be considered as a variable in the implementation of effective treatment both from a process level, and from an outcome level.

This study partially supports Chessick's [35] assertion that interpretations need to be stated in concise and layperson language. Similarly, Sachse [6] suggests that in order to have a positive impact on the therapeutic process, therapist interventions need to be short so that patients are able to process them more easily. This might help explain why in our study the use of longer words by the therapists in their interpretations was negatively related to patient defensive functioning. Perhaps longer words are more challenging for patients to process, and this, in turn, can negatively influence their functioning in-session.

Patients' ability to process challenging words raises an important consideration about their level of education. Despite being university students and having a high level of education, therapists' use of longer words in their defense interpretations negatively affected their in-session functioning. Replicating this study on a population that varies with respect to level of education and symptomatology with a larger sample size would allow for a greater generalizability of results.

Additionally, Langs [4] hypothesized that patients would become increasingly defensive if therapists used overly technical language in their interpretations. This may have been the case in our study. However, our study did not specifically examine the different defense levels and defenses patients used, as we focused primarily on overall defensive functioning. Furthermore, the use of correlational analysis prevented us from determining the causality of this relationship. It is possible that patients with certain ODF lev-

els or other patient characteristics (e.g., quality of object relations, different defense clusters, symptom severity) would respond differently to therapist interpretations of varying word length.

Our findings indicate that longer words – but not longer interpretations or higher number of technical words – in TVID were negatively correlated with patient ODF in sessions with low alliance scores. These findings raise important questions about what it means to be overly technical or verbose. A better understanding of what psychodynamic theorists mean when they recommend against the use of "verbose" interpretations is needed. It may mean that longer words are more verbose than shorter ones, or that verbosity means using more words, or both – using more and longer words.

We found no relationship between the number of technical words in TVID and both patient ODF and the therapeutic alliance. This may be due to the way in which "technically complicated words" were operationalized. In the current study, any terms that could be found in *The Dictionary of Psychology* [34] was categorized as a "technically complicated" word. This may have been too general of a categorization, as certain originally psychological terms (e.g., stress, anxiety) are often used in everyday language. In consequence, we may have been too liberal in our definition of technical language, which may have potentially influenced the clinical significance of its use and its relationship with patient functioning. In future studies, a more stringent definition of technical language might yield discernable differences in a clinically relevant manner.

A key component of therapist technique is the idea that what is important may not be *what* the therapist says but rather *how* the therapist says it. This study did not analyze the tone of voice the therapists used or their voice inflection as well as non-verbal communication when they verbalized their interpretations. For example, it could have been the case that some therapists were warm, attentive, and engaging, while others may have provided their interpretations in a detached, cold, and unempathetic manner. Since these variables may play a crucial role in how patients perceive the therapist's interventions more than the words themselves [36, 38], they certainly warrant investigation when assessing TVID in subsequent studies.

In addition, given the nature of the sample (i.e., small and university sample) removing these therapists would have severely limited our ability to carry out exploratory analyses. This is a limitation that would need to be addressed both from a methodological and clinical perspective in future research.

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