

Verbal interaction patterns in the clinical context: A model of how people change in therapy

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Abstract

Background: The paper “Why do people change in therapy? A preliminary study” (2006), published in this journal, led to the beginning of a line of research based on observational methodology and aimed at the clarification of the therapeutic process. Throughout these years, significant progress has been made towards an explanation of clinical change. In this paper, a synthesis of this line of research is presented, along with a series of conclusions that can, to some extent, provide an answer to the questions we posed in the aforementioned first paper. **Method:** Verbal behavior both of therapist and client was coded for 92 clinical sessions using the Verbal Behavior Interaction Category System (SISC-INTER-CVT). Descriptive and sequential analyses of the observations were then performed. **Results:** The data show the existence of certain patterns of verbal interaction that are related to the clinically relevant activities undertaken by the therapist, from which a model for verbal interaction in the clinical context was developed. **Conclusions:** The functional analysis of the therapist-client verbal interaction is essential for the comprehension of the processes that explain clinical change as well as for the improvement of the quality of psychological therapy.

Keywords: process research, verbal behavior, therapeutic interaction, functional analysis, sequential analysis.

Resumen

Patrones de interacción verbal en el contexto clínico: un modelo de cómo la gente cambia en terapia. **Antecedentes:** el artículo publicado en esta revista “¿Por qué la gente cambia en terapia? Un estudio preliminar” (2006) supuso el inicio de una línea de investigación basada en metodología observacional, dirigida a clarificar el proceso terapéutico. A lo largo de estos años han sido grandes los avances en la explicación del cambio clínico. En este artículo se presenta una síntesis de esta línea de investigación, aportando una serie de conclusiones que, en cierta medida, dan respuesta a muchos de los interrogantes que presentábamos en ese primer trabajo al que hacíamos referencia. **Método:** se registró la conducta verbal de terapeutas y clientes en 92 sesiones clínicas, mediante el sistema de categorización de la interacción de la conducta verbal en terapia (SISC- INTER- CVT). A continuación, se realizó un análisis descriptivo y secuencial de las observaciones. **Resultados:** los datos mostraron la existencia de ciertos patrones de interacción verbal, relacionados con las actividades clínicamente relevantes desempeñadas por el terapeuta, a partir de los cuales se desarrolló un modelo de interacción verbal en el contexto clínico. **Conclusiones:** el análisis funcional de la interacción verbal terapeuta-cliente resulta imprescindible para comprender los procesos que explican el cambio clínico y aumentar la calidad de la terapia psicológica.

Palabras clave: investigación de procesos, conducta verbal, interacción terapéutica, análisis funcional, análisis secuencial.

Back in 2006, the paper “Why do people change in therapy? A preliminary study” was published in this journal. This paper was to be the starting point for the research on the therapeutic process that our group has been developing for almost a decade. This paper presents a proposal for a model of verbal interaction in clinical settings that, unlike the predominant standpoints in the current state of psychotherapy (Carey, 2005; Wampold & Budge, 2012) emphasizes specific and systematic patterns that are present regardless of the therapist and the client’s problem; patterns in which the key for clinical change might be found.

Research on the therapeutic process has monopolized the attention of researchers for many years. A review of the published literature in the last decades shows that a great level of importance was granted to non-specific factors in the explanation of clinical change and, specifically, to the therapeutic relation (Castonguay, Constantino, & Grosse, 2006; Fiedler, 1950; Lambert, 1992; Rosen & Davinson, 2003). Most works focused on the independent study of some characteristic of the therapist and/or the client, and how they could affect the intervention (Blatt, Zuroff, Hawley, & Auerbach, 2010; Crits-Christoph & Mintz, 1991; Clarkin & Levy, 2004). In this regard, recent works by Wampold conclude that the effectiveness of psychotherapy stems from contextual characteristics and not the specific ingredients of each intervention (Benish, Quintana, & Wampold, 2011; Minami et al., 2009; Minami et al., 2008; Wampold et al., 2011).

