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Patients' verbal emotional expressions and their connection with the psychotherapeutic change: a multi-level analysis of the psychotherapeutic activity

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GENERAL ABSTRACT

Emotional expressions contribute to the activation and regulation of personal emotional experiences, and communicate something about internal states and intentions. These emotional expressions can be observed in the words we use in our speech. The growing interest in knowing what happens during the psychotherapeutic process has made researchers focus on the study of verbal patient-therapist interaction, considering a notion of performative language, in which language is not only understood as a simple reflection of reality, but as constitutive of it. The present Doctoral Thesis aims at studying the link between verbal emotional expressions and psychotherapeutic change, through the use of five levels of analysis of the psychotherapy: therapy, session, episode, speaking turn and word. The specific objectives that oriented this research were: (a) to determine the differential characteristics of the verbal emotional expression of patients and therapists during Change Episodes; (b) to determine the behavior of these verbal emotional expressions in Change and Stuck Episodes; (c) to determine the behavior of these verbal emotional expressions in each phase of the therapy and throughout the psychotherapeutic process; and (d) to determine which cognitive mechanisms are present in verbal emotional expressions during Change Episodes and throughout the psychotherapeutic process. A mixed methodology was used to analyze 38 Change Episodes (1016 speaking turns) and 19 Stuck Episodes (581 speaking turns) which were identified within two psychodynamic psychotherapeutic processes. Verbal expressions were analyzed using the Therapeutic Activity Coding System (TACS-1.0) which was built to respond to the need to conceptualize and study the verbal activity of patients and therapists. The present Doctoral Thesis is a dossier made up by seven articles that detail the results of each of the aforementioned studies, in order to: (a) identify the main characteristics of the therapeutic conversation during Change Episodes; (b) establish the existence of communicative patterns to work on emotional contents during Change Episodes; (c) determine temporal sequences of interaction between these patterns; (d) analyze the main communicative patterns in order to determine their behavior within Change Episodes, and throughout the different phases of the psychotherapeutic process; and (e) analyze the words verbalized during the use of the main communicative patterns in order to determine the cognitive mechanisms involved in the work of emotional contents during Change Episodes.

INTRODUCTION

The growing interest in knowing what happens during the psychotherapeutic process has made researchers focus on the study of verbal and non-verbal patient-therapist interaction. This has made it possible to establish the theoretical foundations of how this interpersonal relationship is structured. More specifically, it has encouraged scholars to study the role played by emotions in said interaction, which has given them the place they deserve in the research of the therapeutic process. Not only are emotions an important element for the development of the first interpersonal bonds, they also play a relevant role in the evolution, ontogeny, operation, and psychosocial adaptation of human beings to their environment (Izard, 2002). In general, they are usually considered as a part of the cognitive process, or as a phenomenon depending on it; yet, emotions contain a certain kind of information that differs from all other types, if we consider that they are subjectively experienced (Izard, 2002), and that they also fulfill an adaptive function as a result of the integration between the cognitive and the affective domains (Greenberg & Bolger, 2001).

So far, the results of research on emotion have made it possible to establish the following: (a) that during the therapeutic dialog, patients produce specific affective reactions in their therapists, while at the same time the latter show their patients how these expressions of emotion end up influencing their interaction during the therapy; and (b) that successful therapeutic processes, as opposed to unsuccessful ones, display specific characteristics during the therapist-patient affective exchange. It has been observed, for example, that changes in patients' behavioral patterns during the therapy may be regarded as indicators of changes at the structural level, which may be used to measure therapeutic success. Also, there appears to be a link between the success of the treatment and both a greater diversity of facial expressions during the first sessions, and therapist-patient complementarity in their expression (Dreher, Mengele, Krause & Kämmerer, 2001). Such results are to be expected in research with an emphasis on the therapeutic relationship, one of the most widely studied factors in these days, due to is close and well-proved link with therapeutic success. Consequently, it is possible to conclude that: (a) a large part of the therapeutic outcome seems to be explained by patient factors (Asay & Lambert, 1999); and (b) facilitating the patient's emotional engagement during the therapeutic process seems to be a factor that promotes cognitive and behavioral changes (Castonguay, Goldfried, Wiser, Raue & Hayes, 1996; Goldman, Greenberg & Pos, 2005). Both conclusions have been replicated through all therapeutic approaches.

The present Doctoral Thesis aims at studying the link between emotion and psychotherapeutic change, through the use of five levels of analysis of the psychotherapy: process, session, episode, speaking turn and word. Its main objective is to analyze verbal communication associated with

emotional contents transmitted between the patient and the therapist, so as to identify certain communicative patterns and microsequences of those patterns, that make it possible to: (a) establish a distinction between patients and therapists; (b) establish a distinction between the segments of the therapeutic process characterized by the presence of change moments (Change Episodes) and those that lack them (Stuck Episodes); (c) establish the behavior of said communicative patterns throughout the Change Episode; and (d) establish the behavior of said communicative patterns throughout the therapeutic process. In order to achieve this, a cross-sectional analysis of the communicative actions associated with verbal emotional expressions will be carried out, as well as a longitudinal analysis of the same variables, so as to describe and compare their behavior through several phases of the psychotherapeutic process. A mixed design will be employed to perform both analyses, that is, a discovery-oriented qualitative methodology (Hill, 1990; Mahrer & Boulet, 1999) of the prototypical patient-therapist communicative patterns and microsequences, along with a quantitative methodology so as to establish distinction between Change Episodes and Stuck Episodes, and between the different phases of the process.

Moreover, this research involved conducting four successive studies and two successive pilot studies. ***Study 1*** described and compared the verbalized emotions of both psychotherapists and patients in psychotherapeutic dialogue during Change Episodes and through the psychotherapeutic process. In an initial stage of the study, the description of emotional expressions was done using a discovery-oriented qualitative methodology, since it made it possible to discover what took place in the sessions reviewed, with the objective of developing theoretical models through the formulation and contrast of hypotheses that do not come from pre-established theories. In a second stage, a quantitative methodology was used to analyze the distribution of the emotional expressions during the psychotherapeutic process. ***Study 2*** was aimed at detecting certain patterns in verbal communication, used by patients and therapists for working on emotional contents during Change Episodes. This study was divided into three parts: the first of them helped to determine and compare the Communicative Actions present in patients' and therapists' verbalizations during Change Episodes in comparison with Stuck Episodes; the second established which Communicative Patterns (CPs) were used by patients and therapists for working on emotional contents during both types of episode; and the third determined the existence of temporal interaction sequences between these Communicative Patterns (CPs), depending on the type of episode. ***Study 3*** was also divided into two parts: the first analyzed the main Communicative Patterns (CPs) used by patients and therapists for working on emotional contents during Change and Stuck Episodes, in order to establish differences between both episode types; the second part analyzed the Communicative Patterns (CPs) present during each therapeutic phase in order to describe their behavior as the psychotherapeutic process progressed. ***Study 4*** analyzed

the words uttered by the patients and the therapists during their use of Communicative Patterns, in order to determine which cognitive mechanisms were involved in the participants' work on emotional contents during Change and Stuck Episodes, and throughout the psychotherapeutic process. Before this last study, two Pilot Studies were carried out: ***Pilot Study 1*** adapted LIWC-2007 to the methodology for analyzing Change Episodes, and demonstrated its sensitivity to detect significant differences between the characteristics of patients and therapists and between the phases of the therapeutic process; ***Pilot Study 2*** analyzed Communicative Actions and some characteristics of patients' and therapists' Linguistic Styles during Change Episodes, in order to determine which contents were conveyed by the speakers to influence the other participant and to construct new meanings together.

The present Doctoral Thesis is a dossier made up by seven articles that detail the results of each of the aforementioned studies. Three of them have been published in ISI journals (*articles 1, 2* and *6*), one was published in a SciELO journal (*article 5*), one was submitted for review (*article 3*), and two are currently in progress (*articles 4* and *7*). The results presented in these articles made it possible to achieve the following specific objectives:

1. To determine the differential characteristics of the verbal emotional expression of patients and therapists during Change Episodes.
   Study 1 (*article 1* and *article 2*). Study 2 (*article 3*).
2. To determine the behavior of patients' and therapists' verbal emotional expressions in Change and Stuck Episodes. Study 3 (*article 4*)
3. To determine the behavior of patients' and therapists' verbal emotional expressions in each phase of the therapy and throughout the psychotherapeutic process. Study 3 (*article 4*)
4. To determine which cognitive mechanisms are present in patients' and therapists' verbal emotional expressions during Change Episodes and throughout the psychotherapeutic process. Pilot Study 1 (*article 5*), Pilot Study 2 (*article 6*) and Study 4 (*article 7*).

The order of presentation of the articles is determined by the sequence in which the studies were conducted to answer the specific objectives.

CHAPTER 1
THEORETICAL AND EMPIRICAL ANTECEDENTS

Concerning the effectiveness of therapeutic processes, it has been demonstrated that: (a) said effectiveness is above the range considered significant in clinical practice (Asay & Lambert, 1999; Eysenck, 1992, 1994; Shadish, Matt, Navarro & Phillips, 2000), and (b) there is, at the same time, a very small difference in the effectiveness of therapeutic approaches (Luborsky, Singer & Luborsky, 1975; Matt & Navarro, 1997). These results, besides being the basis for research carried out to compare different therapeutic effects (Luborsky, 2001; Mahrer & Boulet, 1999), have made it possible to develop growingly effective methodologies for the analysis and comprehension of the findings made up to that point concerning the nature, magnitude, and generalization of psychotherapeutic effects (Shadish, Matt, Navarro, Siegle, Crits-Christoph, Hazelrigg, et al., 1997).

Research in psychotherapy has developed in four phases: (a) the first of them focused on laying the foundations of scientific research (1927-1954); (b) the second, on the search of scientific rigor (1955-1969); (c) the third, on extension and organization (1970-1983); and (d) the current one, focused on consolidating and reformulating the theories developed so far (1984 to date) (Russell & Orlinsky, 1996). Specifically, psychotherapy research has focused on the study of: (a) unspecific or common change factors, internal or external to the therapy, which are shared by all therapeutic approaches, and are the cause of change (Chatoor & Krupnick, 2001; Crits-Christoph & Connolly, 1999; Hubble, Duncan & Miller, 1999; Matt, & Navarro, 1997; Oei & Shuttlewood, 1997); (b) patient-therapist interaction based on process-outcome research (Luborsky, 2000; Lueger, 1998; Williams & Hill, 2001), the chronological analysis of relevant episodes (Fitzpatrick, Janzen, Chamodraka & Park, 2006; Goldfried, Raue & Castonguay, 1998; Vanaerschot & Lietaer, 2007), the structure of discourse during the therapeutic process (Bucci & Maskit, 2006; Koch & Zumbach, 2002; Mergenthaler & Bucci, 1999; Roussos & Leibovich, 2002; Roussos & O´Connell, 2005; Westerman, Foote & Winston, 1995); and, finally (c) the effectiveness of assigning psychological treatments for certain specific problems of disorders (Chambless & Hollon, 1998).

The present Doctoral Thesis belongs to process research, and, more specifically, to the analysis of the use of verbal expressions connected with emotional contents transmitted between the patient and the therapist, during significant intra-session episodes -characterized by the presence of change moments- so as to account for the special features of this specific type of interaction, and so contribute to the reformulation and/or consolidation of the theories developed so far in the field of emotion and psychotherapy.

1. Studies on emotion in the light of psychotherapy process research

In the last years, psychotherapy process research has basically focused on the study of therapeutic interaction and the process of change experienced during the help relationship (Conte, Plutchik, Jung, Picard, Karasu & Lotterman, 1990; Hill, 1990; Stiles & Shapiro, 1994), which has made it possible to draw relevant conclusions about the complexity of the processes involved in the emotional regulation of the patient during said interaction. But, above all things, this research has highlighted the importance of studying these processes at various levels of analysis, and with a methodological integration that will result in a better comprehension of such processes. This has made it possible to develop research methodologies based on the systematic qualitative analysis of sequential data (Hageman & Arrindell, 1999; Hill, 1990; Mahrer & Boulet, 1999; Stiles, Shapiro & Firth-Cozens, 1990; Williams & Hill, 2001), or its combination with quantitative methodologies (Hill, O'Grady & Elkin, 1992) in order to describe what happens during the sessions and so generate theoretical models based on the formulation and contrast of hypotheses which may or may not be the result of already established theories.

Next, some of the most relevant results in the field of emotion will be mentioned, according to four areas of study in process research developed so far: (a) Change Episodes or therapeutically relevant episodes, (b) therapist forms of intervention, (c) the patient's emotional experience, and (d) the structure of discourse during therapist-patient interaction.

1.1 Therapeutically relevant episodes of change. One of the areas that has been more thoroughly researched lately is the analysis of therapeutic sessions, which has made it possible to observe clear differences between those considered by therapists to be clinically significant and those regarded as less significant. More specifically, there is an interest in identifying and describing the sequence of significant moments based on the segmentation of the process into Change Episodes, or therapeutically relevant moments (Bastine, Fiedler & Kommer, 1989; Goldfried, et al., 1998; Marmar, 1990). This is a useful strategy for studying intra-session change processes, and enables scholars to construct new theoretical models. Likewise, and based on the analysis of "critical moments" in early phases of the therapy, Fitzpatrick, et al. (2006) concluded that when a meaning has positive valence for the patient, it results in more openness and higher exploration levels in him or her, which in turn generates the feeling of having more positive emotions. This coincides with the theory of positive emotions by Fredrickson (2003), which states that the momentary experience of positive emotions activates psychological expansion, which in turn produces more positive emotions and the construction of more psychological resources. Vanaerschot and Lietaer (2007) studied the relationship between "significant help episodes" during the sessions, the various levels of empathic attunement, and "therapeutic ingredients", from both the patient's and the therapist's perception. They were unable to identify a

specific class of empathic help episodes, but concluded that the different levels of empathic attunement represent different phases within the global empathic interaction process.

Process research based on the study of significant segments during the therapy has demonstrated that the contents which facilitate change, and which are shared by all psychotherapeutic approaches, are those related with problem solving, moments of (cognitive and affective) insight, personal contact (Llewelyn, 1988; Mahrer, Nadler, Stalikas, Schachter & Sterner, 1988), and moments in which new forms of behavior are put into practice (Mahrer & Nadler, 1986; Hill, 1990). On the basis of such results, the present Doctoral Thesis aims to describe and analyze the characteristics of verbal patient-therapist emotional communication during relevant segments of the session, characterized by the presence of change moments. But it is also possible to formulate the question of whether it is possible to predict the final outcome of a therapy based on the identification and analysis of episodes regarded as relevant (Goldfried, et al., 1998; Stiles, et al., 1990).

1.2 Forms of intervention by the therapist. Some process studies have aimed at understanding the various forms of intervention carried out by the therapist throughout the therapy. As a result, the theory of emotions has suggested seven principles related to the form of intervention employed by the therapist: the use of positive and negative emotions, emotional regulation as a mediator of emotions, the existence of emotional patterns, emotional communication during the early stages of development, and the connection between relatively independent emotions and the cognitive system (Izard, 2002).

In a study conducted by Elliott, Hill, Stiles, Friedlander, Mahrer and Margison (1987) six forms of intervention were identified: questions, information, advice, reflection, interpretation, and self-expression, with interpretation showing the highest degree of correlation with positive evaluations of the treatment (Caspar, Pessier, Stuart, Safran, Samstag & Guirguis, 2000; Connolly, Crits-Christoph, Shappell, Barber & Luborsky, 1998; Hill, et al., 1992; Pessier & Stuart, 2000). Specifically, there is thought to be a positive association between a successful therapeutic outcome and the frequency of therapist interpretations referring to the emotions experienced by the patient in the transferential relationship, which are very similar to those experienced in the relationship with parents and other meaningful individuals (Marziali, 1984). Also, Wiser and Goldfried (1998) carried out a study to analyze the relationship between interventions performed by the therapist and the patient's emotional experience, and found that patients who received therapeutic interventions such as reflection, recognition, interventions regarded as non-controlled and favoring affiliation, or interventions that highlighted non-specific contents in the patient, in general remained in a highly affective state, whereas patients who received longer interventions, and interventions regarded as favoring affiliation but a moderate control as well, had a tendency to move towards less affective states.

On the basis of these results, the present Doctoral Thesis intends to identify patterns in verbal communication, associated to emotional contents during Change Episodes, in order to determine whether there is a connection between certain given verbal actions by the patient and the therapist, and the way in which the patient's change and psychotherapeutic outcomes evolve.

1.3 Emotional experience of the patient. The theory, formulated on the basis of empirical results, suggests that therapeutic work done at an affective level is potentially more profound, has a larger impact on therapeutic outcomes, and persists for longer than when interventions are performed at a cognitive level only (Orlinsky & Howard, 1986). Therefore, if emotions are experienced instead of repressed, they could be used to regulate interaction during therapeutic work (Greenberg & Safran, 1989). It has been possible to demonstrate that high levels of emotional experience are associated with: (a) the attainment of insight by the patient, (b) specific moments or phases during the therapy, and (c) the existence of verbal and non-verbal patterns of mutual therapist-patient influence, employed by the latter to regulate their own affective conflicts.

Firstly, there is evidence showing that the conscious activation of emotional experience, as well as its expression, are relevant elements for explaining psychotherapeutic change (Hill et al., 1992; Timulak, 2007). Even more so, some theoreticians suggest the existence of structures of implicit emotional meaning, and acknowledge the necessity of integrating the cognitive and the affective domains for emotional experience to be meaningful. Only so, they state, would it be possible to generate new meanings from emotional experience, highlighting its independent role in human life (Greenberg, Auszra & Herrmann, 2007). A study carried out by Elliott and James (1989) classified patients' experience into nine categories, which are in turn subdivided into more specific forms of experience. The first five categories are connected to psychological processes present during the therapy, that is, the kind of relationship with the therapist, the kind of reference to oneself, the central feelings, intentions, and worries. The next two categories are related to the therapist's intentions and actions, whereas the last two refer to the way in which immediate and long-term therapeutic effects are experienced. The most frequent result, concerning how emotional effects are experienced, has to do with emotional expression and support, as well as with the sensation of being understood (Bänninger-Huber & Widmer, 1999; Krause & Cornejo, 1997; Popp-Baier, 2001). More recently, and following a similar line of research, Fontao and Mergenthaler (2007) conducted a micro-process research project aimed at identifying and analyzing emotion-abstraction patterns during the therapy. This method has made it possible to analyze therapeutic processes through the identification of therapeutic cycles subjected to a cyclic progression of emotional tone and abstraction level in a temporal sequence (Mergenthaler, 1996, 1998).

Secondly, it has been observed that emotional experience is associated with specific moments or phases in the therapy (Mahrer, Lawson, Stalikas & Schachter, 1990). Castonguay, Pincus, Agras and Hines III (1998) analyzed how the patient's emotional experience varied during three phases of the treatment: participation, differentiation and work. They observed that the participation phase was characterized by the presence of patient-therapist processes of commitment and acceptance; the differentiation phase was characterized by the appearance of negative emotions such as avoidance and conflict; and the work phase was characterized by an increase of intimacy and of work toward the therapeutic goals. Besides, it was also possible to demonstrate the association between therapeutic success and positive emotional experience during the first and the second phase of the treatment.

And thirdly, there is evidence substantiating the existence of reciprocal therapist-patient affective patterns, which, besides, are consistently observable throughout the therapeutic process. A large percentage of facial expressions are organized as repetitive patterns (individual or dyadic) with a constant structure in the course of the therapy, and, seemingly, the less complementary these repetitive patterns are during the therapist-patient affective interaction, the less favorable the therapeutic result (Dreher et al., 2001, Merten, 2005). Rasting and Beutel (2005) showed that there is a connection between both protagonists' emotional patterns during therapeutic interaction, even though patients are more active verbally and display more emotions through facial expressions than therapists. The contribution of the latter to patients' emotional regulation is not limited to verbal interventions; it is also tightly linked to non-verbal exchange (Davis & Hadicks, 1990). Bänninger-Huber (1992) has studied the cognitive-affective regulation processes during the process of psychotherapeutic interaction, and has developed a microanalytical system that analyzes the expressive components of the emotions conveyed through facial expressions. The author starts from the assumption that, on the one hand, this is a behavior that occurs unconsciously and automatically, and on the other hand, that this behavior not only reflects a subjective process that takes place inside the person, but which has a communicative meaning for the other person as well. The regulation of therapeutic dialog, on the basis of the existence of an asymmetry in the roles played, is mainly focused on the regulation of the patient's emotional experience, while the therapist records and empathically shares the patient's emotions as they appear, and controls his or her own at all times.

In spite of this difference in the roles played, each of the protagonists may evoke specific reactions in the other through prototypical affective microsequences, which are small sequences of affective regulation during interaction. A successful affective microsequence is characterized by the establishment of a state of affective resonance between the therapist and the patient, whereas a prototypical unsuccessful affective microsequence lacks such resonance. So, the moment-to-moment analysis of emotional expression through facial expressions has shown that the patient's patterns are

established during the first sessions and that some patterns of the dyadic process are considered as good predictors of therapeutic outcome (Bänninger-Huber & Widmer, 1999; Merten, Anstadt, Ullrich, Krause & Buchheim, 1996).

In an attempt to understand how emotional patterns are established at the beginning of the psychotherapy, and how they help to create the emotional quality of the relationship, Merten (2005) analyzed patients' and therapists' facial expressions using the EMFACS technique, based on the Facial Activity Coding System (FACS: Ekman & Friesen, 1978), which makes it possible to analyze only the movements potentially related to affections. In order to do this, facial expressions are regarded as expressions congruent with basic positive and negative emotions (happiness, anger, contempt, disgust, fear, sadness, surprise and social smile). For instance, it has been observed that basic negative emotions, and their combination, can be identified and used as indicators of conflicts in the regulation of the therapeutic relationship (Dreher, et al., 2001; Merten, et al., 1996). In this respect, Merten (2005) concluded that the basic emotions that therapists and patients show the least during the therapeutic situation are happiness and disgust, whereas fear and surprise are the ones patients show the most; that the increase of fear in patients' facial expression may signal the reactivation of a specific conflict during the therapeutic relationship; that patients' display of surprise may indicate the processing of new contents belonging to the change process in mental representations, as an adjustment process; that the reduction in the facial expression of sadness may signal a stable patient-therapist relationship; and that the facial expression of anger may indicate a lockup, or may be a sign in the therapist resulting from his or her failure to modify the patient's behavior. Yet, there are also other studies that demonstrate that expressed anger is more intense in sessions that patients later regard as successful in conflict solving. (MacKay, Barkham & Stiles, 1998; Mohr, Shoham-Salomon & Beutler, 1991). Some therapists have suggested, for example, that depression is the result of the blocking of experience and the inhibition of certain negative emotions, so that, when anger is taken to the patient's consciousness during the therapy, therapeutic change is facilitated (Rosner, Beutler & Daldrup, 2000), as long as anger does not continue to be expressed as a secondary or instrumental emotional response. Leising, Rudolf, Stadler, Jacobsen, Oberbracht and Grande (2003) studied how patients' interpersonal behavior and emotional experience changed during therapies regarded as successful. In order to do this, they employed a Clinical Emotions List (Leising, 2000) developed to measure patients' emotional profile, which includes 17 categories of positive emotions, 22 negative categories, and 3 categories with an unspecific valence. The authors found that, as the proportion of positive emotions increased, symptoms and interpersonal problems decreased. They also observed that, the higher the dispersion of emotions in the affective profile, the higher the correlation with therapeutic success. That is to say, patients who showed an increasing emotional variability during the therapy displayed decreasing interpersonal

problems, and a much sharper decline of symptoms. This growing skill by the patient to perceive different emotions during the therapy seems to be associated with an improvement in the necessary conditions for communication, and with the implementation of more effective behaviors for solving interpersonal problems.

On the basis of these results, the present Doctoral Thesis intends to develop a microanalytical system for analyzing the verbal emotional expressions during the psychotherapeutic dialogue, in order to identify microsequences of patterns in verbal communication within Change Episodes, and throughout the psychotherapeutic process.

1.4 Discourse structure during therapeutic interaction. In process research, there is an area of study centered on the analysis of the use of words to express different emotional experiences. This ability is related to the evaluation of what we are thinking and/or feeling, automatically and involuntarily, and which is being verbally expressed at the same time. During therapeutic conversation, basic emotions generally appear as narrations with emotional contents that took place in the past, or as emotional contents whose occurrence is anticipated during the session (Ekman, 1999).

Although the study of verbal exchange and the categories belonging to the structure of language has been relatively neglected by process research, there are some studies on the structure of discourse, carried out so as to identify communicative patterns of therapist-patient interaction, used during the therapeutic process to influence each other (Koch & Zumbach, 2002; Mergenthaler & Bucci, 1999; Westerman, et al., 1995). Russell, Jones and Miller (2007) conducted a study on the main mechanisms of the change process and the communication patterns during interaction, associated with the patient's therapeutic outcome. In order to achieve this, they focused on the moment-to-moment temporal analysis of the emotional patterns of patient and the therapist, in order to determine which factors or processes appear to facilitate or hinder the patient's recovery. The factors found were grouped into four areas: patient affections, therapeutic work, relationships, and search for information.

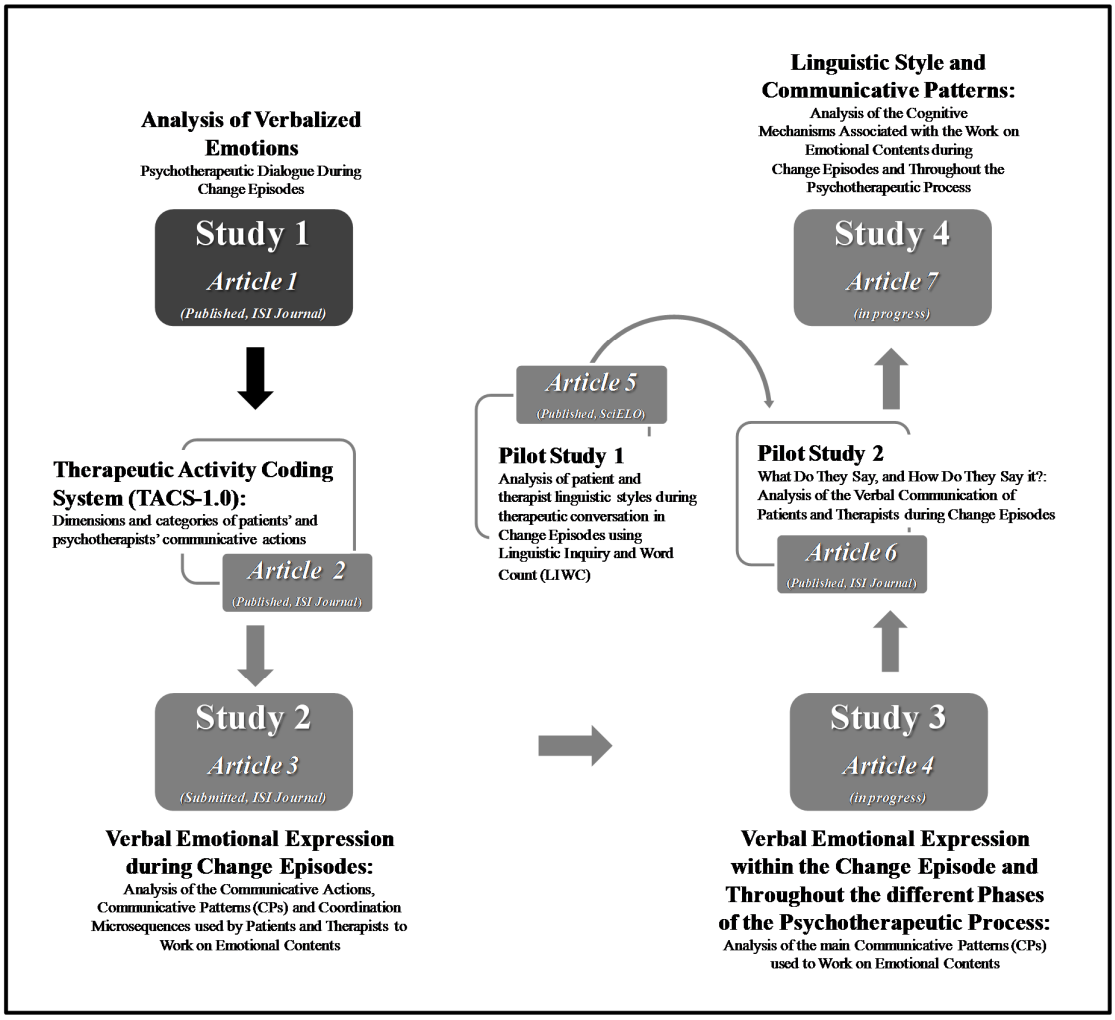
Starting from the notion that emotional work is a common denominator in the various therapeutic approaches, Hölzer, Pokorny, Kächele and Luborsky (1997) developed a computer system based on schemes for the classification and codification of emotional words, which has shown that therapists include in their discourse more words with an emotional content than their patients, that there is a significant correlation between the therapist's orientation and the presence of certain types of emotion, and that the therapies that obtain the best results are those that include more emotional words. In this same line of research, Gervasio, Taylor and Hirshfield (1992) developed a computer assisted system for the linguistic analysis of therapist-patient interaction during therapeutic dialog (MacCALAS), which allowed them to classify verbs into three types, according to their semantic nature (static verbs,

action verbs, and process verbs) and according to their function in conversation. From these three types, static verbs are the most frequently used, and are in turn subdivided into: static verbs connected to affective experiences (to desire, to feel, and to want) and static verbs related to cognitive experiences (to define, to think, and to believe). This is particularly important given the relevance that affective and cognitive processes have in psychological research. For example, Anderson, Bein, Pinnell and Strupp (1999) demonstrated that therapists in successful therapies, during highly affective segments, included a higher proportion of action verbs and less static verbs with cognitive contents, while patients used more static and process verbs. Also, therapists were more prone to talking about non-causal experiences using static verbs in highly affective segments, and to talk about behaviors with action verbs in segments with less affective work. These results seem to indicate that therapists are more attuned to the present moment of the emotion experienced by patients during the session than patients themselves; on the other hand, they support the existence of linguistic differences between the patient and the therapist, in segments characterized by a high proportion of affective contents. Seemingly, therapists' discourse includes more information, expressed in clear and simple words, and in a more efficient way than patients' discourse.

Although there are significant differences between the semantic and the prosodic characteristics of emotional expression, they are not completely independent dimensions, since it is difficult to separate what is said from how it is said (Shapiro & Danly, 1985). The concept of Referential Activity (RA) is useful in this regard, since it refers to the ability to integrate emotions with the symbolic verbal code, that is to say, with the words that provide it with meaning (Bucci, 1992, 1997), based on the various codes of information processing advanced in the Multiple Code Theory (sub-symbolic though, non-verbal symbolic thought, and verbal symbolic thought). It has been observed that AR varies throughout the therapeutic process, remaining low while the patient has not yet integrated the experience to a linguistic form, and increasing when this integration is effected through a psychotherapeutic process that fosters a better connection between emotions and the words that provide them with meaning (Bucci, 1997). Seemingly, the patients' description of events with a concrete, specific, and creative language is positively correlated with therapeutic change (Mergenthaler & Bucci, 1999; Roussos & Leibovich, 2002). Thus, the quality of discourse content and prosodic language seem to provide different types of information about the patient's emotional participation during the therapy. Patients with a lower level of emotional participation have a discourse characterized by narratives full of descriptions of external and impersonal events, whereas patients with higher levels provide descriptions richer in personal details and attain successful therapeutic outcomes (Mohr, et al., 1991; Rudkin, Llewelyn, Hardy, Stiles & Barkham, 2007).

On the basis of all these theoretical and empirical antecedents, the present Doctoral Thesis fulfills the required criteria for process research (Glaser & Strauss, 1967; Miles & Huberman, 1984; Strauss & Corbin, 1990), and aims at responding the following research questions: Are there prototypical emotional patterns in verbal patient-therapist communication, associated to psychotherapeutic change?, and, what are their main characteristics?.

CHAPTER 2
PUBLISHED, SUBMITTED AND IN PROGRESS ARTICLES BY THE AUTHOR



First specific objective: to determine the differential characteristics of the verbal emotional expression of patients and therapists during Change Episodes.

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Analysis of Verbalized Emotions in the Psychotherapeutic Dialogue During Change Episodes [1]

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Abstract

As described by many theorists, emotional expressions contribute to the activation and regulation of personal emotional experiences, and communicate something about internal states and intentions. These emotional expressions can be observed in the words we use in our speech and our non verbal behaviors, even when non verbal behaviors are synchronized to one's own speech or to the speech of others. Using a quantitative and qualitative methodology, this article reports a classification of verbal emotional expressions of both psychotherapists and patients in change episodes. Assuming that the emotions loaded in linguistic contents are explicit emotions shown by emotion words, this methodology allows for a complete and differentiating assessment of affective qualities in both patients and psychotherapist during the psychotherapeutic dialogue.

Keywords: Communicative actions, emotions, change episodes, psychotherapeutic dialogue.

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Emotions have a critical role in the evolution, ontogeny, functioning and adaptation to the physical and social environment (Izard, 2002). They define the quality of human experience, and are tendencies with a great adaptive value, and with evident manifestations at a physiological level, through facial expressions, in subjective experience and information processing. Emotions appear before the evaluation of some previous events, and facilitate prosocial behavior and creative problem solving (Fredrickson, 2003). The affective regulation system is internalized as an individual representation and as sociocultural and family norms, which can determine adaptive or dysfunctional behavior (Dreher, Mengele, Krause, & Kämmerer, 2001). Thus, emotions can be explained considering their profound influence on perception, cognition and action, agreeing that they have an adaptive function, but can also be defined in terms of goal-oriented actions, or in terms of the individual's intention to influence a person.

Emotion: definition and its expression

There are some perspectives in emotion research that consider the term "basic" emotions (Ekman, 1999), in order to separate them according to specific characteristics (e.g., positive emotions versus negative emotions). There is a perspective, typically associated with a Darwinian tradition, which conceptualizes the existence of a small number of emotions which are evolutionarily shaped in order to fulfill specific survival-benefit functions (Schröder, 2003) and an important finding in this perspective is the universality of some facial expressions of emotions, demonstrated by Paul Ekman (1999). He showed that at least six emotions (happiness, sadness, anger, fear, surprise, and disgust) were expressed in the face and recognized in it in the same way in many different cultures. A second perspective has a constructivist point of view and considers emotions to have a universal quality to all species; in this view, emotions are believed to be learned irrespective of the culture type. Cornelius (2000) considers emotions as socially constructed patterns that are learned and culturally shared. They fulfill a social purpose and regulate interactions between individuals. Not only the expression of emotions, but emotions themselves including the subjective experience, are seen as culturally constructed. This perspective recognizes the existence of biological foundations for emotions, but their importance is secondary in relation with the socially constructed mechanisms (Schröder, 2003). Finally, the third perspective considers that emotions developed from their adaptive value in the resolution of certain tasks that are fundamental for life (Ekman, 1999). It means that each emotion is related to a direction that, in the course of the evolution, has turned out to be better than other solutions to obtain certain types of goals. For example, Stein and Trabasso (1992) concluded that in joy there is a goal that is maintained, in sadness there is a fault to maintain a goal, in anger there is an agent causing a lost of a goal, and in fear there is an expectation to fail in obtaining a goal.

To consider an emotion as basic it is necessary to make a distinction between emotions and other affective phenomena. Ekman (1999) defines eight characteristics that describe basic emotions: (a) they have universal specific signs, (b) they have a distinguishing physiology, (c) they appear as the result of an automatic and tuned valuation with equally distinguishing previous events, (d) they have a distinguishing appearance in their development, (e) they are also present in other primate types, (f) they have a fast beginning, a short duration and a spontaneous occurrence, (g) they are accompanied by distinguishing thoughts or images, and (h) they allow the continuous conformation of subjective experience. These emotions can also differ from each other according to: the subjective evaluation of each (e.g., fear, anger and sadness are unpleasant emotions, whereas joy, pride, profit and satisfaction are pleasant emotions), previous events, behavioral response, and the physiology of the person (Ekman, 1999).

The most concrete description of emotions is the use of emotion-denoting words or category labels, and human language has proven to be extremely powerful in producing labels for emotional status (Schröder, 2003). The capacity to use words to express different emotional experiences is related to automatic valuations and involuntary changes in expression and physiology, which also allow us to regulate that what we are thinking and feeling is expressed verbally at the same moment. However, it is not easy to access the subjective experience of others, because each emotion belongs to a family of related emotional states and not to a specific affection type (Ekman, 1999). Basic emotions generally refer to emotional contents that appear during psychotherapy sessions, narratives with emotional contents that took place in the past, or emotional contents whose occurrence is anticipated during the session. The truth is that emotional expression is an important aspect for the development and the regulation of the psychotherapeutic relationship (Ekman, 1999).

Methods for evaluating emotions

Classical methods for evaluating emotions tend to focus on questionnaires or interviews (e.g., using videotaped sessions and asking participants to recall instant by instant what they felt at each moment during their performance). But, there are some studies about the structure of speech which analyze differences in linguistic style in spoken and written text (Anderson, Bein, Pinnell, & Strupp, 1999; Koch & Zumbach, 2002; Mergenthaler & Bucci, 1999; Westerman, Foote, & Winston, 1995), based on the assumption that basic emotions are usually used in a narrative way during the psychotherapeutic dialogue, with emotional contents that occurred in the past or emotional contents whose occurrence is anticipated during the session (Ekman, 1999).

In 1979, Cook developed a grammar matrix in which special emphasis is placed on the use of verbs phrases as grammatical and semantic anchors of speech. Based on Cook's conceptualization, Pepinsky

(1985) and Gervasio, Taylor and Hirshfield (1992) developed Computer Assisted Language Analysis Systems (CALAS and MacCALAS, respectively) for the analysis of the relationship between verb phrases and noun phrases and the roles that they play during interactive dialogue. These systems use a classification of the semantic nature of three verb types: stative, action and process verbs. Stative verbs describe a non-causal relationship between persons or things, or a state or property of a person or thing (e.g., are, appear and could). Action verbs describe a causal relationship of the experiencer that is cognitive in nature (e.g., bring, catch and start). Process verbs describe a causal relationship, without specifying an agent, in which something is happening to a person or a thing (e.g., grow, live and suffer). Among the three types of verbs, the first one is the most frequently spoken (Gervasio et al., 1992), and they are divided into stative-experiencer-affective (SEA) and stative-experiencer-cognitive (SEC) verbs. This verb types are particularly important because of their relevance for affective and cognitive processes in psychological research.

Hölzer, Pokorny, Kächele, and Luborsky (1997) developed a computer system based on classification schemes and the codification of emotional words, which has shown that psychotherapists include in their speech more words with an emotional content than patients. There is a significant correlation between the psychotherapist's approach and the presence of certain types of emotions, and a correlation between psychotherapeutic outcome and the proportion of emotional words. Also, Anderson et al. (1999) examined the relationship between various linguistic measurements with outcome in verbalized affect segments during the therapy. Results indicated that, in high affect segments, psychotherapists with poor outcome cases used more cognitive verbs than psychotherapists with good outcome cases. These findings are interesting because, apparently, psychotherapists differed from patients by speaking with a more differentiated pattern of speech in both high and low affect segments. It could be useful for the psychotherapists to be aware of their patterns of expression and to let this knowledge influence their treatments (Ekman, 1999).

Although there are significant differences between the semantics and the prosody of verbal emotional expressions, it is difficult to separate what is said from how it is said, because these dimensions are not completely independent. Thus, the concept of Referential Activity (RA) becomes useful, because it relates the ability to integrate emotions with the verbal symbolic code, that is, with the words that give them meaning (Bucci, 1992, 1997), from the different codes of information processing raised in the Theory of Multiple Codes (sub-symbolic processing and verbal and non-verbal symbolic processing). It has been observed that RA varies during the therapeutic process, while maintaining low levels when the patient has not yet integrated experience to a linguistic form and, when this integration is rising from a specific psychotherapeutic process that fosters a better link between emotions and the words that give them meaning (Bucci, 1997; Stigler & Pokorny, 2001).

Apparently, the description of events with a precise, specific and creative language by patients is positively correlated with psychotherapeutic change (Mergenthaler et al., 1999; Roussos & Leibovich, 2002). Thus, the quality of the content of speech and prosodic language seem to provide different types of information about the patient's emotional involvement during therapy. Patients with lower levels have a speech marked by narratives characterized by many descriptions of external and impersonal events, while patients with higher levels of emotional involvement are characterized by descriptions of personal details and results of treatment success (Mohr, Shoham-Salomon, & Beutler, 1991; Rudkin, Llewelyn, Hardy, Stiles, & Barkham, 2007). This idea seems to be supported by the results by Watson (1996), who analyzed the relationship between vivid description, emotional expression and problem solving during the therapeutic session. These results concluded that: (a) successful sessions, as opposed to unsuccessful ones, are characterized by high levels of Referential Activity when patients describe problematic situations followed immediately by a specific emotional reaction and, (b) patients typically report an emotional change after making vivid descriptions of the problem situations.

Importance of emotions in psychotherapy settings

In psychotherapy process research, there is an increased interest in studying the process of configuration of human relationships. Emotions are exchanged through verbal expressions, allowing a specific form of relationship between patient and psychotherapist to develop. Research has shown that successful treatments are distinguished by specific characteristics of affective exchange and emotional experience in the psychotherapeutic dyad (Dreher et al., 2001). During the psychotherapeutic dialogue, patients produce specific affective reactions in their psychotherapists, while psychotherapists show their patients that their emotional expressions have had some type of consequence in the interaction (Dreher et al., 2001).

The idea of emotion as inherently adaptable and motivational emphasizes the importance of emotions for any relationship. As for the therapeutic relationship, the theory of emotions suggests seven principles to develop preventive interventions: the utilization of positive and negative emotions, emotions modulation as a mediator of emotion utilization, emotion patterns in states and traits, different processes of emotion activation, emotion communication in early life, and the development of connections for the modular and relatively independent emotion and cognitive systems (Izard, 2002). Despite the fact that there is a strong tendency in research to consider emotions as part of the cognitive processes, or as a dependent phenomenon of these, emotions contain certain types of information different from any other, since they are experienced subjectively (Izard, 2002). The automatic emotional response already has occurred before one can stop it and it is adaptive to respond

quickly in some situations, whereas at other times better functioning results from the integration of cognition into emotional response (Greenberg & Bolger, 2001).

The aim of this study is to describe and compare the verbalized emotions of both psychotherapists and patients, in psychotherapeutic dialogue during change episodes and through the psychotherapeutic process. In an initial stage of the study, the description of the emotional expressions was done using a discovery oriented qualitative methodology (Hill, 1990; Mahrer & Boulet, 1999), since it made it possible to discover what took place in the sessions reviewed, with the objective of developing theoretical models through the formulation and contrast of hypotheses that do not come from pre-established theories. In a second stage, a quantitative methodology was used to analyze the distribution of the emotional expressions during the psychotherapeutic process. The following hypotheses guided this study: (a) the discourse of psychotherapists and patients will be characterized by the presence of certain kinds of communicative actions. Psychotherapists will most frequently use communicative actions intended to explore and clarify the other's emotion, while patients will most frequently use communicative actions intended to deepen their own emotion, (b) verbal emotional expressions will be characterized by the presence of specific types of basic emotions and will be different depending on the role of each participant, (c) the emotional contents of verbal expressions will be different in the two psychotherapeutic processes studied, since they will be more related with the main problem presented by each patient, (d) there will be differences in the emotional expressions according to whom they are referred to.

We assume that the verbal emotional expressions of patients will be referred to themselves and to others not present in session, and the verbal emotional expressions of psychotherapists will be referred to the ones expressed or narrated by the patients, (e) there will be differences between patient and psychotherapist depending on the valence of the verbal emotional expressions., and finally (f) there will be similarities and differences in the way communicative actions, basic emotions, emotional contents, and their valence and reference evolve throughout the different phases of the psychotherapeutic processes. Specifically, we expect an increase of positive verbal emotional expressions and a decrease of negative ones throughout the psychotherapeutic process.

Method

Sample

Two individual psychotherapies conducted in Chile were analyzed (A and B). Both psychotherapeutic processes were scheduled in a range of 18 to 20 treatment sessions approximately, one session per week, over a period of 4 to 5 months, and corresponding to a short-term psychodynamic psychotherapies characterized by the exploration of a focus, which can be identified by

psychotherapists and patients. Both psychotherapists were male psychiatrist psychoanalysts and both patients were female. The presenting problem of patient A (38 years old) was the development of mourning for separation and recent losses, while that of patient B (43 years old) was the expression of needs, the desire to strengthen autonomy and increase quality relationships. Both psychotherapeutic processes were chosen because they had the same approach (psychoanalytic), the same modality (individual) and both patients had a similar diagnosis.

In the current study, we decided to analyze the full range of sessions of both psychotherapeutic processes, to delimit all the change episodes in each one. Specifically, we analyzed 38 change episodes (Psychotherapeutic process A = 14 change episodes; Psychotherapeutic process B = 24 change episodes) included in 39 sessions (Psychotherapeutic process A = 18 sessions; Psychotherapeutic process B = 21 sessions). The speaking turns of both psychotherapists and patients during these change episodes were analyzed, reaching a total of 433 speaking turns (Psychotherapeutic process A = 230 speaking turns; Psychotherapeutic process B = 203 speaking turns).

Procedure and measurements

***Psychotherapy Outcome*.** In order to assess change, the Outcome Questionnaire (OQ-45.2) was applied to all patients in order to measure their progress throughout the psychotherapeutic processes. This self-administered questionnaire was developed by Lambert, Hansen, Umpress, Lunnen, Okiishi, and Burlingame (1996) and validated in the Chilean context by Von Bergen and de la Parra (2002). A high total score indicates that the patient reports a high discomfort in his quality of life as expressed in symptoms, interpersonal relationships and social role. The interpretation of the scores is based on a cut-off score, derived by comparing a sample from the community with clinical samples, which separates functional and dysfunctional populations (cut-off score is 73 for the Chilean context) and on the reliable change index (RCI), which determines if the change exhibited by an individual in treatment is clinically significant (this score is 17 in the Chilean context) (Jacobson & Truax, 1991). Both psychotherapeutic processes studied were considered successful, since both patients had surpassed the Reliable Change Index (RCI) for the Chilean population between pre and post treatment. Thus, patient A started therapy with a total OQ of 68, finishing with 48.4 (RCI = 19.6), and patient B started with a total OQ of 111 and finished with 91 (RCI = 20). Therefore, both patients showed an improvement above the reliable change index during psychotherapy in their total scores (between the beginning and the end of the psychotherapeutic process), although patient A started the psychotherapy below the cut-off score and patient B above the cut-off score. Based on this, it was possible to conclude that both patients showed a significant change.

Demarcation of Change Episodes and Speaking Turns. Currently, psychotherapy research is emphasizing the analysis of psychotherapeutic sessions, specifically the identification and description of those segments that, in accordance with specific criteria, stand out in the therapeutic process as significant, or relevant for change. Bastine, Fiedler, and Kommer (1989) define a change episode as the interval of time, segment or sequence within one or many therapeutic sessions where significant changes take place, in order to analyze them in relation to changes, their previous conditions and effects. Under these considerations, the present study analyzes the communicative actions of psychotherapists and patients and their corresponding emotional content within change episodes.

The two psychotherapeutic processes were video and audio-taped and observed through a one-way mirror by expert observers trained in the use of a protocol developed to guide and facilitate the observation and coding of change moments, which is understood as a change in the patient's subjective theories (Groeben & Scheele, 2000), and detected using the hierarchy of Generic Change Indicators List (Krause, de la Parra, Arístegui, Dagnino, Tomicic, Valdés et al., 2007) that makes it possible to establish the boundaries of a change episode according to a thematic criteria. The sessions were listed in chronological order and transcribed in order to facilitate the subsequent demarcation of the change episodes. To demarcate a change episode, the change moment was first identified based on its theoretical correspondence with the Generic Change Indicators. This change moment corresponds to the end of the change episode. Then, according to a thematic approach, the session was reviewed backwards in order to identify the beginning of the topic discussed by patients and psychotherapists that deals with that specific change moment. Finally, the change episodes were broken down into speaking turns, which constituted a discourse unit. A speaking turn was defined as all the words expressed by psychotherapist and patient in their turn during the psychotherapeutic dialogue (e.g., roughly a sentence of dialogue).

Communicative Actions and Verbal Emotional Expressions. We analyzed communicative actions and verbal emotional expressions within each speaking turn of both patient and psychotherapist and classified them according to the basic emotions they expressed and their emotional contents, irrespective of the grammatical form (e.g., nouns, adjectives or verbs). We understand communicative actions as those linguistic actions that a person performs when speaking (e.g., explore an emotion or narrate an emotion). We propose one level of analysis related to the explicit presence of emotion in speech, in contrast to the implicit presence of emotion which is associated with the emotional climate during the session. This second level was not considered for the analyses in this article. The analysis of each speaking turn was conducted in three successive stages: (a) coding of each speaking turn of

the first change episode through a process of intersubjective consensus between researchers[2]. Based on this, a preliminary list of verbal emotional expressions was built, (b) coding of the remaining change episodes using the preliminary list of emotional expressions, open to the possibility of the emergence of new emotions, and (c) revision of the final list of verbal emotional expressions in order to achieve a final consensual validation.

For the classification of verbal emotional expressions, Ekman's emotion classification (1999) was used, considering that each basic emotion denotes a family of related emotions. Through a qualitative analysis we identified 74 emotional words, and, to simplify this, we classified these emotional words according to the basic emotion classification (Table I).

Table I. Emotional Contents Included in the Basic Emotions and their Valence

VALENCE	BASIC EMOTIONS	EMOTIONAL CONTENTS
Pleasantness	Happiness	Enthusiasm, gratefulness, happiness (happy, contentment), avidity, luck, passion, love (ador commotion, pride, confidence, superiority, satisfaction, affection, hope, delicate, relax (tranquility, comfortable), calm, joy, tender and security.
Unpleasantness	Sadness	Insult, loneliness (isoled), deception (defrauded), offence (critic), neglect (abandonment), emptiness, boring, compassion, mercy, nostalgic (lowered), sadness (depressed), desperatior vulnerability (sensible), to miss, hopelessness, suffering (pain) and bitterness.
	Fear	Fear, tension, afraid, nervous (anxious), regret, scare (terror), shame, guilt, insecurity (inhibition, repression), submissiveness (annulled), worried, standstill (catched) and distress (anxiety).
	Anger	Annoyance, rejection, resigns, jealousy, resentment, hatred, bad-tempered, distrust, envies, rebel, impatience, scorn, anger (uncontrolled), wrath, disgust, exhaustion (tired), demand (pressed, criticized), over-demand, indifference (coldness) and frustration.
Other	Neutral	Curiosity, scepticism (doubt), concern-unconcern and desire.

Note: The words in parentheses are synonymous with the previous emotional content.

The final version of the emotional contents list contains 20 positive and 50 negative emotion categories as well as 4 categories with an unspecific valence. By applying this procedure it was assured that all words of the transcripts which were judged to have an emotional connotation were added to the list. Nevertheless, even when it was not an objective of this study, we found similarities with Cook's emotional words, used by Anderson et al. (1999) to understand how the language within the patient-psychotherapist dialogue relates to outcomes as well as to theoretically based process

[2] The Change Episodes were individually encoded by researchers at the first stage of the analysis process and reviewed together at the second stage, in order to reach an intersubjective consensus.

measures. This system allows differentiating the patient's emotional profile as an indicator of the subjective affective significance (Leising, Rudolf, Stadler, Jakobsen, Oberbracht, & Grande, 2003).

Finally, we classified these verbal emotional expressions using only two of the three independent intersecting dimensions defined by Dahl, Hölzer, and Berry (1992): reference and valence. We defined the first dimension, reference or orientation, as that which indicates whether the emotional expression refers to the self, to the other present in the session or to another person out of the session. The second dimension, valence, refers to the quality of pleasantness or unpleasantness of the emotion (Hölzer et al., 1997).

Hypotheses

We investigated the following hypotheses:

Hypothesis 1: Psychotherapists will most frequently use communicative actions to explore and clarify the emotion of the patient, while patients will most frequently use communicative actions to deepen their own emotion.

Hypothesis 2: Verbal emotional expressions will be characterized by the presence of specific types of basic emotions and there will be differences depending on the role of patient or psychotherapist.

Hypothesis 3: The emotional contents of verbal expressions will be related to the main problem presented by each patient, therefore there will be differences between the two psychotherapeutic processes analyzed.

Hypothesis 4: Verbal emotional expressions of patients will be referred to themselves and to others not present in the session, while verbal emotional expressions of psychotherapists will be referred to the ones expressed or narrated by the patients.

Hypothesis 5: There will be differences between patient and psychotherapist depending on the valence of the verbal emotional expressions.

Hypothesis 6: There will be similarities and differences in the way communicative actions, basic emotions, emotional contents, and their valence and reference evolve throughout different phases of the psychotherapeutic processes.

Statistical model

For the classification of the verbal emotional expressions, a discovery oriented qualitative methodology was used. In a second stage, a quantitative methodology (e.g., frequencies and percentages) was used for analyzing the distribution of the verbal emotional expressions during the psychotherapeutic processes and according to the role during the psychotherapeutic dialogue. The statistical method employed was a Chi-Square statistical metric to compare the distribution of all the

studied variables. Also, we used this method for the analysis of the variables in different phases of the psychotherapeutic processes, but in some cases we only used a descriptive analysis because of the small amount of verbal emotional expressions in some cells.

Results

A total of 13,277 pronounced words were found in psychotherapeutic process A: 8,029 corresponded to the patient (60.5%) and 5,248 corresponded to the psychotherapist (39.5%). Something similar happened with psychotherapeutic process B in which a total of 14,857 pronounced words were found: 9,083 corresponded to the patient (61.1%) and 5,774 corresponded to the psychotherapist (38.9%). Of these pronounced words, a total of 13,071 (98.5%) and 14,677 (98.8%) non-emotional expressions were found in A and B, respectively. A total of 206 (1.5%) verbal emotional expressions were found in A: psychotherapist = 111 (53.9%) and patient = 95 (46.1%), while a total of 180 (1.2%) verbal emotional expressions were found in B: psychotherapist = 90 (50%) and patient = 90 (50%). It was possible to conclude that both processes were similar in this aspect.

Communicative Actions, Basic Emotions and Emotional Contents within Change Episodes

Results show that it was possible to distinguish four types of communicative actions: (a) to show an emotion of another (to reflect an emotion to the other person, e.g., *"maybe you were inhibited or repressed with him"*), (b) to explore an emotion (to inquire emotional components, e.g., *"what do you feel when you remember this?"*), (c) to express an emotion (to experience an emotion when speaking, e.g., *"I am sad right now"*), and (d) to narrate an emotion (to recount an affective situation of the past, e.g., *"I had a lot of fear when I was a child"*). The communicative actions most frequently used by psychotherapists and patients during the psychotherapeutic dialogue were: showing an emotion of another (40.6%), followed by narrating an emotion (33.7%) and expressing an emotion (17.8%), while exploring an emotion (7.9%) was less frequent. With respect to the basic emotions, the most frequent one was anger (30.70%) and fear (30.5%), followed by sadness (20.8%), happiness (10.9%), and finally, the neutral basic emotions (7.2%). We coded an emotional expression as neutral when it did not fit in any of the previous categories, that is, when they could at times be perceived as positive emotions and other times as negative ones (e.g., concern, unconcern and doubt). In relation to the emotional contents, the most frequent ones were: annoyance (11.3%), anger (14.8%), demand (14.8%), suffering (6.2%), scare (6.0%), sadness (5.8%), submissiveness (5.1%), afraid (4.8%), guilt (4.2%) and concern (3.7%). The remaining percentage was shared between a great variety of emotional contents, but with less frequency.

Communicative Actions and Basic Emotions. After the analysis of communicative actions and basic emotions in both psychotherapeutic processes (A and B), it was possible to conclude that they were similar because they presented approximately the same proportion of communicative actions, χ^2 (3, N = 433) = 7.119, p =.068, and the same proportion of basic emotions, χ^2 (4, N = 433) = 6.808, p =.146. However, the differences appear when comparing the words pronounced by patients and psychotherapists (Table II). Patients used more communicative actions aimed at narrating an emotion and expressing an emotion, while psychotherapists used more communicative actions intended to showing an emotion and exploring an emotion of the patient, χ^2 (3, N = 433) = 364.069, p =.000. Therefore, Hypothesis 1 was confirmed: psychotherapists most frequently use communicative actions to explore and clarify the emotion of the patient, while patients most frequently use communicative actions to deepen their own emotion.

Table II. Communicative Actions and Basic Emotions according to the Psychotherapeutic Process and Role

Psychotherapeutic process A					
Categories	Subcategories	Role			
		Patient		Psychotherapist	
		f	%	f	%
Communicative actions	To show an emotion	1	0.9	105	86.1
	To express an emotion	35	32.4	1	0.8
	To explore an emotion	0	0.0	14	11.5
	To narrate an emotion	72	66.7	2	1.6
		108	100.0	122	100.0
Basic emotions	Happyness	14	13.0	5	4.1
	Sadness	29	26.9	26	21.3
	Fear	26	24.1	48	39.3
	Anger	29	26.9	39	32.0
	Neutral	10	9.3	4	3.3
		108	100.0	122	100.0
Psychotherapeutic process B					
Categories	Subcategories	Role			
		Patient		Psychotherapist	
		f	%	f	%
Communicative actions	To show an emotion	5	4.4	65	72.2
	To express an emotion	39	34.5	2	2.2
	To explore an emotion	2	1.8	18	20.0
	To narrate an emotion	67	59.3	5	5.6
		113	100.0	90	100.0
Basic emotions	Happyness	25	22.1	3	3.3
	Sadness	14	12.4	21	23.3
	Fear	25	22.1	33	36.7
	Anger	35	31.0	30	33.3
	Neutral	14	12.4	3	3.3
		113	100.0	90	100.0

Note. f =Frequency; %= Percentage (N=433).

In relation to basic emotions, there was also an association between the roles of patient and psychotherapist, χ^2 (4, N =433) =36.782, p=.00. When analyzing each psychotherapeutic process, this association was only maintained statistically in patient B, χ^2 (4, N =203) =25.007, p=.000. In both psychotherapeutic processes, psychotherapists showed the same proportion of the basic emotions fear, anger and sadness, in their speech. However, patient A had the same proportion of anger and sadness, followed by fear, while patient B had a greater proportion of anger followed by the same proportion of fear and happiness. Therefore, Hypothesis 2 was confirmed: there are differences in the basic emotions verbalized during the speech, depending on the role of patient or psychotherapist.

Table III. Emotional Contents according to the Psychotherapeutic Process and Role

Psychotherapeutic process A					
Categories	Subcategories	Role			
		Patient		Psychotherapist	
		f	%	f	%
Emotional contents	Relax	8	7.4		
	Loneliness	5	4.6	8	6.6
	Sadness	9	8.3	9	7.4
	Suffering	10	9.3	5	4.1
	Afraid			11	9.0
	Scare			5	4.1
	Guilt	6	5.6		
	Insecurity			5	4.1
	Submissiveness			15	12.3
	Annoyance	17	15.7	7	5.7
	Anger			8	6.6
	Demand	7	6.5	17	13.9
	Concern	10	9.3		
	Others	36	33.3	32	26.2
Psychotherapeutic process B					
Categories	Subcategories	Role			
		Patient		Psychotherapist	
		f	%	f	%
Emotional contents	Confidence	5	4.4		
	Relax	7	6.2		
	Offense			6	6.7
	Sadness	5	4.4		
	Suffering			9	10.0
	Afraid			9	10.0
	Fear	6	5.3		
	Scare	7	6.2	12	13.3
	Guilt	5	4.4		
	Standstill			5	5.6
	Annoyance	18	15.9	7	7.8
	Bad-tempered	5	4.4		
	Anger	9	8.0	14	15.6
	Demand			7	7.8
	Skepticism	8	7.1		
	Others	32	34.0	21	23.2

Note. This table shows the emotional contents with a frequency greater than or equal to five.
The remaining emotional contents with a less frequency were included in the category "others" (N=433).

There was also an association between communicative actions and basic emotions during psychotherapy, χ^2 (12, N = 433) = 45.975, *p* =.000, nevertheless, it was not possible to associate this with the role played. Patients used communicative actions aimed at narrating and expressing the five basic emotions (happiness, sadness, fear, anger and neutral), while psychotherapists used communicative actions intended to show an emotion with the five basic emotions and tended to explore the basic emotions of sadness and neutral.

Emotional Contents within Change Episodes. There were significant differences in both psychotherapeutic processes in relation to the contents of the verbal emotional expressions, χ^2 (46, N =433) =135.564, *p*=.000. Nonetheless, there was an association between emotional contents and the role played during psychotherapy, χ^2 (46, N =433) =135.032, *p*=.000. As shown in Table III, patients of both psychotherapeutic processes used more frequently verbal expressions whose emotional contents were annoyance (A = 15.7% and B = 15.9%), followed by suffering, concern and sadness in the case of patient A; and the emotional contents of anger, skepticism and scare in the case of patient B. On the other hand, psychotherapist A used verbal expressions whose emotional contents were demand, submissiveness and afraid, while psychotherapist B used verbal expressions whose emotional contents were anger, scare, suffering and afraid. Therefore, Hypothesis 3 was confirmed: there were differences between the two psychotherapeutic processes since it seems that emotional contents of verbal expressions are related to the main problem presented by each patient.

Reference and Valence of the Verbal Emotional Expressions during Change Episodes. On the basis of the previous analysis, we also analyzed emotional contents according to the following two levels: (a) the reference of the emotional contents (if the verbal emotional expression referred to the self, to the other person present in the session or another person out of the session), and (b) the valence of the emotional contents (if the verbal emotional expressions were pleasant or unpleasant). As seen in Table IV, the greatest percentage of emotional expressions present in the speech of both psychotherapists and patients, were referred to him/herself (42.3%), and to the other present in session (42.3%), while a lower proportion was referred to another not present in the session (15.5%). On the other hand, the valence of the verbal emotional expressions more frequently used was unpleasantness (81%), followed by pleasantness (10.9%), and finally others that do not fit in any of the previous categories (7.4%). This category coincides with the neutral basic emotions and was used for those emotional expressions with an unspecific valence (e.g., at times perceived as positive and as negative at others). Only emotional expressions with a clear valence were tagged as such.

Table IV. Reference and Valence of Verbal Emotional Expressions according to the Role

Categories	Subcategories	Role				Total
		Patient		Psychotherapist		
		f	%	f	%	%
Reference	Referred to him/herself	170	76.9	13	6.1	42.3
	Referred to other present	8	3.6	175	82.5	42.3
	Referred to other not present	43	19.5	24	11.3	15.4
		221	100.0	212	100.0	100.0
Valence	Pleasantness	39	17.6	8	3.8	10.9
	Unpleasantness	157	71.0	197	92.9	81.8
	Other (*)	25	11.3	7	3.3	7.3
		221	100.0	212	100.0	100.0

Note. f = Frequency; % = Percentage.
* The subcategory "others" includes the verbal emotional expressions thatdo not fit into any of the previous subcategories (N=433).

The analysis of the reference and the valence of the verbal emotional expressions of the two psychotherapeutic process studied (A and B) allows us to conclude that both processes were similar: (a) showed approximately the same proportions of verbal emotional expressions referred to him/herself, to the other present in the session and to another person not present in the session, χ^2 (2, N =433) =2.610, p=.271, and (b) showed a higher percentage of verbal emotional expressions related to unpleasantness, χ^2 (2, N =433) =5.079, p=.079. Also, there was an association between the reference of verbal emotional expressions and the role played by each participant during the psychotherapy, χ^2 (2, N =433) =292.420, p=.000. In both psychotherapeutic processes, psychotherapists frequently used verbal emotional expressions referred to the patients, while patients used verbal emotional expressions referred to themselves. Therefore, Hypothesis 4 was confirmed: verbal emotional expressions of patients are referred to themselves and to others not present in the session, while verbal emotional expressions of psychotherapists are referred to the ones expressed or narrated by the patients.

One of the most interesting results was the association between communicative actions and the reference of the verbal emotional expressions in the speech of psychotherapists and patients, and how these results were also associated to the role during psychotherapy. In the case of patients, most of the communicative actions aimed at narrating an emotion were referred to another person not present in session, followed by those referred to themselves. The communicative actions aimed at expressing an emotion were also referred to themselves, but patients were also able to show emotions to the psychotherapist. Psychotherapists used communicative actions referred to the patient during sessions, χ^2 (6, N =221) =89.858, p=.000, and to another not present in the session. They also explored emotions related to others not present in the session and emotions referred to themselves, χ^2 (6, N =212) =63.033, p=.000, but less frequently.

In relation to the valence of emotional expressions, there is also an association with the role played, χ^2 (2, N=433) =34.920, *p*=.000. Psychotherapists concentrate on unpleasant emotions like patients do, but they eventually show other emotions (see Table IV). Therefore, Hypothesis 5 was also confirmed: There are differences between patients and psychotherapists depending on the valence of the verbal emotional expressions.

An association between communicative actions and the valence of the verbal emotional expressions during psychotherapy was found, χ^2 (6, N =433) =35.591, *p*=.000, but not with the role. Thus, patients from both psychotherapeutic processes narrated and expressed verbal emotional expressions with different valences (pleasantness, unpleasantness and others), while psychotherapists focused, on the one hand, on showing emotions with a pleasant and unpleasant valence that were typical of the patient; and, on the other hand, on exploring those emotions with an unspecific valence.

Analysis of Communicative Actions, Basic Emotions, Valence and Reference throughout the Psychotherapeutic Process

It was possible to analyze the distribution of communicative actions, basic emotions, valence and reference throughout the psychotherapeutic process, since both processes were similar in terms of these categories. In order to achieve this, the processes were divided into three phases: the initial phase of the psychotherapeutic process included the first three episodes (A = Change Episodes 1 to 3; B = Change Episodes 1 to 3) and the final phase included the last three episodes (A = Change Episodes 12 to 14; B = Change Episodes 22 to 24), while the middle phase included the four episodes equidistant from the initial and final phases (A = Change Episodes 6 to 9; B = Change Episodes 11 to 14).

As shown in Figure 1, there were no differences in the way communicative actions and the valence of the verbal emotional expressions evolved throughout the psychotherapeutic process. The communicative actions more frequently performed by psychotherapists (to explore and show an emotion of another) and patients (to express and narrate an emotion), had a similar proportion throughout the different phases of the psychotherapeutic process, χ^2 (2, N = 159) = 2.134, *p* =.344, even when there was a tendency to decline during the final phase. Something similar happened with the valence of the emotional expressions verbalized by psychotherapists and patients, which were maintained in a similar proportion throughout the different phases of the psychotherapeutic process, χ^2 (2, N = 159) = 1.823, *p* =.402. Therefore, Hypothesis 6 was confirmed: there were similarities in the way communicative actions and the valence of verbal emotional expressions evolved throughout different phases of the psychotherapeutic process. However, this finding is different than what was expected, that is, an increase of positive verbal emotional expressions and a decrease of negative ones throughout the psychotherapeutic process.

But also, there were differences in the way basic emotions and the reference of verbal emotional expressions evolved throughout the psychotherapeutic process (see Figure 1). The basic emotions verbalized by patients and psychotherapists had different proportions throughout the different phases of the psychotherapeutic process, χ^2 (6, N = 159) = 22.210, p =.001. During the initial phase of the process, a greater frequency of expressions related to the basic emotion of fear was observed, followed by expressions related to the basic emotions of anger. During the middle phase of the process there was an important decrease of the verbal expressions related to the basic emotion of fear and an important increase of the verbal expressions related to the basic emotion of anger. During the final phase of the process, a greater frequency of expressions related to the basic emotion of sadness was observed.

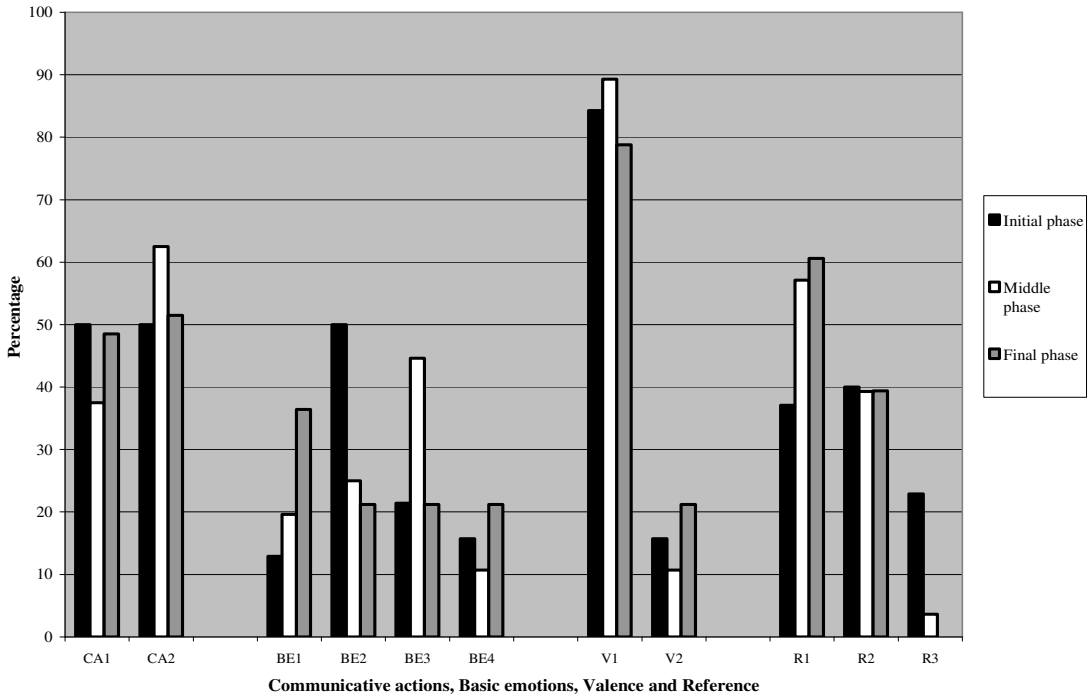

Figure I. Communicative Actions, Basic Emotions, Valence and Reference according to the Phases of the Psychotherapeutic Process. CA_1 = To explore and to show an emotion of other; CA_2 = To express and to narrate an emotion; BE_1 = Sadness; BE_2 = Fear; BE_3 = Anger; BE_4 = Happiness and Neutral emotions; V_1 = Unpleasantness; V_2 = Pleasantness and others; R_1 = Referred to him/herself; R_2 = Referred to the other present in session; R_3 = Referred to other not present in session (N = 433).

In relation with the reference of the emotional expressions verbalized by patients and psychotherapists during the psychotherapeutic dialogue, differences in the way they evolved throughout the different phases of the process were also found, χ^2 (4, N = 159) = 18.609, p =.001 (see

Figure 1). During the initial phase of the process, there was a greater frequency of emotional expressions verbalized by psychotherapists referring to the other present in the session (patient), followed by emotional expressions verbalized by patients referring to themselves. During the middle phase of the process, there was an increase of emotional expressions verbalized by patients that referred to themselves, followed by emotional expressions verbalized by psychotherapists referred to the other person present in the session (patient), as well as a significant decrease of emotional expressions referred to another not present in the session (which is maintained until the end of the process). During the final phase of the psychotherapeutic process, there was a greater frequency of emotional expressions verbalized by patients referring to themselves, followed by emotional expressions verbalized by psychotherapists referring to the other present in the session (patient). Therefore, Hypothesis 6 was also confirmed: there were differences in the way basic emotions and reference of verbal emotional expressions evolved throughout different phases of the psychotherapeutic process.

Finally, even when it was not possible to apply a statistical analysis to compare the emotional contents throughout different phases of both psychotherapeutic processes because of the low frequency of some of these elements, it was possible to observe how emotional contents were distributed during different phases. Psychotherapeutic process A presented a higher frequency of verbal expressions with emotional contents such as submissiveness (11.9%), shame (10.2%) and demand (10.2%) at the initial phase; annoyance (18.6%), demand (14.0%), suffering (14.0%) and anger (11.6%) at the middle phase, and sadness (34.8%) at the final phase. On the other hand, psychotherapeutic process B presented a high frequency of verbal expressions with emotional contents such as anger (27.3%) at the initial phase; scare (23.1%), demand (15.4%) and afraid (15.4%) through the middle phase; and gratefulness (20.0%), happiness (20.0%) and skepticism (20.0%) towards the final phase of the psychotherapeutic process.

Discussion

In this study, we described and classified verbal emotional expressions in psychotherapeutic dialogue, on the basis of the analysis of change episodes. The relevance of studying emotional expressions within these episodes resides in the importance they have for the psychotherapeutic change. This makes it possible to reveal important information about the structure of the psychotherapeutic process, and to focus on patterns of interactions and communication that contribute to patients' progress through proximal outcomes (Russell, Jones, & Miller, 2007). Reducing the hundreds of words that represent affective states to a fairly small number of categories that seemed to be fairly comprehensive was a difficult task, not only because there was a small, but assorted quantity of emotional words, but due to the fact that each of them also had different characteristics, like their valence or their reference. The

capacity to represent emotional experience in words changes many aspects of emotional experience (Ekman, 1999). With regard to this, we developed a system that assumes that the emotions payload in linguistic contents is made up by explicit emotions shown by emotion words, which can be used to describe how words with an affective meaning are being used within a sentence. It allows for a complete and differentiating assessment of affective qualities in both patients and psychotherapists during the psychotherapeutic dialogue. This system resulted in a list of emotional contents using a similar methodology as that of Leising, Rudolf, and Grande (2000) for the development of the Clinical Emotions List as a way to assess and differentiate the patient's emotional profile as an indicator of subjective affective significance (Leising et al., 2003).

We were able to demonstrate that both psychotherapeutic processes analyzed were very similar, not only in the quantity of verbal emotional expressions present, but also in the communicative actions found in the speech of each participant, the basic emotions types, and their reference and valence. However, the emotional contents of verbal expressions were different among patients and not among psychotherapists, which leads us to hypothesize that the contents of verbal emotional expressions were related to the dynamics or main problem presented by each patient. It was possible to confirm all the hypotheses when chi-square reached statistical significance; still, we discuss in length the results concerning the valence of verbal emotional expressions more extensively because we expected an increase of positive emotional expressions and a decrease of the negative emotional expression at the end of the psychotherapeutic process.

The analysis of what patients and psychotherapists do when they speak allowed us to observe differences between them in all the classification categories. This result provides support for the existence of linguistic style differences between psychotherapists and patients. Psychotherapists explore and show the emotions of patients, while patients express and narrate different kinds of emotions. The manner in which psychotherapists differed from patients in the communicative actions used during the psychotherapeutic dialogue suggests that there is a complimentarity in the way they verbalize emotions throughout the psychotherapeutic processes. Emotions define the human experience because they assure the adaptation process and the development of a prosocial behavior, temperament and personality (Izard, 2002). The communicative actions used by psychotherapists and patients to work with the emotional experience during psychotherapeutic dialogue are based on an accurate decoding and encoding of verbal emotional expressions and emotion signals which enhances and sustains the therapeutic relation as a social interaction; at the same time, it regulates interpersonal relationships throughout life (Ekman, 1999).

The percentage of emotional expressions verbalized by psychotherapists and patients was rather similar in both processes, but psychotherapists had a tendency to show a higher percentage of emotion

words in their verbalizations. Our findings confirm the results by Hölzer et al. (1997) referred to a tendency of psychotherapists to use more verbal emotional expressions than their patients. Specifically, during both psychotherapeutic processes anger and fear were the basic emotions verbalized more frequently during psychotherapeutic dialogue. These emotions are not only important in any psychotherapy; they are also essential in the psychodynamic approach, especially anger. In the initial phase of the psychotherapeutic process the most frequent expressions are those related to the basic emotion of fear, and during the middle phase there is an important increase in verbal expressions related to the basic emotion of anger. These findings are consistent with those of Rasting and Beutel (2005), who used the Emotional Action Coding System (EMFACS) to analyze the facial affect displays of patients and psychotherapists during intake interviews to determine their impact on the outcome. As they expected, the affects that patients most frequently displayed after the social smile were disgust, sadness, contempt, happiness, anger and combinations of these. Due to the type of analysis used in the current study it is not possible to explain this result, however, we recognize the importance of the fact that anger in psychotherapy is an emotion with many functions: it eliminates the source of irritation, eliminates the obstacle between gratifications, or even destroys the bad object like primitive anger (Gomberoff, 1999).

Surprisingly, pleasant emotions were present in a low frequency during the change episodes of both psychotherapeutic processes. Our expectation of an increase in pleasant emotional expressions throughout the process was not confirmed, even though it was possible to observe a tendency to increase during the final phase of the psychotherapeutic process. From the point of view of the dynamics of each patient, there was the same proportion of unpleasant emotions throughout the different phases of both psychotherapeutic processes, with a small tendency to decrease during the final phase. This could be related with the focus of each specific process. In the case of patient of psychotherapeutic process A, the emotions of suffering, concern, sadness and fear -all intense emotions- resulted from mourning and needed elaboration, while the patient of psychotherapeutic process B showed a tendency to increase pleasant emotions at the final phase. This particular distribution of emotions makes sense from looking at the dynamics of this patient, and we could expect more positive emotions since there was an accomplishment of autonomy, and establishment of limits that made her feel more in charge of her life. Not only can these emotions be explained from the focus of each psychotherapy, but also through the fact that unpleasant emotions increased at the final phase, since termination in all types of psychotherapy implies a loss and a re-elaboration of all previous losses. However, we conclude that it is necessary to analyze not only the verbal emotional expressions used by both participants during psychotherapeutic dialogue, but also the emotional climate that emerges in the dyad during the session, because pleasant emotions may be the baseline for the development of the

therapeutic alliance and this aspect of the relationship is not only transversal to the process and necessary for its success, but also allows the expression of unpleasant emotions.

When emotions are classified according to their valence, there is evidence that demonstrates that pleasant emotions are related with an open, flexible and complex cognitive organization, as well as with the ability to integrate different types of information. This is also related with a more creative way of solving problems and with the ability to make more sensible and right judgments for decision making (Fredrickson, 2003). Pleasant emotions may involve increased cognitive flexibility in the way people narrate positive or neutral ideas to another person, and increased access to multiple meanings of non-negative cognitive material (Isen, Niedenthal, & Cantor, 1992).

In general terms, subjective change refers to change in the meanings of experience. But it is necessary for this cognitive change to be accompanied by changes in subjective emotions, and this integration can only be made in relationship with another person, in this case, with the psychotherapist. This study showed that patients use more frequently expressions referred to themselves and to another not present in the session, while psychotherapists use more frequently expressions referred to their patients. Thus, the reference of verbal emotional expressions also suggests a complimentarity in the way psychotherapists and patients verbalize emotions during dialogue throughout psychotherapeutic processes, providing access to the regulation of the mutual interaction that appears as a significant element in the further course of the psychotherapeutic process. This reciprocity could be an indicator of the interpersonal modes of affect regulation between psychotherapists and patients, which includes verbal interventions and the nonverbal exchange during psychotherapeutic dialogue (Rasting et al., 2005).

Still, no significant differences were observed between both psychotherapeutic processes when analyzing the total number of change episodes (aside for the contents of verbal emotional expressions). When analyzing the different phases of the processes significant differences were observed on the basic emotions and the reference of verbal emotional expressions, while communicative actions and valence remained in the same proportion throughout the psychotherapeutic process. However, as mentioned earlier it was possible to observe a tendency for unpleasant emotions to increase in the middle phase of the psychotherapeutic process, and a tendency to decrease in the final phase of the process. These findings are consistent with those of Leising, Rudolf, Oberbracht, and Grande (2006) who concluded that the subjective emotional experience of patients changes in the course of a psychotherapeutic process, in a way that a better therapy outcome is associated with an increase in emotional variability and a decrease in the proportion of negative emotions. Pleasant emotions generated by receiving attention or a little generosity may enhance certain types of creativity and problem solving. Therefore, experiencing pleasant emotions can optimize health, subjective well-

being, enlarge thought-action repertories, mitigate or undo the emotional effects of negative life events, and increase psychological resilience, whereas unpleasant emotions can be associated to tendencies for clear and specific responses (Fredrickson, 2003; Izard, 2002). With regard to this, we demonstrate that psychotherapy fluctuates and evolves in relation with contents, but it also is a stable process in relation with structure.

These results offer additional support for a growing body of evidence that highlights the importance of both participants in psychotherapy outcome and process. It is important when results emerge systematically as a consequence of using alternative methods and mixed methodologies, considering that process research is more exploratory in nature. Replications of these findings, and the inclusion of other variables such as psychotherapeutic approaches, the emotional climate during change episodes and other segments of the psychotherapy without change, are necessary for evaluating the significance of our data.

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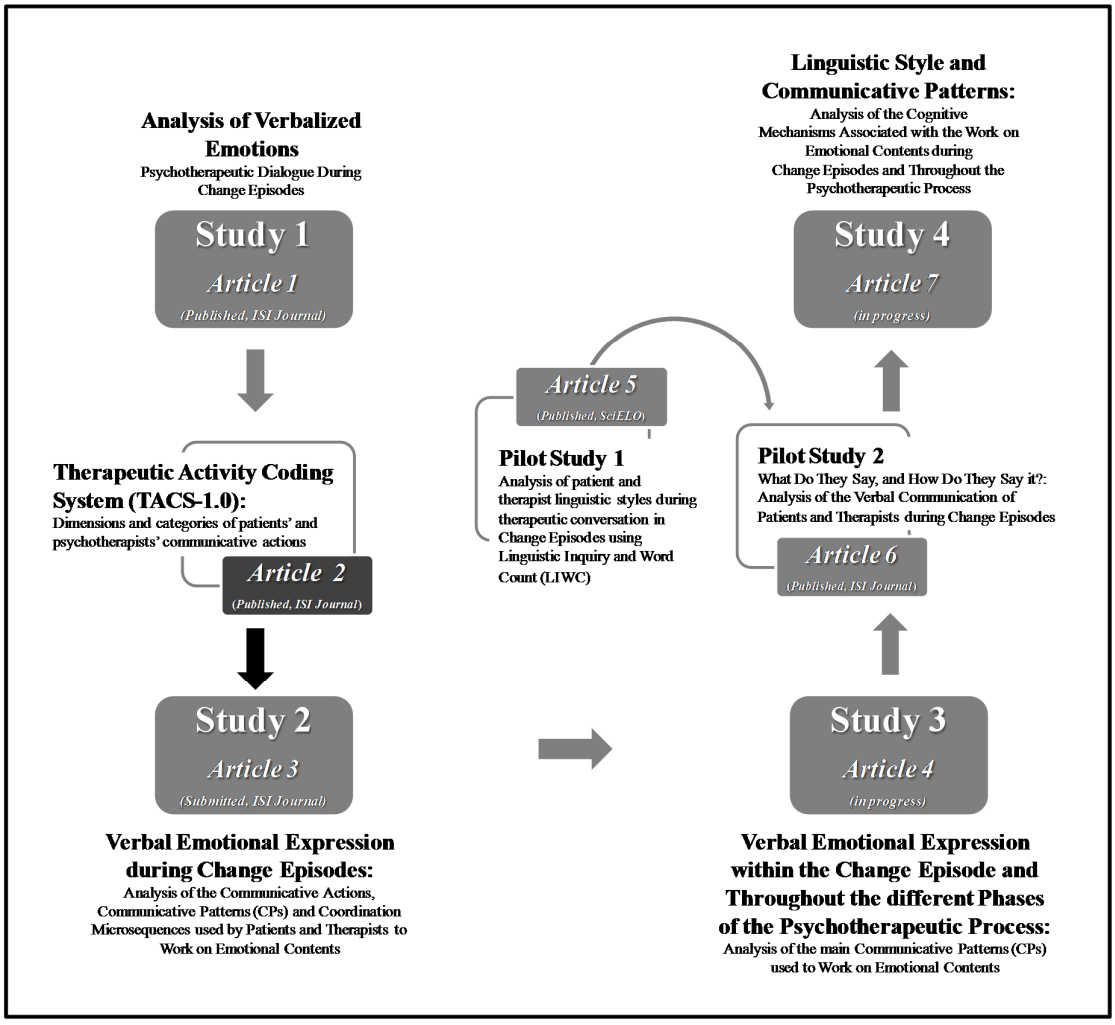

First specific objective: to determine the differential characteristics of the verbal emotional expression of patients and therapists during Change Episodes.

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Therapeutic Activity Coding System (TACS-1.0): Dimensions and Categories of Patients' and Psychotherapists' Communicative Actions [3]

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Abstract

The Therapeutic Activity Coding System (TACS-1.0) is presented. This coding system was built to respond to the need to conceptualize and study the verbal activity of patients and therapists. At a theoretical level, the coding system is based on a notion of performative language, assuming that "saying something is doing something." According to this conceptual approach, the verbalizations are called Communicative Actions and they have the dual purpose of carrying information (content) and influence others and the reality constructed by speakers (Action). The TACS-1.0 considers both dimensions (Content and Action) of Communicative Action. The Contents dimension includes the category Domain (of what is being discussed) and the category Reference (who is the protagonist). The dimension of Action includes the categories Basic Form, Communicative Intention and Technique. A total of 31 codes included in these 5 categories were developed using a discovery-oriented methodology initially, followed by an inter-rater reliability analysis. Good agreement indices were found. Finally, the usefulness for the study of patients' and therapists' verbal communication during relevant segments of therapies of different theoretical approaches is discussed.

Keywords: Communicative actions, microanalysis, psychotherapeutic process research.

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Therapeutic communication, specifically, the speech of therapists and patients is the dimension in which, microanalytically speaking, therapeutic change is constructed (Boisvert & Faust, 2003; Elliot, Slatick, & Urman, 2001; Krause, et al., 2007; Llewelyn & Hardy, 2001; Orlinsky, Ronnestad, & Willutzki, 2004; Wallerstein, 2001). However, this activity has received less attention than the effectiveness of therapy or therapeutic outcomes (Asay & Lambert, 1999; Messer & Wampold, 2002; Wampold, 2005; Wampold, Ahn, & Coleman, 2001), or unspecific or common factors such as the therapeutic alliance (Hubble, Duncan, & Miller, 1999; Krause, 2005; Maione & Chenail, 1999; Meyer, 1990; Orlinsky & Howard, 1987).

The conclusion that specific therapeutic interventions, associated to particular therapeutic models, are not the main causes of change (Lambert & Barley, 2001: Wampold & Brown, 2005) may be a bit rash. If therapeutic action were separated from specific schools, and studied in generic terms, seeking those shared by the different therapeutic approaches and modes, it would be possible to assess their actual contribution to the construction of the patient's change in therapeutic interaction. However, this requires a "meta-school" coding system thorough enough to include all the relevant dimensions of psychotherapeutic dialog and of its speakers. The Therapeutic Activity Coding System (TACS-1.0), presented in this article, was constructed with this objective in mind.

Current Systems for the Classification of Psychotherapeutic Dialog

In general terms, the leading systems for the classification of psychotherapeutic dialog only consider the therapists' utterances (Elkin, Parloff, Hadley, & Autrey, 1985; Elliot, Hill, Stiles, Friedlander, Mahrer, & Marginson, 1987; Friedlander, 1982; Goldberg, et al., 1984; Hill, 1978; Mahrer, Nadler, Stalikas, Schachter, & Sterner, 1988; Shaikh, Knobloch, & Stiles, 2001; Stiles, 1993; Watzke, Koch, & Schulz, 2006; Wiser, & Goldfried, 1996), while others can be applied to both therapists and patients (Connolly, Chris-Cristoph, Shapell, Barber, & Luborsky, 1998; Jones, Cumming, & Pulos, 1991; Hill, 1990, 2005; Valdés, et. al., 2007). In addition, these systems have been constructed upon the basis of a specific therapeutic approach, or to analyze a particular therapeutic issue (Etchebarne, Fernández, & Roussos, 2008; Evans, Piasecki, Kriss, & Hollon, 1984; Trijsburg, Lietaer, Colijn, Abrahamse, Joosten, & Duivenvoorden, 2004) (see Table 1).

For example, the Counselor Verbal Response Category System (HCVRCS), developed by Hill in 1978 and perfected by Friedlander in 1982, only considers the therapists' utterances, which are classed into reassurance, guidance, interpretation, questions, and restatements. Other systems focusing on specific therapist's interventions were developed by Goldberg et al. (Conversational Therapy Rating System, 1984), by Mahrer et al. (Taxononomy of Procedures and Operations in Psychotherapy, 1988), by Elliot (1984), by Wiser & Goldfried (1996), and more recently, by Watzke et al. (2006).