However, some works published from different standpoints consider the aforementioned non-specific factors to be important, but not enough to completely explain clinical change (Beutler

& Clarkin, 1990; Beutler et al., 2004; Hill, 2005). As for the behavioral standpoint, the importance of the study of interaction in the clinical process is stressed, especially interactions that “support” the therapeutic process (Follette, Naugle, & Callaghan, 1996; Kohlenberg & Tsai, 1991; Tsai et al., 2009). In the different approaches that have undertaken the research of the therapeutic relation throughout the years, it has been its appearance, rather than its real in-session function, that has received the most attention, to the point that the concept has been reified and turned into the goal of therapy itself (Rosenfarb, 1992). Conversely, approaches like that of Bordin (1980), Horvath (2001) or the FAP research group (Kohlenberg & Tsai, 1991; Tsai et al., 2009) consider that the therapeutic relation provides a context that promotes and interacts with the specific strategies used in therapy.

This approach to the study of the therapeutic relation has trod a long path, starting with Truax’s studies (1966) and the unpublished works by Willard Day’s research group in the eighties in Reno University. Some authors from this group (Hayes, 2005; Tsai et al., 2009) have continued this line of research, emphasizing that the mechanism of in-session change is a result of contingent and differential reinforcement following the client’s target behaviors: the therapist acquires the function of a discriminative and reinforcing stimulus, concluding that a great part of what happens in therapy can be understood as the development of a new learning history for the client, focusing mostly on the establishment of an alternative verbal repertoire, different from the one present up to that moment (Strosahl, Hayes, Wilson, & Gilford, 2005).

As for our research, after the observation and analysis of a great amount of clinical sessions, we found the hypothetical functions

of the therapist’s verbal behavior showed systematic patterns that changed throughout the therapeutic process. These changes were not related to the therapist, the client or the kind of problem that was under treatment but to the aim pursued by the therapist in each moment, which we called clinically relevant activity (CRA): assessing, explaining, treating or consolidating change (Froján, Montaña, & Calero, 2006, 2010; Froján, Montaña, Calero, & Ruiz, 2011; Ruiz, Froján, & Calero, 2013). In this work we now present, we put the therapist’s verbal behavior in relation with the client’s through a sequential analysis, obtaining objective and systematic patterns of interaction in each of the CRAs, which could be an explanation for the therapeutic process.

Method

Participants

Recordings of 92 sessions were analyzed (78 hours, 19 minutes and 2 seconds of therapy were observed) belonging to 19 different clinical cases treated by 9 behavior therapists with different degrees of expertise in the Therapeutic Institute of Madrid, a private psychology clinic located in Madrid. All clients were adults and all therapies were individual. In all cases, informed consent from both the therapists and the clients was obtained for the recording and subsequent observation and analysis of the sessions. All the process was approved by the Research Ethics Committee of the Autonomous University of Madrid. All the characteristics of the cases, sessions, clients and therapists used in this paper are detailed in Table 1.

Table 1
Characteristics of the analyzed recordings

Case	T	Gender (T)	Age (T)	Expertise (years)	Gender (C)	Age(C)	Problem
1	1	F	43	14	F	29	Low mood
2	1	F	45	16	F	32	Relationship problems
3	1	F	47	18	M	31	Obsessive-compulsive disorder
4	1	F	48	19	F	32	Anxiety
5	1	F	44	15	F	36	Agoraphobia
6	2	M	31	5	F	29	Eating disorders
7	2	M	30	4	M	36	Anxiety and social skills problems
8	2	M	32	6	F	22	Low mood
9	3	F	30	4	F	51	Fear of flying
10	3	F	33	7	F	35	Hypochondria and relationship problems
11	3	F	32	6	F	31	Anxiety
12	3	F	30	4	M	34	Social skills
13	4	F	33	7	F	19	Fear of choking
14	5	F	26	1	F	21	Obsessive-compulsive disorder
15	6	F	25	1	F	33	Nail-biting
16	7	F	26	1	F	35	Low mood
17	8	F	36	2	F	22	Anxiety
18	9	F	24	1	M	21	Fear of spiders
19	9	F	24	1	M	25	Eating disorder

T = Therapist; C = Client; S = Session; M = Male; F = Female

Variables

Therapist's verbal behavior. Thirteen different categories were considered, coded according to their frequency (event categories) or duration (state categories). For the first type, the occurrence percentage over the total *event categories* coded was calculated. For the second type, the percentage of time used in each of the state categories over total session time was studied.