Table 1: Systems for the Classification of Psychotherapeutic Dialog

Classification systems	Categories	Role	Psychoterapeutic approach	Problem
Counselor Verbal Response Category System (Hill, 1978)	Open questions, closed questions, information, direct guidance, restatement, reflection, non verbal reference, interpretation, self-disclosure, approval-reassurance, confrontación and minimal encourager	Psychotherapist	–	–
Friedlander (1982)	Approval, information, guidance, open questions, closed questions, reformulation, interpretation, confrontation and free association	Psychotherapist	–	–
Conversational Therapy Rating System (Goldberg, Hobson, Maguire, Margison, O´Dowd, Osborn, et al., 1984)	Closed questions, open questions, questions of understanding, definition of the process, information-explanation, definition of the subject area, general instructions, advice, restatement, understanding hypothesis and therapist-owned	Psychotherapist	–	–
Taxononomy of Procedures and Operations in Psychotherapy (Mahrer, Nadler, Stalikas, Schachter, & Sterner, 1988).	inquire about ongoing self, simple explanations, agreements or disagreements, general structure, problem identification, reflection, simple answers, patients' and Psychoterapists' explanation.	Psychotherapist	–	–
Elliott (1984)	Questions, information, advice, reflection, interpretation and selfexpression.	Psychotherapist	–	–
Wiser & Goldfried (1996)	Question, reflection, interpretation and advice.	Psychotherapist	–	–
Watzke, Koch, & Schulz (2006)	interpretation, confrontation, cognitive interventions, behavioral interventions, directive interventions and focusing (to emotions, interpersonal relationships, in transference, in therapeutic relationship or group interventions)	Psychotherapist	–	–
Verbal Response Modes (Stiles, 1992; Shaikh, Knobloch, & Stiles, 2001)	Disclosure, edification, advice, confirmation, question, recognition, interpretation and reflection	Psychotherapist	–	–
Psychotherapy Process Q-Set (Jones, Cumming, & Pulos, 1991)	Attitudes, behaviors and patient's experiences; attitudes and psychotherapist's behaviors; and interaction structure	Psychotherapist Patient	–	–
Cognitive Elaboration Rating System (Connolly, Chris-Christoph, Shappell, Barber, & Luborsky, 1998).	Past or present experiences, past or present emotions or past or present thoughts, experiences, emotions or thoughts (news or developing)	Psychotherapist Patient	–	–
Collaborative Study Psychotherapy Rating Scale (Evans, Piasecki, Kriss, & Hollon, 1984)	Psychotherapist's actions to ensure the adherence to treatment, explicit and directive actions, and methods and enabling conditions	Psychotherapist	–	Specific (depression)
Etchebarne, Fernández, & Roussos (2008)	Specifics interventions, non specifics interventions and common interventions	Psychotherapist	Psychodynamic, cognitive and interpersonal	–
Comprehensive Psychotherapeutic Interventions Rating Scale (Trijsburg, Lietaer, Colijn, Abrahamse, Joosten, & Duivenvoorden, 2004)	Facilitating interventions, experiential interventions, psychodynamic interventions, directive behavioral interventions, cognitive interventions, psychodynamic group interventions and sistemic interventions			–

The taxonomy developed by Stiles to analyze therapist utterances is also noteworthy (Verbal Response Modes, VRM, 1992; Shaikh et al., 2001), because it is based on the more general framework of speech acts (Searle, 1969), which considers both the literal and the pragmatic meanings of actions.

The available systems capable of classifying both therapist and patient actions include the Psychotherapy Process Q-Set (PQS), developed by Jones et al. (1991) and the Cognitive Elaboration Rating System (CERS) created by Connolly et al. (1998) upon the basis of studies by Elliot (1985).

On the other hand, the Collaborative Study Psychotherapy Rating Scale (CSPRS), by Evans et al. (1984), is an example of a therapeutic dialog classification system developed to study a specific therapeutic issue. This scale classifies therapist actions specifically associated with patient adherence to depression treatment (Treatment of Depression Collaborative Research Program, TDCRP; Elkin et al., 1985).

Regarding the study of therapist interventions associated with specific psychotherapeutic models, Etchebarne et al. (2008) developed a classification of specific, non-specific, and common therapist interventions through a "multidimensional analysis of dimensions". In turn, the Comprehensive Psychotherapeutic Interventions Rating Scale (CPIRS), by Trijsburg et al. (2004) -product of the analysis of the main therapeutic approaches (client-centered, psychodynamic, behavioral, cognitive, and systemic therapy) focuses on common therapist interventions.

Even though the aforementioned classification systems have proven useful for analyzing verbal interaction in psychotherapeutic dialog, it was deemed necessary to develop a single system for studying the utterances of both participants of the therapy (patient and therapist), which could be used to describe therapeutic communication, understand its evolution, distinguish different types of episode, and identify change in psychotherapeutic processes of various approaches and modes and in different psychological problems.

Action and Content in Psychotherapeutic Dialog

TACS is based on a performative idea of language, which assumes that "saying something is doing something." From this perspective, language is regarded not as a mere reflection of reality, but as one of its constitutive elements (Krause, de la Parra, & Arístegui, 2006; Reyes et al., 2008; Searle, 1969, 1979), and therefore, patient-therapist therapeutic dialog configures a new reality which is part of the patient's psychological change. However, language also involves the transmission of contents by the speaker which are directly associated with the object of therapeutic work. This twofold notion of communication performance of actions and conveyance of contents led to the development of a system for analyzing therapeutic dialog through the identification of the verbal actions whereby both actors influence each other. Of course, care was taken to avoid losing track of content, as both dimensions participate in the construction of psychological change.

The purpose of this article is to introduce the Therapeutic Activity Coding System (TACS-1.0), presenting the methodology used to develop it, illustrating its main categories of analysis, and showing its use as a reliable coding system.

Method

TACS-1.0 was constructed using an exploratory descriptive design with a mixed approach, that is to say, using qualitative and quantitative techniques sequentially. The analyses were periodically reviewed, discussed, and validated through intersubjective agreements between the researchers. Finally, a reliability study was conducted using the Kappa index.

Sample

The sample unit used for constructing TACS-1.0 and the reliability study was the episode of psychotherapeutic change (Krause et al., 2006). It has been shown that focusing on relevant episodes during the psychotherapeutic process facilitates the study of effectiveness in psychotherapy (Hill, 1990, 2005; Krause, 2005; Mergenthaler, 2000), and that such episodes can be reliably identified not only by external observers, but also by patients and therapists (Helmeke & Sprenkle, 2000; Hill, 1990). In addition, the use of Change Episodes results in two methodological advantages. First, it is a system for selecting relevant segments in psychotherapeutic sessions which has been empirically validated (see the instrument of Generic Change Indicators in Echávarri et al., 2009; Krause, et al., 2006; Krause et. al., 2007; Reyes et al., 2008, Valdés et al., 2005). Second, using these relevant episodes may solve the problem of the excessive amount of information which can result from the microanalysis of verbal communication in each session of a therapeutic process, by assigning both a theoretical and a practical meaning to the sampling procedure implicit in the selection of such episodes (Elliot, et al., 1987; Krause, 2005).

Thus, the sample is made up by 69 Change Episodes, identified in 5 psychotherapies of different therapeutic approaches and modes (see Table 2), which were conducted by five therapists (1 female and 4 male) with different levels of expertise (between 10 and 30 years). All treatments were considered successful according to the patients' scores in the OQ-45.2 and the Reliable Change Index (RCI) (Lambert, Hansen, Umpress, Lunnen, Okiishi, & Burlingame, 1996; version adapted and validated for Chile, de la Parra & Von Bergen, 2001).

Procedure

The Therapeutic Activity Coding System (TACS-1.0) was developed in two successive phases. The objective of the first phase was to construct the coding system, whereas the second involved a study to ensure the reliability of the system and the results it provides.

First Phase: Construction of the TACS. A qualitative analysis (Discovery-Oriented Content Analysis; Hill & O'Grady, 1985) was applied to the Communicative Actions (CAs) verbalized by patients and therapists during Change Episodes. CAs were conceptualized as linguistic actions that individuals perform when speaking (what they do when speaking) and which fulfill the double purpose of transmitting information (conveying contents) and influencing the other actor and the reality jointly constructed by both (action). The TACS, therefore, considers both dimensions.

For the analysis, the episodes were divided into speaking turns. They were identified considering that the limits of the speaking turn are defined by the start of the verbalization of one participant, which

ends when the other speaker's verbalization begins (Krause et al., 2009; Valdés, et al., 2007). The analysis of speaking turns involved two stages.

Stage 1. First, a research team integrated by researchers and therapists with different theoretical approaches coded the speaking turns of the first five Change Episodes from each therapy (N=25). They employed an intersubjective validation strategy: through group discussions, they tagged CAs forming categories and different coding options. The result of this first stage was a preliminary list which included 108 CAs grouped into the following 3 categories: 4 *Basic Forms* (Agreement, Assertion, Question, and Denial), 58 Actions grouped into 9 *Communicative Intentions* (Explore, Clarify, Focalize, Attune, Provide Feedback, Resignify-Construct, Resignify-Consolidate, Orient Behavior, and Work on Affection), and 46 *Techniques* (Krause et al., 2006; Valdés, et al., 2005). With this preliminary list ready, the researchers coded the remaining Change Episodes (N=44) from all the therapies. This coding process was carried out by sub-teams, allowing for new CAs to emerge at this stage.

Table 2. Characterization of the Therapies Analyzed

Nº Therapy	Psychotherapeutic approach	Modality	Sex	Age (yr)	Occupation	Marital status	Focus of therapy	Nº of Change Episodes
I	Psychodynamic	Individual	F	29	Med. Tech	Married	Decrease anxiety stemming from separation; strengthen autonomy; favor the expression of emotional needs	10
II	Psychodynamic	Individual	F	38	Teacher	Separated	Development of mourning for separation and recent losses	14
III	Social Constructionist	Family	F	38	Sales	Separated	Resolution of conflict's between mother and son and between the parents	12
IV	Cognitive Behavioral (drug abuse)	Group	M M M M M M	19 23 32 34 36 52	Student Unemploy Physician Sales Computer tech Professor	Single Single Single Single Married Married	Recognition of addiction; strenghtening ability to set limits; identification of situations of risk	9
V	Psychodynamic	Individual	F	43	School principal	Married	Expression of needs; strengthen autonomy; increase quality of relationships	24

Stage 2. The TACS was cleaned up in order to generate a final version of the system consensually. In order to achieve this, the system's categories were reviewed one by one (*Basic Forms*, *Communicative Intentions*, and *Techniques*), with their different coding options, through three semi-simultaneous strategies. The first strategy consisted of an analysis of the frequency of the codes of each category, eliminating low-frequency ones. The second strategy involved a theoretical and

empirical review of current classification systems (e.g. Elliott et al., 1987), in order to compare the categories and codes of the TACS with those of other systems, and rearrange the codes of its categories when they corresponded to the same type of communicative form (*Basic Form*), purpose (*Communicative Intention*), or tool (*Technique*); for instance, Explore, Clarify, and Focalize were grouped under a single *Communicative Intention* called Explore, because all three are intended to gather, provide, or clarify information in a precise fashion (Krause et al., 2009). Finally, two analysis categories were included to enable the system to account for the contents and references conveyed through the aforementioned actions (Valdés, et al., 2010).

The result of this second stage was the definitive list of the first version of the Therapeutic Activity Coding System, referred to as TACS-1.0 from then on. Additionally, and based on this last version, a manual was developed for training its users (Krause et al., 2009), including the description of the analysis categories, the criteria for the segmentation of speaking turns, the procedures to fill in the coding forms, and a glossary with examples of each of the codes for the different categories.

Second Phase: Reliability Study of the TACS-1.0. The reliability study of the TACS-1.0 involved two stages. In the first stage, two raters trained in the use of the TACS-1.0 independently coded a sample of 2 episodes of psychotherapeutic change. After coding 190 speaking turns, a reliability analysis was carried out. With the results ready, the sources of disagreement were analyzed to correct them in the manual. In the second stage, the same procedure was carried out using a stuck episode[4] (117 speaking turns) to ensure that the reliability of the system would not be reduced depending on the type of episode. In total, 307 speaking turns/segments were coded (2 change episodes and 1 stuck episode), all taken from the same psychotherapeutic process. The reliability study of the TACS-1.0 was conducted using the Kappa index (index of agreement), which is frequently used when working with categorical variables. The analyses were carried out using SPSS 14.0 and EPIDAT 3.1.

Results

The results are organized as follows: first, the final definitions and categories that make up the different dimensions of the TACS-1.0 are presented; then the results of the reliability analyses of the system are detailed: lastly, the application of the system is illustrated with an extract from a Change Episode.

Dimensions, Categories, and Codes of the TACS-1.0

[4] A Stuck Episode is defined as a segment of the therapeutic session in which the patient displays a repetition of his/her patterns of problematic functioning, characterized by the persistence of his/her emotions, behavior, and ways of understanding, all of which are associated with the problem and incompatible with change.

The Therapeutic Activity Coding System (TACS-1.0) is made up by five categories of analysis; three of them belong to the Action dimension while two belong to the Content dimension. The categories that include 22 Action codes are: Basic Form, Communicative Intention, and Technique. On the other hand, the categories that include 9 Content codes are Domain and Reference (see Figure 1).

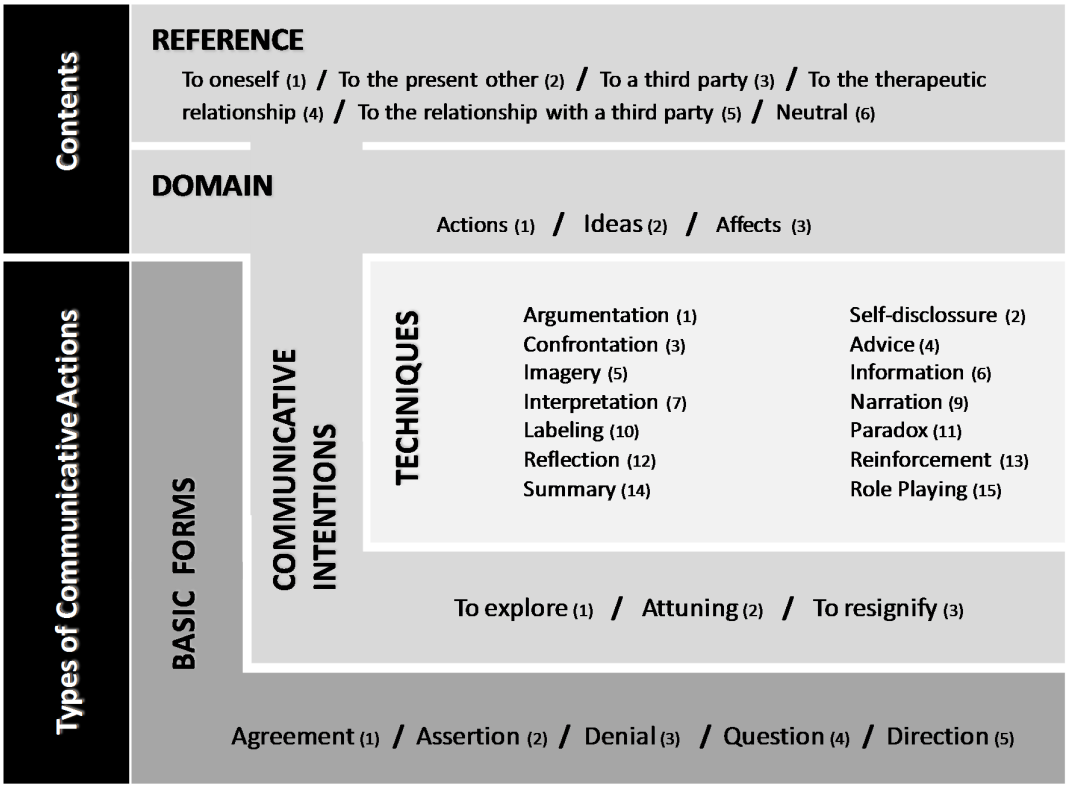

Figure 1. Dimensions, Categories and Codes of the TACS-1.0 (Valdés, et al., 2010).

Categories of the Action Dimension. The first category of the Action dimension is termed Basic Form and makes it possible to classify the formal structure of the speaker's utterance, distinguishing the codes *Agreement*, *Assertion*, *Denial*, *Question*, and *Direction*. The *Agreement* Basic Form is a Communicative Action (CA) performed by the speaker to admit that what the other has said is true (e.g. *"right"*, *"of course"*, *"maybe"*, *"hmm"*), whereas the *Denying* Basic Form is used by the speaker to negate the truth of what the other party has said (e.g. *"no"*, *"no way"*). On the other hand, the *Assertion* Basic Form is used by the speaker to support something that he/she wants others to regard as true (e.g. *"but he misses her anyway, that could be another way"*, *"he did it to commit himself"*, *"impossible"*), while the *Direction* Basic Form is performed to prevent another speaker from executing

a cognitive, emotional, or behavioral action (e.g. *"think about what I've just said"*, *"contain the emotion you're feeling now"*, *"look at your husband while he speaks to you"*). Finally, the *Question* Basic Form is a CA performed by the speaker to interrogate the other party about certain information (e.g. *"and what did he complain about, then?"*, *"how did you feel in that moment?"*).

The second category of the Action dimension is termed Communicative Intention and makes it possible to classify the communicative purpose of the speaker's utterance, that is, what an individual wants to achieve with it. This category includes the following codes: *Explore*, *Attune*, and *Resignify*. The *Explore* Communicative Intention is the CA performed by the speaker in order to: (a) find out or provide unknown contents (e.g. *"what do you fear?"*, *"my mother was 36 back then"*, *"when was your last relapse?"*); (b) clarify contents (e.g. *"so you don't tell anyone about this?"*, *"I mean, I won't complete my university degree"*); and/or (c) direct the participants' attention and efforts towards a specific aspect of the conversation (e.g. *"let me tell you something that happened to me this weekend"*, *"I'd like to go back to something you said at the beginning of the session"*, *"you've mentioned several things, but let's focus on the first one"*). The *Attune* Communicative Intention is performed in order to: (a) understand or be understood by the other participant (e.g. *"I need you to understand what I'm trying to explain"*, *"oh, you mean it's hard for you to recognize this"*, *"so you think this event had to do with the fact that he didn't call you"*); (b) harmonize the relationship with the other party (e.g. *"I'm trying to put myself in your shoes, and I guess all this must be really complicated"*, *"your daughter's situation must have made you really happy"*); and/or (c) providing feedback to the other speaker (e.g. *"what you just said bothered me"*, *"that speaks well of your progress, because you've managed to deal with difficult situations"*). Finally, the *Resignify* Communicative Intention is a CA performed in order to: (a) construct new meanings (e.g. *"You haven't noticed that there is a part of you that is like a steamroller, and another which nobody sees. That is the part that suffers"*, *"I think that this thing of being so serious and boring has to do with how my father educated me"*); and/or (b) consolidate them (e.g. *"you recognized that you conceal your emotions, but that makes you avoid other people"*, *"deep inside, I never wanted to stop being a child"*).

The third category of the Action dimension is termed Technique and makes it possible to classify the methodological resources present in the speaker's utterance, distinguishing the following codes: *Argumentation*, *Self-revelation*, *Confrontation*, *Advice*, *Imagery*, *Information*, *Interpretation*, *Narration*, *Labeling*, *Paradox*, *Reflection*, *Reinforcement*, *Summary*, and *Role Playing*.

Eight of the codes in this category match psychotherapeutic techniques which characterize certain psychotherapeutic approaches:

- In *Confrontation*, the speaker faces the other or him/herself with his/her own statements (e.g. *"it will be very hard for you to maintain the lifestyle you had, and do the same things you used to do"*, *"you want things to be done the way you want"*);
- In *Imagery*, the subject mentally represents a present, past or future situation, which can be real or imagined (e.g. *"imagine how you will act in that moment"*, *"I guess you must have felt sad after my call"*);
- In *Interpretation*, a content is understood, expressed, and translated into a new form of expression (e.g. *"it seems that you... considering this thing you told me about being cautious, caring about your image... it seems that you are sort of afraid of resembling your father at some point, and that's why you care about your image"*);
- In *Labeling*, the individual terms an idea, event or situation narrated (e.g. *"it's not embarrassment, it's fear"*);
- In *Paradox*, the speaker states something that appears to be true, but which contains a logical contradiction absurd for common sense (e.g. *"if you don't feel like getting up, don't get up, don't take a shower. On the third day you will feel like getting up"*);
- In *Reflection*, the speaker mirrors the affective, cognitive, and/or behavioral states of the other (e.g. *"you also look sort of jaded and tired"*, *"it seems that you are thinking about what I've just said to you"*);
- In *Reinforcement*, the other is encouraged or validated (e.g. *"but, you are capable of reflecting about what the right path could be"*, *"I mean, you've definitely shown your ability to act as a mother"*);
- In *Role Playing*, a situation is acted out by using different characters (e.g. *"T: speak as if you were my nose, P: my main task as a nose is to breathe"*).

On the other hand, six codes of this category correspond to communicational resources typical of everyday interaction:

- In *Argumentation*, the speaker provides support, an example, a generalization, or justification for a content (e.g. *"I've been feeling the urge to consume because I'm very tired, down"*, *"for example when you made the choice not to call him anymore", "I won't cry because men never cry"*);
- In *Self-revelation*, the therapist, or the patient acting as co-therapist (the role of patient involves a constant self-revelation), presents personal information (e.g. *"I understand you as a father, I would be concerned too"*, *"in my case, when I dream about consuming, I tell others the next day"*);

- In *Advice*, the speaker persuades the other so that he/she performs certain acts, giving an instruction or a task (e.g. *"you shouldn't allow him to do that, because if you do, he will continue treating you like that"*, *"look at your wife when she tells you how she feels"*, *"the next time you take a walk in the center of town I want you to do it as slowly as you can"*);
- In *Information*, the speaker transmits knowledge accepted as true (e.g. *"it's important that children have limits"*);
- In *Narration*, the speaker quotes contents which refer to a succession of events taking place in a certain period (e.g. *"that time, he told me that he didn't want to be with me anymore, and I panicked, and asked him to please give another chance to our relationship. From that moment on, he began arriving home very late, almost every night"*, *"when I go outside with my brother he always runs, he doesn't let me hold his hand, and that's when I get angry and we start fighting"*);
- In *Summary*, the speaker gives a brief statement of the main points expressed by the other participant or by him/herself (e.g. *"in short, according to what we have discussed, we might say that you consider that your job is a bit monotonous"*).

Categories of the Content Dimension. The first category of the content dimension is termed Domain and makes it possible to classify the Communicative Action (CA) depending on whether the object of the therapeutic work is mostly cognitive (*ideas*), emotional (*affects*), or behavioral (*actions*).

The *Ideas* code in the Domain category indicates that therapeutic work is focused on thoughts, thus being of a cognitive nature (e.g. *"I have the feeling that what I've just said made sense to you"*, *"I think that is why I'm like this, because I do not take advantage of the time of others"*). The *Affects* code of the Domain category indicates that therapeutic work is focused on emotions, feelings, or moods (e.g. *"save that, connect with what you're feeling now"*, *"that's why I cannot feel any pleasure, I that in that case I would feel very sad"*). Finally, the *Action* code of the Domain category indicates that therapeutic work is focused on behavior (e.g. *"when they start quarreling, I just stay away"*, *"when I was talking to you and leading you to another topic, you started checking your watch"*).

The second category of the Content dimension has been termed Reference and makes it possible to classify the CA depending on whether it is *directed at the speaker him/herself* (patient or therapist), *at somebody else present in the session* (patient, therapist, or others), *at a third party outside the session*, *at the relationship with a third party outside the session*, or *at a neutral subject*.

The following three codes in this category make it possible to ascribe the Reference to the main actors of the psychotherapeutic conversation:

- The Reference is *to the Self* when the verbalization about the object of therapeutic work is directed at the speaker him/herself, either the patient or the therapist (e.g. *"I try to be as honest as I can but I can't tell if it's really like that"*);
- The Reference is *to Somebody else present* when it is aimed at the other speaker in the session, either the patient or the therapist (e.g. *"you should consider what she is telling you"*, *"haven't you thought about this?"*);
- The Reference is *to the Therapeutic Relationship* when it is aimed at the current relationship of the patient(s) with the therapist (e.g. *"we were discussing that in the previous session"*, *"you have helped me become aware of things I had never realized before"*, *"when I point out that thing you do, you get angry"*).

The next two codes in this category specify whether the Reference is aimed at other actors which participate in the therapeutic conversation, even if they are not present in the session:

- The Reference is *to a Third Party* when it is directed to somebody else in or out of the session (e.g. *"she has never admitted that it bothered her", "they don't understand me, they are not patient with me"*, *"women always think they are right about everything"*);
- The Reference is *to the Relationship with a Third Party* when it is aimed at the speaker's relationship with somebody else in the session or outside it (e.g. *"my husband and I couldn't agree on this subject"*).

Finally, the Reference can be *Neutral* if it is aimed at something indefinite, in which the subject of communication is omitted and the action is an considered to be independent from an agent (e.g. *"this keeps happening because things don't change overnight"*, *"that is the question exactly"*).

Results of the Reliability Study of the TACS-1.0

The degree of agreement between two independent raters was measured in the coding of the 5 categories of the TACS-1.0, in two Change Episodes and one Stuck Episode. As shown in Table 3, reliability analyses were applied to all segments (N=307) in the three episodes considered. In addition, the reliability of the analysis of the Change and the Stuck Episode were calculated separately.

The results indicate that the raters display high levels of agreement ($\kappa s \geq .90$, 95% CI, .86 - .99) in the Basic Form category, made up by 5 codes, both when analyzing the three episodes jointly, and when considering the Change Episodes and the Stuck Episode separately. In the Communicative Intention category, constituted by 3 codes, the raters present good agreement levels ($\kappa s \geq .71$, 95% CI, .63 - .87) in all measurements. In the Technique category (which includes 14 codes), the raters had

the lowest agreement rates. In this category, the levels measured were kp= 0.53 for all episodes, kp= 0.42 for Change Episodes, and kp= 0.70 in the Stuck Episode.

Table 3. Reliability Study of the TACS-1.0

Categories of the TACS-1.0	**N° segments**	**Kappa**	**Kappa SE**	***p***
Change Episodes and Stuck Episodes				
Basic Forms Communicative	307	0.92	0.02	.000
Intentions	307	0.74	0.03	.000
Techniques	307	0.53	0.04	.000
Content-Area	307	0.73	0.03	.000
Content-Reference	307	0.79	0.03	.000
Change Episodes				
Basic Forms Communicative	190	0.91	0.03	.000
Intentions	190	0.71	0.04	.000
Techniques	190	0.42	0.04	.05*
Content-Area	190	0.73	0.04	.000
Content-Reference	190	0.73	0.04	.000
Stuck Episode				
Basic Forms Communicative	117	0.93	0.03	.000
Intentions	117	0.78	0.05	.000
Techniques	117	0.70	0.06	.000
Content-Area	117	0.73	0.05	.000
Content-Reference	117	0.82	0.05	.000

Note. Kappa SE = standard error; * $p < .05$.

In the Domain category of the Content dimension, which includes 3 codes, the agreement between the raters was good ($\kappa s \geq .73$, 95% CI, .62 - .83) in the whole set of measurements. The results of the analysis of the Reference category of the Content dimension (6 codes) were also good ($\kappa s \geq .73$, 95% CI, .65 - .89), similar to those obtained in the Domain category of the same dimension.

Finally, based on the analysis of the superposition of the confidence intervals of the kappa intervals calculated for each of the categories of the TACS-1.0, it is possible to establish that the differences between them are not statistically significant (Hernández, Fernández, & Baptista, 1991).

Illustration of the Application of the TACS-1.0

The following is an example of the application of the TACS-1.0 to a Change Episode. It was taken from a recording of verbal patient-therapist interaction during a brief individual psychotherapy with a psychodynamic approach. The extract analyzed is made up by three speaking turns. Speaking turns contain the unit of analysis of the TACS-1.0, that is, the verbalization of therapists and patients. The

limits of each speaking turn are defined by the start of the verbalization of one participant, which ends when the other speaker's verbalization begins. This is expressed in the transcription of the sessions through sequentially numbered paragraphs separated by a full stop, in this case, 260, 261, and 262. The participant who initiates it is represented by the letters P (patient) or T (therapist) (see Table 4).

Table 4. Illustration of the Application of the TACS-1.0

Transcription	Basic Form	Communicative Intention	Technique	Area	Reference
260 T: *why did you choose Luis, then?*	1. Ask	1. Explore	1. –	1. Action	1. Somebody else present
261 P: *because he was what I had at hand*	1. Assert	1. Explore	1. Argumentation	1. Ideas	1. Self
262 T: *no, but how[1]/, did you choose him[2]*	1. Deny 2. Assert	1. – 2. Resignify	1. – 2. Confrontation	1. – 2. Action	1. – 2. Somebody else present

In speaking turn 260, the therapist *Question* (Basic Form) and *Explores* (Communicative Intention) in order to request an explanation from the patient regarding her choice of a mate (Domain), which establishes the object of the therapeutic work; here, the explicit use of the verb "choose" indicates that it belongs to behavioral aspects, that is, to the area of *Action*. In the same turn, the speaker is the therapist; however, the protagonist of the therapeutic work is the patient, who, from the therapist's point of view, is *Somebody Else present* in the session (Reference). Finally, no specific communicative tools are used (Technique), so this is not coded.

In speaking turn 261, the patient *Asserts* (Basic Form) and *Explores* (Communicative Intention) in order to provide the information required by the therapist, and also uses *Argumentation* (Technique) as a communicative tool to provide support or justification for the content conveyed. This content is coded as *Idea* (Domain), since although the conversation remains focused on the issue of the patient's choice of a partner, the use of the conjunction "because" allows observers to interpret that the therapeutic work shifts to the patient's representation of the behavior discussed. This time, the patient as a speaker is also the protagonist of the therapeutic work, that is to say, her Communicative Action *refers to her Self* (Reference).

In speaking turn 262, the therapist performs two successive Communicative Actions which are coded separately. In the first segment, the therapist only *Denies* (Basic Form), and it is not possible to code any of the other analysis categories considered by the TACS-1.0 (to review the coding rules, see

Krause et al., 2009). In the second segment, the therapist *Asserts* (Basic Form) and *Resignifies* (Communicative Intention) when he questions the information provided by the patient. This communicative purpose is supported by a *Confrontation* (Technique), a methodological resource employed by the therapist to confront the patient with her own assertion, and show her the inconsistency of the contents related to her specific behavior of choosing a partner. Therefore, an *Action* (Domain) is coded as the object of the therapeutic work again shifts to this behavior. Lastly, the speaker is the therapist, who establishes the patient as the protagonist of the therapeutic work, that is to say, as *Somebody Else present* in the session (Reference).

Conclusion

The TACS-1.0 is based upon speech regarded as a performative phenomenon (to say something is to do something). With this notion in mind, the system was developed considering parallel and non-inclusive dimensions of analysis, which make it possible to extend this argument in terms of the idea that saying something is to do something, and more. In this regard, the inclusion of more than one dimension to account for Communicative Actions (the categories Basic Form, Communicative Intention, and Technique) and the content conveyed through said actions (with the categories Domain and Reference), makes the TACS-1.0 an analysis tool capable of revealing the complexity and multi-dimensionality of communicative interaction in psychotherapy.

In addition, the TACS-1.0 was developed in accordance with the idea that the process of psychotherapeutic change is co-constructed both by the patient's and the therapist's Communicative Actions. Although all the dimensions and categories included in the TACS-1.0 are influenced by this notion, the Technique category most clearly illustrates it. The idea of a communicative technique to support a communicative purpose is not advanced as it has been traditionally done --as an action exclusively in charge of the therapist-- but as an action which may be performed by both participants. This characteristic of the TACS-1.0 makes it possible, for instance, to display the complementary or symmetrical nature of the therapeutic interaction and/or the evolution of the relationship in these terms throughout the psychotherapeutic process.

Likewise, the TACS-1.0 as a system for coding therapeutic activity was not constructed based on a specific psychotherapeutic model or a particular intervention. On the contrary, it was developed in order to enable researchers to study patient-therapist interaction in psychotherapies of different approaches and modes. The generic nature of the system makes it possible to analyze therapeutic activity simultaneously in terms of its specificity (for example, the analysis of the Communicative Actions which may be more frequent in certain psychotherapy types) and its shared characteristics (for instance, the analysis of Communicative Actions present in different types of psychotherapy).

Finally, the TACS-1.0 is a reliable system for coding the Communicative Actions present in patient-therapist dialog during relevant episodes in psychotherapies of different modes and theoretical approaches. Four of the five categories that it includes (Basic Forms, Communicative Intentions, Domain, and Reference), displayed agreement between raters equal to or better than levels considered substantial or good ($kp \geq .61$; Landis & Koch, 1977). The Technique category, however, displayed the lowest level of agreement between raters. Nevertheless, the agreement levels in this category remained within the range of values regarded as moderate or acceptable ($.60 \geq kp \geq .41$; Landis & Koch, 1977), especially if we consider that, of all the categories of the TACS-1.0, this one includes the largest number of codes (14).

As a whole, the aforementioned characteristics of the TACS-1.0 reveal the final purpose sought when developing this coding system: to permit the rigorous study and analysis of patients' and therapists' verbalizations in psychotherapeutic dialog, in order to obtain information about the evolution of the verbal communication, the mechanisms, and the actions that produce change throughout the psychotherapeutic process.

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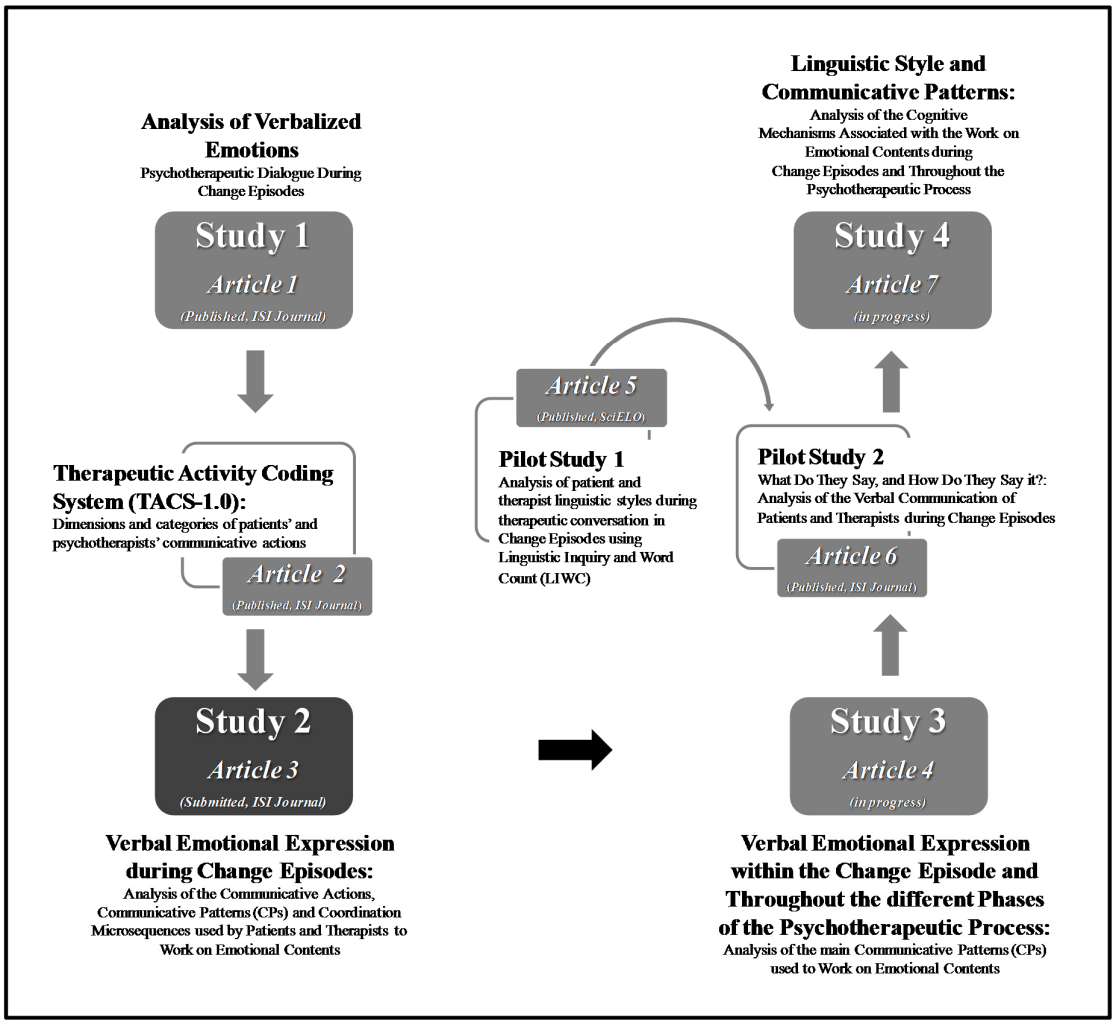

First specific objective: to determine the differential characteristics of the verbal emotional expression of patients and therapists during Change Episodes.

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Verbal Emotional Expression During Change Episodes: Analysis of the Communicative Patterns used by Patients and Therapists to Work on Emotional Contents [5]

Valdés, N., Krause, M., Tomicic, A., & Espinosa, H.D.

Abstract

Patients' psychological change is based on the construction of a new reality in the therapeutic conversation. There were three successive studies in order: (a) to identify the main characteristics of the therapeutic conversation during Change Episodes; (b) to establish the existence of communicative patterns to work on emotional contents during Change Episodes; and (c) to determine temporal sequences of interaction between those patterns. Method: A mixed methodology was used to analyze 38 Change Episodes (1016 segments of speaking turns) and 19 Stuck Episodes (581 segments of speaking turns) which were identified within two psychodynamic psychotherapeutic processes. Patients' and Therapists' verbal expressions were analyzed using the Therapeutic Activity Coding System (TACS-1.0, Valdés, Tomicic, Pérez, & Krause, 2010). Results: There are three main Communicative Patterns (CP) used to work emotional content: *Affective Exploration*, *Affective Attunement* and *Affective Resignification*. The findings suggest that the patterns patients and psychotherapists use during the psychotherapeutic dialogue vary depending on the episode type and the actor of the verbalization. In addition, there are also Communicative Coordination Microsequences between both, patient and therapist during Change Episodes.

Keywords: Change Episodes, Communicative Patterns, Verbal Emotional Expressions, Communicative Coordination Microsequences.

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The experiences that patients relate during the session always have a shared point which makes it possible for listeners to remember them as a whole. This common characteristic is often associated with certain emotional contents (Raingruber, 2000). Therefore, therapeutic conversation is frequently an activity for the reconstruction of patients' experience, which allows them not only to focus on constructing new meanings aided by the therapist's empathy and assistance, but also on the narration of their own affective experiences as they relate them, which results in a more profound understanding of their own self. Several studies have demonstrated the existence of verbal and non-verbal patterns of mutual patient-therapist influence, used by the former to solve their affective conflicts throughout the process (Greenberg & Safran, 1989). The activation and expression of affective experience are important elements for explaining psychotherapeutic change (Hill, O'Grady, & Elkin, 1992; Timulak, 2007), since they are believed to regulate patient-therapist interaction during therapeutic activity and to generate more insight in patients. The present article intends to establish the presence of certain patterns in verbal communication, used by patients and therapists to work on emotional contents during relevant episodes of the session, which are characterized by the presence of change moments. Its objective is to reveal the traits of this specific type of verbal interaction, and thus make a contribution to the reformulation and/or consolidation of current theories of emotion and psychotherapy.

The main conclusions about the complexity of the series of processes involved in therapeutic interaction have highlighted the necessity of studying said processes using different levels of analysis to attain a deeper understanding of them, and of developing new research methodologies for the systematic analysis of what occurs during the sessions (Hageman & Arrindell, 1999; Hill, 1990; Hill, et al., 1992; Mahrer & Boulet, 1999; Stiles, Shapiro, & Firth-Cozens, 1990; Williams & Hill, 2001; Valdés, 2010; Valdés, et al., 2005; Valdés et al., 2010a; Valdés, Krause, & Álamo, 2011). For example, one of the most widely researched areas nowadays is the analysis of therapeutic sessions, in order to identify the main differences between those regarded as significant and less significant by patients and therapist (Altimir, et al., 2010). More specifically, this has led to the identification and description of the sequence of significant moments based on the segmentation of the therapeutic process in change episodes or therapeutically relevant episodes (Bastine, Fiedler, & Kommer, 1989; Goldfried, Raue, & Castonguay, 1998; Marmar, 1990; Vanaerschot & Lietaer, 2007), which is a useful strategy for studying moments of change during the sessions. For instance, Fitzpatrick, Janzen, Chamodraka and Park (2006) analyzed "critical moments" in early therapeutic stages and concluded that when a certain meaning was positively perceived by the patient, he/she became more open and attained higher levels of exploration. Russell, Jones and Miller (2007) also studied the main mechanisms of the process of change and communication patterns during interaction, which are associated with the patient's therapeutic outcome. In order to do this, they focused on the moment-by-moment analysis of patient

and therapist emotional patterns in order to determine which factors or processes appeared to facilitate or hinder the patient's improvement. The factors identified were grouped into four areas: therapeutic work, relationships, information search, and patient affects. Likewise, the microprocess studies by Fontao and Mergenthaler (2007) have led to the identification of therapeutic patterns that follow a cyclic progression in terms of their emotional tone and abstraction level in temporal sequences during the therapy (Mergenthaler, 1996, 2000).

Although there is a strong tendency among experts to consider emotions as part of cognitive processes or as a phenomenon dependent on them, emotions contain a certain type of information which is different from any other, since they are experienced subjectively by individuals (Izard, 2002). This has increased the interest of researchers in the description and comprehension of what occurs during the psychotherapeutic process, paying special attention to the study of therapeutic interaction and the process of change experienced in the patient-therapist relationship (Chatoor & Krupnick, 2001; Conte, Plutchik, Jung, Picard, Karasu, & Lotterman, 1990; Crits-Christoph & Connolly, 1999; Hill, 1990; Hubble, Duncan, & Miller, 1999; Luborsky, 2000; Lueger, 1998; Matt & Navarro, 1997; Oei & Shuttlewood, 1997; Stiles & Shapiro, 1994; Valdés, 2010; Valdés, et al., 2011; Valdés, et al., 2010a; Valdés, Tomicic, Pérez, & Krause, 2010b; Williams & Hill, 2001). This has led to the development of theoretical foundations about the structure of this interpersonal relationship, and has also put emotions back in their right place within the psychotherapeutic process. So far, psychotherapy research has not only shown that a large portion of a patient's therapeutic outcome seems to be explained by certain factors of the patient (Asay & Lambert, 1999); in terms of emotion, it has revealed the following: (a) during therapeutic dialog, patients generate specific affective reactions in their therapists, but the latter show their patients how the display of affects influences the way in which both interact in the therapy, (b) facilitating the patient's emotional involvement during the therapeutic process appears to be a factor that fosters cognitive and behavioral changes (Castonguay, Goldfried, Wiser, Raue, & Hayes, 1996; Goldman, Greenberg, & Pos, 2005); and (c) successful therapeutic processes, in contrast with less successful ones, display certain specific characteristics during the patient-therapist affective exchange (Dreher, Mengele, Krause, & Kämmerer, 2001). These conclusions apply to all therapeutic approaches and modes. In this regard, it must not be forgotten that emotional expression plays a key role in the social and physical adaptation of individuals (Izard, 2002), not only because emotions transmit certain information about the person's subjective experience through verbal and non verbal external manifestations, but also because they foster the development of a prosocial behavior and creative problem-solving (Fredrickson, 2003). This adaptive function of emotional expression can be defined in terms of actions oriented towards a specific purpose, or of the individual's intention to exercise and influence over another. Therefore, patient-therapist communication can be understood as a dimension

in which, microanalytically speaking, therapeutic change is constructed (Boisvert & Faust, 2003; Elliott, Slatick, & Urman, 2001; Krause, et al., 2007; Llewelyn & Hardy, 2001; Orlinsky, Ronnestad, & Willutzki, 2004; Wallerstein, 2001). However, this activity had usually been neglected in comparison with the study of effectiveness or therapeutic outcomes (Messer & Wampold, 2002; Wampold, 2005; Wampold, Ahn, & Coleman, 2001), or the study of unspecific or common factors, such as the therapeutic alliance (Hubble, et al., 1999; Krause, 2005; Maione & Chenail, 1999; Meyer, 1990). Nevertheless, some studies have resulted in the development of systems to classify psychotherapeutic change, some of which only consider therapists' utterances and their forms of intervention throughout the therapy (Elkin, Parloff, Hadley, & Autrey, 1985; Elliot, Hill, Stiles, Friedlander, Mahrer, & Marginson, 1987; Friedlander, 1982; Goldberg, et al., 1984; Hill, 1978; Mahrer, Nadler, Stalikas, Schachter, & Sterner, 1988; Shaikh, Knobloch, & Stiles, 2001; Stiles, 1992; Watzke, Koch, & Schulz, 2006; Wiser & Goldfried, 1996). For instance, Elliott, et al. (1987) identified the following six forms of therapist intervention: questions, information, advice, reflection, self-expression, and interpretation, with the latter type displaying the strongest correlation with positive evaluations of the treatment (Caspar, Pessier, Stuart, Safran, Samstag, & Guirguis, 2000; Connolly, Crits-Christoph, Shappell, Barber, & Luborsky, 1998; Hill, et al., 1992; Pessier & Stuart, 2000). Specifically, they identified a positive association between a successful therapeutic outcome and the frequency of the therapist's interpretations of patients' emotions during the transferential relationship, which are very similar to those experienced in their relationship with parents and other significant people (Marziali, 1984). There also seems to be an association between the therapist's interventions and work on certain emotional contents of patients, so that patients who receive therapeutic interventions such as reflection or recognition, or interventions perceived as fostering bonding, generally remain in a highly affective state (Wiser & Goldfried, 1998). On the other hand, the most frequent result with respect to how certain emotional contents are experienced, is connected not only with emotional expression and support, but also with the feeling of being understood (Bänninger-Huber & Widmer, 1999; Popp-Baier, 2001). Therefore, therapeutic work performed at an affective level can be deeper, have a more relevant impact on therapeutic outcomes, and persist for a longer period than when interventions only involve the cognitive level (Orlinsky & Howard, 1987).

Experts have developed systems to classify both patient and therapist verbalizations (Connolly, et al., 1998; Hill, 1990, 2005; Jones, Cumming, & Pulos, 1991), however, many of them were constructed considering a specific therapeutic approach, or were aimed at analyzing a single therapeutic issue (Etchebarne, Fernández, & Roussos, 2008; Evans, Piasecki, Kriss, & Hollon, 1984; Trijsburg, Lietaer, Colijn, Abrahamse, Joosten, & Duivenvoorden, 2004). Therefore, it was deemed necessary to develop a system to study both patient and therapist verbalizations during therapeutic conversation, in order to

describe the main characteristics of this form of communication. This system had to be sensitive enough to establish differences and similarities between different types of episode during the session, but also needed to allow its users to understand how the characteristics of this communication varied throughout the psychotherapeutic process. In other words, it must be a thorough enough classification system to account for all the relevant dimensions of psychotherapeutic dialog between the speakers. This is the objective of the Therapeutic Activity Coding System (TACS-1.0, Valdés, et al., 2010b), which is based on a performative idea of language, that is, language regarded not as a mere reflection of reality but as one of its constitutive elements (Arístegui, et al., 2004; Krause, et al., 2006; Reyes et al., 2008; Searle, 1969, 1979, 1980). Patient-therapist therapeutic conversation makes it possible to configure new realities, which are part of the patient's psychological change; however, language also involves the transmission of contents by the speakers, which are directly associated with the object of therapeutic work. This twofold notion of communication --performance of actions and conveyance of contents-- has made it possible to analyze the verbal actions whereby both actors influence each other during therapeutic conversation, without losing track of content, as both dimensions participate in the construction of psychological change (Valdés, et al., 2011).

The present study is part of a line of process research which intends to answer the following questions: which characteristics does patient-therapist communication have during Change Episodes?; is it possible to identify verbal patterns used by patients and therapists to work on emotional contents during Change Episodes?, if so, what are the characteristics of these patterns?; and finally, is it possible to identify a temporal microsequence between patients' and therapists' patterns during Change Episodes?, and if so, what are the characteristics of these temporal sequences?.

In order to answer each of these questions, three successive studies were conducted: (a) the first made it possible to determine and compare the Communicative Actions present in therapeutic conversation during Change Episodes; (b) the second established the Communicative Patterns (CPs) used by patients and therapists to work on emotional contents during Change Episodes; and (c) the third identified the temporal interaction sequences between the Communicative Patterns (CPs) used by patients and therapists during Change Episodes.

Study 1

The first study was carried out to determine and compare the Communicative Actions present in the verbalizations of therapists and patients during therapeutic conversation in Change Episodes.

Sample

Two short weekly individual psychodynamic therapies (A and B), conducted by male psychoanalysts with a vast clinical experience, were analyzed. Both patients were female and had similar reasons for seeking help, and gave their informed consent to participate in the study. All sessions in both therapies were included (N=39) in order to delimit, transcribe, and analyze all the Change Episodes identified in them. Thus, 825 speaking turns were analyzed (A=352, B=473), identified in 38 Change Episodes (A=14, B=24). A speaking turn starts with the verbalization of one participant, and ends when the other speaker's verbalization begins (Krause, Valdés, & Tomicic, 2009). Each speaking turns was segmented depending on the presence of two or more Communicative Patterns (CPs) within a single turn. In order to have a group for comparison, 19 Stuck Episodes were identified (A=7, B=12), constituted by 449 speaking turns (A=213, B=236). Therefore, the total sample was constituted by 1597 segments: 1016 from the Change Episodes and 581 from the Stuck Episodes (see Table I).

Table I. Characteristics of the sample

	Psychotherapeutic Processes	
	Therapy A	Therapy B
Patients	Woman	Woman
Age	38 years old	43 years old
Focus of therapy	Development of mourning for separation and recent losses	Expression of needs; strengthen autonomy; increase quality of relationships
Psychotherapeutic approach	Psychodynamic approach	
Therapists	2 Psychoanalyst-Psychiatrists (Men)	
Total number of sessions (N=39)	18	21
Change Episodes (N=38)	14	24
Speaking turns (N=825)	352	473
Total of number of segments (N=1016)	437	579
Segments coded with a type of content (N=692)		
Segments coded with emotional contents and f>5 (N=161)	81	80
Stuck Episodes (N=19)	7	12
Speaking turns (N=449)	213	236
Total number of segments (N=581)	289	292
Segments coded with a type of content (N=383)		
Segments coded with emotional contents and f>5 (N=61)	45	16

Procedure and data analysis

Psychotherapeutic Outcome and Change. Therapeutic outcomes were estimated using the Outcome Questionnaire (OQ-45.2) developed by Lambert, Hansen, Umpress, Lunnen, Okiishi and Burlingame (1996), and validated for Chile by Von Bergen and De la Parra (2002). A high total score in the questionnaire means that the patients reported a high level of unhappiness in spite of their high quality of life, which is expressed through their symptoms, interpersonal relationships, and social role. The interpretation of the results is based on a cut-off score (in Chile, 73) derived from comparing a clinical sample with a non-clinical one, which led to the identification of a functional and a dysfunctional population and resulted in a Reliable Change Index (RCI) which determines whether the patient's change at the end of the treatment is clinically significant (RCI for Chile=17; Jacobson & Truax, 1991). In this case, Patient A started the therapy with a total score of 68 and ended it with 48.4 (RCI=19.6), whereas Patient B started the therapy with a total score of 111 and ended it with 91 (RCI=20). This means that both patients displayed a significant degree of change during the therapy, even though Patient A started below the cut-off score and Patient B above it.

On the other hand, from the perspective of Generic Change Indicators (GCI, Krause et al, 2007), both therapies were successful, considering the number of change moments during the session (A=14, B=24), but especially due to their level in the hierarchy of indicators (Altimir, et al, 2010; Echávarri, et al, 2009). GCIs are grouped into three levels which show the evolution of the change process. The largest percentage of change indicators was associated with an increase in the patients' openness to new forms of understanding (Level II). The consolidation of the structure of the therapeutic relationship (Level I) was more frequent during the initial stages of the therapy; also, both patients were capable of constructing and consolidating a new way of understanding themselves (Level III). Therefore, it can be concluded that both therapies also showed a positive evolution from the point of view of Generic Change Indicators s (GCI).

Delimitation of Change Episodes and Stuck Episodes. Both therapies were recorded audiovisually and observed through a one-way mirror by expert raters trained in the use of: (a) the protocol for guiding observation and for detecting and identifying change moments; (b) the Hierarchical List of Change Indicators (Krause, et al., 2007); and (c) the List of Stuck Episode Topics. All sessions were listed in chronological order and transcribed to facilitate the subsequent delimitation of Change Episodes.

As Figure I shows, the moment of change marks the end of the Change Episode. Said moment of change must meet the criteria of theoretical correspondence, novelty, topicality, and consistency; that is, they must match one of the indicators from the hierarchical List of Generic Change Indicators, be

new, occur during the session, and persist over time (Krause, et al., 2007). Afterwards, using a thematic criterion, the beginning of the therapeutic interaction referring to the change moment is tracked in order to define the start of the Change Episode.

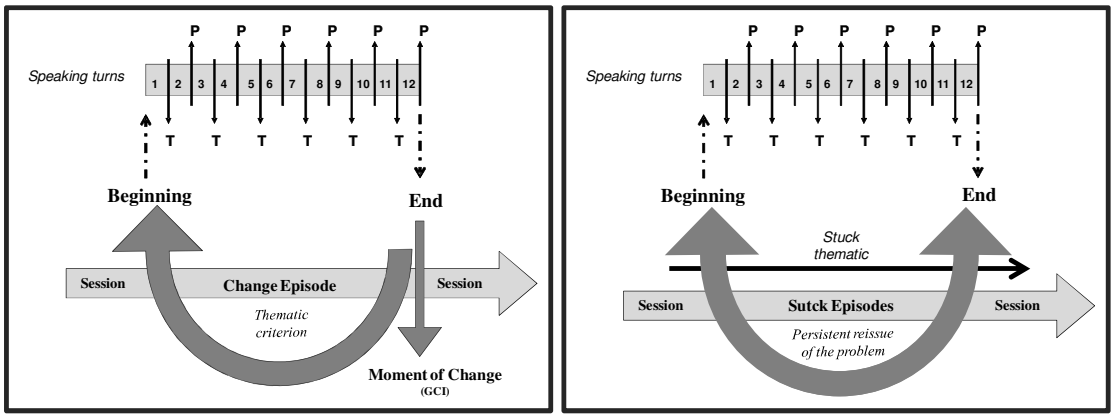

Figure I. Delimitation of Change Episodes and Stuck Episodes.

In the case of Stuck Episodes, it was necessary to identify the existence of periods of the session in which there was a temporary halting of the patient's change process due to a reissue of the problem, that is, episodes of the session characterized by a lack of progressive construction of new meanings, or an argumentative persistence in the patient's discourse which does not contribute to the objective of change (Herrera, Fernández, Krause, Vilches, Valdés, & Dagnino, 2009). A Stuck Episode must meet the criteria of theoretical correspondence, novelty, and nonverbal consistency; that is, it must match one of the topics from the List of Stuck Topics, occur during the session, and be nonverbally consistent with the topic of the stuck period (Krause, et al., 2007). In addition, Stuck Episodes must comply with the following methodological criterion: be at least three minutes long and be at least 10 minutes apart from a Change Episode in the same session.

Change Episodes and Stuck Episodes were made up by patient and therapist speaking turns, which were segmented when the coding was performed if the speaker had more than one communicative purpose (Valdés, et al., 2010b).

Analysis of Communicative Actions. The Therapeutic Activity Coding System (TACS-1.0, Valdés, et al., 2010b) was used to manually code the verbalizations of patients and therapists present in each speaking turn segment of the Change Episodes and the Stuck Episodes analyzed. This system was developed to reflect the complexity and multidimensionality of communicative interaction in a

psychotherapeutic context. It is based on a performative view of language and involves parallel and non-inclusive dimensions of analysis which make it possible to extend this notion in the sense that saying something is also doing something (Arístegui, et al., 2004; Krause, et al., 2006; Reyes et al., 2008). In this regard, the verbalizations of patients and therapists have been termed Communicative Actions because they have the double role of conveying information (Contents) and exert an influence on the other speaker and the reality jointly constructed by both (Action). This system was developed firstly through a discovery-oriented methodology, followed by an inter-rater reliability analysis, which showed good agreement levels (Valdés, et al., 2010b). The trained coders had to work independently all speaking turns or speaking turn segments, using the Coding Manual developed by Krause, Valdés and Tomicic (2009, unpublished manuscript). As Figure II shows, the five analysis categories that make up the TACS-1.0 (Valdés, et al., 2010b) are: three categories in the Action dimension and two categories in the Content dimension. The categories that include 22 Action codes are: Basic Form (5), Communicative Intention (3) and Technique (14). The categories that contain nine Content codes are: Area (3) and Reference (6).

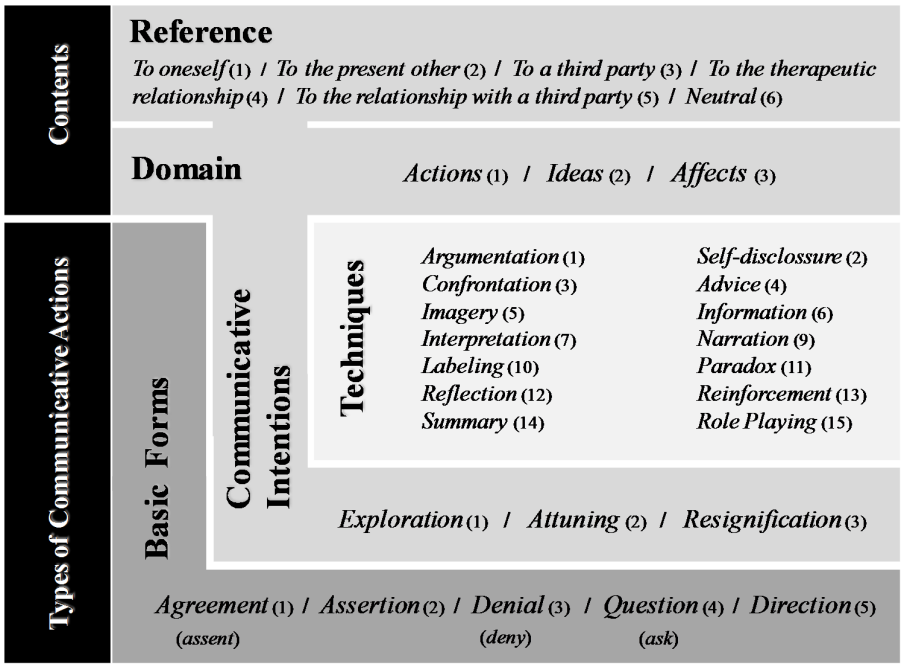

Figure II. Dimensions, categories, and codes of the Therapeutic Activity Coding System (TACS-1.0).

To evaluate the degree of agreement between the coders who coded all the speaking turn segments present in the Change Episodes and the Stuck Episodes analyzed, a reliability analysis was carried out

using 15% of the total number of segments, selected at random (N=268). SPSS 19.0 was used to calculate the Cohen's Kappa for each of the five categories of the TACS-1.0. The Kappa indexes obtained were the following: Basic Form (k=.95, *p*=.00), Communicative Intention (k=.70, *p*=.00), Technique (k=.51, *p*=.00), Domain (k=.73, *p*=.00) and Reference (k=.79, *p*=.00). Therefore, the reliability of the raters' coding of both episode types was between average and very good.

Results

The objective of the first study was to determine the characteristics of the verbalizations of patients and therapists based on the analysis of the Communicative Actions (Basic Form, Communicative Intention, Technique, Domain, and Reference) used during the therapeutic conversation, in Change and Stuck Episodes. In this analysis, the first step was to determine how similar the two therapies (A and B) were, for which they had to meet the following condition: regardless of the participant's role, the proportion of Communicative Actions verbalized in each therapy may or may not be similar, due to the difference in the number of speaking turns analyzed in them; however, the degree of association between the verbalization of these Communicative Actions and the participant's role must be similar within each therapy, in spite of the difference in proportion (for instance, if the therapist asked more questions than the patient in one therapy, the same association must remain in the other therapy, or both must ask questions with the same frequency).

The individual analysis of each therapy with respect to the use of Communicative Actions during Change Episodes, regardless of the speaker's role, showed that both therapies were similar in the proportion of Basic Form[6] and Technique categories present, but not with respect to the use of the Communicative Intention, Domain and Reference categories (see Table II). Basically, the differences were mostly a larger proportion of the *Attune* Communicative Intention and of the *Affects* Domain in Therapy A, along with a larger proportion of the *Ideas* Domain and of the Reference *to another person present* in Therapy B. On the other hand, when each therapy was analyzed separately to check the association between said Communicative Actions with the participant's role, a similar association was found between the participant's role and the Basic Form, Communicative Intention, Techniques, and Reference categories, but not with the Domain category. This difference was only due to the fact that Patient A, in comparison with her therapist, verbalized a larger proportion of Communicative Actions from the *Actions* Domain, whereas this proportion was similar in the Patient B-Therapist B dyad.

[6] In the results of Study 1, TACS-1.0 categories (Basic Form, Communicative Intention, Technique, Domain, and Reference) are underlined, whereas their respective codes are *italicized*.

However, in both therapies there was a similar association between the participant's role and the *Ideas* and *Affects* Domains, which is the key point of the present study. Therefore, the necessary condition was fulfilled to conclude that both therapies were similar in terms of the association of all Communicative Actions with the participant's role, except for the *Actions* Domain. Consequently, this code was left out of subsequent analyses in this study and in the other two (see Table II).

Table II. Proportion of Communicative Actions by therapy and their association with the speaker's role

Comunicative Actions	Similarity in the proportion of Communicative Actions (A y B)		Association between the verbalization of Communicative Actions and the speaker's role			
			Therapy A		Therapy B	
	χ^2	*p*	χ^2	*p*	χ^2	*p*
Basic Form	5.91	.12	15.81	.01	100.30	.00
Comunicative Intention	9.39	.01	23.54	.00	50.79	.00
Techniques	.36	.55	108.82	.00	148.04	.00
Domain *	10.97	.00	8.30	.02	1.40	.50
Reference	21.60	.00	148.87	.00	263.57	.00

* The association was observed only within the *Actions* Domain. It was not observed in the *Ideas* and *Affects* Domain.

Afterwards, all speaking turn segments of both therapies were analyzed together in order to determine the characteristics of the Communicative Actions present in the therapeutic conversation during Change Episodes, and compare them with Stuck Episodes. For the analysis of the Basic Form category, all 1016 speaking turn segments from the Change Episodes were analyzed (P=572, T=444) along with all 581 speaking turn segments from the Stuck Episodes (P=311, T=270). In contrast, the analysis of the Communicative Intention, Technique, Domain, and Reference categories, the total sample was reduced to 692 segments from the Change Episodes (P=353, T=339) and 383 segments from the Stuck Episodes (P=194, T=189), because only segments with a full coding in these categories were considered. Thus, the analysis included 68.11% of the total number of Change Episode segments and 65.92% of the total sample of Stuck Episode segments. In order to determine the presence of an association between the categories and the type of episode or the speaker's role, the non-parametric test Chi Square was used (χ^2).

Basic Form. An association was observed between the Basic Form of the verbalizations and the speaker's role both in Change Episodes [χ^2 (3, N=1016) =104.58, *p*=.00] and in Stuck Episodes [χ^2 (3,

N=581) =29.543, *p*=.00]. In both cases, the patients *assented* and *denied* more frequently that their therapists, while the latter *asked* more than the patients (see Table III). Nevertheless, no significant differences were observed in the frequency of patients' and therapists' use of the *assertion* Basic Form in their verbalizations. This result may be a sign that the bulk of the therapeutic work is precisely carried out through verbalizations with this type of formal structure. A comparison between both types of episode revealed a larger proportion of *deny* by patients during Stuck Episodes [χ^2 (3, N=883) =12.00, *p*=.01], and a tendency towards *asking* more in such episodes; however, this association was not significant. There was also a larger proportion of *agreement* by the therapists during Stuck Episodes [χ^2 (3, N=714) =7.99, *p*=.05]. No significant differences were found between the two types of episode in terms of the proportion of *assertion* used by patients and therapists.

Table III. Distribution of the Communicative Actions in each episode type, by speaker's role

Communicative Actions		Episode Types			
		Change Episode		Stuck Episode	
Category	Codes	Patient	Therapist	Patient	Therapist
Basic Form	Agreement (assent)	28.30 (162)	13.10 (58)	27.00 (84)	19.30 (52)
	Assertion	64.90 (371)	66.20 (294)	59.20 (184)	63.00 (170)
	Denial	3.50 (20)	0.50 (2)	7.70 (24)	1.50 (4)
	Question (ask)	3.30 (19)	20.30 (90)	6.10 (19)	16.30 (44)
Communicative Intention	Exploration	49.60 (175)	19.80 (67)	93.30 (181)	47.10 (89)
	Attuning	9.90 (35)	22.10 (75)	6.20 (12)	23.30 (44)
	Resignification	40.50 (143)	58.10 (197)	0.50 (1)	29.60 (56)
Technique	Absence of techniques	39.66 (140)	37.17 (126)	54.12 (105)	47.62 (90)
	Communicative Techniques	55.81 (197)	12.39 (42)	40.72 (79)	6.88 (13)
	Therapeutic Techniques	4.53 (16)	50.44 (171)	5.16 (10)	45.50 (86)
Domain	Actions (behavior)	21.20 (75)	13.60 (46)	14.90 (29)	18.50 (35)
	Ideas (cognitive)	50.40 (178)	52.20 (177)	61.90 (120)	58.70 (111)
	Affects (emotional)	28.30 (100)	34.20 (116)	23.20 (45)	22.80 (43)
Reference	To oneself	64.60 (228)	2.40 (8)	67.00 (130)	3.20 (6)
	To the present other	3.70 (13)	60.50 (205)	6.20 (12)	59.80 (113)
	To a third party	9.90 (35)	5.60 (19)	4.60 (9)	5.80 (11)
	To the therapeutic relationship	6.80 (24)	17.70 (60)	6.20 (12)	18.00 (34)
	To the relationship with a third party	10.50 (37)	5.00 (17)	13.90 (27)	3.20 (6)
	Neutral	4.50 (16)	8.80 (30)	2.10 (4)	10.10 (19)

Note . The scores are expressed as a percentages (%) with their respective frequencies in parentheses (*f*).

Communicative Intention. An association was observed between the Communicative Intention of the verbalizations and the speaker's role, both in Change Episodes [χ^2 (2, N=692) =71.07, *p*=.00] and in Stuck Episodes [χ^2 (2, N=383) =102.66, *p*=.00]. In both cases, the patients *explored* more than their therapists, whereas the latter *attuned* and *resignified* more than the former. A significant result was that Stuck Episodes the percentage of *resignification* used by the patients was nearly zero (see Table

III). A comparison of both episode types revealed that the patients *resignified* more during Change Episodes and *explored* more during Stuck Episodes [χ^2 (2, N=547) =114.87, *p*=.00]; this situation was also observed in the therapists [χ^2 (2, N=528) =51.28, *p*=.00]. There were no significant differences between the two episode types in terms of the proportion of *attuning* used by the therapists.

Technique. Due to the low frequency of some of the Techniques used by patients and therapists in their verbalizations during Change Episodes and Stuck Episodes, and in order to perform statistical analyses on this category, they were grouped according to whether they were *Communicative* Techniques (*argumentation*, *advice*, *information*, *narration* and *summary*) or *Therapeutic* Techniques (*confrontation*, *interpretation*, *labeling*, *reflection*, *reinforcement* and *role-playing*). The absence of Techniques during verbalizations was also considered, as speakers do not always use such resources to support the purpose of their verbalization (see Table III). When such grouping was performed, an association was observed between the Technique present in the verbalizations and the speaker's role, both in Change Episodes [χ^2 (2, N=692) =229.55, *p*=.00] and in Stuck Episodes [χ^2 (2, N=383) =108.62, *p*=.00]. In both cases, the patients used a larger proportion of *Communicative* Techniques (specifically, *argumentation* and *narration*), while the therapists favored *Therapeutic* Techniques (specifically, *interpretation*, *reflection* and *confrontation*). The difference was that the therapists used *reflection* more often during Change Episodes, and *confrontation* in Stuck Episodes. A comparison of both episode types revealed a lower presence of Techniques in the patients' speech during Stuck Episodes, and a more extensive use of *Communicative* Techniques during Change Episodes [χ^2 (2, N=547) =11.60, *p*=.00] (specifically, *argumentation* and *narration*). Another significant result was the presence of more *Communicative* Techniques in the therapists' speech during Change Episodes [χ^2 (2, N=528) =7.39, *p*=.02] (specifically, *argumentation*). There were no significant differences between both episode types in terms of the therapists' use of *Therapeutic* Techniques.

Domain. An association was observed between the Domain of the speaker's verbalizations and his/her role in Change Episodes [χ^2 (2, N=692) =7.86, *p*=.02], especially between the *actions* Domain used and the patient's role. However, it was not possible to establish that, in Change Episodes, patients used more Communicative Actions than the therapists to work on the *actions* Domain, since this result may reflect the fact that this association was only present in the Change Episodes of one of the therapies (A) which make up the total sample. On the other hand, it was possible to establish that during both episode types, both the patients and their therapists verbalized a similar proportion of Communicative Actions to work on the *ideas* and *affects* Domain. A comparison of both episode types revealed a more extensive use of Communicative Actions by the patients to work on the *ideas* Domain during Stuck

Episodes [χ^2 (2, N=547) =6.86, *p*=.03], whereas the therapists favored Communicative Actions to work on the *affects* Domain during Change Episodes [χ^2 (2, N=528) =8.18, *p*=.02].

Reference. The study showed an association between the Reference of the speaker's verbalizations and his/her role, both in Change Episodes [χ^2 (5, N=692) =405.906, *p*=.00] and Stuck Episodes [χ^2 (5, N=383) =228.508, *p*=.00]. In both cases, the patients made a larger proportion of verbalizations Referencing *themselves*, *a third party,* and *the relationship with a third party*, whereas the therapists favored verbalizations Referencing *the other person present* and *the therapeutic relationship*, as well as *neutral* References. No significant differences were observed between both episode types regarding the Reference of patients' and therapists' verbalizations.

Study 2

The second study was conducted in order to identify the main Communicative Patterns (CPs) used by patients and therapists to work on emotional contents during Change Episodes.

Sample

In order to identify the Communicative Patterns (CPs) present in the discourse of patients and therapists, the sample of speaking turn segments analyzed in Study 1 was reused (see Table I). That is, the 692 segments taken from Change Episodes (P=353, T=339) and the 383 segments taken from Stuck Episodes (P=194, T=189) were used because they were fully coded segments: a code had been assigned for each of the five TACS-1.0 categories (Valdés, et al., 2010b) (see Figure II).

Procedure and data analysis

Communicative Pattern Configuration. Once all segments were coded, the resulting code configuration of each of them was analyzed. This configuration was termed Communicative Pattern (CP), and was made up by six digits, which correspond to each of the TACS-1.0 categories (Valdés, et al., 2010b). Thus, the first digit refers to the coding of the Basic Form category (1=agreement, 2=assertion, 3=deny, 4=question, and 5=direct), the second refers to the coding of the Communicative Intention category (1=exploration, 2=attuning, and 3=resignification), the third refers to the coding of the Domain category (1=actions, 2=ideas, and 3=affects), the fourth refers to the coding of the Reference category (1=reference to the self, 2=reference to other person present, 3=reference to a third party, 4=reference to the therapeutic relationship, 5=reference to the relationship with a third party, and 6=neutral reference), and finally, the last two digits refer to the coding of the Technique category (00=absence of technique, 01=argumentation, 02=self-revelation, 03=confrontation, 04=advice,

05=imagery, 06=information, 07=interpretation, 09=narration, 10=labeling, 11=paradox, 12=reflection, 13=reinforcement, 14=summary, and 15=role playing). Also, each Communicative Pattern (CP) is constituted by two levels separated by a hyphen (for example, CP213-101). The first level includes the first three digits and is referred to as Structural Level. This level corresponds to a specific content belonging to the object of therapeutic work, which is transmitted with a certain purpose and using a certain formal structure. The second level includes the last three digits and is referred to as Articulative Level. This level is specifically associated with the speaker that emits the information, that is, the protagonist of therapeutic work in that given moment, and with the presence or absence of any methodological resources (communicative or therapeutic) used by the speaker to provide support for the purpose of his/her verbalization (Communicative Intention). In other words, a Communicative Pattern (CP) can have the same characteristics at the Structural Level, but, at the same time, it can be articulated differently depending on the circumstances present in a given moment of the conversation, which does affect its structure.

In addition, once the Communicative Patterns (CPs) were identified, the methodological decision was taken to only consider the patterns used with a frequency over five, by at least one of the participants (patient and therapist), in order to perform significant statistical analyses which. This situation reduced the sample from 692 to 457 segments in the Change Episodes (P=255, T=202), and from 383 to 215 segments in the Stuck Episodes (P=134, T=81). Therefore, the analyses conducted in this study considered 66.04% of the total sample of Change Episode segments, and 56.13% of the total sample of Stuck Episode sample. In order to determine the existence of an association between the different Communicative Patterns (CPs) and the type of episode or the speaker's role, the non-parametric Chi Square test was used (χ^2). In order to detect the existence of statistically significant differences between two proportions, the *Z-ratio* for independent proportions was used. In some cases, the higher and lower limits of the 95% confidence interval (*CI*) were estimated to determine whether the difference between certain independent proportions was significant.

Results

The objective of the second study was to identify and describe the main Communicative Patterns (CPs) used by patients and therapists to work on emotional contents during their conversation in Change Episodes. It revealed similarities and differences with respect to Stuck Episodes. Therefore, the analysis only considered the segments coded in the Domain category with the affects code, that is, only those that had been assigned number 3 as the third digit of their Communicative Pattern (PC),

which indicates that the object of the therapeutic work during that verbalization of the speaker was focused on affects (see Figure III).

In addition, the analysis only considered the Communicative Patterns (CPs) used with a frequency over five by at least one of the participants (patient and therapist), which again reduced the sample from 457 to 161 speaking turn segments in Change Episodes (P=79, T=82), and from 215 to 61 speaking turn segments in Stuck Episodes (P=35, T=26).

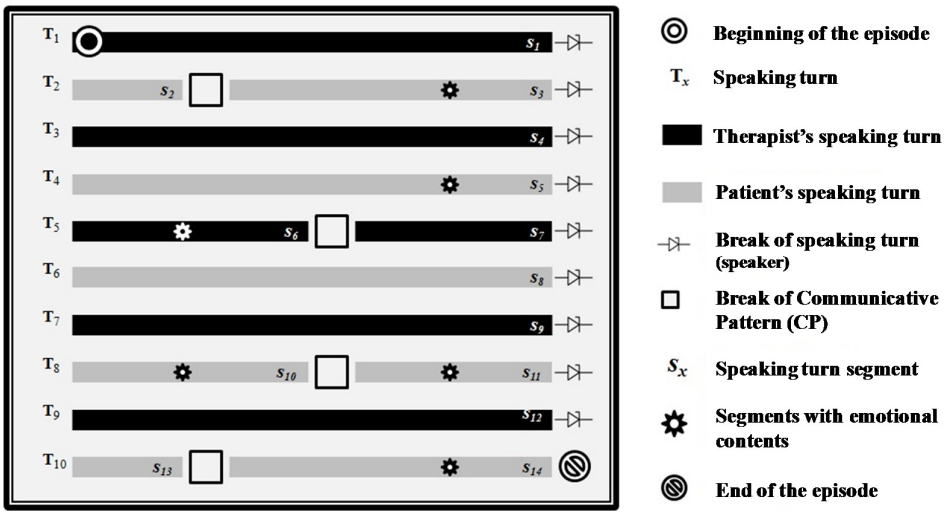

Figure III. Segmentation of speaking turns. For example, this episode has 10 speaking turns (T_x), 14 speaking turn segments (S_x), and six speaking turn segments coded with the presence of emotional contents (S_3, S_5, S_6, S_{10}, S_{11} and S_{14}).

According to the Structural Level, three Communicative Patterns (CPs) were identified in patients and therapists when they worked on emotional contents during therapeutic conversation. The name of each of these patterns was chosen based on their main characteristics at the Structural Level, that is, the communicative purpose for working on affective contents associated with the object of therapeutic work. The three Communicative Patterns (CPs) identified were: (i) the CP213 pattern was termed Affective Exploration[7], and was used only by the patients in order to give information, clarify a point and/or direct the focus of the conversation towards certain emotional contents; (ii) the CP223 pattern was termed Affective Attunement, and was used only by therapists to show understanding, generate harmony, or provide feedback to the patients about certain emotional contents; and (iii) the CP233

[7] In the results of Study 2, Communicative Patterns (Affective Exploration, Affective Attunement, and Affective Resignification) are underlined, whereas the specific types of these patterns are *italicized.*

pattern was termed Affective Resignification, and was used by both patients and therapists to jointly construct and/or consolidate new meanings for certain emotional contents (see Table IV).

Table IV. Distribution of the Communicative Patterns (CPs) used to work on emotional contents

Communicative Patterns (CPs)	Change Episodes			Stuck Episodes		
	Patient	Therapist	Total (*f*)	Patient	Therapist	Total (*f*)
Affective Exploration (CP_{213})	53.16 (42)	0.00 (0)	42	100 (35)	0.00 (0)	35
Affective Attunement (CP_{223})	0.00 (0)	24.39 (20)	20	0.00 (0)	11.54 (3)	3
Affective Resignification (CP_{233})	46.84 (37)	75.61 (62)	99	0.00 (0)	88.46 (23)	23
Total (*f*)	79	82	161	35	26	61

Note. The scores are expressed as a percentages (%) with their respective frequencies in parentheses (*f*). The totals are expressed as frequencies (*f*).

A comparison of both episode types according to the proportion of the patterns used to work on emotional contents revealed that, regardless of the participant's role (patient or therapist), there was a higher proportion of Affective Exploration during Stuck Episodes, and a higher proportion of Affective Resignification during Change Episodes; however, there were significant differences in the proportion of Affective Attunement between the two episode types (see Table V).

Table V. Comparison of the proportion of each Communicative Pattern (CP), by episode type

Communicative Patterns (CPs)	CE	SE	Difference %	95% CI for the difference	*Z*	*p*
Regardless of the role (Patient or Therapist)						
Total of Affective Exploration (CP_{213})	26.09 (42)	57.38 (35)	31.29	[16.84 - 44.44]	4.373	< .0002 **
Total of Affective Attunement (CP_{223})	12.42 (20)	4.92 (3)	7.50	[-2.06 - 14.31]	–	> .05
Total of Affective Resignification (CP_{233})	61.49 (99)	37.70 (23)	23.79	[9.06 - 36.99]	3.180	.001 **
Patients						
Affective Exploration (CP_{213})	53.16 (42)	100 (35)	46.84	[32.34 - 57.73]	–	< .05 *
Affective Resignification (CP_{233})	46.84 (37)	0.00 (0)	46.84	[32.34 - 57.73]	–	< .05 *
Therapists						
Affective Attunement (CP_{223})	24.39 (20)	11.54 (3)	12.85	[-6.34 - 25.62]	–	> .05
Affective Resignification (CP_{233})	75.61 (62)	88.46 (23)	12.85	[-6.34 - 25.62]	–	> .05

Note. If 0% is not a value of the interval, then it can be said with 95% of confidence that the difference of proportions between Change Episodes (CE) and Stuck Episodes (SE) is significant. The Z-ratio calculation was performed only if both samples satisfied the standard binomial requirement: n (p) and n (1-p) must both be equal to or greater than 5.
** $p \leq 0.01$, * $p \leq 0.05$

Comparing the proportion of patterns used to work on emotional contents in each episode type and according to the participant's role (patient or therapist) not only showed that Affective Exploration was more frequently used by the patients during Stuck Episodes, but that it was also the only pattern that they used to work on emotional contents. Affective Resignification was only employed by the patients

during Change Episodes, whereas the therapists displayed a similar proportion of Affective Attunement and Affective Resignification in both episode types.

During Change Episodes, the Affective Exploration pattern was used exclusively by the patients, while only the therapists used the Affective Attunement pattern. Affective Resignification was employed by both the patients and their therapists; however, it was more frequent among the latter (see Table VI). In Stuck Episodes, Affective Exploration was also used by patients only; however, in contrast with Change Episodes, the Affective Resignification pattern was exclusively used by the therapists during work on the construction of new meanings upon the basis of the emotional contents verbalized by their patients. Although there were no significant differences in patients' and therapists' use of the Affective Attunement pattern, its low usage proportion during such episodes could be a relevant result per se.

Also, other specific Communicative Pattern (CP) types were identified based on their Articulative Level, that is, depending on who the protagonist of the therapeutic work was, and on whether any communicative or therapeutic techniques were used to support the purpose of the speaker's verbalization in that moment. The following are the main specific Communicative Pattern types (CPs) used to work on emotional contents.

Table VI. Comparison of the proportion of each Communicative Pattern for both episode types, by role

Communicative Patterns (CP)	P	T	Difference %	95% CI for the difference	*Z*	*p*
Change Episodes						
Affective Exploration (CP_{213})	53.16 (42)	0.00 (0)	53.16	[41.39 - 63.76]	–	< .05 *
Affective Attunement (CP_{223})	0.00 (0)	24.39 (20)	24.39	[15.13 - 34.69]	–	< .05 *
Affective Resignification (CP_{233})	46.84 (37)	75.61 (62)	28.77	[13.78 - 42.06]	3.751	< .0002 **
Stuck Episodes						
Affective Exploration (CP_{213})	100.00 (35)	0.00 (0)	100	[83.77 - 100]	–	< .05 *
Affective Attunement (CP_{223})	0.00 (0)	11.54 (3)	11.54	[-0.90 - 28.98]	–	> .05
Affective Resignification (CP_{233})	0.00 (0)	88.46 (23)	88.46	[68.41 - 96.00]	–	< .05 *

Note. If 0% is not a value of the interval, then it can be said with 95% of confidence that the difference of proportions between Patients (P) and Therapists (T) is significant. The Z-ratio calculation was performed only if both samples satisfied the standard binomial requirement: n (p) and n (1-p) must both be equal to or greater than 5.
** $p \leq 0.01$, * $p \leq 0.05$

Affective Exploration. This Communicative Pattern (CP_{213}) was used to give information, clarify a point, and/or direct the speakers' attention towards certain emotional contents during the therapeutic conversation. At the Structural Level, it is characterized by the use of the Assertion Basic Form; at the Articulative Level, three specific types of this pattern were identified in Change and Stuck Episodes, depending on whether they referred to emotional contents about themselves, or to emotional contents about the relationship with a third party (see Table VII).

Table VII. Distribution of the specific types of the Affective Exploration pattern, by role and episode type

Specific Types of the Affective Exploration (PC213) pattern	Change Episodes			Stuck Episodes		
	Patient	Therapist	Total (*f*)	Patient	Therapist	Total (*f*)
Emotional Description						
$CP_{213\text{-}100}$	38.09 (16)	0.00 (0)	16	45.71 (16)	0.00 (0)	16
Argumentative Emotional Clarification						
$CP_{213\text{-}101}$	47.62 (20)	0.00 (0)	20	42.86 (15)	0.00 (0)	15
$CP_{213\text{-}501}$	14.29 (6)	0.00 (0)	6	11.43 (4)	0.00 (0)	4
Total of CP_{213} (*f*)	42	0	42	35	0	35

Note. The scores are expressed as a percentages (%) with their respective frequencies in parentheses (*f*). $CP_{213\text{-}x}$ corresponds to the sum of other variations of CP_{213} with a frequency lower than 5.

During Change Episodes, the three specific types for Affective Exploration were used exclusively by the patients. The first specific type of this pattern was termed *emotional description*, and was used by the patients to provide novel information about certain emotional contents about themselves, without the support of any communicative or therapeutic technique ($CP_{213\text{-}100}$: e.g., *"the thing is there, whether it hurts or not. And that's it, I mean, I can't do anything. I don't think that I can't, I won't do anything else because he's so ambiguous. I don't want this anymore, this hurts"*, P_A-CE_8-98)[8]. On the contrary, the other two specific types of this pattern were termed *argumentative emotional clarification*, and were used by the patients to clarify a point and/or focus the conversation towards emotional contents about themselves ($CP_{213\text{-}101}$: e.g., *"because I think, I don't know, maybe this is foolish, but I say um 'why haven't I talked about this?', because I'm afraid that if people from my workplace find out, um maybe this situation can be manipulated"*, P_B-CE_{16}-107), or about their relationship with a third party outside the session ($CP_{213\text{-}501}$: e.g., *"because I think I pleased him a lot, I mean, in the sense that I was submissive. I saw through his eyes"*, P_A-CE_3-64). In both cases, the pattern was used together with the argumentation communicative technique, that is, providing support, examples, generalizations or justifications to support the speaker's exploration. The same situation was observed during Stuck Episodes, even in a similar proportion.

A comparison between the specific types of the Affective Exploration pattern in both episode types did not reveal significant differences in the proportion of *emotional descriptions* and *argumentative emotional clarifications* performed by the patients about emotional contents referencing themselves. However, there were significant differences between these two specific types, together and in isolation,

[8] Examples of patient and therapist utterances appear in quotation marks and *in italics*. References for quotations appear at the end of each example in the following order: first, the speaker's role (P_A=Patient A, T_A=Therapist A, P_B=Patient B, T_B=Therapist B), followed by the Change Episode number, and the speaking turn number.

in terms of the presence of *argumentative emotional clarifications* about emotional contents referencing the patients' relationship with a third party. The same situation was also present in Stuck Episodes. Finally, comparing both episode types did not reveal any significant differences regarding the use of the specific types of the Affective Exploration pattern. In fact, their proportion was similar in both episode types. In other words, the patients gave information, clarified some points, and/or focused the conversation on certain emotional contents about themselves or about their relationship with a third party, regardless of the episode type considered (see Table VIII).

Table VIII. Comparison of the proportion of the specific types of Affective Exploration, by episode type

Specific Types of the Affective Exploration (CP_{213}) pattern	P	P	Difference %	95% CI for the difference	*Z*	*p*
Change Episodes						
$CP_{213\text{-}100}$ - $CP_{213\text{-}101}$	38.09 (16)	47.62 (20)	9.52	[-11.24 - 29.18]	0.882	.38
$CP_{213\text{-}100}$ - $CP_{213\text{-}501}$	38.09 (16)	14.29 (6)	23.81	[4.96 - 40.69]	2.482	.01 *
$CP_{213\text{-}101}$ - $CP_{213\text{-}501}$	47.62 (20)	14.29 (6)	33.33	[13.66 - 49.83]	3.304	.00 **
($CP_{213\text{-}100}$ + $CP_{213\text{-}101}$) - $CP_{213\text{-}501}$	85.71 (36)	14.29 (6)	71.43	[52.26 - 82.13]	6.547	< .0002 **
Stuck Episodes						
$CP_{213\text{-}100}$ - $CP_{213\text{-}101}$	45.71 (16)	42.86 (15)	2.86	[-19.45 - 24.77]	0.241	.81
$CP_{213\text{-}100}$ - $CP_{213\text{-}501}$	45.71 (16)	11.43 (4)	34.29	[13.23 - 51.80]	–	< .05 *
$CP_{213\text{-}101}$ - $CP_{213\text{-}501}$	42.86 (15)	11.43 (4)	31.43	[10.64 - 49.11]	–	< .05 *
($CP_{213\text{-}100}$ + $CP_{213\text{-}101}$) - $CP_{213\text{-}501}$	88.57 (31)	11.43 (4)	77.14	[56.60 - 86.89]	–	< .05 *

Note. If 0% is not a value of the interval, then it can be said with 95% of confidence that the difference of proportions between specific types of patterns is significant.
The Z-ratio calculation was performed only if both samples satisfied the standard binomial requirement: n (p) and n (1-p) must both be equal to or greater than 5.
** $p \leq 0.01$, * $p \leq 0.05$

Affective Attunement. This Communicative Pattern (CP_{223}) was used to show understanding, generate harmony, or provide feedback about certain emotional contents verbalized by the patients during the therapeutic conversation. At the Structural Level, it is characterized by the Assertion Basic Form, while at the Articulative Level, only one specific type of this pattern was identified, which referred to emotional contents of the other person present in the session (patients). Said specific type was identified both in Change Episodes as well as in Stuck Episodes, and was termed *emotional empathy* (e.g., *"it seems that what you're feeling is that… that I don't care"*, T_B-CE_{21}-143,145). This specific type was exclusively used by the therapists in situations in which they mirrored their patients' affective states, "here and now", in order to transmit understanding, generate harmony, or provide feedback about the emotional contents verbalized by them (see Table IX). This specific type was also identified during Stuck Episodes, although with a lower frequency than during Change Episodes. In fact, even though a comparison of both episode types did not reveal any significant differences in the proportion of the therapists' use of *emotional empathy*, the proportion of this specific pattern type was

much higher during Change Episodes, [CI 95% =58.40 - 95.07], $p<.05$ (CE=94.12%, SE=5.88%). Therefore, the therapists showed understanding, generated harmony, and/or provided feedback about emotional contents referencing the patients regardless of the episode type (Change or Stuck).

Table IX. Distribution of the specific type of the Affective Attunement pattern, by role and episode type

Specific Type of the Affective Attunement (CP_{223}) pattern	Change Episodes			Stuck Episodes		
	Patient	Therapist	Total (*f*)	Patient	Therapist	Total (*f*)
Emotional Empathy ($CP_{223\text{-}212}$)	0.00 (0)	80.00 (16)	16	0.00 (0)	33.33 (1)	1
$CP_{223\text{-}x}$	0.00 (0)	20.00 (4)	4	0.00 (0)	66.67 (2)	2
Total of CP_{223} (*f*)	0	20	20	0	3	3

Note. The scores are expressed as a percentages (%) with their respective frequencies in parentheses (*f*). $CP_{223\text{-}x}$ corresponds to the sum of other variations of CP_{223} with a frequency lower than 5.

Affective Resignification. This Communicative Pattern (CP_{233}) was used to construct and/or consolidate certain emotional contents verbalized during the therapeutic conversation. At the Structural Level, it is characterized by the use of the Assertion Basic Form, while six main specific types were identified for this pattern during Change Episodes, depending on whether they were emotional contents about themselves, the other person present, or the therapeutic relationship. In contrast, only two of these specific types were identified during Stuck Episodes.