Client's verbal behavior: Fifteen different categories were considered, coded according to their frequency of occurrence throughout the sessions; for subsequent analyses, the percentage of occurrence for each category over the total of client's categories coded was calculated.

A summary of both variables is presented in Table 2.

As shown in Table 2, the reinforcement category has several subcategories. We included them because we wanted to evaluate differences between potentially stronger reinforcing utterances (like 'excellent!') and low intensity ('right') or medium-intensity ('very good') ones. The conversational variant of reinforcement was generated to account for all of the low-intensity reinforcement utterances that happened during the client's speech; in fact, the criterion for this variant was for it to be uttered between two client's utterances. Presumably, conversational reinforcement is meant by the therapist to reinforce the act of speech itself rather than its content (Ruiz, 2011).

Clinically relevant activities. All sessions analyzed were grouped according to the *clinically relevant activities* undertaken by the therapist, which allowed for the determination of how both of the aforementioned variables evolved as a function of the

Table 2
Definition of the categories in the SISC- INTER- CVT

System for the categorization of the verbal interaction in therapy (SISC-INTER-CVT)	
Subsystem for the categorization of the therapist's verbal behavior (SISC-CVT) and definitions	Subsystem for the categorization of the client's verbal behavior (SISC-CVC) and definitions
<p><i>Discriminative</i></p> <p>An utterance issued by the therapist that gives rise to a client's behavior (verbal or not verbal) followed by reinforcement or punishment.</p> <p>Modifiers: conversational (The therapist asks the patient in order to check his or her speech for understanding).</p>	<p><i>Providing Information</i></p> <p>An utterance through which the client tries to provide the therapist with purely descriptive information for the assessment and/or treatment.</p>
<p><i>Reinforcement</i></p> <p>An utterance issued by the therapist that shows approval, agreement and/or acceptance of the behavior that was just issued by the client. Modifiers: low, mid, high, conversational.</p>	<p><i>Requesting Information</i></p> <p>Question, commentary and/or request for information issued by the client.</p>
<p><i>Behavior</i></p> <p>An utterance issued by the therapist that shows disapproval, rejection and/or unacceptance of the behavior that was just issued by the client.</p>	<p><i>Showing acceptance</i></p> <p>An utterance issued by the client that shows agreement, acceptance and/or admiration for the utterances issued by the therapist.</p>
<p><i>Informative</i></p> <p>Utterance issued by the therapist that conveys technical or clinical knowledge.</p>	<p><i>Showing disagreement</i></p> <p>An utterance issued by the client that shows disagreement, disapproval and/or rejection of the utterances issued by the therapist.</p>
<p><i>Motivational</i></p> <p>An utterance issued by the therapist that clearly states the consequences of the client's behavior (be this behavior and/or the situation in which it happens explicitly alluded to or not) in the present, past, future, or as hypothetical situations on the clinical change.</p>	<p><i>Well-being</i></p> <p>An utterance issued by the client that refers to him/her being in a state of satisfaction or happiness or the anticipation of this state.</p>
<p><i>In-session instruction</i></p> <p>An utterance issued by the therapist aimed to stimulate the occurrence of a client's behavior inside the clinical context.</p>	<p><i>Discomfort</i></p> <p>An utterance issued by the client that refers to him/her being in a state of suffering due to his/her problematic behavior, or the anticipation of this state.</p>
<p><i>Out-of-session instruction</i></p> <p>An utterance issued by the therapist aimed to stimulate the occurrence of a client's behavior outside the clinical context. Specific steps must be described.</p>	<p><i>Achievement</i></p> <p>An utterance issued by the client that alludes to the achievement of a therapeutic objective or the anticipation of this achievement.</p>
<p><i>Chatting</i></p> <p>Utterances by the therapist that are a part of the irrelevant chat blocks.</p>	<p><i>Failure</i></p> <p>An utterance issued by the client that alludes to the failure in achieving a therapeutic objective or the anticipation of this failure.</p>
<p><i>Other</i></p> <p>Any utterance issued by the therapist that cannot be included in any of the aforementioned categories.</p>	<p><i>(Non) Compliance with out-of-session instructions</i></p> <p>An utterance issued by the client that alludes to a total or partial (non) compliance with the instructions received and intended for their completion out of the clinical context.</p> <p>Modifiers: Anticipation (saying that he/she will follow the instruction) and Description (describes the tasks that were performed)</p>
	<p><i>(Non) Compliance with in-session instructions</i></p> <p>An utterance issued by the client that alludes to a total or partial (non) compliance with the instructions received and intended for their completion in the clinical context.</p>
	<p><i>Other</i></p> <p>Any utterance issued by the client that cannot be included in any of the aforementioned categories.</p>

aim that was pursued at that moment in therapy. In table 3, the four nominal categories that were the clustering variable for the sessions are shown.

Instruments

The SISC- INTER- CVT is the coding instrument developed by this research (Froján et al., 2008; Ruiz et al., 2013). After a profound refining process performed by a team of observers who were experts in observational methodology, verbal behavior analysis and behavior therapy, an exhaustive coding instrument has been developed, with an operative definition of variables and high reliability and precision levels (precision inter-rater percentages ranging from 80% to 96.5%). The recording of the analyzed sessions was made using a closed camera circuit in the collaborating center. The software used for the observation and coding of sessions was *The Observer XT 6.0*, released by *Noldus Information Technology*. Version 7.0 of the same software was used for periodic analyses of intra- and inter-rater agreement. All statistic tests involving sequential analyses were performed using version 5.0 of the *Generalized Sequential Querier* (GSEQ), a software for the analysis of sequential behavior patterns developed by Bakeman and Quera (1995). The data obtained with *The Observer XT* were translated to *SDIS* (Sequential Data Interchange Standard) using version 2.0 of the *ObsTxtSds* software, by the same authors.

Procedure

Firstly, the collaborating clinic was contacted and the director’s informed consent for the recording of those cases in which both the therapist and the client allowed the observation of sessions was obtained. The selection of sessions, observation and coding were performed by an expert in the use of the SISC-INTER- CVT. In order to guarantee the precision of the data collected, intra- and inter-rater agreement were periodically assessed. The Cohen’s

kappa agreement coefficient was periodically calculated so as to guarantee the precision of the data. These kappa coefficients were between .60 and .90, which means that the intra-rater agreement were between “good” and “excellent” (Bakeman, 2000) and are related to theoretical rater precision values between 80% and 93.5% (Bakeman, Quera, McArthur, & Robinson, 1997). Inter-rater agreement reached kappa values equal to or above .60, up to .91, with a theoretical observer precision above 80% in all comparisons and even reaching 96.5%.

Data analyses

Once the data were collected, descriptive analyses were performed, and sequential log-linear techniques were used (Bakeman & Gottman, 1997; Quera, 1993). The general question that sequential analysis can answer is whether there is a relation between adjacent (or almost adjacent) behaviors. A key concept for the calculi that were performed is that of *lag r transition probability*, defined as the probability, once a certain behavior (given behavior) has happened, for another one (conditioned behavior) to happen r events before or after (positive or negative lag). Transition probabilities of a higher order than 1 (multiple transition probabilities) can also be studied, focusing on longer behavior chains. In order to study the association between specific pairs of categories that were of interest for us, adjusted residues (z) and the Yule’s Q statistic (which assesses the strength of an association in a similar fashion as the correlation coefficient, taking on values ranging from -1 to 1) were calculated (Bakeman & Quera, 1995).

Results

Descriptive analysis

The distribution of the different categories of verbal behavior of the client and the therapist throughout the four clinically relevant activities are shown below (Table 4).

Regarding the therapist, the most frequently coded category is the *discriminative*, with a higher frequency in moments of assessment and gradually decreasing throughout the intervention. The next most frequent categories are *informative* (especially during the explanation of the functional analysis and the proposal of therapeutic objectives) and *reinforcement*.

As for the client, the most frequent category is *providing information*, followed by *showing acceptance*, which appears most frequently during the explanation of the functional analysis. In this same phase, we find the highest frequency of the *showing disagreement* category, although in much smaller percentage than the former, and the *requesting information* category. The categories that account for the *well-being* and *achievement* of the client increase in frequency as the therapy advances, while those that express suffering or frustration are mostly stable throughout the therapy.