Table X. Distribution of the specific types of the Affective Resignification pattern, by role and episode type

Specific Types of the Affective Resignification (CP_{233}) pattern	Change Episodes			Stuck Episodes		
	Patient	Therapist	Total (*f*)	Patient	Therapist	Total (*f*)
Emotional Self-resignification ($CP_{233\text{-}100}$)	29.73 (11)	0.00 (0)	11	0.00 (0)	0.00 (0)	0
Argumentative Emotional Self-resignification ($CP_{233\text{-}101}$)	48.65 (18)	0.00 (0)	18	0.00 (0)	0.00 (0)	0
Emotional Resignification ($CP_{233\text{-}200}$)	0.00 (0)	11.29 (7)	7	0.00 (0)	8.70 (2)	2
Argumentative Emotional Resignification ($CP_{233\text{-}201}$)	2.70 (1)	14.52 (9)	10	0.00 (0)	0.00 (0)	0
Interpretative Emotional Resignification ($CP_{233\text{-}207}$)	0.00 (0)	35.48 (22)	22	0.00 (0)	52.17 (12)	12
Transferential Emotional Resignification ($CP_{233\text{-}407}$)	2.70 (1)	20.97 (13)	14	0.00 (0)	26.09 (6)	6
$CP_{233\text{-}x}$	16.22 (6)	17.74 (11)	17	0.00 (0)	13.04 (3)	3
Total of CP_{233} (*f*)	37	62	99	0	23	23

Note. The scores are expressed as a percentages (%) with their respective frequencies in parentheses (*f*). $CP_{233\text{-}x}$ corresponds to the sum of other variations of CP233 with a frequency lower than 5.

Firstly, a comparison of both episode types according to the proportion of the specific types, regardless of the participant's role (patient or therapist), revealed the exclusive use of *emotional self-resignifications*, *argumentative emotional self-resignifications,* and *argumentative emotional resignifications* during Change Episodes, along with a more extensive use of *interpretative emotional*

resignifications during Stuck Episodes [*Z*=2.886, *p*=.004 (SE=52.17%, CE=22.22%)]. No significant differences were found in the use of *transferential emotional resignifications in both* episode types (see Table X).

During Change Episodes, patients were the only users of *emotional self-resignifications* (e.g., *"but all this that we've talked about has left me more worried, I don't know, it makes me very angry"*, P_B-CE_7-19) and *argumentative self-resignifications* (e.g., *"…although I sometimes think that what I do is important, I often put myself in second place… I think I've always done this, but I had never felt that I was being undervalued. But it may be that I feel that way, that I'm not worth much. Maybe I haven't seen my true value and have been unable to go ahead with what I have"*, P_A-CE_9-52). Both specific types were used to construct, together with their therapists, new meanings for certain emotional contents about themselves: in the first case, without using any communicative or therapeutic techniques, and in the second case, employing the Argumentation communicative technique, that is, presenting examples, generalizations, or justifications to resignify said emotional contents (see Table XI).

Table XI. Comparison of the specific types of the Affective Resignification pattern during Change Episodes, by role

Specific Types of the Affective Resignification (CP_{233}) pattern	P	T	Difference %	95% CI for the difference	*Z*	*p*
Change Episodes						
Emotional Self-resignification ($CP_{233\text{-}100}$)	29.73 (11)	0.00 (0)	29.73	[16.17 - 45.78]	–	< .05 *
Argumentative Emotional Self-resignification ($CP_{233\text{-}101}$)	48.65 (18)	0.00 (0)	48.65	[32.37 - 64.11]	–	< .05 *
($CP_{233\text{-}100}$ + $CP_{233\text{-}101}$)	78.38 (29)	0.00 (0)	78.38	[61.75 - 88.61]	–	< .05 *
Emotional Resignification ($CP_{233\text{-}200}$)	0.00 (0)	11.29 (7)	11.29	[0.29 - 21.52]	–	< .05 *
Argumentative Emotional Resignification ($CP_{233\text{-}201}$)	2.70 (1)	14.52 (9)	11.81	[-1.16 - 22.87]	–	> .05
Interpretative Emotional Resignification ($CP_{233\text{-}207}$)	0.00 (0)	35.48 (22)	35.48	[21.21 - 47.92]	–	< .05 *
Transferential Emotional Resignification ($CP_{233\text{-}407}$)	2.70 (1)	20.97 (13)	18.27	[4.40 - 30.15]	–	< .05 *
($CP_{233\text{-}200}$ + $CP_{233\text{-}201}$ + $CP_{233\text{-}207}$)	2.70 (1)	61.29 (38)	58.59	[41.90 - 69.93]	–	< .05 *

Note. If 0% is not a value of the interval, then it can be said with 95% of confidence that the difference of proportions between Patients (P) and Therapists (T) is significant.
The Z-ratio calculation was performed only if both samples satisfied the standard binomial requirement: n (p) and n (1-p) must both be equal to or greater than 5.
** p≤0.01, * p≤0.05

On the other hand, the therapists only used *emotional resignifications* (e.g., *"it seems that you feel that you're going to be told off, punished, if you don't behave this way in your life in general"* T_B-CE_{13}-82), and *interpretative emotional resignifications* (e.g., *"I have the feeling that the questions that you ask yourself slowly become words of criticism which stay within your head and make you feel guilty. They start as questions, and become criticism over time",* T_B-CE_7-16) about emotional contents verbalized by their patients: in the first case, without the aid of any communicative or therapeutic techniques, and in the second case, applying the Interpretation therapeutic technique, that is, translating and expressing said emotional contents through new forms of expression. In order to resignify emotional contents about the therapeutic relationship, the therapists favored the use of *transferential*

emotional resignifications (e.g., *"that has kept us from becoming closer. But I wonder if this may also prevent you from having closer contacts with other people, because you bottle up your emotions, and that distances you from others"*, T_A-CE_{12}-40), also using the Interpretation therapeutic technique. Finally, it is worth mentioning that, during Change Episodes, the therapists performed *argumentative emotional resignifications* (e.g., *"so what I think is that you are afraid of what may happen due to your actions, such as progressing, and you stop coming, and start procrastinating"*, T_B-CE_{15}-94), which is a specific pattern type characterized by the use of the same communicative technique employed by the patients to co-construct new meanings for emotional contents, that is, Argumentation.

During Stuck Episodes, only two of the six specific types observed during Change Episodes were identified (see Table X). In this case, the therapists were the only participants who used *interpretative emotional resignifications* and *transferential emotional resignifications*. Both specific types involve the use of the Interpretation therapeutic technique, and were used in similar percentages during Stuck Episodes [Z=1.813, p=.07] (52.17% and 26.09%, respectively). Since the therapists were the participants who did most of the resignification work during Stuck Episodes, both episode types were compared considering this aspect, which did not reveal any significant differences in the proportion of *interpretative emotional resignifications* and *transferential emotional resignifications*. Therefore, regardless of the episode type, the work carried out by the therapists to resignify emotional contents about the patients and the therapeutic relationship was similar.

Study 3

The third study was conducted in order to detect the presence of temporal interaction sequences between the Communicative Patterns (CPs) used by patients and therapists to work on emotional contents during Change Episodes.

Sample

In order to identify the temporal interaction sequences of the Communicative Patterns (CPs) present in the discourse of patients and therapists, the complete sample of speaking turn segments considered in Study 1 was reused (see Table I). It must be mentioned that each speaking turn is segmented depending on the presence of two or more Communicative Patterns (CPs) in the same turn, therefore, the total sample for this study included 1597 speaking turn segments: 1016 segments in 38 Change Episodes (A=437, B=579), and 581 segments in 19 Stuck Episodes (A=289, B=292).

Procedure and data analysis

The Communicative Patterns (CPs) identified in Study 2 were analyzed, which corresponded to all the speaking turn segments coded with the Therapeutic Activity Coding System (TACS-1.0, Valdés et al., 2010b): Affective Exploration[9], Affective Attunement, and Affective Resignification (see Table XII). This study also considered the Basic Communicative Patterns Assent and Deny, due to their strong presence during the therapeutic conversation. These patterns are considered basic because they do not have an Articulative Level like the rest of the Communicative Patterns; instead, their Structural Level is characterized by the use of the Basic Forms agreement and denial, respectively.

Table XII. Characteristics of the main Communicative Patterns (CPs)

Communicative Patterns (CC) used to work on emotional contents		
	Codes	Characteristics
Affective Exploration	CP_{213}	At the Structural Level, it is characterized by the presence of the Assert basic form, and is used to convey a content, clarify it, and/or direct the other participant's attention to certain emotional contents during therapeutic conversation. This Communicative Pattern is used by patients only, regardless of the type of episode.
Affective Attunement	CP_{223}	At the Structural Level, it is characterized by the presence of the Assert basic form, and is used to show understanding, generate harmony, or provide feedback about certain emotional contents verbalized by the patients during the therapeutic conversation. This Communicative Pattern is used by therapists only, regardless of the type of episode.
Affective Resignification	CP_{233}	At the Structural Level, it is characterized by the presence of the Assert basic form, and is used to co-construct and/or consolidate new meanings for certain emotional contents during therapeutic conversation. This Communicative Pattern is used by patients and therapists during Change Episodes, and only by therapists during Stuck Episodes.
Basic Communicative Patterns (BCP) used during the psychotherapeutic conversation		
	Codes	Characteristics
Assent	CP_{100}	At the Structural Level, it is only characterized by the use of the Agreement basic form. This Basic Communicative Pattern is used by patients and therapists in order to accept what the other speaker has said as true.
Deny	CP_{300}	At the Structural Level, it is characterized by the use of the Denial basic form. This Basic Communicative Pattern is used by patients and therapists in order to reject the truth of what the other speaker has said.
Communicative Patterns (CP) used to work on cognitive contents		
	Codes	Characteristics
Exploration of cognitive contents	CPX_{12}	Regardless of the basic form used at the structural level, refers to any communicative pattern used by patients and therapists, in order to explore cognitive contents during the conversation.
Attunement with cognitive contents	CPX_{22}	Regardless of the basic form used at the structural level, refers to any communicative pattern used by patients and therapists, in order to tune with cognitive contents during the conversation.
Resignification of cognitive contents	CPX_{32}	Regardless of the basic form used at the structural level, refers to any communicative pattern used by patients and therapists, in order to resignify cognitive contents during the conversation.

The study also considered all communicative pattern forms used to work on cognitive contents, in order to establish their association with the patterns specifically used to work on emotional contents.

[9] In the results of Study 3, Communicative Patterns (Affective Exploration, Affective Attunement, Affective Resignification, Assent, and Deny) are underlined, while their specific types are *italicized*.

Following the same logic used to establish the patterns used to work on emotional contents, the patterns used to work on cognitive patterns also displayed a configuration of codes which determined their Structural and Articulative Levels; however, the latter level was not analyzed in depth because it went beyond the central point of the present study, therefore, only the Structural Level was considered (see Table XII).

In order to determine the temporal interaction sequences between the Communicative Patterns (CPs) used by the participants of the therapeutic conversation during Change Episodes, a Lag Sequential Analysis was applied (LSA, Sackett, 1987), using the Generalized Sequential Querier (GSEQ 5.0, Bakeman & Quera, 1995). This method describes the sequence of certain actions during a given interaction, determining the probability of occurrence of an action (Lag1) after the occurrence of a prior action (Lag0) (Bakeman, Deckner, & Quera, 2005). This does not involve causality; instead, it can be regarded as a relationship of prediction.

According to the objectives of this part of the analysis, the sequences of different lag +1 events were analyzed: (a) therapist pattern (consequence: time 1) after a patient pattern (antecedent: time 0); (b) patient pattern (consequence: time 1) after a therapist pattern (antecedent: time 0); (c) patient pattern (consequence: time 1) after another patient pattern during the same speaking turn (antecedent: time 0); and (d) therapist pattern (consequence: time 1) after another therapist pattern during the same speaking turn (antecedent: time 0).

Results

This analysis yielded statistical results of two types: firstly, descriptive results based on Yule's Q (with values between 1 and -1, which were interpreted as a correlation); secondly, inferential results based on Pearson's Chi-Square test and the Adjusted Residuals test (using $Z \geq 1.96$, associated with Yule's Q), recommended for the exploration of sequential relationships because it indicates the strength of the association between variables and is independent from their frequency (Paul & Liker, 1982; Bakeman, Adamson, & Strisik, 1995; Bakeman, McArthur, Quera, & Robinson, 1997).

Communicative Microsequences of Communicative Patterns. The statistical Chi-Square for this analysis showed that the degree of association between the Communicative Patterns (CPs) used during Change Episodes was not random [χ^2 (1600, N=1016) =2637.42, p<.01)]. Once the total sequential association was established, a more specific analysis was performed on the sequential pairs of Communicative Patterns (CPs). As Table XIII shows, during Change Episodes it was possible to identify 11 positive and statistically significant temporal sequences between the Communicative

Patterns (CPs) present. These temporal sequences were termed Communicative Microsequences, and were classified depending on whether the temporal association occurred within the same patient or therapist speaking turn (Communicative Self-coordination Microsequences) or between the patient and the therapist during successive speaking turns (Communicative Coordination Microsequences).

Table XIII. Main Communicative Microsequences during Change Episodes

Lag 0 - Patient's Communicative Pattern		**Lag 1** - Therapist's Communicative Pattern	N	*Z*	*p*	Yules Q
Affective Exploration (CP_{213})	–	Affective Attunement (CP_{223})	8	6.19	< .01	0.82
Affective Exploration (CP_{213})	–	Assent (CP_{100})	8	3.15	< .01	0.55
Affective Resignification (CP_{233})	–	Affective Resignification (CP_{233})	6	2.90	< .01	0.57
Affective Resignification (CP_{233})	–	Assent (CP_{100})	6	3.37	< .01	0.63
Affective Exploration (CP_{213})	–	Resignification of cognitive contents	10	2.64	~.01	0.44
Resignification of cognitive contents	–	Affective Resignification (CP_{233})	10	2.82	< .01	0.46
Lag 0 - Therapist's Communicative Pattern		**Lag 1** - Patient's Communicative Pattern	N	*Z*	*p*	Yules Q
Affective Attunement (CP_{223})	–	Assent (CP_{100})	13	4.56	< .01	0.67
Affective Resignification (CP_{233})	–	Assent (CP_{100})	28	5.33	< .01	0.57
Affective Resignification (CP_{233})	–	Attunement with cognitive contents	5	3.16	< .01	0.65
Lag 0 - Patient's Communicative Pattern		**Lag 1** - Patient's Communicative Pattern	N	*Z*	*p*	Yules Q
Assent (CP_{100})	–	Affective Exploration (CP_{213})	17	3.64	< .01	0.50
Assent (CP_{100})	–	Affective Resignification (CP_{233})	18	4.72	< .01	0.61

Regarding Communicative Self-coordination Microsequences, it was not possible to observe any temporal sequences in the patterns used by the therapists; however, two positive and significant temporal sequences were identified in the patterns used by the patients during a single speaking turn. The first of these microsequences contained an Assent followed by an Affective Exploration, displaying a moderate degree of association (Q=0.50), while the second microsequence contained an Assent followed by an Affective Resignification, also showing a moderate degree of association (Q=0.61) (see Table XIII).

Communicative Coordination Microsequences were classified depending on whether the antecedent pattern (Lag0) belonged to the patient or the therapist. When the antecedent pattern belonged to the patient, six positive and significant temporal sequences were identified: patient Affective Exploration followed by therapist Assent; patient Affective Exploration followed by therapist Affective Attunement; patient Affective Exploration followed by therapist resignification of cognitive contents; patient Affective Resignification followed by therapist Assent; patient Affective Resignification followed by therapist Affective Resignification; and patient resignification of cognitive contents followed by therapist Affective Resignification. The temporal association strength

of the Communicative Coordination Microsequences identified in Change Episodes was between moderate and very high (see Table XIII).

On the other hand, when the antecedent pattern belonged to the therapist, three positive and significant temporal sequences were identified: therapist Affective Attunement followed by patient Assent; therapist Affective Resignification followed by patient Assent; and therapist Affective Resignification followed by patient attunement with cognitive contents. In this case, the strength of the association between these Communicative Coordination Microsequences was between moderate and high (see Table XIII).

Communicative Microsequences of Specific Pattern Types. The second part of the study explored the temporal sequences between the specific types of Communicative Patterns (CPs) used by patients and therapists during Change Episodes. The statistical Chi-Square for this analysis also revealed that the degree of association between specific pattern types during Change Episodes was not random [χ^2 (8100, N=1016) =10851.38, p<.01]. After establishing the total sequential association, an analysis was performed on the pairs of specific pattern types, considering only positive and statistically significant temporal sequences with a frequency equal to or higher than 3 (see Table XIV).

Table XIV. Communicative Microsequences of specific Communicative Pattern (CP) types

Lag 0 - Patient's Communicative Pattern		**Lag 1** - Therapist's Communicative Pattern	N	*Z*	*p*	Yules Q
Emotional description (CP213-100)	–	Assent (CP100)	3	2.36	.02 *	.62
Argumentative emotional clarification (CP213-101)	–	Resignification of cognitive contents	5	2.42	.02 *	.54
Argumentative emotional clarification (CP213-101)	–	Emotional empathy (CP223-212)	3	5.16	< .01 **	.88
Emotional Self-resignification (CP233-100)	–	Assent (CP100)	3	3.54	< .01 **	.79
Exploration of cognitive contents	–	Emotional empathy (CP223-212)	3	2.27	.02 *	.60
Resignification of cognitive contents	–	Interpretative emotional resignification (CP233-207)	4	2.31	.02 *	.55
Resignification of cognitive contents	–	Transferential emotional resignification (CP233-407)	3	2.98	< .01 **	.72
Lag 0 - Therapist's Communicative Pattern		**Lag 1** - Patient's Communicative Pattern	N	*Z*	*p*	Yules Q
Assent (PC100-000)	–	Emotional description (CP213-100)	4	3.26	< .01 **	.70
Emotional empathy (CP223-212)	–	Assent (CP100)	8	3.69	< .01 **	.69
Argumentative emotional resignification (CP233-201)	–	Assent (CP100)	4	2.30	.02 *	.62
Interpretative emotional resignification (CP233-207)	–	Assent (CP100)	11	4.16	< .01 **	.67
Transferential emotional resignification (CP233-407)	–	Attunement with cognitive contents	3	5.56	< .01 **	.89
Lag 0 - Patient's Communicative Pattern		**Lag 1** - Patient's Communicative Pattern	N	*Z*	*p*	Yules Q
Assent (CP100)	–	Argumentative emotional resignification (CP233-101)	7	2.59	.01 **	.54

This step identified 13 temporal interaction sequences, only one of which was a Communicative Self-coordination Microsequence applied by the patients: *assent* followed by *argumentative emotional self-resignification* during the same speaking turn. This temporal sequence displayed a moderate degree of association (Q=.54).

The remainders of the temporal sequences were Communicative Coordination Microsequences, and were classified depending on whether the antecedent pattern belonged to the patient or the therapist. When the antecedent pattern belonged to the patient, seven temporal sequences were identified: patient *emotional description* followed by therapist *assent*; patient *argumentative emotional clarification* followed by therapist *emotional empathy*; patient *argumentative emotional clarification* followed by therapist resignification of cognitive contents; patient *emotional self-resignification* followed by therapist *assent*; patient exploration of cognitive contents followed by therapist *emotional empathy*; patient resignification of cognitive contents followed by therapist *interpretative emotional resignification* or *transferential emotional resignification*. The association strength between these Communicative Coordination Microsequences was between moderate and high (see Table XIV).

When the antecedent pattern belonged to the therapist, five temporal sequences were identified: therapist *assent* followed by patient *emotional description*; therapist *emotional empathy* followed by patient *assent*; therapist *argumentative emotional resignification* followed by patient *assent*; therapist *interpretative emotional resignification* followed by patient *assent*; and therapist *transferential emotional resignification* followed by patient attunement with cognitive contents. The association strength between these Communicative Coordination Microsequences was high (see Table XIV).

Comparison of Episodes according to Communicative Microsequences. The statistical Chi-Square test also showed that the degree of association between the Communicative Patterns (CPs) used during Stuck Episodes was not random [χ^2 (961, N=581) =1762.16, p<.01]. The strength of the temporal association between the Communicative Microsequences observed ranged from moderate to very high. Based on this information, both episode types were compared considering the temporal sequences of the patterns observed, which revealed statistically significant differences in terms of the patients' use of a Communicative Self-coordination Microsequence (see Table XV): the temporal sequence of Assent followed by Affective Resignification during a single speaking turn. This temporal sequence was only identified during Change Episodes.

Only four of the seven Communicative Coordination Microsequences identified in Change and Stuck Episodes, in which the antecedent pattern belonged to the patient (see Table XV), displayed significant differences: patient Affective Exploration followed by therapist Affective Resignification, exclusively identified during Stuck Episodes; patient Affective Resignification followed by therapist Assent or Affective Resignification, exclusively identified during Change Episodes; and patient resignification of cognitive contents followed by therapist Affective Resignification, also observed exclusively during Change Episodes.

Table XV. Comparison of the proportion of Communicative Microsequences by episode type

Lag 0	→	Lag 1	Change Episode	Stuck Episode	Difference %	95% CI for the difference	Z	p
Patient's CP	→	**Patient's CP**						
Assent (CP100)	–	Affective Exploration (CP213)	53.13 (17)	46.87 (15)	6.25	[-17.33 a 28.89]	0.5	.62
Assent (CP100)	–	Affective Resignification (CP233)	100.00 (18)	0.00 (0)	100.00	[75.13 a 100.00]	–	< .05 *
Patient's Cp	→	**Therapist's CP**						
Affective Exploration (CP213)	–	Assent (CP100)	47.06 (8)	52.94 (9)	5.88	[-25.20 a 35.43]	0.343	.73
Affective Exploration (CP213)	–	Affective Attunement (CP223)	61.54 (8)	38.46 (5)	23.08	[-13.71 a 52.42]	1.177	.24
Affective Exploration (CP213)	–	Resignification of cognitive contents	66.67 (10)	33.33 (5)	33.33	[-1.96 a 59.01]	1.826	.07
Affective Exploration (CP213)	–	Affective Resignification (CP233)	0.00 (0)	100.00 (7)	100.00	[49.89 a 100.00]	–	< .05 *
Affective Resignification (CP233)	–	Assent (CP100)	100.00 (6)	0.00 (0)	100.00	[44.80 a 100.00]	–	< .05 *
Affective Resignification (CP233)	–	Affective Resignification (CP233)	100.00 (6)	0.00 (0)	100.00	[44.80 a 100.00]	–	< .05 *
Resignification fo cognitive contents	–	Affective Resignification (CP233)	100.0 (10)	0.00 (0)	100.00	[60.75 a 100.00]	–	< .05 *
Therapist's CP	→	**Patient's CP**						
Affective Attunement (CP223)	–	Assent (CP100)	100.00 (13)	0.00 (0)	100.00	[60.75 a 100.00]	–	< .05 *
Affective Resignification (CP233)	–	Assent (CP100)	77.78 (28)	22.22 (8)	55.56	[33.12 a 70.41]	4.714	< .000 **
Affective Resignification (CP233)	–	Affective Exploration (CP213)	0.00 (0)	100.00 (6)	100.00	[44.80 a 100.00]	–	< .05 *
Affective Resignification (CP233)	–	Attunement with cognitive contents	100.00 (5)	0.00 (0)	100.00	[38.56 a 100.00]	–	< .05 *

Note. If 0% is not a value of the interval, then it can be said with 95% of confidence that the difference of proportion of a given CP - Lag 0 and CP - Lag 1 temporal sequence is different in Change and Stuck Episodes. The Z-ratio calculation was performed only if both samples satisfied the standard binomial requirement: n (p) and n (1-p) must both be equal to or greater than 5.
** p≤0.01, * p≤0.05

Significant differences were observed in the four Communicative Coordination Microsequences present in the two episode types, when the antecedent pattern belonged to the therapist (see Table XV). Thus, the temporal sequences of therapist Affective Attunement followed by patient Assent, and therapist Affective Resignification followed by patient attunement with cognitive contents were only identified during Change Episodes. The temporal sequence of therapist Affective Resignification followed by patient Assent was also significantly more frequent during Change Episodes; however, the temporal sequence of therapist Affective Resignification followed by patient Affective Exploration was only identified during Stuck Episodes.

Conclusions and discussion

The first study was conducted in order to identify the main characteristics of patient-therapist conversation, based on the analysis of the Communicative Actions (Basic Form, Communicative Intention, Technique, Domain, and Reference) present in Change and Stuck Episodes. This first study did not involve any hypotheses because its data analysis was discovery-oriented (Hill, 1990); however, the methodology used required the control of certain variables, such as: the gender of patients and therapists (female and male, respectively), a similar reason for seeking help shared by the patients, the vast clinical experience of the therapists, a significant change during the therapy according to OQ-45.2 (Lambert, et al., 1996; Von Bergen, & de la Parra, 2002), and a similar therapeutic approach. The results were interpreted considering that each therapeutic approach favors the use of certain types of intervention, which eventually determines the characteristics of the setting during the psychotherapeutic process (Coderch, 1990; Rodríguez-Sutil, 2007).

An important preliminary result was that, in the two therapies used in this study, the same association was observed between TACS-1.0 categories (Valdés, et al., 2010b) and the speaker's role (patient or therapist), except for the *actions* Domain, since one of the patients tended to work more on behavioral contents. However, both patient-therapist dyads showed the same association between the speaker's role and the *ideas* and *affects* Domain, which is relevant for the object of study of the present research. Therefore, without neglecting the individual characteristics of each therapeutic process, it was possible to conclude that both were similar at the communicative level.

The analysis of the formal structure (Basic Form) of the verbalizations led to the identification on some traits of the role of each of the participants during the therapeutic conversation in Change Episodes. The therapists requested certain information from their patients more often (*question*), whereas the patients tended to accept as true (*agreement*) and/or reject (*denial*) the *assertions* of their therapists. Nevertheless, a comparison of the conversation during Change and Stuck Episodes revealed that the proportion of *Deny* used by the patients, and the proportion of *assent* used by the therapists was much higher during Stuck Episodes. This more extensive usage of *deny* by the patients may have been associated with the action of resisting the construction of new meanings during the conversation in such episodes; however, the more frequent use of *assent* by the therapists, should be probed in order to determine the degree to which the application of this Communicative Action may sustain the stagnation of the patients. During the therapeutic conversation, patients' and therapists' discourse was characterized by the presence of *assertions* about something that the speakers considered true, regardless of the episode type. In other words, it was the only Basic Form used in the same proportion regardless of the participant's role and the type of episode considered. This indicates that a large part of the therapeutic activity was performed based on the use of verbalizations which included this Basic Form type, which suggests that, if there are any patterns in the verbalizations of patients and therapists, most of them should also have this Basic Form within their formal structure. The low proportion of verbalizations with the *question* Basic Form is noteworthy, since it is one of the most widely recommended interventions during the psychodynamic training process (Fiorini, 1993; Goates-Jones, Hill, Stahl, & Doschek, 2009); however, it seems that verbalizations with this type of Basic Form are not favored by therapists during Change Episodes, but in other moments of the session.

In addition, certain characteristics of the discourse of patients and therapists were identified, according to the communicative purpose of the speakers' verbalization (Communicative Intention). If psychotherapeutic change is understood as a modification at a representational level (Krause, et al., 2007), then patients should tend to perform more *resignifications* during Change Episodes than during Stuck Episodes. And this is what indeed happened: the discourse of patients and therapists during Change Episodes was mainly characterized by the questioning of elements, the establishment of

relationships, and the offering or approval of new ways of understanding certain contents, while during Stuck Episodes both patients and therapists tended to search for information, provide information, clarify a point, and/or direct the focus of the conversation towards other contents. On the other hand, the therapists always showed understanding, generated harmony with their patients, provided feedback to them, and *resignified* upon the basis of the information given by the patients, regardless of the type of episode.

Regarding the communicative methodological resources used by the speakers to support the purpose of the verbalization (Communicative or Therapeutic Techniques), the patient's speech during Stuck Episodes was marked by the absence of techniques, while that of therapists was characterized by the use of Techniques typical of their psychotherapeutic approach, specifically *confrontation*. This is one of the most widely used Techniques in the psychodynamic approach, especially when confronting the patient with his/her own defenses (Salerno, Farber, McCullough, Winston, & Trujillo, 1992) or when showing him/her the contradictions in his/her discourse and/or behavior (Coderch, 1990). In contrast, during Change Episodes the therapists tended to use Therapeutic Techniques such as *interpretation* and *reflection*; however, it was striking to observe that they also used Techniques typical of everyday interaction in the conversation, specifically *argumentation*. This may confirm the fact that Techniques are used to fulfill a specific function in communication, associated with the speakers' purpose; in addition, their use may also be associated with certain moments of the therapeutic session, for instance, the construction of a change by the patient, or an attempt to resolve a Stuck Episode.

Based on the object of therapeutic work present in the speakers' verbalization (Domain), it was possible to conclude that, regardless of the type of episode, the discourse of patients and therapists was characterized by verbalizations limited to the world of thoughts and emotions. However, a comparison of both episode types revealed more extensive work in the *affects* Domain performed by the therapists in Change Episodes, whereas the patients focused on the *ideas* Domain during Stuck Episodes. In other words, in moments of the session without a co-construction of new meanings, the patients' discourse was characterized by a cognitive content work, while during moments of the session in which there was change, the therapist's discourse was characterized by an emotional content work. This may be related to certain defensive processes of the patients (intellectualization) during Stuck Episodes, concretized and expressed through verbalizations characterized by the presence of contents from the world of *ideas* rather than emotional contents (Vaillant, 1995).

Regarding the protagonist of therapeutic work (Reference), regardless of the type of episode, the patients made more verbalizations *about themselves*, *referencing a third party,* and *the relationship with a third party*, while the therapists favored verbalizations *about the other person present* (patient),

the therapeutic relationship, and verbalizations *with a neutral reference*. Therefore, the patients' discourse was characterized by verbalizations made using the first person singular, the third person singular, and/or the first person plural, whereas the therapists' discourse tended to include verbalizations using the second person singular, the first person plural, or the first and second person singular during the same speaking turn.

Thus, the patients' discourse during Change Episodes was characterized by the verbalization of *assertions* about *cognitive* and *affective* contents *about themselves*, *a third party,* or *the relationship with a third party*. These *assertions* were made with the dual purpose of *exploring* (providing information, clarifying a point, and/or focusing the conversation towards certain contents) and *resignifying* (co-constructing new meanings for such contents with their therapists), supporting this double objective with *argumentation* as a Communicative Technique. On the other hand, the therapists' discourse during Change Episodes was also characterized by the verbalization of *assertions* about *cognitive* and *affective* contents, which referred *to the other person present* (patient), *to the therapeutic relationship*, and/or which had a *neutral* reference. These *assertions* had the dual purpose of *attuning* (showing understanding, generating harmony, and/or providing feedback about certain contents) and *resignifying* (co-constructing new meanings for such contents with their patients). In order to attain the first purpose, the therapists used *reflection* as a Therapeutic Technique; to achieve the second, they employed *interpretation* and *confrontation* as Therapeutic Techniques, together with *argumentation* as a Communicative Technique. This situation confirms the existence of a communicative complementariness which establishes the patients as the true protagonists of their own psychotherapeutic change (Reyes, et al, 2008). In addition, it was significant to observe that the therapists not only referred to the other person present in the conversation during Change Episodes, but also to the therapeutic relationship as the interpersonal space where psychotherapeutic change is constructed and perceived (Ávila, 2005).

After determining the existence of characteristics which are typical of communication between the participants during Change Episodes, a second study was performed in order to identify the main Communicative Patterns (CPs) specifically used by the speakers to work on emotional contents in such episodes. A Communicative Pattern (CP) is the configuration of codes for each speaking turn analyzed with the TACS-1.0 (Valdés, et al., 2010b), and is defined as the combination of Communicative Actions present in the speaker's verbalization that reveals the presence of a certain formal structure used to express a communicative purpose about a given content, with a given reference, and with the potential support of methodological resources. Three main Communicative Patterns (CPs) were identified: Affective Exploration, Affective Attunement, and Affective Resignification. The three patterns were characterized by the presence of the *assertion* Basic Form in their Structural Level, and

different variations depending on their Articulative Level. It was noteworthy that no patterns had the *question* Basic Form, even though it came in second place among the therapists' most used Communicative Actions, and despite the fact that it is one of the most frequent interventions in psychodynamic therapy (Hill, 1989; Wiser & Goldfried, 1998). This may indicate that the interventions performed by the therapists to work on their patients' emotional contents tend to lack *questions*, and that this type of Basic Form may be part of the formal structure of the Communicative Patterns used to work on other content types during Change Episodes, such as cognitive contents.

The Affective Exploration pattern was used exclusively by the patients in both episode types, in order to give information, clarify a point, and/or steer the therapist's attention towards certain emotional contents during the conversation. Two specific types of this pattern were identified: *emotional description* and *argumentative emotional clarification*. The first type was used by the patients to provide novel information to the therapist about emotional contents referencing themselves, while the second type was used to clarify certain emotional contents about themselves or their relationships with a third party, using arguments, examples, generalizations, or justifications to support their points. The patients' use of these specific types during Change Episodes helped the therapists to become aware of certain aspects of the patients' personal histories (Hill, 1989; Wiser & Goldfried, 1998), but also increased the patients' awareness through the act of re-telling their histories to themselves (Elliott, Watson, Goldman, & Greenberg, 2004). As Greenberg (2002) points out, the evocation and exploration of the personal meanings of the patient's emotional experience are related with a constructive change during psychotherapy. On the contrary, during Stuck Episodes the patients' use of *emotional descriptions* and *argumentative emotional clarifications* tended to be characterized by the permanent inclusion of arguments which reflected a reissue of the problem, which eventually configured a temporal halting of the change process (Stuck Episode).

The Affective Attunement pattern was only used by the therapists, especially during Change Episodes, in situations in which they mirrored their patients' affective states expressed by them "here and now", in order to show understanding, generate harmony with them, or provide feedback about such emotional contents. Only one specific type of this pattern was identified, which was termed *emotional empathy*. The therapists' use of this pattern was interpreted as a way of reinforcing the patients' active purveyance and clarification of information, without using Communicative Patterns (CP) which add complexity to the therapeutic activity: the therapists did not attach new meanings to the contents verbalized by the patients in that moment, which the latter may have regarded as a chance to continue giving more information about the same subject. In general, this situation persisted for as long as necessary, and ended with the therapist's use of patterns which introduced more complexity to the therapeutic activity. The existence of this pattern confirms the fact that, in order to promote change,

it is not enough that the therapist offer new perspectives to the patient: it is also necessary that he/she display an empathic understanding (Gabbard, et al., 1994; Wiser & Goldfried, 1998; Rubino, Barker, Roth, & Fearon, 2000); in other words, complex therapeutic interventions are not sufficient to construct change, as communicative coordination, which can be associated with moments of meeting, may be enough (Mitchell & Black, 2004; Stern, 2004; Ávila, 2005). Therefore, episodes which display the presence of the therapist's *emotional empathy* may reflect the therapist's interest in contacting the patient's experience by expressing understanding, or by helping her to understand the emotional content worked on during the session more clearly. This is especially true in the case of a relational psychodynamic intervention which refers to the process of empathy, understood as reliable and careful attention paid to allow the patient to find the road to change (Ávila, 2005; Elson, 1990; Mitchell, & Black, 2004). In contrast, episodes with little or no *emotional empathy* can be regarded as moments in which the therapist seeks to contact the patient's experience, but from the patient's reference framework and not from an empathic position of understanding. Patients need different levels of attunement at different times in their therapy process, according with the results reported by Vanaerschot and Lietaer (2007), who propose that there must be moments of attunement to the patient's experience alternating regularly with moments of minimal attunement.

Contrary to the other patterns, Affective Resignification is characterized by adding more complexity to the therapeutic activity. It was used during Change Episodes by both participants in order to co-construct and/or consolidate new meanings for certain emotional contents. Thus, it is clear that the new meanings are not only constructed by the patients; instead, they are generated in a joint and relational fashion alongside the therapists during treatment (Ávila, 2005; Bakhtin, 198l; Berg & Shazer, 1993; Gergen, 1991, 1994). Certain specific types of this pattern may indicate the presence of the collaborative work of both participants during Change Episodes: the patients performed *emotional self-resignifications* and *argumentative emotional self-resignifications*, while the therapists used *emotional resignifications* and *argumentative emotional resignifications*. These four specific types were used to explain, integrate, or establish connections between the contents, either between the patient's history and her current problems, between the intratherapeutic and extratherapeutic contexts, between past and present information, or between personal aspects of the patients. The specific types which, according to their Articulative Level, are based on argumentation as a Communicative Technique, consider two important elements: the content to be resignified and the purveyance of various reasons which allow one speaker to convince the other. In general, these reasons consisted of logical arguments based on cause-effect and specific-general logical arguments, but mostly of ideas that concretized the new meaning in a situation present in the extratherapeutic context and which was immediately relevant to the patients. The other two specific types of this pattern, which were only used

by the therapists, regardless of the episode type and in a similar proportion, are *interpretative emotional resignifications* and *transferential emotional resignifications*. Both specific types use interpretation as a Therapeutic Technique, in order to ascribe new meanings to certain emotional contents which go beyond the meanings that the patient could attach to them by herself (Rycroft, 1995). The configuration and reconfiguration of the patients' description of their own experience became one of the central aspects of the therapist's work, based on *interpretative emotional resignifications*. In this regard, several researchers have studied the effects of patients' interpretations (Caspar, et al., 2000; Norville, Sampson, & Weiss, 1996; Perääkylää, 2004; Piper, Joyce, McCallum, & Azim, 1993); however, as a way of concretizing the resignification, the therapists also steered their patients' attention to the closest situation during the conversation, that is, the therapeutic relationship (Joyce, Duncan, & Piper, 1995), which is consistent with results that prove the effect of such interventions in therapy (Cashwell, Skinner, Lewis, Young, & Cashwell, 2001; Connolly, Crits-Christoph, Barber, & Luborsky, 2000; Høøglend, Johansson, Marble, Bøøgwald, & Amlo, 2007; Marziali, 1984; Piper, Debbane, Bienvenu, DeCarufel, & Garant, 1986). It is interesting to note that the two forms used by the therapists to concretize the new meanings co-constructed during Change Episodes were *argumentative emotional resignifications* and *transferential emotional resignifications*. In both cases, the new meanings were concretized based on situations that were already concrete for the patients: in the first case, using arguments taken from the extratherapeutic context, and in the second case, making deductions about the therapeutic relationship developed in the session. Thus, it can be established that the therapists' discourse during Change Episodes was also characterized by offering patients new meaning alternatives for certain emotional contents, which they accepted and used to co-construct new subjective theories about themselves (Krause, et al., 2007). However, in Stuck Episodes, Affective Resignification was exclusively applied by the therapists, which was interpreted as a sign of the participants' lack of collaborative work and as a reflection of the patients' insistence in providing arguments which did not result in the co-construction of new forms of interpretation. The results showed that one of the therapist's central tasks was to accompany and promote, through an empathic understanding, the changes in meaning of certain interventions thought to foster resignification work; yet, for this to happen, it was necessary for the patients to participate and apply their ability to connect with new subjective representations in specific moments of the session. In this regard, therapy is understood as a process of discursive transformation, during which meanings are constructed through therapeutic conversation (Kogan & Brown, 1998; Sluzki, 1992).

Finally, after establishing the presence of certain Communicative Patterns (CPs) used by patients and therapists during the conversation in Change Episodes, a final study was carried out to detect the existence of Communicative Microsequences, that is, sequences of temporal interaction between such

patterns. In the therapists, it was not possible to identify any Communicative Self-coordination Microsequences, however, the patients could accept the therapist's words as true (*assent*), and perform during the same speaking turn one of the following actions: continue providing or clarifying certain emotional contents (*Affective Exploration*), or concretize new meanings based on situations directly associated to the therapy but external to it (*Affective Resignification*). The latter Communicative Self-coordination Microsequence used by the patients was only observed during Change Episodes.

On the contrary, an analysis of the temporal sequences between the participants of the therapeutic conversation revealed the presence of different Communicative Coordination Microsequences during Change Episodes, depending on whether the antecedent pattern belonged to the patient or the therapist. For instance, the patients' use of Affective Exploration, performed through *emotional descriptions*, was followed by the therapists' use of Assent. This therapist action, which could be disregarded during communication, highlights the positive role of understanding and listening actively to what the patient says (Mitchell & Black, 2004), which leads them to continue providing information during the change process. On the other hand, the patients' use of Affective Exploration, performed through *argumentative emotional clarifications*, was followed by the therapists' use of Affective Attunement through their display of *emotional empathy*. As previously mentioned, this therapist action did not add complexity to the therapeutic activity during the conversation, which allowed the patients to continue providing more detailed information about certain emotional contents (*argumentative emotional clarifications*). Nevertheless, such clarifications were also employed by the therapists to take the object of the therapeutic work to the cognitive domain, and to resignify certain cognitive contents using the concrete information supplied by the patients in the affective domain. Three other Communicative Coordination Microsequences were identified during Change Episodes only: an Affective Resignification, performed by the patients through *emotional self-resignifications*, followed by the therapists' use of Assent. This therapist action was interpreted as a way of expressing agreement with the resignification proposed by the patients, but it might have been a signal for them to continue elaborating on the new meanings which were being attached by them during the conversation; in the second microsequence, the patients' use of Affective Resignification was followed by the therapists' application of Affective Resignification. In this case, the therapeutic activity between the participants remained at the same complexity level and within the same domain of therapeutic work, which indicates that it could be a sign of collaborative work in the process of co-constructing new meanings for certain emotional contents. Nevertheless, it was observed that the patients' resignification of cognitive contents could also lead to the therapists' use of Affective Resignification in any of the following ways: attributing new meanings to emotional contents, using the latent meaning present in the patients' verbal manifestations (*interpretative emotional resignification*), or steering the

conversation towards new meanings for emotional contents belonging to the therapeutic relationship (*transferential emotional resignification*). This point should be further researched, but the evidence suggests that the therapists took advantage of the fact that they were developing a more complex therapeutic activity in the cognitive domain with the patients, and transferred it to the affective domain while maintaining the same level of complexity and proposing new meanings for emotional contents (Perääkylää, 2004) or concretizing such meanings in the therapeutic relationship (Connolly, et. al., 2000). In this regard, the interventions that the therapist performs while working with emotional contents will depend on the patient's needs at a given moment, and so they will be adjusted depending on the patient's level of participation and openness (Ávila, 2005).

Three other Communicative Coordination Microsequences were identified in Change Episodes only, displaying a therapist Communicative Pattern (CP) as antecedent. In the first one, the therapists' use of Affective Attunement, performed through their display of *emotional empathy*, was followed by the patients' use of Assent. This response by the patients was interpreted as a sign that they were feeling understood, and that they were accepting the feedback provided by the therapists. In the second microsequence, the patients also responded by Assenting, but as a result of the therapists' use of Affective Resignification, which was performed in any of the following two ways: offering new meanings for certain emotional contents (*interpretative emotional resignification*), or concretizing new meanings for such contents, by using situations belonging to the patients' extratherapeutic context (*argumentative emotional resignification*). In the third microsequence, the therapists' use of Affective Resignification, performed through the co-construction of new meanings for emotional contents emerging from the therapeutic relationship (*transferential emotional resignification*), was followed by the patients' attunement with cognitive contents. This transference of the object of therapeutic work to the cognitive domain revealed the bidirectional interplay between work on cognitive and emotional contents, which is precisely one of the foundations of therapeutic activity (Greenberg & Paivio, 2003). There were moments in the therapy in which the therapists used Communicative Patterns (CPs) to incorporate an emotional component into the emotional work done by the patients; likewise, the patients used Communicative Patterns (CPs) to add a cognitive component to the emotional resignifications performed by the therapists.

Another difference between the two episode types was the existence of two Communicative Coordination Microsequences during Stuck Episodes which were not observed in Change Episodes: the patients' use of Affective Exploration followed by the therapists' use of Affective Resignification, and viceversa, the therapists' use of Affective Resignification followed by the patients' use of Affective Exploration. Both temporal sequences were interpreted as a sign of the therapists' interest in taking their patients to more complex levels of therapeutic activity, however, the latter remained at a simpler

level which consisted in the constant purveyance of arguments which did not facilitate the construction of new meanings for certain emotional contents.

The main contribution of these three studies lies in the methodology developed to thoroughly understand what happens in the therapeutic conversation at different levels of analysis, and more specifically, the type of verbal expressions used by patients and therapists to work together on emotional contents associated with psychotherapeutic change. Future studies should involve a more specific analysis of the Communicative Patterns (CPs) used by patients and therapists to work on cognitive contents --like the process applied to the patterns used to work on emotional contents-- in order to determine the relationship between both. In addition, it is necessary to develop a methodology which can yield more detail about the behavior of the Communicative Patterns (CPs) used to work on emotional contents within Change Episodes and throughout the therapeutic process. The limitations of this study include the fact that only two psychotherapeutic processes were analyzed, so it would be advisable to replicate the methodology developed with more processes in order to confirm the findings of the present research.