Sequential analysis

The study of clinical interaction requires an analysis of the verbalizations between therapist and client, so as to emphasize the sequential relations that exist between behavior units (Karpiak & Benjamin, 2004; Quera, 1993). Despite the difficulties that are

Table 3
Categories of the clustering variable in the analyzed therapy sessions, according to the *clinically relevant activities* undertaken by the therapist

Category	Main activities performed by the therapist in session
<i>Assessing cluster</i>	Examining the client’s problem.
	Assessing the changes, difficulties and progress made in the client’s environment that are due to the enforcement of the designed intervention program.
<i>Explaining cluster</i>	Explaining the functional analysis and the treatment proposal.
	Explaining any psychological intervention technique and/or the causes of new problems and demands made by the client.
<i>Treating cluster</i>	Training and/or performing strategies in-session.
	Prescribing guidelines for the behavior out of the clinical setting.
<i>Consolidating cluster</i>	Reduction o the “functional” activity of the therapist.
	Reviewing and maintaining the treatment activities.
	Reinforcing the client’s improvements..
	Appearance of blocks of “irrelevant” or “casual” chat.

inherent to the use of sequential analysis, using this tool provides an enormously rich knowledge on the therapeutic process (Elliot, 2010). We use sequential analysis to put all considered variables in relation, although, in order to avoid an unneeded lengthening of this paper, we will only show here the most relevant results, pointing the interested reader in the direction of other papers in which each of the obtained sequences are described in detail (Ruiz, 2011; Ruiz et al., 2013).

Our proposal of a therapeutic model, based on the most characteristic behavior sequences per CRA, is presented below in Figure 1.

As can be observed in Figure 1, when the therapist assesses, the most characteristic sequence involves the therapist asking questions (*discriminative* category) and the client answers while providing relevant information (*providing information* category). On some occasions, the therapist finishes these *discriminative-*

Table 4
Descriptive statistics for the variables of the therapist's and client's verbal behavior in the four clinically relevant activities

	Cluster activity assessing (n = 17)		Cluster activity explaining (n = 25)		Cluster activity treating (n = 30)		Cluster activity consolidating (n = 20)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
CATEGORIES OF THE THERAPIST'S VERBAL BEHAVIOR								
Discriminative ^a	51.69	7.21	20.48	6.02	42.03	7.75	23.28	9.60
Conversational discriminative ^a	7.14	2.60	38.45	7.13	20.17	6.60	12.82	5.79
Low reinforcement ^a	6.71	3.17	3.64	3.1	5.41	2.81	2.94	2.09
Mid reinforcement ^a	3.56	1.99	4.96	2.28	6.64	4.18	7.65	4.26
High reinforcement ^a	1.42	1.21	3.08	2.32	2.72	2.04	2.05	1.35
Conversational reinforcement ^a	17.58	6.31	17.11	7.68	14.30	5.62	36.19	9.96
Punishment ^a	1.44	1.26	2.52	1.49	2.38	2.43	2.24	1.59
Informative ^b	14.68	5.21	50.63	17.20	36.84	11.65	20.17	7.68
Motivational ^b	1.38	1.55	3.60	2.78	3.43	2.49	3.25	3.10
In-session instruction ^b	0.16	0.43	0.72	2.35	1.07	2.40	0.10	0.20
Out-of-session instruction ^b	2.63	3.07	4.84	4.32	5.59	3.24	3.64	3.04
Chatting ^b	0.55	1.41	0.99	2.81	0.84	1.54	4.48	5.54
Other ^a	4.01	2.29	6.14	3.71	4.99	2.55	5.43	3.15
CATEGORIES OF THE CLIENT'S VERBAL BEHAVIOR								
Providing information ^a	70.47	7.10	46.22	10.28	56.67	9.13	58.75	11.31
Requesting information ^a	2.38	2.47	4.13	3.35	2.77	1.94	2.05	2.07
Showing acceptance ^a	14.00	4.08	30.58	9.14	21.11	5.94	18.54	5.06
Showing disagreement ^a	0.54	0.62	1.34	1.26	1.02	1.15	1.06	1.02
Discomfort ^a	4.82	2.89	3.86	2.84	4.92	3.82	5.35	4.04
Well-being ^a	1.01	1.18	1.97	2.28	1.11	1.10	3.00	2.12
Achievement ^a	0.73	1.43	2.37	3.46	1.82	3.23	4.90	4.41
Failure ^a	0.19	0.48	0.35	0.62	0.57	0.68	0.72	0.90
Com. with in-session instructions ^a	2.40	7.15	3.53	9.28	3.69	9.98	0.14	0.38
Anticipation of com. with out-of-session instructions ^a	0.75	1.03	2.60	2.33	2.00	1.59	1.55	1.62
Description of com. With out-of-session instructions ^a	1.13	1.26	1.84	2.38	2.49	2.33	2.97	2.66
Non com. with in-session instructions ^a	0.08	0.34	0.00	0.00	0.13	0.35	0.00	0.00
Anticipation of non com. with out-of-session instructions ^a	0.07	0.21	0.07	0.21	0.23	0.69	0.01	0.07
Description of non com- with out-of-session instructions ^a	0.14	0.24	0.22	0.67	0.56	0.79	0.36	0.63
Other (client) ^a	1.11	1.54	0.66	0.58	0.86	0.83	0.55	0.60
Com.= Compliance								
^a Variable measured as a percentage of occurrence of the corresponding category over the total of event categories issued by the therapist during the session.								
^b Variable measured as a percentage of in-session time in which the corresponding state category was coded								

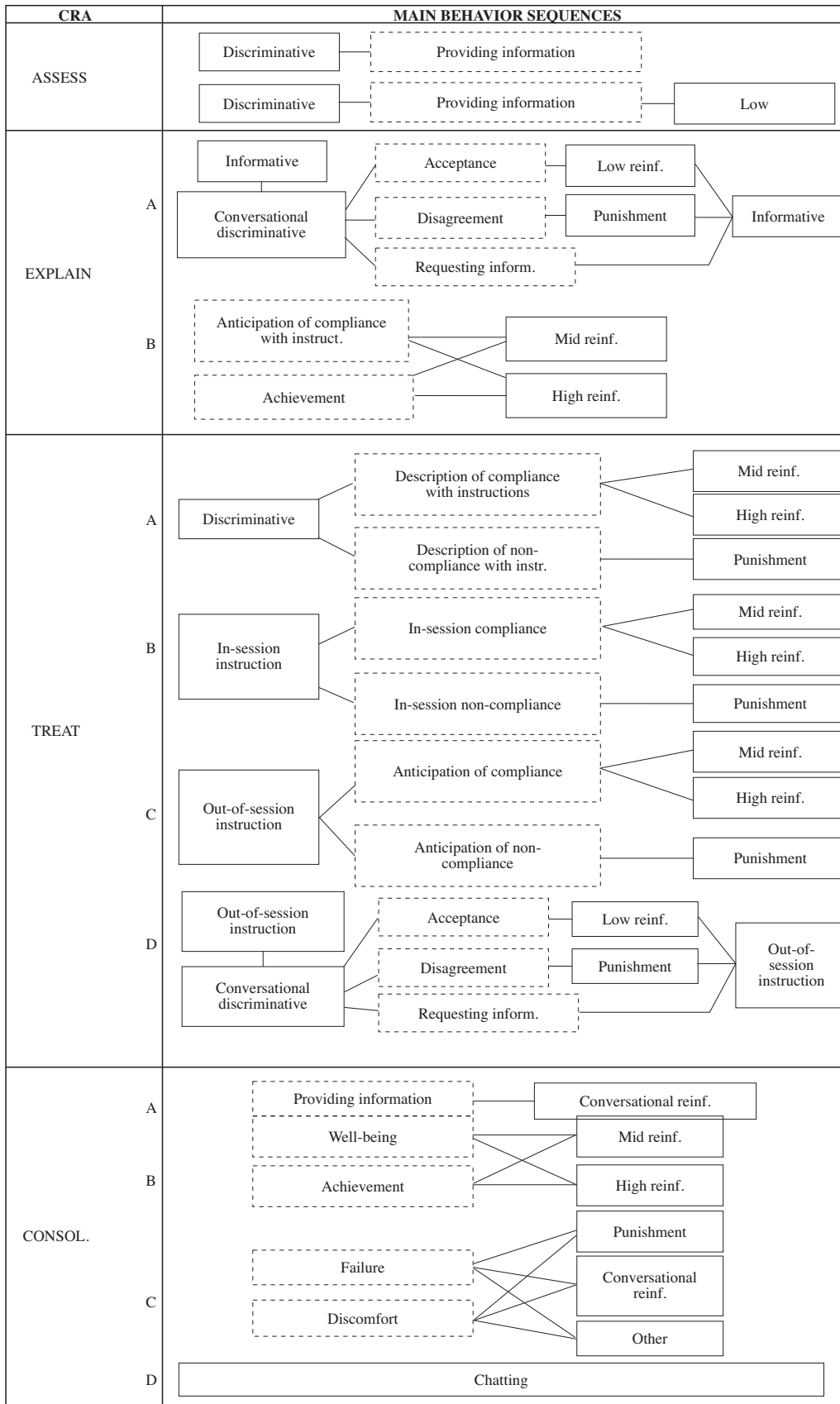


Figure 1. Behavior sequences in each clinically relevant activities undertaken by the therapist

provide information sequences with low reinforcement utterances.

When the psychologist *explains*, he/she usually issues long information blocks of speech (*informative* category) that are interrupted by questions made in order to be sure that the client is understanding said information (*conversational discriminative* category). The client can respond by accepting the therapist's explanation (*showing agreement* category), rejecting it (*showing disagreement* category) or asking questions of his/her own to clear his/her doubts (*requesting information* category). The therapist then acts accordingly to the type of answer issued by the client, issuing low reinforcement utterances after the client's acceptance and *punishment* utterances after his/her disagreement, to later continue with the explanation. We also found a pattern in which the client requests a clarification and the therapists answers by reformulating his/her explanation.

The moments in therapy in which the therapist is *treating* are characterized by four different behavioral patterns. In the first of them, the therapist asks the client about that week's homework, either issuing *mid* and *high reinforcement* utterances when the client confirms his/her compliance with the homework (*describing instruction compliance out of session* category), or formulating utterances of disapproval (*punishment* category) when he/she has failed to comply (*describing non-compliance out of session* category). The second and third patterns are similar in their structure: the therapist proposes a task, either to be performed in session (*in-session instruction* category) or as homework (*out of session instruction*) and, when the client executes the task (*in-session instructions compliance* category) or anticipates his/her execution of the task (*anticipation of out-of-session instruction compliance* category), issues *mid* and *high reinforcement* utterances, while, should the client not follow the instruction (*non-compliance with in-session instructions*) or anticipate that he/she will not do it (*anticipation of out-of-session instruction non-compliance*), answers by issuing *punishment* utterances. As