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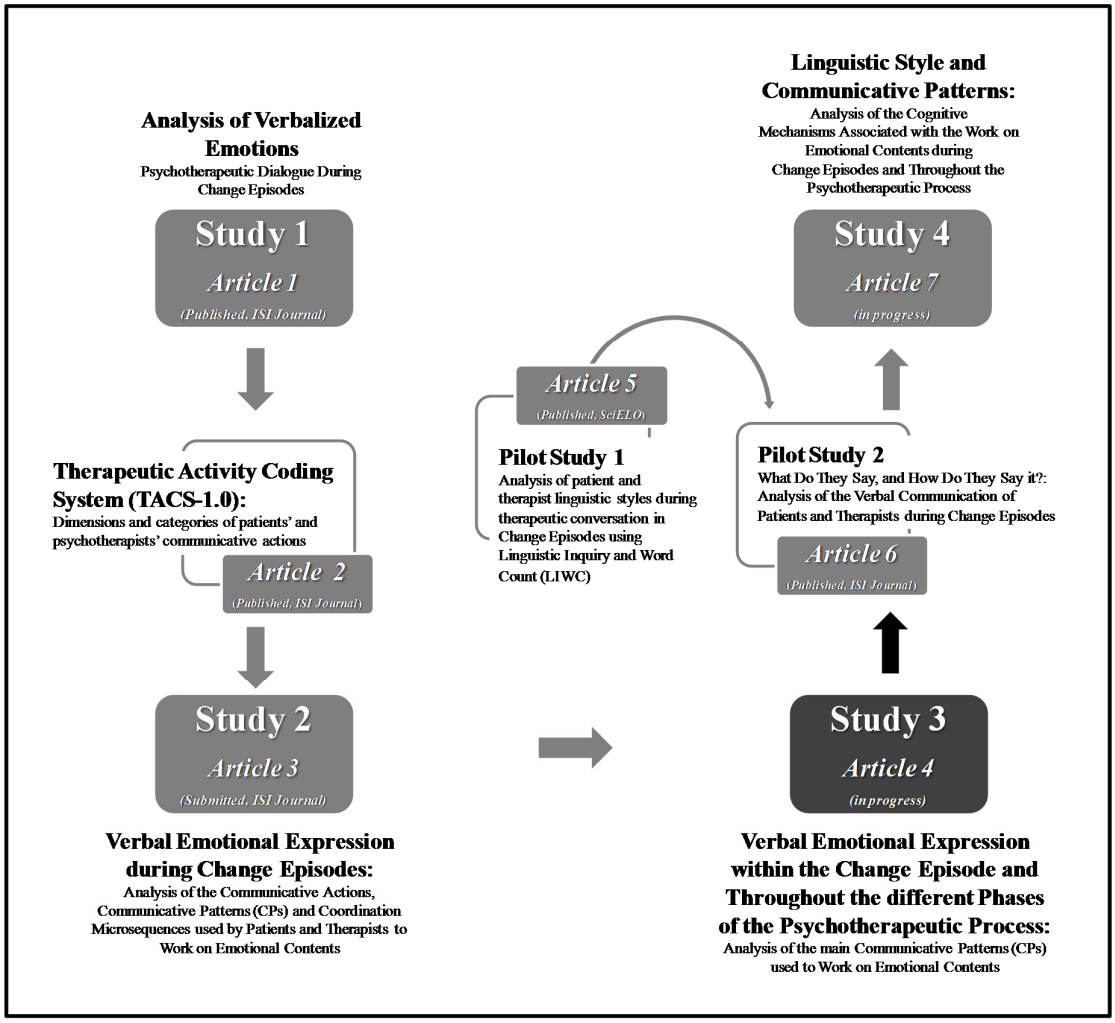

Second and third specific objectives: to determine the behavior of patients' and therapists' verbal emotional expressions in Change and Stuck Episodes and, to determine the behavior of patients' and therapists' verbal emotional expressions in each phase of the therapy and throughout the psychotherapeutic process.

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Analysis of Verbal Emotional Expression in Change Episodes and Throughout the Psychotherapeutic Process: Main Communicative Patterns Used to Work on Emotional Contents [10]

Valdés, N.

Abstract

Three main Communicative Patterns (CPs) used to work emotional contents during Change Episodes were identified: *Affective exploration*, *Affective attunement* and *Affective resignification*. Each of these patterns reveals a particular formal structure used to express a communicative purpose about certain emotional contents (Valdés, Tomicic, Krause, & Espinosa, 2011b). Objective: To analyze the main Communicational Patterns (CPs) in order to determine their behavior within Change Episodes, and throughout the different phases of the psychotherapeutic process. Method: A mixed methodology was used to analyze 38 Change Episodes (1016 segments of speaking turns) and 19 Stuck Episodes (581 segments of speaking turns) which were identified within two psychodynamic psychotherapeutic processes. Patients' and Therapists' verbal expressions were analyzed using the Therapeutic Activity Coding System (TACS-1.0, Valdés, Tomicic, Pérez, & Krause, 2010b). Results show the existence of an increasingly collaborative work between Patients and Therapists at the end of the Change Episodes. A decrease of *Affective exploration* by the patient was observed during the final phase of therapy, as well as an increase of *Affective resignification*. However, therapists performed the same therapeutic work throughout the process.

Keywords: Change Episodes, Communicative Patterns, Psychotherapeutic Process.

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It was been proven that working on affective contents during therapy is a useful tool to promote positive changes in the patient, regardless of the therapist's therapeutic approach. Other studies have demonstrated the existence of mutual influence patterns, used by patients to regulate their own affective conflicts during therapeutic conversation (Bänninger-Huber, 1992; Bänninger-Huber & Widmer, 1999; Greenberg & Safran, 1989). Previous research has identified certain characteristics of the verbal communication between the participants of therapeutic dialog during their work on emotional contents in relevant moments of the session (Valdés, Krause, Tomicic, & Espinosa, 2011b). In this specific type of therapeutic activity, the verbal expressions of patients and therapists take the form of Communicative Patterns (CP) which are used exclusively by the patients to give information, clarify a point, and/or direct the therapists' attention towards certain emotional contents (Affective Exploration), while others are used exclusively by the therapists to provide their patients with feedback about certain emotional contents (Affective Attunement), and others are used by both participants to co-construct and/or consolidate new meanings for such emotional contents (Affective Resignification) (Valdés, et al., 2011b). There is sufficient evidence to support the notion that the conscious activation of certain emotional contents, along with their verbal expression during the session, are important elements to explain psychotherapeutic change (Hill, O'Grady, & Elkin, 1992; Timulak, 2007; Valdés, Krause, & Álamo, 2011a). In addition, there is evidence that high levels of emotional experience are associated with the patient's attainment of insight and with specific phases of the therapeutic process. Upon this basis, and understanding psychotherapy as a process which involves a series of phases characterized by the performance of certain activities which lead to the achievement of specific goals, the present study will analyze the main Communicative Patterns (CP) in order to determine their behavior within Change Episodes and during the phases of the psychotherapeutic process.

Over the last 60 years, various methods have been developed to understand patient change during psychotherapy. However, studies analyzing patient-therapist interaction microanalytically are the least frequent in process research (Elliott, 2010), as most studies have focused on the effect of certain therapeutic interventions on patients' actions during the session, and viceversa, and on the connection of this effect on therapeutic outcomes (Chatoor & Krupnick, 2001; Elliott, Slatick, & Urman, 2001; Gazzola, Iwakabe, & Stalikas, 2003; Greenberg, 2007; Hill, 1990; Klein, & Elliott, 2006; Luborsky, 2000; Mahrer & Boulet, 1999; Valdés, 2010; Valdés, et al., 2011a; Valdés, et al., 2010a; Valdés, Tomicic, Pérez, & Krause, 2010b; Williams & Hill, 2001; Wiseman & Rice, 1989). Although there is a strong tendency among researchers to consider emotions as a part of cognitive processes, or as a phenomenon that depends on them, it must be stressed that emotional contents include certain information that differs from all other contents, because they are experienced subjectively by individuals (Izard, 2002). This has led researchers to study the process of change experienced during

the help relationship, in order to expand the theoretical fundamentals of the structure of this type of interpersonal relationship and thus put emotions back in their right place within process research.

Nowadays, it has been shown that a large part of the therapeutic outcome can be explained by certain patient factors (Asay & Lambert, 1999), but in addition to this: (a) in therapeutic dialog, patients produce specific affective reactions in their therapists, while the latter show their patients how such expressions influence the type of interaction during therapy; (b) the performance of actions that increase the patient's emotional involvement during the therapeutic process appears to be a factor that promotes cognitive and behavioral changes (Castonguay, Goldfried, Wiser, Raue, & Hayes, 1996; Goldman, Greenberg, & Pos, 2005); and (c) successful therapeutic outcomes tend to display specific characteristics during the patient-therapist affective exchange (Dreher, Mengele, Krause, & Kämmerer, 2001). These conclusions apply to all therapeutic approaches and modes. Most of these approaches accept that working on emotional contents throughout the therapeutic process is essential for obtaining successful outcomes (Foa & Kozak, 1986; Henretty, Levitt, & Mathews, 2008). In other words, performing actions that facilitate emotional expression and reflecting on certain emotional contents during the session are elements which result in deeper emotional transformations and therapeutic outcomes (Donelly & Murray, 1991; Greenberg, 2008; Greenberg & Pascual-Leone, 2006; Mackay, Barkham, & Stiles, 1998). For this reason, there is growing interest in studying how emotional contents are dealt with during the therapeutic dialog, through the use of certain verbal expressions which reveal the type of interaction between the participants throughout the psychotherapeutic process.

Emotional expression plays a critical role in the physical and social adaptation of individuals (Izard, 2002) not only because it has the function of conveying information about the subjective experience of the individual through verbal and nonverbal external manifestations, but also because it contributes to the development of a prosocial behavior and creative problem-solving (Fredrickson, 2003). This adaptive function of emotional expression can be defined in terms of the actions oriented towards a specific purpose, or of the individual's intention to exercise an influence over another. In this regard, psychotherapeutic dialog is the micronanalytic dimension in which the patient's therapeutic change is constructed (Boisvert & Faust, 2003; Elliot et al., 2001; Krause, et al., 2007; Llewelyn & Hardy, 2001; Orlinsky, Ronnestad, & Willutzki, 2004; Wallerstein, 2001). For the analysis of therapeutic conversation several systems have been developed to classify patients' and therapists' verbalizations and their forms of intervention throughout the therapy (Elkin, Parloff, Hadley, & Autrey, 1985; Friedlander, 1982; Goldberg, et al., 1984; Hill, 1978; Mahrer, Nadler, Stalikas, Schachter, & Sterner, 1988; Shaikh, Knobloch, & Stiles, 2001; Stiles, 1992; Watzke, Koch, & Schulz, 2006; Wiser & Goldfried, 1996). For instance, a study by Elliott, Hill, Stiles, Friedlander, Mahrer and Marginson (1987) identified six forms of therapist intervention: questions, information, advice, reflection, self-

expression, and interpretation, with the latter type displaying the strongest correlation with positive evaluations of treatment (Caspar, Pessier, Stuart, Safran, Samstag, & Guirguis, 2000; Connolly, Crits-Christoph, Shappell, Barber, & Luborsky, 1998; Hill, et al., 1992; Pessier & Stuart, 2000; Valdés, et al., 2011b). Specifically, they identified a positive association between a successful therapeutic outcome and the frequency of the therapist's interpretations of patients' emotions during the transferential relationship, which are very similar to those experienced in their relationship with parents and other significant people (Marziali, 1984). Likewise, patients who receive therapeutic interventions such as reflection, recognition, or interventions perceived as fostering bonding, generally remain in a highly affective state (Wiser & Goldfried, 1998), precisely because they have the feeling of being understood (Bänninger-Huber & Widmer, 1999; Popp-Baier, 2001; Valdés, et al., 2011b). Therefore, therapeutic work performed at an affective level tends to be deeper, have a more relevant impact on therapeutic outcomes, and persist for a longer period than when interventions only involve the cognitive level (Orlinsky & Howard, 1987). In addition, experts have developed systems to classify both patient and therapist verbalizations (Connolly, et al., 1998; Hill, 1990, 2005*;* Jones, Cumming, & Pulos, 1991); however, many of them were constructed considering a specific therapeutic approach, or were aimed at analyzing a single therapeutic issue (Etchebarne, Fernández, & Roussos, 2008; Evans, Piasecki, Kriss, & Hollon, 1984; Trijsburg, Lietaer, Colijn, Abrahamse, Joosten, & Duivenvoorden, 2004). In this context, the Therapeutic Activity Coding System (TACS-1.0, Valdés, et al., 2010b) was developed as a thorough classification system to account for all the relevant dimensions of patient-therapist dialog. This system is based on a performative notion of language, that is, language understood not as a mere reflection of reality, but as one of its constitutive elements (Arístegui, et al., 2004; Krause, et al., 2006; Reyes et al., 2008; Searle, 1969, 1979, 1980); additionally, it considers the speakers' transmission of contents, which are directly related with the object of therapeutic work. This twofold notion of communication --performance of actions and conveyance of contents-- has made it possible to analyze the verbal actions whereby both actors influence each other during therapeutic conversation, but without losing track of content, as both dimensions participate in the construction of psychotherapeutic change. (Valdés, et al., 2011a; Valdés, et al., 2011b). The TACS-1.0 not only has proven to be sensitive enough to describe the main Communicative Actions used by patients and therapists during the therapeutic conversation, but has also revealed the presence of certain Communicative Patterns (CP) used by the participants of therapeutic dialog to work on emotional contents; furthermore, it has lead to the identification of differences and similarities between different episode types based on the analysis of certain patterns (Valdés, et al., 2011a; Valdés, et al., 2011b). However, a pending step is to analyze the characteristics of patient-therapist conversation throughout the psychotherapeutic process, which is why this study is specifically aimed at describing how such

Communicative Patterns (CP) behave within Change Episodes and during the phases of the psychotherapeutic process.

The complexity of the series of processes involved in therapeutic interaction has highlighted the necessity of studying said processes using different levels of analysis to attain a deeper understanding of them, and of developing new research methodologies for the systematic analysis of what occurs during the sessions (Hageman & Arrindell, 1999; Hill, et al., 1992; Mahrer & Boulet, 1999; Stiles, Shapiro, & Firth-Cozens, 1990; Williams & Hill, 2001; Valdés, 2010; Valdés, et al., 2005). For this reason, one of the most widely researched areas nowadays is the analysis of therapeutic sessions, in order to identify the main differences between those regarded as significant and less significant by patients and therapists (Altimir, et al., 2010). More specifically, this has led to the segmentation of the session into change episodes or therapeutically relevant episodes (Bastine, Fiedler, & Kommer, 1989; Goldfried, Raue, & Castonguay, 1998; Marmar, 1990; Valdés, et al., 2005; Vanaerschot & Lietaer, 2007) as useful strategy for studying the sessions in which psychotherapeutic change occurs. For example, Fitzpatrick, Janzen, Chamodraka and Park (2006) analyzed "critical moments" in early therapeutic stages and concluded that when a certain meaning was positively perceived by the patient, he/she became more open and attained higher levels of exploration. Russell, Jones and Miller (2007) also studied the main mechanisms of change during interaction, focusing on the temporal (moment-by-moment) analysis of emotional patterns in order to determine which factors or processes facilitated or hindered the patient's recovery. The factors identified included: patient affects, therapeutic work, relationships, and information search.

The present study belongs to process research, and is intended to find an answer to the following research questions: based on the analysis of Communicative Patterns (CPs) used by patients and therapists to work on emotional contents, Which are the main characteristics of therapeutic conversation during the initial and final stages of Change Episodes?, What are the main characteristics of therapeutic conversation during each of the phases of the psychotherapeutic process?, Which are the differences and similarities between patients' and therapists' verbalizations, depending on the therapeutic phase and the type of episode?.

Method

Sample

Two short weekly individual psychodynamic therapies (A and B), conducted by male psychoanalysts with a vast clinical experience, were analyzed. Both patients were female and had a similar reason for seeking help, and gave their informed consent to participate in the present study (see Table I).

Table I. Characteristics of the sample

	Psychotherapeutic Processes	
	Therapy A	Therapy B
Patients	Woman	Woman
Age	38 years old	43 years old
Focus of therapy	Development of mourning for separation and recent losses	Expression of needs; strengthen autonomy; increase quality of relationships
Psychotherapeutic approach	Psychodynamic approach	
Therapists	2 Psychoanalyst-Psychiatrists (Men)	
Total number of sessions (N=39)	18	21
Change Episodes (N=38)	14	24
Speaking turns (N=825)	352	473
Total of number of segments (N=1016)	437	579
Segments coded with a type of content (N=692)		
Segments coded with emotional contents and *f* >5 (N=161)	81	80
Stuck Episodes (N=19)	7	12
Speaking turns (N=449)	213	236
Total number of segments (N=581)	289	292
Segments coded with a type of content (N=383)		
Segments coded with emotional contents and *f* >5 (N=61)	45	16

Note. The same sample was used in the study "*Verbal Emotional Expression During Change Episodes: Analysis of the Communicative Patterns used by Patients and Therapists to Work on Emotional Contents"* (Valdés, et al., 2011b).

All sessions in both therapies were included (N=39), during which 38 Ch ange Episodes were identified, delimited, transcribed, and analyzed (A=14, B=24). Each episode was made up by patients' and therapists' speaking turns (N=825), which begin with the start of one participant's verbalization and end when the other's starts (Krause et al., 2009). Each speaking turn was segmented depending on the presence of two or more Communicative Patterns (CPs) within a single speaking turn (see Figure I). Out of the 1016 segments available, only 692 were coded with some type of content (cognitive, emotional, or behavioral). As the objective of this study was to analyze the patterns used by patients and therapists specifically to work on emotional contents during the conversation, it only considered the segments which included one of the Communicative Patterns (CPs) used for this end, and which displayed a frequency above five for at least one of the participants (patient and therapist).

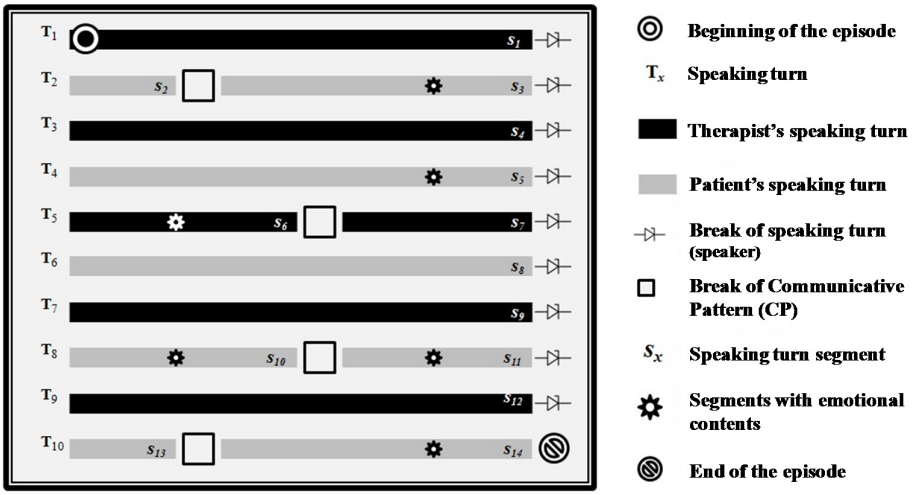

Figure I. Segmentation of speaking turns. According to the TACS-1.0 Manual, this episode has 10 speaking turns (T_x), 14 speaking turn segments (S_x), and 6 speaking turn segments with emotional contents (S_3, S_5, S_6, S_{10}, S_{11} and S_{14}) (Valdés, et al., 2011b).

In addition, in order to have a group for comparison, 19 Stuck Episodes were identified (A=7, B=12), which were delimited, transcribed, coded with a type of content, and analyzed to identify in them the Communicative Patterns (CPs) more frequently used for working on emotional contents (*f* >5). Thus, the total sample was made up by 161 emotional segments in Change Episodes (P=79, T=82), and 61 emotional segments in Stuck Episodes (P=35, T=26).

Procedure and data analysis

Therapeutic Outcome and Change. Therapeutic outcome was estimated using the Outcome Questionnaire (OQ-45.2), developed by Lambert, Hansen, Umpress, Lunnen, Okiishi and Burlingame (1996), and validated for Chile by Von Bergen and De la Parra (2002). A high total score in the questionnaire means that the patients reported a high level of unhappiness with their high quality of life, which is expressed through their symptoms, interpersonal relationships, and social role. The interpretation of the results was based on a cut-off score (in Chile, 73) derived from comparing a clinical sample with a non-clinical one, which led to the identification of a functional and a dysfunctional population and resulted in a Reliable Change Index (RCI) which determines whether the patient's change at the end of the treatment was clinically significant (RCI for Chile = 17; Jacobson & Truax, 1991). In this case, Patient A started the therapy with a total score of 68 and ended it with 48.4 (RCI=19.6), whereas Patient B started the therapy with a total score of 111 and ended it with 91 (RCI=20). This means that both patients displayed a significant degree of change during the therapy, even though Patient A started below the cut-off score and Patient B above it.

On the other hand, from the perspective of Generic Change Indicators (GCI, Krause et al., 2007), both therapies were successful, considering the number of change moments during the session (A=14, B=24), but especially due to their level in the hierarchy of indicators (Altimir, et al, 2010; Echávarri, et.al, 2009). GCIs are grouped into three levels which reflect the evolution of the change process (see Figure II).

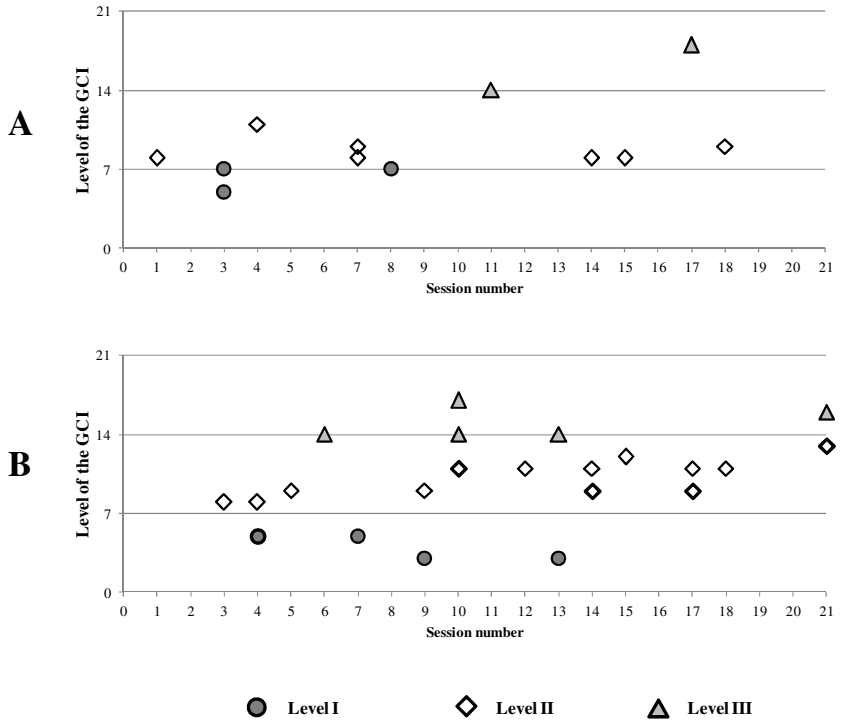

Figure II. Distribution of Generic Change Indicators (GCI) in therapies A and B.

The largest percentage of change indicators was associated with an increase in the patients' openness to new forms of understanding (Level II). The consolidation of the structure of the therapeutic relationship (Level I) was more frequent during the initial stages of the therapy; also, both patients were capable of constructing and consolidating a new way of understanding themselves (Level III). Therefore, it can be concluded that both therapies displayed a positive evolution from the point of view of Generic Change Indicators (GCI).

Delimitation of Change Episodes and Stuck Episodes. Both therapies were recorded audiovisually and observed through a one-way mirror by expert raters trained in the use of: (a) the protocol for guiding observation and for detecting and identifying change moments; (b) the hierarchical List of Change Indicators (Krause, et al., 2007); and (c) the List of Stuck Episode Topics. The sessions were

listed in chronological order and transcribed to facilitate the subsequent delimitation of Change Episodes.

As shown in Figure III, the moment of change marks the end of the episode. Said moment of change must meet the criteria of theoretical correspondence, novelty, topicality, and consistency; that is, it must match one of the indicators from the list of Generic Change Indicators (GCIs), be new, occur during the session, and persist over time (Krause, et al., 2007). Afterwards, using a thematic criterion, the beginning of the therapeutic interaction referring to the content of the moment of change is tracked in order to define the start of the Change Episode.

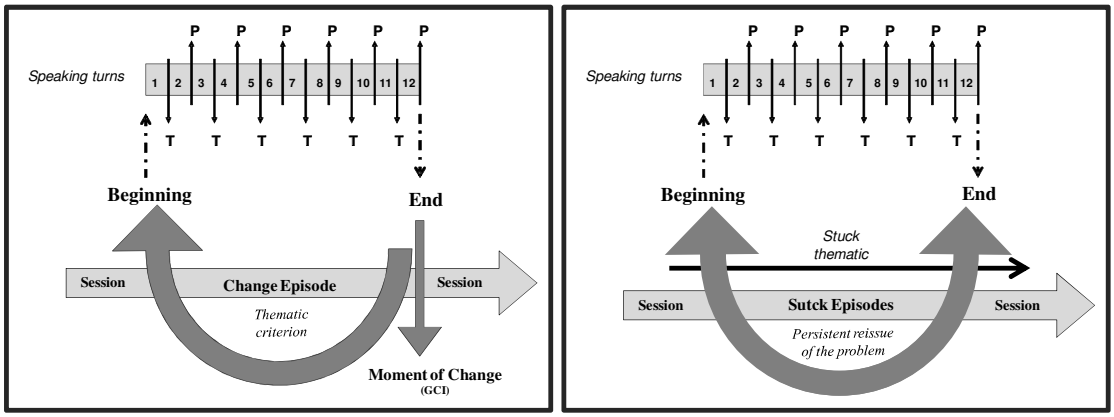

Figure III. Delimitation of Change Episodes and Stuck Episodes (Valdés, et al., 2011b).

In the case of Stuck Episodes, it was necessary to identify the existence of periods of the session in which there was a temporary halting of the patient's change process due to a reissue of the problem, that is, episodes of the session characterized by a lack of progressive construction of new meanings, or an argumentative persistence in the patient's discourse which did not contribute to the objective of change (Herrera, Fernández, Krause, Vilches, Valdés, & Dagnino, 2009). A Stuck Episode must meet the criteria of theoretical correspondence, novelty, and nonverbal consistency; that is, it must match one of the topics from the List of Stuck Moment Topics, occur during the session, and be nonverbally consistent with the topic of the Stuck Episode. In addition, Stuck Episodes must comply with the following methodological criterion: be at least three minutes long and be at least 10 minutes apart from a Change Episode in the same session. Change Episodes and Stuck Episodes were made up by patient and therapist speaking turns, which were segmented if more than one Communicative Pattern (CP) was identified (Valdés, et al., 2010b).

Configuration of Communicative Patterns (CPs). The Therapeutic Activity Coding System (TACS-1.0, Valdés, et al., 2010b) was used for manually coding patients' and therapists' verbalizations in each speaking turn segment during Change and Stuck Episodes. This system was developed to account for the complexity and multidimensionality of communicative interaction in psychotherapy, and is based on a performative view of language which considers parallel and non-inclusive dimensions of analysis that make it possible to extend this argument in terms of the notion that saying something is doing something (Arístegui, et al., 2004; Krause, et al., 2006; Reyes et al., 2008). Patient and therapist verbalizations were termed Communicative Actions, because they had the double purpose of conveying information (Contents) and exerting an influence on the other participant and the reality constructed by both (Action). Thus, the trained coders must independently code each speaking turn segment according to the five TACS-1.0 (Valdés, et al., 2010b) analysis categories: three belonging to the Action dimension and two to the Content dimension. The categories that include 22 Action codes are: Basic Form (5 codes), Communicative Intention (3 codes), and Technique (14 codes). The categories that include nine Content codes are: Domain (3 codes) and Reference (6 codes). Each coder must follow the Coding Manual developed by Krause, Valdés and Tomicic (2009, in progress).

A reliability analysis was carried out to evaluate the coders' degree of agreement about the speaking turn segments in Change and Stuck Episodes. In order to do this, 15% of the total number of segments was selected at random (N=268). SPSS 19.0 was used to calculate Cohen's Kappa for each of the five TACS-1.0 categories. The Kappa indexes obtained were: Basic Form (k=0.95, p=.00), Communicative Intention (k=0.70, p=.00), Technique (k=0.51, p=.00), Domain (k=0.73, p=.00), and Reference (k=0.79, p=.00). Therefore, the reliability of the raters' coding of both episode types ranged from average to very good.

Once all segments in both episode types were coded, the resulting code configuration of each of them was analyzed. This combination was termed Communicative Pattern (CP), and was made up by six digits which correspond to each of the TACS-1.0 categories (Valdés, et al., 2011b). The first digit corresponds to the coding of the Basic Form category, the second digit to the Communicative Intention category, the third to the Domain category, the fourth to the Reference category, and the last two to the Technique category. Each Communicative Pattern (CP) is made up by two levels separated by a hyphen (for example, CP213-101). The first level includes the first three digits and is referred to as Structural Level. This level corresponds to specific contents associated with the object of therapeutic work, which is transmitted with a certain purpose and using a certain formal structure. The second level includes the last three digits and is referred to as Articulative Level. This level specifies the Communicative Pattern (CP) used, and is associated with the participant that emits the information

(the protagonist of therapeutic work in that given moment) and with the presence or absence of any techniques (communicative or therapeutic) used by the speaker to provide support for the purpose of his/her verbalization (Communicative Intention). In other words, a Communicative Pattern (CP) can have the same characteristics at the Structural Level, but, at the same time, it can be articulated differently depending on the circumstances present in a given moment of the conversation, which does not affect its structure.

Table II. Characteristics of the Communicative Patterns (CPs) used to work on emotional contents

Communicative Patterns (CPs) and their Specific Types	Characteristics
AFFECTIVE EXPLORATION (CP213)	Communicative pattern used by patients only, regardless of the type of episode. At the Structural Level, it is characterized by the presence of the Assert basic form, and is used to convey a content, clarify it, and/or direct the other participant's attention to certain emotional contents during therapeutic conversation.
Emotional Description (CP213-100)	Specific type of the Affective Exploration pattern (PC213), used by patients to provide novel information about emotional contents that refer to themselves. At the Articulative Level, it is characterized by the absence of (communicative or therapeutic) techniques and by the use of the first person singular.
Argumentative Emotional Clarification (CP213-101) (CP213-501)	Specific type of the Affective Exploration pattern (PC213), used by patients to clarify and/or direct the conversation to certain emotional contents about themselves or their relationship with a third party. At the Articulative Level, it is characterized by the presence of the Argumentation technique, and by the use of the first person singular, third person singular, or first person plural.
AFECTIVE ATTUNEMENT (CP223)	Communicative pattern used by therapists only, regardless of the type of episode. At the Structural Level, it is characterized by the presence of the Assert basic form, and is used to show understanding, generate harmony, or provide feedback about certain emotional contents verbalized by the patients during the therapeutic conversation.
Emotional Empathy (CP223-212)	Specific type of Affective Attunement (PC223) used by therapists to mirror patients' affective states expressed by them "here and now". At the Articulative Level, it is characterized by the absence of the Reflection technique and by the use of the second person singular.
AFFECTIVE RESIGNIFICATION (CP233)	Communicative Pattern used by patients and therapists during Change Episodes, and only by therapists during Stuck Episodes. At the Structural Level, it is characterized by the presence of the Assert basic form, and is used to co-construct and/or consolidate new meanings for certain emotional contents during therapeutic conversation.
Emotional Self-resignification (CP233-100)	Specific type of the Affective Resignification pattern (PC233), used exclusively by patients to co-construct new meanings for certain emotional contents about themselves. At the Articulative Level, it is characterized by the absence of (communicative or therapeutic) techniques and by the use of the first person singular.
Argumentative Emotional Self-resignification (CP233-101)	Specific type of the Affective Resignification pattern (PC233), used exclusively by patients to co-construct new meanings for certain emotional contents about themselves. At the Articulative Level, it is characterized by use of the Argumentation technique and the first person singular.
Emotional Resignification (CP233-200)	Specific type of the Affective Resignification pattern (PC233), used exclusively by therapists to co-construct new meanings for certain emotional contents about the other person present (patients). At the Articulative Level, it is characterized by the absence of (communicative or therapeutic) techniques and by the use of the second person singular.
Argumentative Emotional Resignification (CP233-201)	Specific type of the Affective Resignification pattern (PC233), used exclusively by therapists to co-construct new meanings for certain emotional contents about the other person present (patients). At the Articulative Level, it is characterized by use of the Argumentation technique and the second person singular.
Interpretative Emotional Resignification (CP233-207)	Specific type of the Affective Resignification pattern (PC233), used exclusively by therapists to co-construct new meanings for certain emotional contents about the other person present (patients). At the Articulative Level, it is characterized by use of the Interpretation technique and the second person singular.
Transferential Emotional Resignification (CP233-407)	Specific type of the Affective Resignification pattern (PC233), used exclusively by therapists to co-construct new meanings for certain emotional contents about the therapeutic relationship. At the Articulative Level, it is characterized by the presence of the Interpretation technique and the first person plural, or by the use of first and second person singular during the same speaking turn.

Note . Communicative Patterns (CPs) with theris respective definitions are a result of previous studies (Valdés, et al., 2011b)

Table II presents the main Communicative Patterns (CPs) used by patients and therapists to work on emotional contents during Change Episodes, along with their specific types at the Articulative Level. The characteristics mentioned for each Communicative Pattern (CP) are the result of previous studies which are still unpublished (Valdés, et al., 2011b).

Data analysis involved two successive stages. The first stage consisted in the application of the Chi Square test (χ^2) in order to establish whether there was an association between the different patterns, the stage of the episode, and the phase of the therapy. The second stage involved calculating the *Z-ratio* to compare independent proportions, and estimating 95% Confidence Intervals (CI) when the value of *Z* could not be estimated. Logistic Regression was used to detect the variables which best predict the use of each Communicative Pattern (CP).

Results

The results of this study will be presented in two parts: the first referring to the characteristics of verbal emotional expression within Change Episodes, and the second to the characteristics of verbal emotional expression throughout the phases of the psychotherapeutic process.

Characteristics of verbal emotional expression within Change Episodes

In the first part of the study, each Change and Stuck Episode was divided into three stages as similar as possible, depending on the total number of speaking turn segments present in each episode. Given that the objective of the study was to determine the characteristics of the Communicative Patterns (CPs) used as the Change Episode progressed, what occurred at the beginning of the episode was compared with what happened at the end, but also considering the therapeutic stage[11]. Therefore, the analysis involved 64 speaking turn segments from the initial stage of Change Episodes belonging to the initial, middle, and final phases of the therapy (24, 21, and 19, respectively), and 39 speaking turn segments from the final stage of Change Episodes belonging to the initial, middle, and final phases of the therapy (16, 15, and 8, respectively). No association was observed between the stage of the episode and the therapeutic phase, thus, the participants' work on emotional contents during Change Episodes was performed at the beginning and at the end of the episodes in a similar proportion, regardless of the therapeutic phase. Nevertheless, in the last third of the therapy, work on emotional contents was more frequent in the initial stage of Change Episodes. In the case of Stuck Episodes, the analysis involved

[11] Both therapeutic processes (A and B) were also divided into three thirds, depending on their total number of sessions: initial stage, middle stage, and final stage.

27 speaking turn segments from the initial stage of episodes belonging to the initial, middle, and final phases of the therapy (1, 19, and 17, respectively), and 17 speaking turn segments from the final stage of episodes belonging to the initial, middle, and final phases of the therapy (1, 8, and 8, respectively). No association was observed between the stage of the episode and the therapeutic phase; however, in the middle phase of the therapy, work on emotional contents was more frequent in the initial stage of Stuck Episodes.

When the Change Episodes were analyzed, regardless of the participant's role (patient or therapist), no association was found between the stage of the episode and the type of Communicative Pattern (PC) used to work on emotional contents; likewise, no association was observed between said patterns and the participant's role. Nevertheless, certain significant differences were observed within each of the stages of the Change Episodes (see Table III).

Table III. Distribution of Communicative Patterns (CPs) within the episode

Communicative Patterns (CPs)	Stages of the Change Episode			Stages of the Stuck Episode		
	Initial	Final	Total (*f*)	Initial	Final	Total (*f*)
Patients						
Affective Exploration	68.75 (22)	45.45 (10)	32	100.00 (14)	100.00 (11)	25
Affective Attunement						
Affective Resignification	31.25 (10)	54.55 (12)	22			
Therapists						
Affective Exploration						
Affective Attunement	28.13 (9)	17.65 (3)	12	23.08 (3)	0.00 (0)	3
Affective Resignification	71.87 (23)	82.35 (14)	37	76.92 (10)	100.00 (6)	16
Total (*f*)	64	39	103	27	17	44

Note. The scores are expressed as a percentages (%) with their respective frequencies in parentheses. The totals are expressed as frequencies (*f*).

During the initial stage of the episodes, the patients verbalized a larger proportion of Affective Explorations[12], compared with the proportion of Affective Resignifications performed during this stage Z=3.000, p=.00. On the other hand, the therapists verbalized a larger proportion of Affective Resignifications compared with the proportion of Affective Attunement shown to their patients Z=3.500, p=.00, and also compared with the Affective Resignifications used by the patients during this stage Z=3.252, p=.00. During the final stage of Change Episodes, in contrast with the initial stage, the patients performed a similar proportion of Affective Explorations and Affective Resignifications; also,

[12] For presenting the results, the Communicative Patterns used for working on emotional contents (Affective Exploration, Affective Attunement, and Affective Resignification) will be underlined, while their specific types will be *italicized*.

the Affective Resignifications performed by the therapists continued to be 64.71% [95% CI =31.64 - 80.91] more frequent than the Affective Attunement shown to their patients. There were no significant differences between patients' and therapists' use of Affective Resignifications during this stage of the episode. The same analysis, when applied to Stuck Episodes, was even less effective at establishing an association between the stage of the episode and the Communicative Patterns (CPs) used due to their absence or low frequency during these episodes. As Table III shows, there were no significant differences between the initial and the final stages of Stuck Episodes in terms of the proportion of Affective Explorations performed by the patients. This Communicative Pattern (CP) was the only one used by the patients to work on emotional contents, and did not display any variations in proportion during Stuck Episodes. During Stuck Episodes, like during Change Episodes, the therapists focused on the co-construction of new meanings for certain emotional contents, but there was no collaborative work leading to change.

Finally, a comparison of both episode types in terms of the proportion of Communicative Patterns (CPs) in both stages of the episode revealed that the Affective Explorations performed by the patients were 31.25% [95% CI =5.94 - 48.57] and 54.55% [95% CI =21.91 - 73.08] more frequent during the initial and final stages of Stuck Episodes, respectively; also, the patients not only performed Affective Resignifications exclusively during Change Episodes, but did so in similar percentages during both stages of the episode, and with a tendency to increase during the final stage. The therapists performed practically the same resignification work during the different stages of both episode types.

Table IV. Distribution of Change and Stuck Episodes by therapeutic phase

	Phases of the Psychotherapeutic Process			
	Initial	Middle	Final	Total
Therapy A				
Number of sessions	6	6	6	18
+ Change Episodes (CE)	35.71 (5)	28.57 (4)	35.71 (5)	14
+ Stuck Episodes (SE)	0.00 (0)	57.14 (4)	42.86 (3)	7
Therapy B				
Number of sessions	7	7	7	21
+ Change Episodes (CE)	33.33 (8)	41.67 (10)	25.00 (6)	24
+ Stuck Episodes (SE) †	33.33 (4)	8.33 (1)	58.33 (7)	12

† Greater proportion of Stuck Episodes during the middle phase of Therapy A, [95% IC =6.83 - 76.70], $p < .05$ (A=57.14% and B=8.33%).

Characteristics of verbal emotional expression throughout the therapeutic process

The second part of the study was aimed at analyzing the distribution of the Communicative Patterns (CPs) used to work on emotional contents during the different phases of the therapeutic process. In

order to do this, each therapy was divided into three phases, depending on their total number of sessions. Thus, the initial phase was made up by 13 Change Episodes (A=5; B=8), the middle phase, by 14 Change Episodes (A=4; B=10), and the final phase, by 11 Change Episodes (A=5; B=6). No significant differences were observed in the proportion of Change Episodes present in the two therapies or within each phase. Therefore, the distribution of Change Episodes was also homogeneous. Regarding the distribution of Stuck Episodes, a significant difference was only present during the middle phase of both therapies, which was taken into account when performing the analyses below (see Table IV).

The analysis of the behavior of Communicative Patterns (CPs) throughout the therapeutic process, regardless of the participant's role, revealed an association between the Communicative Patterns (CPs) used to work on emotional contents during Change Episodes and the therapeutic phase [χ^2 (4, N=161) =10.201, p=.04], which means that there was a larger proportion of Affective Explorations during the initial phase of the therapeutic process and a larger proportion of Affective Resignifications during its final phase. No associations were observed between the Affective Attunement displayed and the phase of the therapy (see Table V). In other words, the start of the therapeutic process was mainly characterized by the purveyance of novel information, the clarification of some points, and/or the focalization of the conversation on certain emotional contents (Affective Exploration), whereas its final phase was characterized by the co-construction and/or consolidation of new meanings associated with certain emotional contents (Affective Resignification). The participants showed understanding, generated harmony, or provided feedback about emotional contents (Affective Attunement) regardless of the therapeutic phase.

Table V. Distribution of Communicative Patterns (CPs) by therapeutic phase and episode type

Communicative Patterns (CPs)	Change Episodes				Stuck Episodes			
	Phases of the Psychoterapeutic Process				Phases of the Psychotherapeutic Process			
	Initial	Middle	Final	Total (*f*)	Initial	Middle	Final	Total (*f*)
Affective Exploration (CP_{213})	33.33 (21)	28.85 (15)	13.04 (6)	42	75.00 (3)	54.05 (20)	60.00 (12)	35
Affective Attunement (CP_{223})	17.46 (11)	9.61 (5)	8.70 (4)	20	0.00 (0)	5.41 (2)	5.00 (1)	3
Affective Resignification (CP_{233})	48.39 (30)	62.26 (33)	78.26 (36)	99	25.00 (1)	40.54 (15)	35.00 (7)	23
Total (*f*)	62	53	46	161	4	37	20	61

Note. The scores are expressed as a percentages (%) with their respective frequencies in parentheses. The totals are expressed in frequencies (*f*).

A comparison of both episodes regardless of the participant's role revealed a larger proportion of Affective Resignifications during Change Episodes, Z=1.956, p=.05 (CE=61.54%, SE=40.54%), and a larger proportion of Affective Explorations during Stuck Episodes, Z=2.399, p=.02 (SE=54.05%,

CE=28.85%). This situation remained constant when comparing both episode types in the final phase, which again displayed a larger proportion of Affective Explorations during Stuck Episodes, *Z*=3.936, *p*<.00 (SE=60.00%, CE=13.04%) and a larger proportion of Affective Resignifications during Change Episodes, *Z*=3.390, *p*=.00 (CE=78.26%, SE=35.00%).

Evolution of CPs throughout the Therapeutic Process, by Role. Assuming the existence of an association between the Communicative Patterns (CPs) used to work on emotional contents during Change Episodes and the therapeutic phase, the next step was to analyze the distribution of the frequency of such patterns within each phase of the therapeutic process, but considering the participant's role.

Initial phase of the process. In this phase, statistically significant differences were observed in the proportion of Affective Explorations and Affective Resignifications performed by the patients, *Z*=3.098, *p*=.002 (CP213=70.00%, CP233=30.00%), as well as in the proportion of Affective Attunement and Affective Resignifications performed by the therapists, *Z*=2.708, *p*=.01 (CP233=66.67%, CP223=33.33%). The proportion of Affective Resignifications performed by the therapists in the initial phase of the therapy was higher in comparison with the patients, *Z*=2.907, *p*=.00 (T=66.67%, P=30.00%) (see Figure IV).

Middle phase of the process. In contrast with the previous phase, no significant differences were observed in the proportion of Affective Explorations and Affective Resignifications performed by the patients, however, significant differences remained in the proportion of Affective Attunement and Affective Resignifications performed by the therapists, *Z*=3.618, *p*=.00 (CP233=77.27%, CP223=22.73%). In the middle phase, most Affective Resignifications were still performed by the therapists Z=1.997, *p*=.05 (T=77.27%; P=50.00%) (see Figure IV).

Final phase of the process. During this phase, significant differences were again observed in the proportion of Affective Explorations and Affective Resignifications performed by the patients *Z*=2.271, *p*=.02 (CP233=68.42% and CP213=31.58%); also, the proportion of Affective Resignifications by the therapists continued to be 70.37% [95% CI =45.39 - 82.96] more frequent in comparison with the Affective Attunement displayed in this phase. During the final phase, there was a 16.76% difference [95% CI = -7.21 - 40.88] between the proportion of Affective Resignifications by the patients and the therapists (T=85.19%, P=68.42%); however, this difference was shown to be non significant (see Figure IV).

Comparison between the phases. A comparison of the phases of the therapeutic process revealed significant differences in the proportion of the Communicative Patterns (CPs) used by the patients during Change Episodes: compared with the initial phase of the therapy, the patients performed fewer Affective Explorations Z=2.635, p=.01 (70.00%, 31.58%) and a larger proportion of Affective Resignifications Z=2.635, p=.01 (68.42%, 30.00%) during the final phase of the therapy; on the other hand, there were no significant differences in the Communicative Patterns (CPs) used by the therapists to work on emotional contents during the different phases of the psychotherapeutic process.

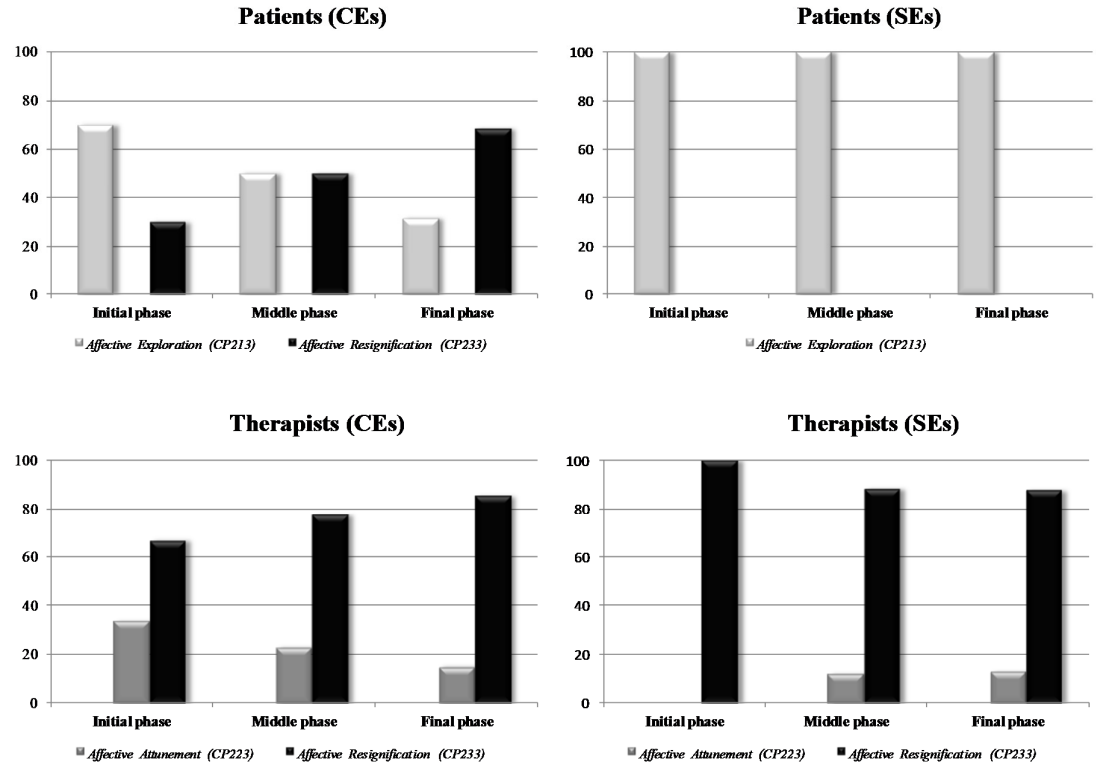

Figure IV. Distribution of the Communicative Patterns (CPs) used to work on emotional contents, by role and episode type.

Comparison between episode types. As previously mentioned, due to the low frequency of some Communicative Patterns (CPs) during the Stuck Episodes contained in some phases of the therapeutic process (f<5), it was not possible to observe an association between such patterns and the phase of the therapy. Therefore, it was only possible to analyze the proportion of Affective Exploration and Affective Resignification when comparing the initial and the final phase of the process. Unlike in Change Episodes, there were no significant differences between the middle and the final phase of the therapy in terms of the proportion of Affective Exploration performed by the patients, nor in the case of the Affective Resignification performed by the therapists. In other words, no changes were observed in the Communicative Patterns (CPs) used by the patients during Stuck Episodes: their work

throughout the phases of the process was limited to providing information, clarifying points, or steering the conversation towards other emotional contents (Affective Exploration), while the therapists performed the same resignification work that they did during Change Episodes, only without the corresponding resignification response by the patients.

Evolution of specific CP types throughout the process. Based on the assumption that there are significant differences in the proportion of certain Communicative Patterns (CPs) during Change Episodes in the three phases of the therapy, the study focused on the analysis of the proportion of specific CPs types, considering the participant's role.

Initial phase of the process. During this phase, the patients performed a similar proportion of *Emotional Descriptions* and *Argumentative Emotional Clarifications*, along with a similar proportion of *Emotional Self-resignifications* and *Argumentative Emotional Self-resignifications* (see Figure V). However, the latter pattern was used by the patients 26.66% [95% CI =6.33 - 45.19] less than *Argumentative Emotional Clarifications*, which constitutes a significant difference. On the other hand, the therapists displayed *Emotional Empathy* and performed *Argumentative Emotional Resignifications* and *Interpretative Emotional Resignifications* in a similar proportion. During the initial phase, in the case of the therapists, *Interpretative Emotional Resignifications* were: 33.33% [95% CI =14.57 - 50.54] more frequent than *Transferential Emotional Resignifications*; 30.30% [95% CI =10.70 - 47.88] more frequent than *Emotional Resignifications*; and 24.24% [95% CI =3.45 - 42.76] more frequent than *Argumentative Emotional Resignifications*, all of which constitute significant differences. A comparison of the sum of the specific types CP233-100 and CP233-101 used by the patients with the sum of the specific types CP233-200 and CP233-201 used by the therapists did not reveal significant differences between the participants during the initial phase; however, some differences were observed when including the *Interpretative Emotional Resignifications* performed by the therapists, Z=2.820, p=.00 (T=54.55%, P=20.00%) (see Figure V).

Middle phase of the process. During this phase, the patients performed *Emotional Descriptions*, *Argumentative Emotional Clarifications*, *Emotional Self-resignifications*, and *Argumentative Emotional Self-resignifications* in a similar proportion; whereas the therapists displayed *Emotional Empathy* and used specific types to resignify emotional contents in a similar proportion (see Figure V). During the middle phase, the proportion of *Transferential Emotional Resignifications* performed by the therapists was 22.72% [95% CI =0.43 - 43.94] less frequent than the proportion of *Interpretative Emotional Resignifications*, which constitutes a significant difference. A comparison of the sum of the

specific types CP233-100 and CP233-101 used by the patients with the sum of the specific types CP233-200 and CP233-201 used by the therapists did not reveal significant differences between the participants during the middle phase, even when including the *Interpretative Emotional Resignifications* performed by the therapists.

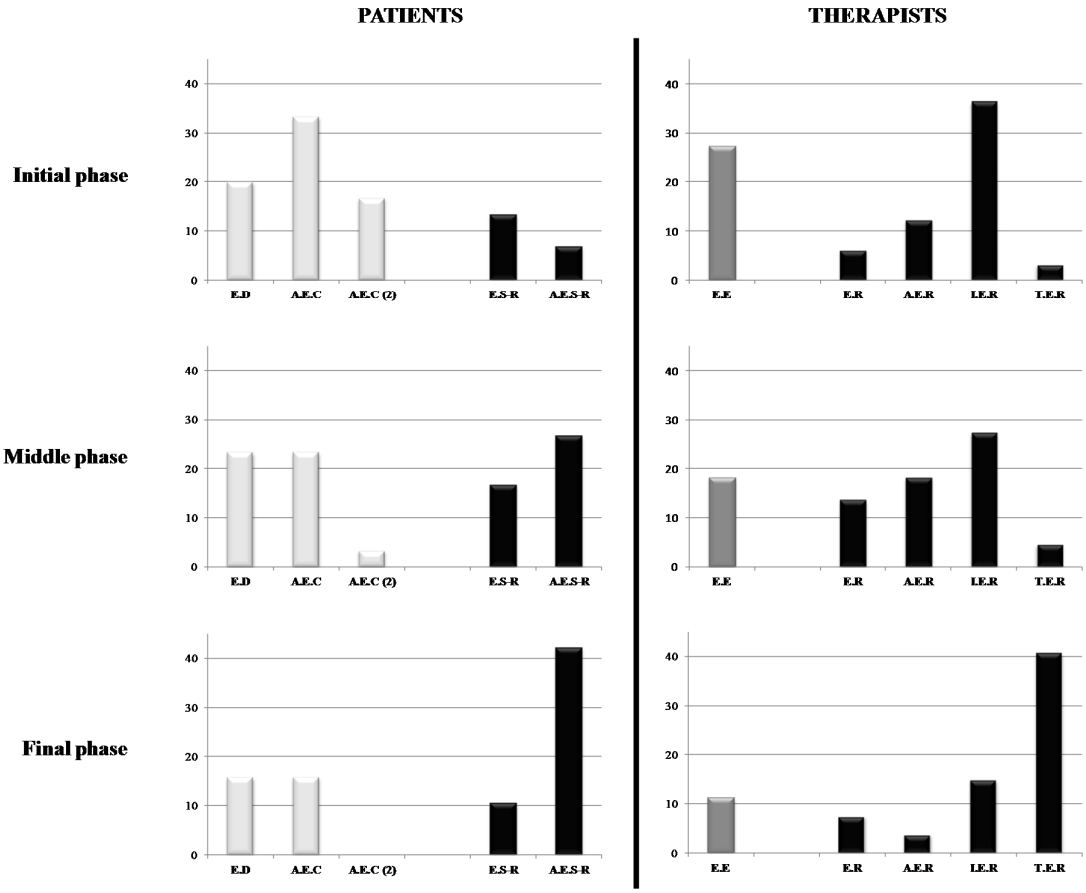

Figure V. Distribution of the specific Communicative Patterns (CPs) types used to work on emotional contents during Change Episodes: ED=*Emotional Description*; AEC=*Argumentative Emotional Clarification* about the patients themselves; $AEC_{(2)}$=*Argumentative Emotional Clarification* about the relationship with another person; ES-R=*Emotional Self-resignification*; AES-R=*Argumentative Emotional Self-resignification*; EE=*Emotional Empathy*; ER=*Emotional Resignification*; AER=*Argumentative Emotional Resignification*; IER=*Interpretative Emotional Resignification*; and TER=*Transferential Emotional Resignification*.

Final phase of the process. During this phase, the patients performed *Emotional Descriptions* and *Argumentative Emotional Clarifications* in a similar proportion, however, in contrast with previous phases, the *Argumentative Emotional Self-resignfications* performed by the patients during this phase were 31.58% [95% CI =3.38 - 54.49] more frequent than *Emotional Self-resignifications* (see Figure V). Although the therapists displayed *Emotional Empathy*, they did so 29.63% [95% CI =6.17 - 49.53]

less frequently than they performed *Transferential Emotional Resignifications*, which in turn were 25.93% [95% CI =1.94 - 46.48] more frequent than *Interpretative Emotional Resignifications.*

One of the most interesting findings resulting from this study was the fact that, during the final phase, the resignification work performed by the patients using the specific types CP233-100 and CP233-101 jointly, was 41.52% [95% CI =14.59 - 62.83] more frequent than the therapists' work using the specific types CP233-200 and CP233-201 jointly, which constitutes a significant difference. These differences between the participants only disappeared when including the proportion of *Interpretative Emotional Resignifications* performed by the therapists as part of their resignification work.

Comparison between the phases. In comparison with the initial phase of the process, the *Argumentative Emotional Self-resignifications* performed by the patients were 20.00% [95% CI =0.75 - 38.42] more frequent during the middle phase. Although no significant differences were observed between the middle and the final phases in this aspect, the *Argumentative Emotional Resignifications* performed by the patients were 35.44% [95% CI =11.47 - 57.59] more frequent during the final phase than in the initial phase. On the other hand, the *Transferential Emotional Resignifications* performed by the therapists during the final phase of the process were 36.19% [95% CI =12.51 - 55.10] more frequent than during the middle phase, and 37.71% [95% CI =17.36 - 56.41] more frequent than in the initial phase, while the rest of the specific Communicative Pattern (CP) types maintained a similar proportion during all phases of the psychotherapeutic process. The *Transferential Emotional Resignifications* performed by the therapists during Stuck Episodes were 30.74% [95% CI =5.83 - 54.45] more frequent during the middle phase of the process.

Finally, a logistic regression analysis was conducted to predict the appearance of each of the Communicative Pattern (PC) types used to work on emotional contents during the therapeutic conversation, considering the following variables: episode type, role of the participant, and therapeutic phase. When predicting the Affective Exploration pattern, the logistic regression model yielded a correct estimate [χ^2 (4, N=222) =184.65, p<.00] of 86.50% of cases; thus, it entered the equation as the only variable with predictive value in the initial phase of the therapy (Wald= 6.527, p<.05). Once controlling for the effects of the variables present in the equation, it is less likely that in the final phase the participants provide information, clarify a point, and/or steer the focus of the conversation towards certain emotional contents (Affective Exploration) compared to the initial phase. Regarding the prediction of the Affective Attunement pattern, the logistic regression model yielded a correct estimate [χ^2 (4, N=222) =40.938, p<.00] of 89.60% of cases, and so no variables that predicted the action of showing understanding, generating harmony, and/or providing feedback about certain emotional

contents (Affective Attunement) were included in the equation. For the prediction of the Affective Resignification pattern, the logistic regression model yielded a correct estimate [χ^2 (4, N=222) =69.248, p<.00] of 75.70% of cases, and thus the following variables entered the equation as predictors: the middle phase of the therapy (Wald= 5.850, p<.05), the final phase of the therapy (Wald= 8.819, p<.01), Change Episodes (Wald= 13.304, p<.00), and the therapist's role (Wald= 42.332, p<.00). Therefore, after controlling for the effects of the variables included in the equation, it is more likely that the participants construct new meanings for certain emotional contents (Affective Resignification) in the middle and final phases than in the initial phase; in addition, the therapists are more likely to perform this resignification during Change Episodes.

Conclusions

Communicative Actions are a relevant element in the psychotherapeutic process, because they make it possible to characterize the verbalizations of patients and therapists during therapeutic dialog (Valdés, et al., 2011b). These actions are directly related with the object of therapeutic work, and do not only convey contents when speaking, but also construct a new reality upon the basis of language (Reyes, et. al., 2008; Vetlesen, 1994). Each of the speakers' verbalizations is characterized by the following dimensions: a formal structure, a purpose, a specific type of contents, a protagonist of therapeutic work, and the presence or absence of communicative or therapeutic techniques used to support the speaker's communicative intention (Valdés, et al., 2011b). Therefore, verbalizations acquire a specific configuration with certain characteristics which depend on the way in which all these dimensions fit together during the speaking turns of each of the participants of therapeutic dialog. Such configurations are termed Communicative Patterns (CPs), and are used by patients and therapists to work on various contents and influence each other during the conversation (Valdés, et al., 2011b).

Previous studies have shown that Communicative Patterns (CPs), depending on their structural and articulative levels, make it possible to characterize the verbal expression of patients and therapists, associated with therapeutic work on emotional contents (Valdés, et al., 2011b). They have also helped to establish similarities and differences between Change and Stuck Episodes, and to identify temporal interaction sequences between Communicative Patterns (CPs), depending on the type of episode and the participant's role (Valdés, et al., 2011b). On the other hand, psychotherapy, in any of its forms, is understood as a process involving a series of phases characterized by the need to attain specific objectives, based on actions conducted by both participants of the therapeutic dialog. One of the methodological problems of previous studies is their approach: studying the therapeutic process as a whole, instead of breaking it up into stags (Goates-Jones, Hill, Stahl, & Doschek, 2009). In this regard,

the present study not only provides a novel analysis methodology, but also makes it possible to identify similarities and differences in the behavior of Communicative Patterns (CPs) in Change and Stuck Episodes, and throughout the phases of the psychotherapeutic process.

The results of the first part of the study suggest the presence of significant differences within Change Episodes, in terms of the Communicative Patterns (CPs) used by patients and therapists to work on emotional contents. The initial stage of Change Episodes was characterized by the construction of new meanings for certain emotional contents (Affective Resignification), mostly performed by the therapists, whereas the patients focused on providing information, clarifying points, and and/or steering the conversation towards certain emotional contents verbalized in the conversation (Affective Exploration); on the other hand, in the final stage of Change Episodes, the patients also provided information or clarified points about certain emotional contents, but while they co-constructed new meanings for such contents (Affective Resignification), thus collaborating with the resignification work conducted by the therapists from the beginning of the episode. The behavior of Communicative Patterns (CPs) was different during Stuck Episodes: the patients provided information, clarified certain points, and focused the conversation on certain contents (Affective Exploration) throughout the episode; in contrast, the therapists worked on the resignification of emotional contents, but without a collaborative response by the patients. Therefore, regardless of the episode type, the therapists constantly provided alternative ways of understanding emotional contents; however, it was only during Change Episodes that the patients displayed a collaborative response, which appeared to increase as such episodes progressed. This is consistent with previous studies, which mention the existence of moments which are more beneficial than others therapeutically speaking (Elliott, 1985; Krause, et al., 2007; Martin & Stelmaczonek, 1988; Timulak, 2007), during which patients become more aware of their life experiences and therefore attain a deeper knowledge of themselves; in contrast, there exist less beneficial moments, conceptualized as hindering events (Grafanaki & McLeod, 1999; Herrera, et al., 2009), during which no new meanings are constructed by the patient in his/her interaction with the therapist. In this regard, it can be said that during Change Episodes, therapeutic work led to the emergence of a change moment in the patients, and that during such episodes the participants jointly used Affective Resignification in order to co-construct new meanings associated with such change moment.

The second part of the study was aimed at determining how these Communicative Patterns (CPs) behaved during the phases of the therapeutic process, which were defined based on a temporal criterion, depending on the total number of sessions of each therapy. The analysis of such patterns during Change Episodes, regardless of the participant's role, resulted in the conclusion that the initial phase of the therapeutic process was mainly characterized by Affective Exploration work, whereas the

final phase was characterized by Affective Resignification. This is consistent with Elliott and Shapiro (1992), who state that episodes in the session are windows into the therapeutic process, as Communicative Patterns (CPs) had roughly the same behavior within Change Episodes. However, when analyzing the patterns during Stuck Episodes, regardless of the participant's role, no association was observed between them and the phase of the therapy, which can be partly explained by the absence or low frequency (f<5) of some patterns in all phases of the therapeutic process, which may have resulted from the number of Stuck Episodes in comparison with Change Episodes. However, it may be regarded as a result in itself that there were no changes in the behavior of Communicative Patterns (PCs) within Stuck Episodes.

Based on the results obtained, the next step was to analyze the distribution of Communicative Patterns (CPs) within the phases of the psychotherapeutic process, but considering the participants' role. During the initial phase of the therapy, therapeutic activity was characterized by the patients' use of Affective Exploration, through the purveyance of novel information about certain emotional contents (*emotional descriptions*), but mainly by using generalizations or justifications to clarify a point or focus the conversation on certain emotional contents about themselves (*argumentative emotional clarifications*). Likewise, it was significant that both participants performed Affective Resignifications to construct new meanings for the emotional contents verbalized, which could be interpreted as a higher response level reached by the patients (Beutler, Clarkin, & Bongar, 2000; Kernberg, Yeomans, Clarkin, & Levy, 2008) during the resignification work carried out during Change Episodes. It seems that a therapist's degree of directiveness, that is, how active he/she is during the therapeutic process, is moderated by the patient's response or resistance to his/her influences (Beutler & Clarkin, 1990; Beutler, et al., 1991). In this regard, less directive interventions are associated with better outcomes if they are performed in the moments when patients resist external influence, while more directive ones have a stronger impact when patients are open to be influenced by the other (Beutler & Clarkin, 1990). It is likely that, during Change Episodes, the therapists' discourse was perceived by the patients as a source of possibilities to attain insight or new perspectives, which were accepted without displaying resistance to change (Knox, Hess, Petersen, & Hill, 1997). Even more so, this resignification work was often performed based on meanings proposed by the patients themselves during the conversation (*emotional self-resignifications* and *argumentative emotional self-resignifications*), and by the therapists (*argumentative emotional resignifications* and *interpretative emotional resignifications*) considering all the information provided by the patients. It must be mentioned that, although resignification work was conducted by both participants, it was dominated by the therapists during the initial phase of the process, as they often provided new meanings based on how they understood the information given by the patients (*interpretative emotional resignifications*),

compared to their use of arguments, examples, generalizations, or justifications taken from the patients' discourse to consolidate a new meaning (*argumentative emotional resignifications*). The therapists' resignification was associated with the establishment of hypotheses formulated upon the basis of certain aspects of the patients' history which the patients had not yet taken into account; therefore, in order to perform this therapeutic action, the therapists needed to have as much clarity as possible about the information provided by the patients. Another important finding was that, during the initial phase, the therapists provided very few meanings for emotional contents about the therapeutic relationship (*transferential emotional resignifications*). It must be stressed that the therapists interpreted transference using one of the most active interventions for achieving long-term changes in the psychodynamic model (Gabbard & Westen, 2003). Patient-therapist interaction is strongly influenced by the patient's past relationships and his/her affective experiences, therefore, focusing on the conflicts and issues which emerge in the therapeutic relationship can have an immediate affective resonance which reflects the nature of the patient's relational problems outside the therapy. Considering this, it may be that using this type of intervention excessively, or too soon, may increase the patients' anxiety (Piper, Azim, Joyce, & McCallum, 1991), so that only patients with more extensive psychological resources or more mature relationships may benefit from such interventions in short psychotherapies (Gabbard, 2006). It is not surprising, then, that in the therapies analyzed the proportion of *transferential emotional resignifications* was lower at the beginning of the therapy, and that therapists focused on the resignification of the patients' relationships outside the therapy (Frances & Perry, 1983; Høglend, 2003). It is also noteworthy that mirroring the patients' affective states "here and now", in order to show understanding, generate harmony, and/or provide feedback about certain emotional contents (*emotional empathy*) was another of the interventions favored by the therapists, at a level similar to that of the *argumentative emotional resignifications* and *interpretative emotional resignifications* carried out during this phase. This result confirms the suggestions of Wiser and Goldfried (1998) that patients maintain a high level of therapeutic work when the therapists use the Reflection technique, and that therapists need empathy to facilitate patients' work during the therapy (Sachse & Elliott, 2002).

The middle phase of the therapeutic process was again characterized by the patients' use of the Affective Exploration pattern, through the purveyance of novel information about certain emotional contents referencing themselves (*emotional descriptions*); however, this time, they used it in a similar proportion as *argumentative emotional clarifications* (generalizations or justifications to clarify a point or focus the conversation on certain emotional contents about themselves). During this phase, both participants continued using the Affective Resignification pattern, through the purveyance of new meanings proposed by the patients during the conversation (*emotional self-resignifications* and *argumentative emotional self-resignifications*), and of new meanings proposed by the therapists based

on the information given by the patients (*argumentative emotional resignifications* and *interpretative emotional resignifications*). During the middle phase of the therapy, although resignification work was still conducted jointly by the patients and the therapists, it was still dominated by the latter, due to the proportion of *interpretative emotional resignifications* that they used; however, the main difference with the initial phase was that the patients carried out exploration and resignification work simultaneously during the middle phase. On the other hand, the therapists continued co-constructing new meanings for certain emotional contents (*interpretative emotional resignification*) and consolidating such meanings (*argumentative emotional resignification*) while at the same time showing understanding and/or providing feedback to their patients about such contents (*emotional empathy*). Again, the ascription of new meanings to emotional contents about the therapeutic relationship *transferential emotional resignifications*) remained low, and its frequency was smaller than that of the *interpretative emotional resignifications* performed by the therapists.

The main characteristic of the final therapeutic phase was the co-construction of new meanings for emotional contents verbalized during the conversation (Affective Resignification), which, in addition to being performed by the patients and the therapists together, was used in a similar proportion by both participants, in contrast with previous phases in which said activity had mostly been conducted by the therapists. During the final phase, the patients continued performing *emotional descriptions* and *argumentative emotional clarifications* in a similar proportion, however, unlike in previous phases, patients were more likely to consolidate meanings (*argumentative emotional self-resignifications*). Although the therapists continued to display *emotional empathy* during the final phase, they did so with a lower frequency compared to their co-construction of new meanings for emotional contents about the therapeutic relationship (*transferential emotional resignifications*). The latter actions were performed more frequently than *interpretative emotional resignifications*, which had been predominant up to that point. These changes in transference may suggest that the termination of therapy could be an appropriate decision, in the sense that the patients may have displayed less resistance during the *transferential emotional resignifications* performed by the therapists (Novick, 1997). Even when not considering the *interpretative emotional resignifications* performed by the therapists during the final phase, the patients' resignification work (*emotional self-resignifications* and *argumentative emotional re-significations*) was more extensive than that carried out by the therapists (*emotional resignifications* and *argumentative emotional resignifications*). It is interesting to observe that the therapists' use of Affective Attunement decreased towards the end of the process, which suggests the question of whether the more frequent presence of this pattern in the initial phase reflected the therapists' interest that their patients performed more therapeutic work --so that after achieving the necessary level of activity-- the therapists diminished their use of it.

A comparison of the phases of the therapeutic process led to the identification of three important findings: (a) in comparison with the initial phase, the patients used the Affective Exploration pattern less frequently in the final phase, which was manifested through a decrease of *emotional descriptions* and *argumentative emotional clarifications*; (b) in comparison with the initial phase, the patients used the Affective Resignification pattern mores frequently during the final phase, which was observable through an increase in *argumentative emotional self-resignifications* from the middle phase onwards; and (c) although no significant differences were observed in the Communicative Patterns (CPs) used by the therapists to work on emotional contents during the phases of the therapeutic process, *transferential emotional resignifications* were used more often in the final phase than in the initial and middle ones, which may reflect an increase in the patients' comprehension (Sachse, 1992; Sachse & Elliott, 2002).

The analysis of the distribution of Communicative Patterns (CPs) within Stuck Episodes according to the phase of the therapy did not reveal any associations between such patterns and therapeutic phases. Although this situation may be due to the low frequency of such patterns during these episodes, which could be regarded as a result in itself, it is mostly connected with the absence of Affective Resignifications by the patients. A hypothesis for future studies may be that, during Stuck Episodes, certain Communicative Patterns (CPs) appear that make it possible to work on other contents, such as cognitive ones. In view of this situation, Stuck Episodes were described in terms of the Affective Explorations performed by the patients, and the Affective Resignifications conducted by the therapists during the middle and final phases of the process. Stuck Episodes in the middle and the final phases of the therapy, as opposed to Change Episodes, displayed a similar proportion of Affective Explorations by the patients, and a similar proportion of Affective Resignifications by the therapists. It seems that there are moments in the therapy in which patients feel satisfied with their therapists' interpretations (Hill, Rochlen, Zack, McCready, & Dematatis, 2003) and decide to participate in the co-construction of new meanings, although there are others when they feel less happy with them. In this regard, it may be thought that the therapists' use of the Affective Resignification pattern by the therapists could in fact be more efficient depending on the moment of the session, that is, whether it is applied during a Change or a Stuck Episode.

A comparison of both episode types revealed that: (a) in Change Episodes, the patients performed Affective Explorations and Affective Resignifications in different proportions depending on the therapeutic phase, while in Stuck Episodes they provided information, clarified points, or steered the conversation towards certain emotional contents (Affective Exploration); (b) the therapists used the same resignification patterns in both episode types, however, Change Episodes were characterized by the exclusive presence of *argumentative emotional resignifications*, which were also used by the

patients in these episodes, and which was interpreted as a way of creating a link between the new meanings acquired in the therapeutic context with the patients' direct extratherapeutic context; and (c) while Change Episodes from the final phase were characterized by a higher proportion of *transferential emotional resignifications*, Stuck Episodes from this phase displayed a higher proportion of *interpretative emotional resignifications*.

The present study showed that Affective Exploration and Affective Resignification are not phases of the process as proposed by Hill (2004), but Communicative Patterns performed throughout the therapy by one or both participants of the therapeutic conversation. In other words, it is possible to observe exploration work carried out by the patients both at the beginning and at the end of the therapy, along with resignification by the therapists during the whole process. In this regard, the patients will always have novel information to provide during the therapeutic conversation, even towards the end of the therapy, given that much of this novel information can be associated with their new way of understanding themselves and their context.

The analysis methodology used in the present study has revealed that Communicative Patterns (CPs) are used by patients and therapists differently depending on the type of episode involved (Valdés, et al., 2011b), and that such patterns are used in different proportions depending on the stage of the episode, and even according to the therapeutic phase. Working on emotional contents throughout the therapy not only allows patients to be in closer contact with their emotions, but also to pay attention and work on other content types (cognitive or behavioral) during the therapeutic process. Patients tend to permanently give information about their life experiences. A shared characteristic of these experiences narrated during the conversation, and which holds them all together, is the patients' verbalization of emotions (Raingruber, 2000), which have an adaptive function as a result of the integration between the cognitive and affective domains (Greenberg & Bolger, 2001).

Therapeutic conversation is a space for the patient to construct new subjective theories about him/herself aided by his/her therapist (Benjamin, 1988; Hill, 2004; Farber, Berano, & Capobianco, 2004; Krause, et al., 2007), based on the possibilities emerging from the dialog, and about which he/she was not conscious beforehand. For patients, this requires a learning process that involves experiencing, recognizing, verbalizing, and resignifying certain emotional contents which are fundamental for developing new ways of understanding themselves (Raingruber, 2000). For therapists, on the other hand, working on certain emotional contents verbalized by patients during the conversation also entails a learning process during the therapeutic activity which involves, for example, learning to identify the moments of the session in which showing understanding, generating harmony, or providing feedback about a certain content conveyed by a patient (*emotional empathy*) can be more effective, or learning to identify the moments in which a patient's process of change has temporarily halted due to a reissue

of the problem during the session, and so abstain from providing new meanings for certain emotional contents (*interpretative emotional resignification*) which could be dealt with more effectively in other moments of the therapy. Working on emotional contents during the therapy is an activity which entails the use of certain Communicative Patterns (CPs) by both patients and therapists, depending not only on the moment of the session, but also on the therapeutic phase. This therapeutic activity performed specifically with emotional contents allows patients to eventually construct a new way of understanding themselves, and to understand emotions as a type of content that involves information that differs from all other information, because it is experienced subjectively (Izard, 2002).

One of the limitations of the present study is that its findings cannot be generalized, because the size of the sample was greatly reduced by only analyzing speaking turns with Communicative Patterns (CPs) used to work on emotional contents, along with the fact that only patterns with a frequency higher than 5 were considered in the analysis. However, its main limitation was that less Stuck Episodes than Change episodes were analyzed, a situation caused by the fact that the former were less frequent than the latter in the two psychotherapeutic processes studied. Therefore, this study should be replicated using a larger number of processes in order to confirm its findings.

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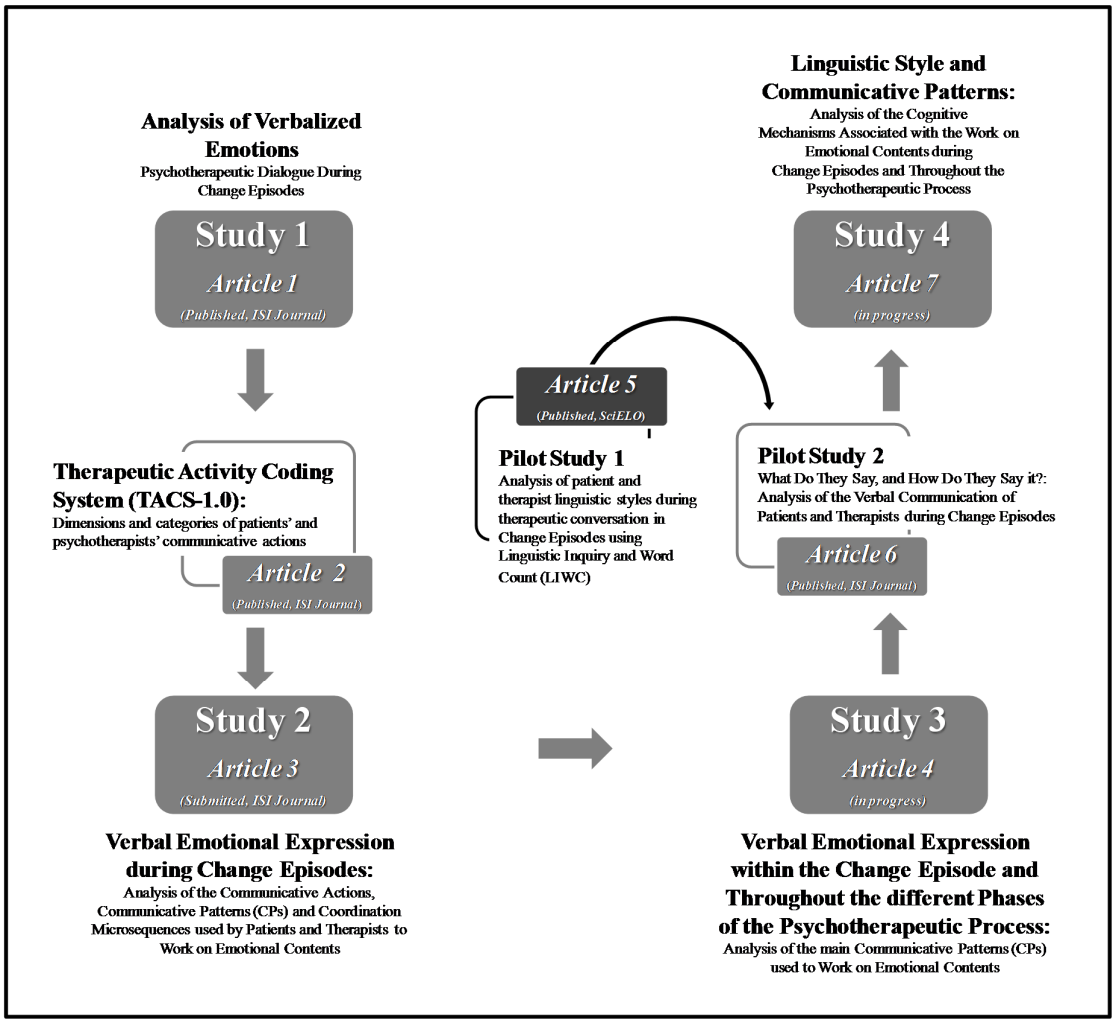

Fourth specific objective: to determine which cognitive mechanisms are present in patients' and therapists' verbal emotional expressions during Change Episodes and throughout the psychotherapeutic process.

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Analysis of Patient and Therapist Linguistic Styles During Therapeutic Conversation in Change Episodes, Using Linguistic Inquiry and Word Count (LIWC)[13]

Valdés, N.

Abstract

The growing interest in knowing what happens during the psychotherapeutic process has made researchers focus on the study of verbal and non-verbal patient-therapist interaction, considering a notion of performative language, in which language is not only understood as a simple reflection of reality, but as constitutive of it. We assumed that, during the therapeutic conversation, both patient and therapist, are "doing something" while they are "saying something" (Reyes et al., 2008; Searle, 1980, 2002). Consequently, the conversation between patient and therapist can set a new reality on which the patient's psychological change is built. Studies in the last three decades support the notion that physical and mental health are correlated with the type of words used during conversation (Chung & Pennebaker, 2007; Graybeal, Sexton, & Pennebaker, 2002; Niederhoffer & Pennebaker, 2002; Stirman & Pennebaker, 2001; Slatcher, Vazire, & Pennebaker, 2008), which are thought to reflect the structure of individuals' psychological processes. This article includes the results of using Linguistic Inquiry and Word Count (LIWC; Pennebaker, Booth, & Francis, 2001) for the analysis of patient-therapist therapeutic conversation during Change Episodes, based on certain linguistic and psychological categories.

Keywords: Change episode, therapeutic dialog.

[13] The system presented in this article is part of the results of Fondecyt Project Nº1080136 (National Science and Technology Fund, Ministry of Education, Chilean Government).

Although the form of language and the use of certain words instead of others can vary depending on the social context, there is evidence to support the idea that a person's linguistic style makes it possible to identify significant indicators which reflect certain characteristics of their social processes and personality (Pennebaker, Mehl, & Niederhoffer, 2003). Based on the fact that human beings do not act as a result of what things are, but according to their representation of them, the words that a person uses may lead to a better understanding of the subjective meaning that he/she ascribes to him/herself and his/her relationship with his/her surroundings. This representation may be cognitive, affective, evaluative, and can also be implicit in the person's behavior.

Using text analysis to determine multiple psychological dimensions based on people's speech is by no means a novel approach. In fact, previous studies have identified two methodological strategies for the study of texts in psychology. The first of them involves the analysis of each of the phrases in a text in order to generate codes, which have made it possible to identify individuals with different medical diagnoses (Gottschalk, Stein, & Shapiro, 1997), personality traits (Weintraub & Aronson, 1964), and cognitive and emotional dynamics (Stiles, 1992). On the other hand, the second analysis strategy is based on a count of the words that a person uses in his/her discourse. Like the previous approach, this has not only made it possible to establish differences between a series of medical and psychiatric diagnoses (Bucci, 1997, Mergenthaler, 1996, Rosenberg, Schnurr, & Oxman, 1990; Schnurr, Rosenberg, & Oxman, 1992; Stein, Folkman, Trabasso, & Richards, 1997), but have also helped to characterize certain cognitive processes (Lee, Park, & Seo, 2006), emotional processes (Kahn, Tobin, Massey, & Anderson, 2007), and some personality traits (Mehl, Gosling, & Pennebaker, 2006). However, the most frequent criticism directed at most of these studies is that they were conducted applying both analysis strategies to a specific therapeutic approach, and not using the nature of language in itself.

After establishing the effectiveness of psychotherapy in terms of the nature, magnitude, and generalization of psychotherapeutic effects --along with the homogeneous effectiveness of different therapeutic approaches-- psychotherapy researchers focused on developing more convenient methodologies to estimate psychotherapeutic change more precisely and generate theories based on empirical data. This has made it possible, for example, to carry out studies devoted to understanding patient-therapist interaction. In addition, other work has paid attention to unspecific change factors in order to identify the internal and external factors of therapy which are instrumental in producing change, and which are also shared by all therapy types.

This process-based approach leads to understanding therapeutic change as a change in meanings, that is to say, as a representational modification. Said change is associated with the patient's subjective view of him/herself, his/her problems and symptoms, and the connection between them and the

environment in which they occur (Krause, et al., 2007). In other words, therapeutic change involves a person's construction of new Subjective Theories about his/her self and his/her relationship with the world, upon the basis of connections constructed gradually through associations fostered during therapeutic activity as the result of a successive process of resignification. More specifically, during the segments of the session which, according to certain criteria, appear to be significant or relevant for change. Bastine, Fiedler & Kommer (1989, p.11) refer to these moments as Change Episodes, and define them as the "the periods of time, segments, or sequences in one or many therapeutic sessions in which significant changes are expected to occur", and which to some extent prepare the moment of change during the session. Therefore, it is possible to conclude that both therapeutic change and the factors that foster it can be observed during the session in these relevant segments which function as "windows" of the therapeutic process (Elliott & Shapiro, 1992).

Based on the assumption that a person's linguistic style is configured by the type of words that he/she usually employs when speaking, and regarding language as a performative phenomenon (Reyes, et al., 2008), that is, not as a mere reflection of reality but as a constitutive part of it, the present article analyzes a patient's and her therapist's speech during Change Episodes, considering that whenever they say something, they also do something (Krause, de la Parra, & Arístegui, 2006; Searle, 1980, 2002). In other words, the article will stress the notion that the linguistic style of the participants of the therapeutic conversation, apart from allowing speakers to transmit contents, influences the other person and configures new realities.

Method

Sample

The analysis was applied to an individual psychodynamic therapy conducted in Chile to a 43-year-old patient by a psychoanalyst with a vast professional experience. The full process was made up by 21 weekly sessions. The patient's main reasons for seeking help were to learn to express her needs, strengthen her autonomy, and improve the quality of her relationships. In the present study, all sessions were analyzed in order to delimit, transcribe, and analyze all the change episodes identified throughout the therapeutic process. Specifically, 24 change episodes were analyzed, in which all the words uttered both by the patient and the therapist were transcribed. The sampling unit employed was the word.

Procedure and instruments

Therapeutic Outcome. The Generic Change Indicators List was used to measure therapeutic change (Krause, et al., 2007). It contains 19 contents of therapeutic change grouped according to: a) the initial

consolidation of the structure of the therapeutic relationship; b) the increase of permeability regarding new ways of understanding; and c) the construction and consolidation of new ways of understanding. In addition, the Outcome Questionnaire (OQ-45.2) was also used. This self-report questionnaire was developed by Lambert, Hansen, Umpress, Lunnen, Okiishi & Burlingame (1996), and was validated for Chile by Von Bergen and de la Parra (2002). A high total score in the questionnaire means that the patient reports a high level of unhappiness in spite of her high quality of life, which is expressed through her symptoms, interpersonal relationships, and social role. The interpretation of the results is based on a cut-off score derived from comparing a clinical sample with a non-clinical one, which led to the identification of a functional and a dysfunctional population (cut-off score for Chile context = 73) and resulted in a Reliable Change Index (RCI) which determines whether the patient's change at the end of the treatment is clinically significant (RCI for Chile = 17; Jacobson & Truax, 1991). In this case, even though the patient starts the therapy with a score above the cut-off level, comparing her final (91) and her initial scores (111) suggests that her change can be considered statistically significant (ICC=20).

Demarcation of Change Episodes. The whole therapy was audiovisually recorded and observed through a one-way mirror by expert raters, trained in the use of a protocol for detecting and identifying change moments based on the Hierarchical List of Change Indicators (Krause, et al., 2007). The sessions were listed in chronological order and transcribed to facilitate the subsequent delimitation of the change episodes.

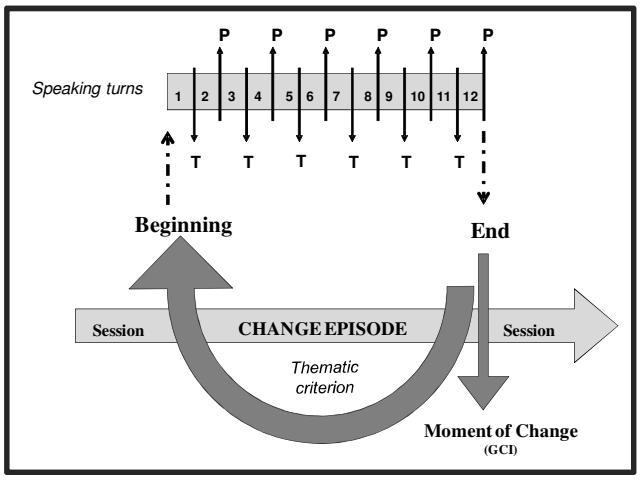


Figure 1: Delimitation of Change Episodes.

As shown in Figure 1, the moment of change marks the end of the episode. A moment of change must meet the criteria of theoretical correspondence, novelty, topicality, and consistency; that is, they must match one of the indicators from the List of Generic Change Indicators, be new, occur during the session, and persist over time (Krause, et al., 2007). Afterwards, using a thematic criterion, the beginning of the therapeutic interaction referring to the change moment is tracked in order to define the start of the episode. Thus, each Change Episode delimited is made up by all the words uttered by the patient and her therapist during the relevant segments (Valdés, et al., 2005).

Characteristics of a Subject's Linguistic Style. The words uttered by the patient and her therapist during Change Episodes were analyzed using Linguistic Inquiry and Word Count (LIWC). This software was developed by Pennebaker, Francis & Booth (2001) as part of their work on disclosure writing. It has contributed to several studies demonstrating that people can improve their psychological wellbeing after writing about traumatic experiences (Chung & Pennebaker, 2007; Graybeal, Sexton, & Pennebaker, 2002; Niederhoffer & Pennebaker, 2002; Pennebaker & King, 1999; Stirman & Pennebaker, 2001; Slatcher, Vazire, & Pennebaker, 2008).

The program can capture and calculate, in a matter of seconds, percentages of words in a text according to a variety of linguistic and psychological categories and subcategories, which makes it possible to describe certain characteristics of a person's linguistic style and predict his/her linguistic wellbeing in the future. This system has been proven to be highly reliable in English-speaking countries; after the introduction of transcultural studies, it was translated and validated for the Spanish language by Ramírez-Esparza, Pennebaker & García (2007).

The Spanish version of LIWC maintained the 72 linguistic categories of the English one, which are grouped into 5 broad dimensions: a) standardized linguistic categories (pronouns, negations, assertions, articles, prepositions, and numbers); b) categories referencing psychological processes (cognitive, affective, sensory-perceptual, and social processes); c) categories referencing relativity (time, space, and movement); d) categories referencing personal contents (job, pleasurable activities, and physical states, among others); and e) experimental categories (fillers, hesitations, etc.).

The Spanish version employs a dictionary which includes 7,515 words and word roots. The system identifies and counts the total number of words from each category and sub-category of each dimension. Therefore, each word or word root can be part of one or more category or subcategory. This system has been used with different types of text by different researchers, who have found it is highly consistent (Alpers, et al., 2005; Mehl & Pennebaker, 2003; Pennebaker & King, 1999) and provides a highly significant correlation in most categories of both versions, which indicates an

adequate degree of correspondence (Ramírez-Esparza, Pennebaker, & García, 2007). Most of the differences between the two versions can be explained by the number of words included in each dictionary, as the Spanish one contains more verb conjugations, masculine and feminine nouns, accented and non-accented words, and a higher number of verb synonyms.