for the fourth pattern, it is defined by the therapist stopping in the middle of the emission of an *out-of-session instruction* utterance to check, through a question (*conversational discriminative* category), whether the client accepts or understands his/her instructions. The client can answer by 1) showing *acceptance*, following which the therapist will issue low reinforcement utterances, 2) showing disagreement, following which the therapist will issue punishment utterances; or 3) *requesting information*, following which the therapist reformulates his/her instructions.

Regarding the *consolidating* activity, we find that after *well-being* and *achievement* utterances issued by the client, the clinician responds by contingently issuing *mid* and *high reinforcement* utterances. We also find irrelevant chat blocks, and verbalizations uttered by the client that contain information and which the therapist simply reinforces through the use of *conversational reinforcement* utterances.

Discussion

The results confirm our initial approach regarding the existence of objective and systematic patterns of verbal interaction throughout the course of the therapy, and allow for the proposal of a model for clinical work, based on the processes of operant learning: verbal shaping, as proposed by Follete et al. (1996) or Rosenfarb (1992). In the same direction, they show the usefulness of research

methodologies that study the psychologist's performance moment-by-moment, and the clients' change throughout the therapy, as proposed by Busch, Kanter, Callaghan, Baruch, Weeks & Berlin, (2009). These results are clearly at odds with the hegemonic standpoint in current psychotherapy that defends the existence of non-specific factors that are common to every and all types of intervention and that would be, ultimately, responsible for clinical change (Wampold & Budge, 2012)

The first conclusion that can be clearly extracted from our work is the division of the therapeutic process into *clinically relevant activities*, rather than chronological phases. Depending on the currently pursued clinical aim, the verbal categories issued by the therapist change, and those variations follow the same sequence regardless of the therapist, the client or the clinical problem that is being treated.

When the therapist *evaluates*, his/her main categories are *discriminative* and, on occasion, *low reinforcement*; that is to say, he/she obtains the information he/she needs by asking open questions, while using approval only to close the client's speech and ask a new question, without issuing utterances of approval in the middle of the latter's speech (*conversational reinforcement*).

When the therapist *explains*, long blocks of speech with a technical or motivational content appear, only interrupted by the therapist him/herself with questions intended to check whether the client is understanding or not (*conversational discriminative*). Of special interest is the apparition of the *achievement anticipation* and *instruction compliance anticipation* categories, possibly as an evidence of how the client starts to predict the benefits of the intervention and begins to utter his/her intention of performing the required tasks.

The moments in which the therapist treats reveal a typical three-term pattern. In the first place appears the discriminative category as a stimulus that affects the apparition of certain behaviors; after that, utterances by the client that can be pro- or anti-therapeutic depending on how they refer to compliance or non-compliance of the tasks; and finally, approval categories (*mid* or *high reinforcement*) for pro-therapeutic utterances or disapproval (*punishment*) for anti-therapeutic utterances. These results support the existence of an in-session verbal shaping process through which a new repertoire of more adaptive behaviors is promoted and reinforced. This approach has already been proposed by other authors (Follete et al., 1996; Rosenfarb, 1992), which is one of the principles of *Functional-Analytic Psychotherapy*, which assumes that the client's verbal behavior can be modified, like any other behavior, through in-session shaping: by differentially reinforcing the approach to more adaptive behavior and punishing or extinguishing maladaptive behavior.

Lastly, we observe that, when the therapist is *consolidating*, he/she assumes a less directive role and lets the client take the initiative. These are moments in therapy in which the clinical objectives that were the target of the treatment have already been achieved, and the therapist limits him/herself to keep reinforcing (*mid* and *high reinforcement*) the utterances of the client that he deems appropriate. There are moments of irrelevant chat (*chatting*), and moments in which the therapist is simply paying attention to the client's speech (*conversational reinforcement*). The emergence of contents that would, at first sight, be considered anti-therapeutic (*failure* and *discomfort*) can come across as striking in these consolidation moments, but can be explained in several ways. As for the therapist's verbal behavior, as seen in Figure 1, he/she responds

in a very heterogeneous way to these behaviors. Sometimes he/she shows disapproval (*punishment category*) as could be expected, but he/she also issues utterances coded as *conversational reinforcement* and *others*. It seems that the therapist is not being systematic in the way he/she responds, maybe due to certain objections to showing disapproval or rejection of these kind of utterances made by the client. In this sense, the sequential three-terms analysis has shown that the systematic use of punishment is restricted to those sequences in which the therapist him/herself is the one who provides the antecedent stimulus for the client to verbalize some kind of anti-therapeutic content, thus enabling the therapist to punish it, rather than the moments in which it is the client him/herself who issues these utterances with no antecedent control by the therapist.

In light of these results, we can affirm that the study of verbal interaction is a valid alternative to the independent analysis of individual therapist and client variables that dominates the research on psychotherapy since the 90s. This latter type of research has resulted in the search for common factors through psychotherapeutic interventions, from the stance that whatever they have in common would explain their effectiveness. From that standpoint, the conclusion seems evident: if what all approaches to therapy have in common is the presence of a therapist, a client and a relation between them, it is there that the key to the clinical process should be found (Imel & Wampold, 2008; Rosenzweig, 2002). For our part, we consider this argument to be misleading:

the fact that there are common factors does not mean that those factors are the only ones that are relevant in the therapeutic process; what's more, they can be irrelevant in the sense that they neither improve nor stimulate the treatment or they can even be detrimental to it. Moreover, research on the value of the clinical relation with an appropriate, non-intuitive methodology is sorely needed. The clinical relation is the result of a continued interaction, and does not seem to lend itself to adequate study if it is not from the interactive process that generates it; a process that, on the other hand, is mainly verbal. Our approach stands opposite to the descriptive study of the therapeutic process, and defends the functional analysis of the interaction; for this analysis, considering external variables can be useful, dispositional variables that can affect the interaction without being a part of it, let alone explaining it: for example, the historical and cultural context, the therapist's personality or the client's expectations. There is still a long way to go until we find the key to clinical change; we, however, consider the sequential study of the verbal interaction to be an adequate starting point to achieve this objective.

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