For the present study, the linguistic styles of the patient and her therapist during Change Episodes were compared, considering only the following LIWC categories and sub-categories: personal pronouns (first person singular, second person singular, first person plural, plus other personal pronouns), psychological processes (affective, cognitive, and behavioral processes), valence of affective contents (positive, negative, and neutral), cognitive subprocesses (cause, insight, tentativeness, and certainty), and temporality (past, present, and future).

Data Analysis

Data analysis involved two successive stages. The first stage consisted in the application of the Chi Square test, in order to establish whether there was an association between the different categories and the participant's role (patient and therapist). The second stage consisted in calculating *Z* for independent proportions to compare the percentage of words uttered by each of the participants during each of the phases of the therapeutic process.

Results

Linguistic Inquiry and Word Count (LIWC) captured 88.53% of the total words uttered by the patient and the therapist during the 24 Change Episodes analyzed. When applied to the total words uttered by the participants individually, LIWC captured 91.01% of the patient's words (N=9,243) and 86.06% of the therapist's words (N=5,689). Therefore, the system reliably captured over 85% of the words uttered during Change Episodes. All the analyses presented below were carried out considering the total number of words captured by the system (N=14,932).

Association between LIWC categories and participant's role

The association between LIWC categories and sub-cateogries with the participant's role was probed considering the total number of words uttered during Change Episodes.

Personal pronouns. Considering the total number of personal pronouns uttered (N_P=1,494; N_T=714), an association was observed between the participant's role and the type of pronouns used

during the conversation, χ^2 (3, N = 2208) = 465.61, p =0.00. As shown in Figure 1, this result is evident in the association between the use of the *second person singular* and the role of therapist (37.96%), and between the role of patient and the *first person singular* (50.53%) and *other personal pronouns* (44.31%). These results can be interpreted as a clear and concrete example of the asymmetry between the participants during therapeutic dialog, which can be observed even in these short segments of the sessions.

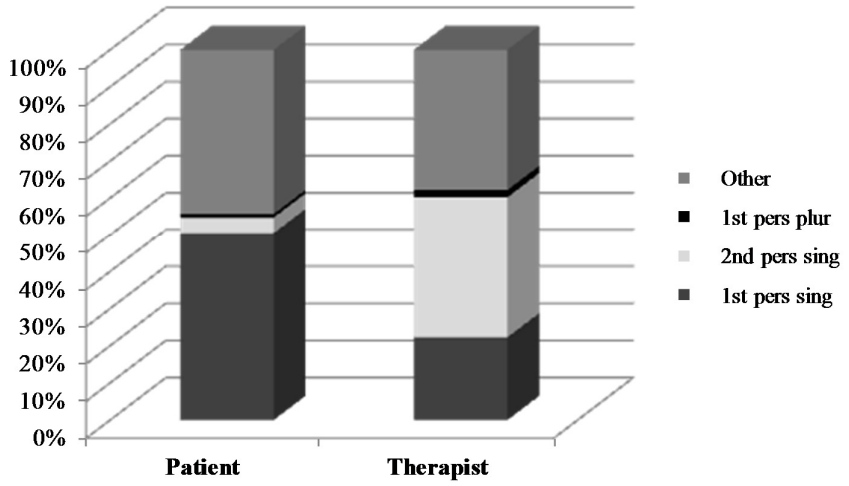


Figure 1: Distribution of Personal Pronouns.

Psychological processes. Considering the total number of words uttered by the participants (N_P=2,025; N_T=1,308), it was not possible to establish an association between any of the psychological processes (*affective*, *cognitive*, and *behavioral*) and the participant's role. That is to say, both the patient and the therapist tended to utter words referencing *cognitive* processes (P=75.21%; T=73.70%), followed by *affective* (P=20.84%; T=23.17%) and *behavioral* ones (P=3.95%; T=3.13%). Thus, most verbalizations are related to resignification work.

Valence of affective contents. Considering the total number of words with an affective content uttered by the participants (N_P=422; N_T=303), an association between emotional valence and the participant's role was observed, χ^2 (2, N = 725) = 6.15, p =0.05. As shown in Figure 2, this result can be clearly observed in the association between the verbalization of emotional contents with a *negative valence* and the therapist's role (49.17%), as well as in the association between the verbalization of emotional contents with a *positive valence* and the patient's role (51.66%). Likewise, part of the result

is visible in the association between the verbalization of emotional contents with a neutral valence and the patient's role (8.29%).

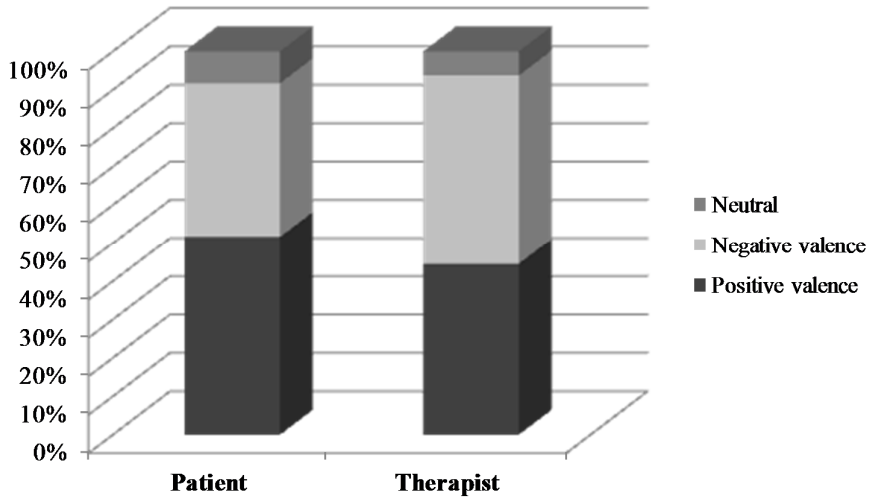


Figure 2: Distribution of Emotional Valences.

Cognitive Subprocesses. Considering the total number of words with a cognitive content uttered by the participants (N_P=1,137; N_T=579), an association between the use of words referencing certain cognitive processes and the participant's role was observed χ^2 (1, N = 1716) = 13.6, p =.01. As Figure 3 shows, this result is visible in the association between the verbalization of words revealing *insight* and the therapist's role (42.14%), and in the connection between words that reference *causality* and the patient's role (28.76%).

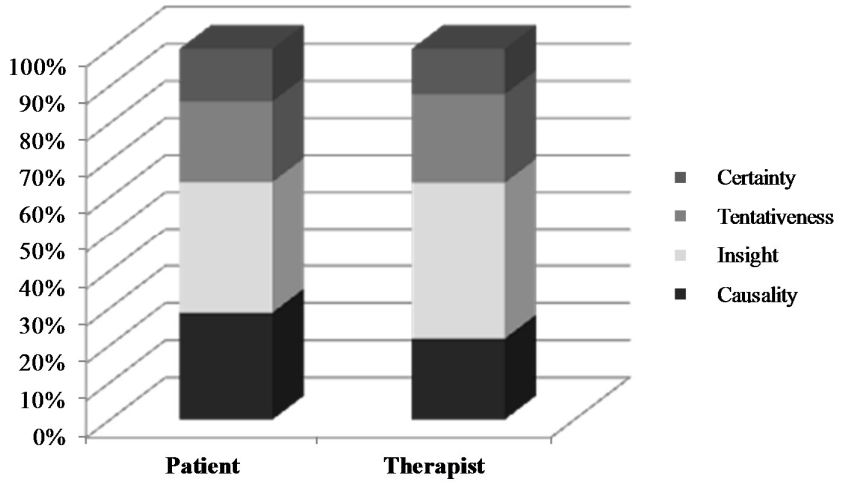


Figure 3: Distribution of Cognitive Subprocesses.

However, when considering all the words uttered by both participants during Change Episodes in order to determine which percentage of words each of them contributes to the therapeutic conversation, there emerged significant differences between patient and therapist regarding words referencing cognitive processes. The patient uttered a larger percentage of words with a cognitive content which mostly revealed *insight*, Z=6.900, $p < 0.00$ (P=23.43%; T=14.22%) and *causality*, Z=10.136, $p < 0.00$ (P=19.06%; T=7.34%), followed by *tentativeness*, Z=5.896, $p < 0.00$ (P=14.39%; T=8.04%) and *certainty*, Z=6.119, $p < 0.00$ (P=9.38%; T=4.14%). Therefore, this result may reflect how it is the patient who actually resignifies in every session, with the therapist's help, her understanding of various situations and of herself. In addition, it is interesting to note the similar percentage of words reflecting therapist *insight* (14.22%) and patient *tentativeness* (14.39%), which may be a sign of the collaborative work of the participants aimed at constructing new meanings.

Temporality. Considering the total number of words referencing temporality (*past*, *present*, and *future*) uttered by the participants (N_P=1,700; N_T=882), it was not possible to establish an association between the temporality of the words used and the participant's role. In other words, both the patient and the therapist mostly uttered contents in *present* tense (P=74.53%; 76.42%), followed by contents in *past* (19.82%; 18.37%) and *future* tenses (5.65%; 5.21%).

Distribution of LIWC categories according to therapeutic phase and participant's role

In order to analyze the distribution of percentages of the different categories in each of the phase of the therapeutic process according to the participant's role, the therapy was divided into three phases: an initial phase which included the first 6 Change Episodes, and a final phase made up by the last 6 change episodes. The middle phase, in contrast, included the 6 Change Episodes located precisely between the initial and the final phases of the therapy. Therefore, this phase of the analysis comprised 75% of the total sample, i.e. 18 of the 24 Change Episodes delimited.

Personal pronouns. As Figure 4 shows, during the initial phase the patient uttered a larger number of *other personal pronouns*. This percentage decreased during the middle phase (Z=2.197, p= .03), and remains low until the end of the therapy, which suggests that speaking about “others” and about her “relationship with others” is typical of the initial phase.

The same is true of the therapist (Z=2.075, p= .04); however, he used the f*irst person singular* more often during the middle phase (Z=2.14, p= .03). During the final phase, in contrast with the middle phase, the therapist used *other personal pronouns* more often (Z=3.098, p= .00) and the *second person*

singular less frequently (Z=3.544, p= .00). This was interpreted as a sign of the decrease in the asymmetry between the participants towards the end of the psychotherapeutic process.

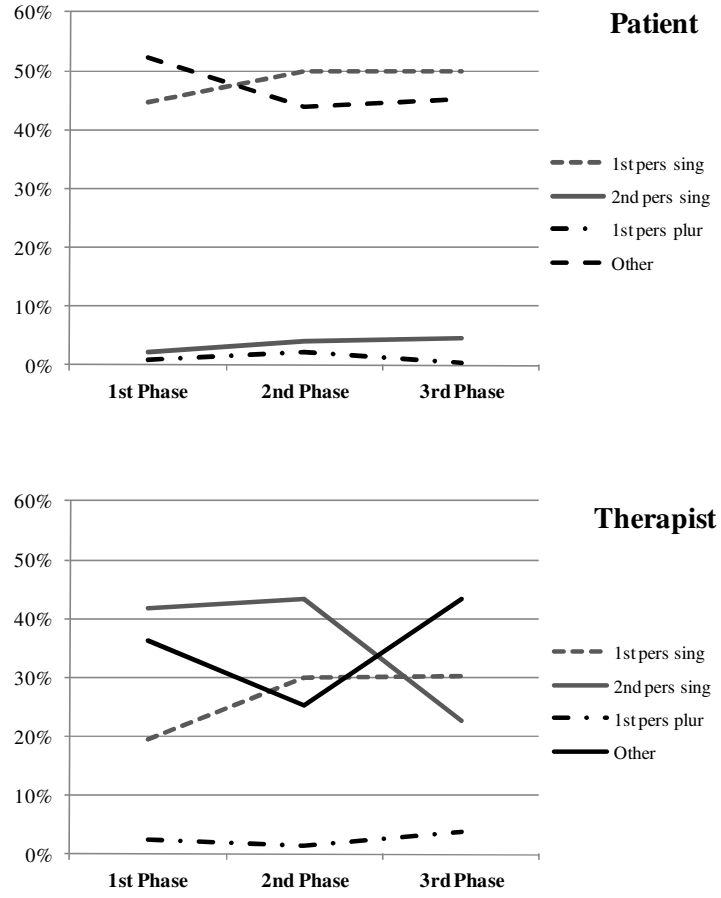
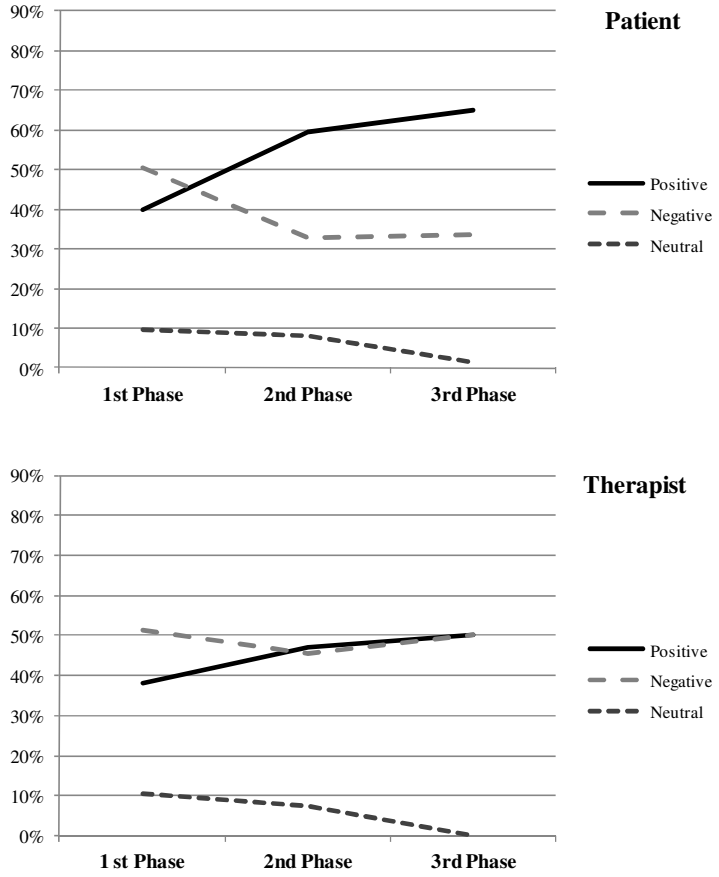


Figure 4: Distribution of Personal Pronouns according to therapeutic stage.

Psychological processes. An analysis of the percentage of words that reference psychological processes did not reveal significant differences between the phases, neither in the patient nor in the therapist. This indicates that in both cases, the percentage of words referencing *affective*, *cognitive*, and *behavioral* processes in the three phases of the process was similar. These results do not only reflect a certain degree of continuity and consistency in the activity performed throughout the therapy, but a communicative attunement between the participants.

Valence of affective contents. The analysis of emotional contents during each of the therapeutic phases (see Figure 5), revealed that the patient uttered a lower percentage of emotional contents with a *negative valence* (Z=2.580, p = .01), and a higher percentage of emotional contents with a *positive*

valence (*Z*=2.799, *p* = .01). This situation remained stable until the last therapeutic phase. Although it is necessary to analyze specific emotional contents, this result was interpreted as a sustained increase in the patient's hope and optimism with respect to change, which in theory is strongly associated with an optimal therapeutic outcome. In contrast, no significant differences were observed in the valence of the emotional contents conveyed by the therapist during the different therapeutic phases. This may indicate the presence of sustained work by the therapist throughout the process.



Graph 5: Distribution of Emotional Valences, according to therapeutic phase.

Cognitive subprocesses. It was observed that the patient verbalized a similar percentage of words referring to all the *cognitive* subprocesses in the three phases of the process (see Figure 6). This result, again, may reflect some degree of consistency in the successive process of resignification that the patient carries out in her conversation with the therapist throughout the therapy. In contrast, during the middle phase, the therapist uttered a higher percentage of words which revealed *certainty* (*Z*=2.861, *p*

= .00). This percentage drops in the final phase of the therapy (*Z*=2.190, *p* = .03), which coincides with a decrease in the percentage of words revealing *tentativeness* (*Z*=1.947, *p* = .05) and a higher percentage of words displaying *insight* (*Z*=2.716, *p* = .01).

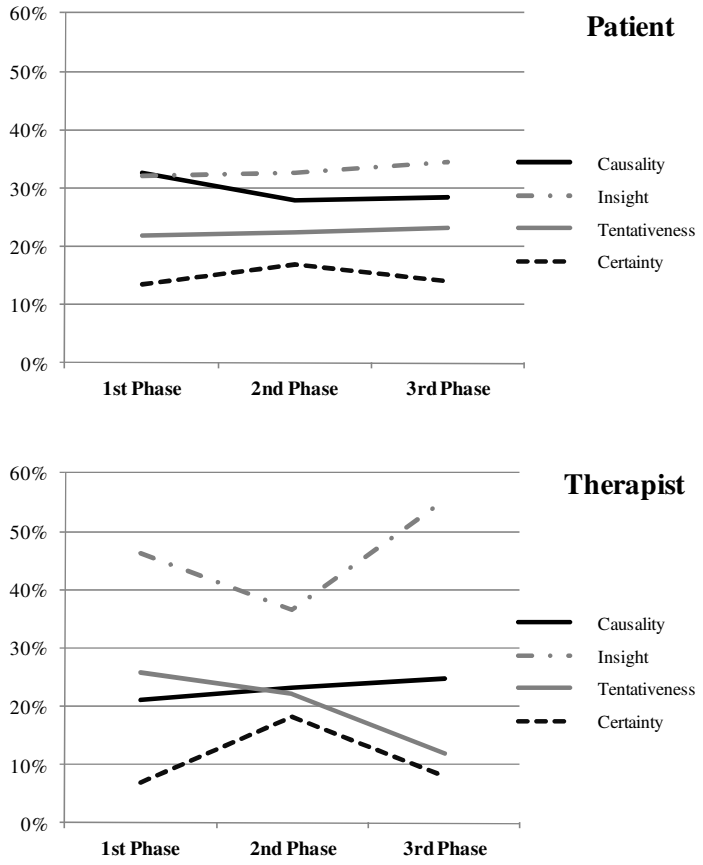


Figure 6: Distribution of Cognitive Subprocesses according to therapeutic stage.

Temporality. As shown in Figure 7, the patient used a similar percentage of verbal tenses until the middle phase. However, in the final phase she reduced her use of *past tense* words (Z=3.520, *p* = 0.00) and increased her use of *present tense* words (Z=2.014, *p* = 0.05); also, in this phase, her use of *future forms* rose in comparison with previous phases. It is interesting that the same happens in the therapist's discourse, but in the middle phase of the therapy. In this phase, the therapist uttered more words in their *present form* (Z=2.264, *p* = 0.02) and fewer *past tense* words (Z=1.959, *p* = 0.05). In the middle and final phases, significant differences were observed in the therapist's use of *future tense* words (Z=2.146, *p* = 0.03).

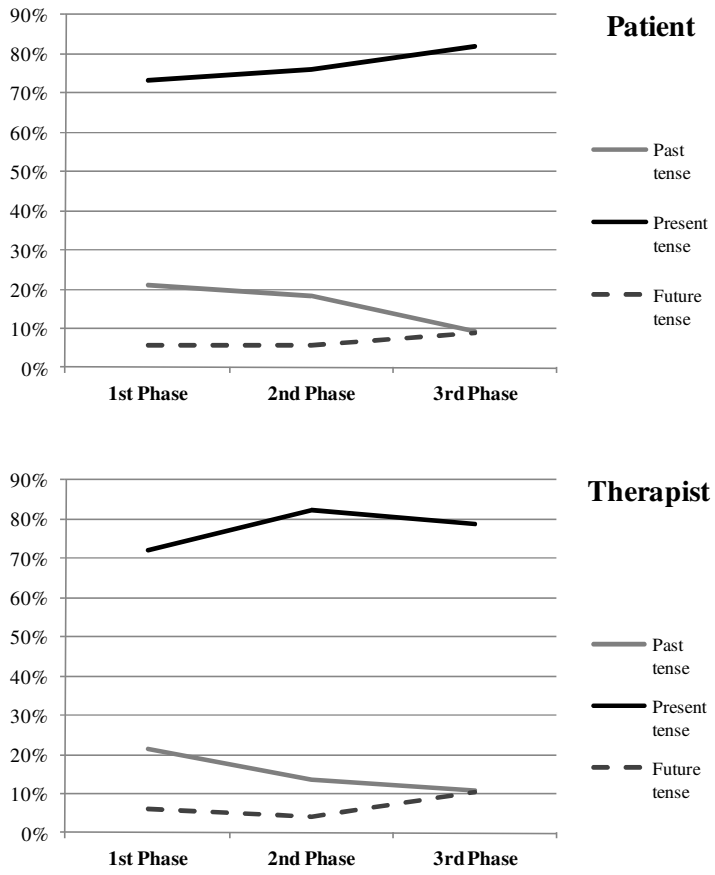


Figure 7: Distribution of Temporality according to therapeutic stage.

Conclusions

Linguistic styles may illustrate how people express their thoughts and affects in conversation. Even though some linguistic characteristics, such as the use of certain personal pronouns or verb tenses, may not provide information about what an individual is speaking about, they can clarify his/her subjective perception of him/herself and of different situations.

The present study used the Spanish version of Linguistic Inquiry and Word Count (LIWC), which captured, on average, over 80% of the total number of the words analyzed. This software not only was susceptible of being adapted to the analysis methodology of Change Episodes, but also showed to be so sensitive that it revealed significant differences between the patient's and the therapist's discourse along with significant divergences between therapeutic stages. The results indicate that there was an association between certain linguistic/psychological characteristics and the participant's role. For example, the patient used more personal pronouns in the *first person singular*, emotional contents with

a *positive valence*, and words that reflected *causality-related* cognitive subprocesses; in contrast, the therapist tended to use personal pronouns in the *second person singular*, emotional contents with a *negative valence*, and words that reflected *insight-related* cognitive subprocesses. However, some linguistic/psychological characteristics are shared by both participants and may reflect a certain degree of continuity and consistence in their activity during the conversation; likewise, it may be interpreted as a sign of communicative attunement during the therapeutic activity that characterizes relevant or significant segments. This is the case of the percentage of words referred to psychological processes (*affective*, *cognitive*, and *behavioral*) and to the temporality of verbalizations (*past*, *present*, and *future*).

Based on the assumption that individuals' use of words to express themselves tends to be constant over time, it was possible to establish differences in some of the linguistic and psychological categories analyzed, depending on the stage of the therapeutic process considered. For example, compared with the initial phase of the process, during the middle phase the patient used "other" personal pronouns less frequently, less emotional contents with a *negative valence*, and more emotional contents with a *positive valence*; on the other hand, the therapist used "other" personal pronouns less frequently, while he employed more *second person singular* words, more words in their *present tense* form, and more words accounting for *certainty-related* cognitive subprocesses. In comparison with the middle phase, during the final phase the patient used fewer *past tense* words and more present and future forms; on the other hand, the therapist uttered fewer *second person* singular words, more words revealing *insight-related* cognitive subprocesses, fewer *tentativeness-related* words, and more words in their *future tense* forms.

The results obtained show that Linguistic Inquiry and Word Count (LIWC) contains categories and subcategories which permit a much more microanalytic study of the participants' speech in Change Episodes, and that the software will complement the analysis of Communicative Actions according to the Therapeutic Activity Coding System (TACS-1.0, Valdés, Tomicic, Pérez, & Krause, 2010). Future analyses will make it possible to correlate the categories included in both systems; likewise, replicating them in other segments of the session will increase the consistency of the results obtained.

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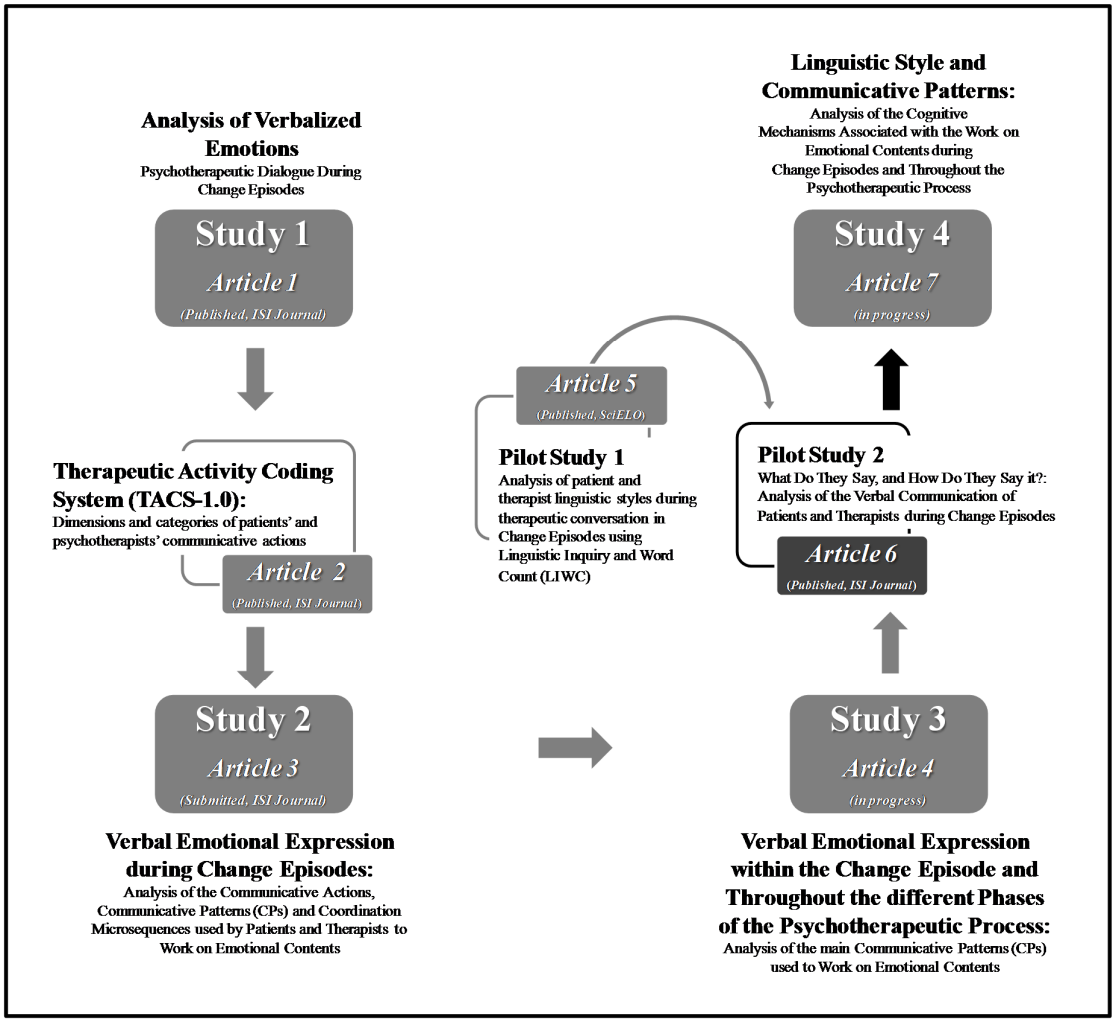

Fourth specific objective: to determine which cognitive mechanisms are present in patients' and therapists' verbal emotional expressions during Change Episodes and throughout the psychotherapeutic process.

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What Do They Say, and How Do They Say it?: Analysis of the Verbal Communication of Patients and Therapists During Change Episodes [14]

Valdés, N., Krause, M., & Álamo, N.

Abstract

Considering a notion of performative language, we assume that during the therapeutic conversation, both patient and therapist, are "doing something" while they are "saying something" (Reyes et al., 2008). Several studies support the notion that physical and mental health are correlated with the type of words used during conversation (Chung & Pennebaker, 2007; Slatcher, Vazire, & Pennebaker, 2008), which are thought to reflect the structure of individuals' psychological processes. Using a mixed methodology, this article focuses on the study of patient-therapist verbal interaction, showing some differences and similarities in the Communicative Actions and the Linguistic Style of both speakers, during therapeutic conversation within Change Episodes. These differences show their complementary roles in psychotherapy.

Key words: Change episode, linguistic style, therapeutic dialogue, communicative actions.

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Although the form of language and the use of certain words instead of others can vary depending on the social context, there is growing evidence to support the idea that a person's linguistic style makes it possible to identify significant indicators which reflect certain characteristics of their social processes and personality (Pennebaker, Mehl, & Niederhoffer, 2003). Based on the fact that human beings do not act as a result of what things are, but according to their representation of them, studying the words that a person uses (and how) may lead to a better understanding of the subjective meaning that he/she ascribes to him/herself and his/her relationship with his/her surroundings. These meanings may be cognitive, affective, evaluative, and behavioral.

The homogeneous effects of different therapeutic approaches in terms of their outcome (Matt, & Navarro, 1997) have made it necessary to seek new and more convenient analysis systems capable of estimating psychotherapeutic change more accurately, and which can help in the formulation of theories based on empirical data. This has led, for example, to carrying out studies devoted to understanding patient-therapist interaction (Williams, & Hill, 2001). In addition, other work has focused on unspecific change factors in order to identify the internal and external factors of therapy which are instrumental in producing change, and which are also shared by all therapy types (Chatoor, & Krupnick, 2001; Krause, 2005).

Text analysis is one of the systems developed to determine multiple psychological dimensions based on people's speech. In fact, this has resulted in the identification of two methodological strategies for the analysis of texts in psychology. The first of them involves the analysis of each of the phrases in a text in order to generate codes, which have made it possible to identify individuals with different medical diagnoses (Gottschalk, Stein, & Shapiro, 1997), personality traits (Weintraub & Aronson, 1964), and cognitive and emotional dynamics (Stiles, 1992). The second analysis strategy is based on a count of the words that a person uses in his/her discourse. Like the previous approach, this has not only made it possible to establish differences between a series of medical and psychiatric diagnoses (Bucci, 1997, Mergenthaler, 1996, Rosenberg, Schnurr, & Oxman, 1990; Schnurr, Rosenberg, & Oxman, 1992; Stein, Folkman, Trabasso, & Richards, 1997), but has also helped to characterize certain cognitive processes (Lee, Park, & Seo, 2006), emotional processes (Kahn, Tobin, Massey, & Anderson, 2007), and some personality traits (Mehl, Gosling, & Pennebaker, 2006). However, the most frequent criticism directed at most of these studies is that they were conducted applying both analysis strategies to a specific therapeutic approach, often considering one of the participants, and not analyzing the nature of language in itself. With this in mind, this article proposes a view of therapeutic language which includes both the performance of actions by both participants when they speak, and the transmission of contents which are directly associated with the object of therapeutic work. This twofold notion of verbal communication makes it possible to analyze therapeutic activity by

identifying variable actions whereby patients and therapists influence each other without losing track of content, as both dimensions participate in the construction of psychological change (Valdés, Tomicic, Pérez, & Krause, 2010).

This article analyzes the verbal communication of patients and therapists during Change Episodes. It is this process-based approach that leads to understanding therapeutic change as a change in meanings, that is to say, as a representational modification. Said change is associated with the patient's subjective view of him/herself, his/her problems and symptoms, and the connection between them and the environment in which they occur (Krause, et al., 2007). In other words, therapeutic change involves a person's construction of new Subjective Theories about his/her self and his/her relationship with the world, upon the basis of connections constructed gradually through associations which result from a successive process of resignification. Such associations are fostered during segments of the session considered significant or relevant for change according to certain criteria, and are also expressed at a communicative and linguistic level during therapeutic conversation. Bastine, Fiedler and Kommer (1989, p.11) labeled these moments Change Episodes, and define them as the "the periods of time, segments, or sequences in one or many therapeutic sessions in which significant changes are expected to occur", and which to some extent prepare the moment of change during the session. Therefore, such relevant segments act as "windows" to the psychotherapeutic process (Elliott & Shapiro, 1992), and make it possible to observe not only therapeutic change but also the verbal expressions that facilitate it.

Based on a performative view of language (Reyes, et al., 2008), which stresses that every time one of the participants says something, he/she is also doing something (Krause, et al., 2006; Searle, 1980, 2002), and assuming that a person's linguistic style is defined by the type of words he/she uses, the present article analyzes Communicative Actions and some characteristics of patients' and therapists' Linguistic Styles during therapeutic conversation in Change Episodes, in order to determine the type of actions performed and the contents conveyed by the speakers to influence the other participants and configure new realities.

Method

Sample

Two short weekly individual psychodynamic therapies, conducted by male psychoanalysts with a vast clinical experience, were analyzed (see Table 1). Both patients were female and had a similar reason for seeking help, which is why they were selected for the present study. All sessions in both therapies were included in order to delimit, transcribe, and analyze all the Change Episodes identified in each.

Specifically, 38 Change Episodes were analyzed (14 in Therapy A, 24 in Therapy B), included in 39 sessions (18 in Therapy A, 21 in Therapy B). A total of 1,016 speaking turns --the sampling unit-- present in said Change Episodes were analyzed (437 in Therapy A, 579 in Therapy B).

Table 1. Patient and therapeutic process data

Therapy	Sex	Age	Occupation	Marital status	Sessions	Change Episodes	Focus of therapy
A	F	38	Teacher	Separated	18	14	Development of mourning for separation and recent losses
B	F	43	School principal	Married	21	24	Expression of needs; strengthen autonomy; increase quality of relationships

Procedure and Instruments

Therapeutic Outcome. The List of Generic Change Indicators was used to estimate therapeutic change (Krause, et al., 2007). It contains 19 contents of therapeutic change grouped according to: (a) the initial consolidation of the structure of the therapeutic relationship; (b) the increase of permeability regarding new ways of understanding; and (c) the construction and consolidation of new ways of understanding. The analysis also included the Outcome Questionnaire (OQ-45.2), developed by Lambert, Hansen, Umpress, Lunnen, Okiishi and Burlingame (1996), and validated for Chile by Von Bergen and de la Parra (2002). A high total score in the questionnaire means that the patient reports a high level of unhappiness in spite of her high quality of life, which is expressed through her symptoms, interpersonal relationships, and social role. The interpretation of the results is based on a cut-off score derived from comparing a clinical sample with a non-clinical one, which led to the identification of a functional and a dysfunctional population (cut-off score for Chile =73) and resulted in a Reliable Change Index (RCI) which determines whether the patient's change at the end of the treatment is clinically significant (RCI for Chile =17; Jacobson & Truax, 1991). In this case, Patient A started the therapy with a total score of 68 and ended it with 48.4 (RCI =19.6), whereas Patient B started the therapy with a total score of 111 and ended it with 91 (RCI =20). This means that both patients displayed a significant degree of change during the therapy, even though Patient A started it below the cut-off score and Patient B was above it.

Demarcation of Change Episodes. The therapies were audiovisually recorded and observed through a one-way mirror by expert raters, trained in the use of a protocol for detecting and identifying change moments based on the Hierarchical List of Change Indicators (Krause, et al., 2007). The sessions were listed in chronological order and transcribed to facilitate the subsequent delimitation of the Change Episodes.

As shown in Figure 1, the moment of change marks the end of the episode. Said moment of change must meet the criteria of theoretical correspondence, novelty, topicality, and consistency; that is, they must match one of the indicators from the list of Generic Change Indicators (GCI), be new, occur during the session, and persist over time (Krause, et al., 2007). Afterwards, using a thematic criterion, the beginning of the therapeutic interaction referring to the change moment is tracked in order to define the start of the episode. Each Change Episode delimited is made up by all the speaking turns of patients and therapists contained in the relevant segments (Valdés, et al., 2005).

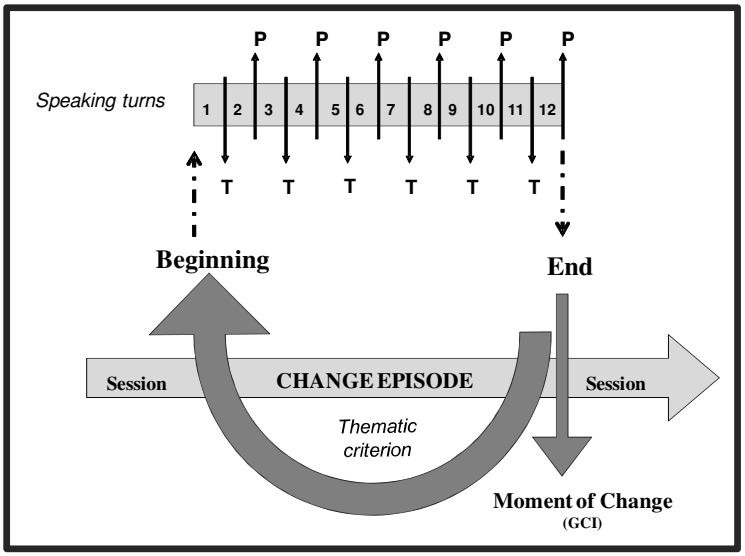

Figure 1. Delimitation of a Change Episode.

Characteristics of Communicative Actions. The Therapeutic Activity Coding System (TACS-1.0) was used to manually code the Communicative Actions present in each of the speaking turns of patients and therapists during the Change Episodes delimited. This system was developed by Valdés, et al. (2010) in order to reveal the complexity and multidimensionality of communicative interaction in psychotherapy. It is based on a performative view of language, and includes parallel and non-inclusive dimensions of analysis which make it possible to extend this argument in terms of the notion that saying something is doing something. Verbalizations are referred to as Communicative Actions,

because they have the double purpose of conveying information (Contents) and exerting an influence on the other participant and the reality constructed by both (Action). The TACS-1.0 considers both the influence and the content of Communicative Actions.

As Figure 2 shows, the TACS-1.0 (Valdés, et al., 2010) is made up by five categories of analysis; three of them belong to the Action dimension while two belong to the Content dimension. The categories that include 22 Action codes are: Basic Form (formal structure of the utterance), Communicative Intention (communicative purpose expressed during the utterance), and Technique (methodological resources present in the utterance, some of which coincide with therapeutic techniques while others are typical of everyday interaction). On the other hand, the 9 Content codes are: Domain (whether the object of therapeutic work is mostly cognitive, affective, or behavioral) and Reference (protagonist of the object of therapeutic work). These 5 categories and the 31 codes they include were developed using, firstly, a discovery-oriented methodology followed by inter-rater reliability studies which showed good agreement indexes (Valdés, et al., 2010).

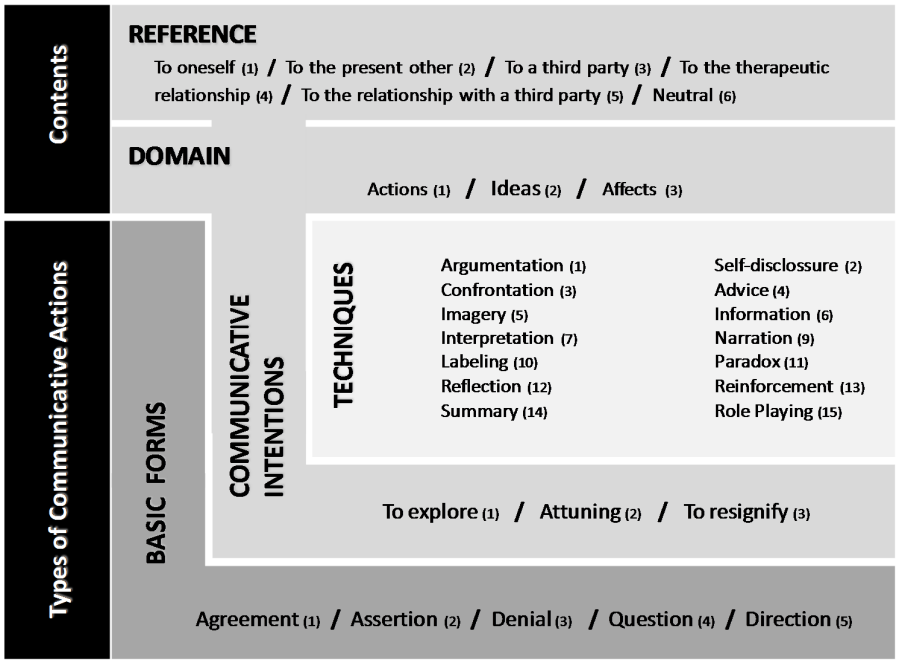

Figure 2. Dimensions and categories of the Therapeutic Activity Coding System (TACS-1.0, Valdés, Tomicic, Pérez, & Krause, 2010).

Characteristics of a Subject's Linguistic Style. The words uttered by patients and therapists during their speaking turns in Change Episodes were analyzed using Linguistic Inquiry and Word Count (LIWC-2007). This software was developed by Pennebaker, Francis and Booth (2001) as part of their

work on disclosure writing. It has contributed to several studies demonstrating that people can improve their psychological wellbeing after writing about traumatic experiences (Chung & Pennebaker, 2007; Graybeal, Sexton, & Pennebaker, 2002; Niederhoffer & Pennebaker, 2002; Pennebaker & King, 1999; Stirman & Pennebaker, 2001; Slatcher, Vazire, & Pennebaker, 2008). The program can capture and calculate percentages of words in a text according to a variety of linguistic and psychological categories and subcategories, which makes it possible to describe certain characteristics of a person's linguistic style and predict his/her linguistic wellbeing. This system has been proven to be highly reliable in English-speaking countries; after the introduction of transcultural studies, it was translated and validated for the Spanish language by Ramírez-Esparza, Pennebaker and García (2007).

The Spanish version of LIWC maintained the 72 linguistic categories of the English one, which are grouped into 5 broad dimensions: (a) standardized linguistic categories (pronouns, negations, assertions, articles, prepositions, and numbers); (b) categories referencing psychological processes (cognitive, affective, sensory-perceptual, and social processes); (c) categories referencing relativity (time, space, and movement); (d) categories referencing personal contents (job, pleasurable activities, and physical states, among others); and (e) experimental categories (fillers, hesitations, etc.). The Spanish version employs a dictionary which includes 7515 words and word roots. The system identifies and counts the total number of words from each category and sub-category of each dimension. This system has been used with different types of text by different researchers, who have found it is highly consistent (Alpers, et al., 2005; Mehl & Pennebaker, 2003; Pennebaker & King, 1999) and provides highly significant correlations in most categories of both versions, which indicates an adequate degree of correspondence (Ramírez-Esparza et al., 2007). Most of the differences between the two versions can be explained by the number of words included in each dictionary, as Spanish requires more verb conjugations and includes masculine and feminine nouns, accented and non-accented words, and a higher number of verb synonyms.

The present study compared the Communicative Actions and Linguistic Styles of patients and therapists during Change Episodes, considering the categories present in both dimensions of the TACS-1.0[15], (Basic Form, Communicative Intention, Technique, Domain, and Reference) plus the following LIWC-2007 categories: personal pronouns (First person singular, Personal pronouns that reference the speaker, Second person singular, First person plural, and Personal pronouns that reference others) and psychological processes (Affective, Cognitive, and Behavioral).

[15] Each of the dimensions and categories of the TACS-1.0 are defined in the Manual of Procedure developed by Krause, Valdés, & Tomicic (2009) for applying the system to therapeutic conversations.

Data Analysis

Data analysis involved two successive stages. The first stage consisted in the application of the Chi Square test (χ^2), in order to establish whether there was an association between the different categories and the participant's role (patient and therapist). The second stage consisted in calculating *Z* for independent proportions to compare the percentage of words belonging to the categories shared by both analysis systems (TACS-1.0 and LIWC-2007).

Results

This section is organized as follows: first, the results of the analysis of Communicative Actions for the dimensions and categories of the TACS-1.0 are presented; then, the results of the analysis of Linguistic Styles using two specific LIWC-2007 categories are detailed; lastly, a comparison of the categories shared by the two systems is performed.

Association Between Communicative Actions (TACS-1.0) and Participant's Role

For the analysis of Communicative Actions, 1,016 speaking turns were coded (437 in Therapy A, 579 in Therapy B) which were present in the 38 Change Episodes considered (14 in Therapy A, 24 in Therapy B), in order to identify and compare the Communicative Actions present in the speech of patients (244 turns by Patient A, 328 turns by Patient B) and therapists (193 turns by Therapist A, 251 turns by Therapist B). Below are the results of the analysis of TACS-1.0 categories, which reveal the Communicative Actions present in the utterances of patients and therapists during Change Episodes.

Basic Forms. For the analysis of the formal structure of the verbalizations, all the speaking turns of both participants were considered (N_P=572; N_T=444), which were coded according to one of the Basic Forms in the Action dimension of the TACS-1.0 (*agreement*, *assertion*, *denial*, *question*, or *direction*). An association was observed between the participant's role and the type of formal structure of verbalizations in the conversation, χ^2 (3, N =1016) =104.59, *p*=.00. This situation remained constant even when analyzing Therapy A (χ^2 (3, N =437) =15.81, *p*=.01) and Therapy B (χ^2 (3, N =579) =100.30, *p*=.00) separately.

As Figure 3 shows, this result was mainly encountered in the association between the patient's role and the *Agreement* Basic Form (P=28.3%, T=13.1%) and the *Denial* Basic Form (P=3.5%, T=0.4%); likewise, it was found in the association between the therapist's role and the *Question* Basic Form (T=20.3%, P=3.3%). However, no significant differences were observed in the use of the *Assertion* Basic Form by both participants of the therapeutic conversation (P=64.9%, T=66.2%).

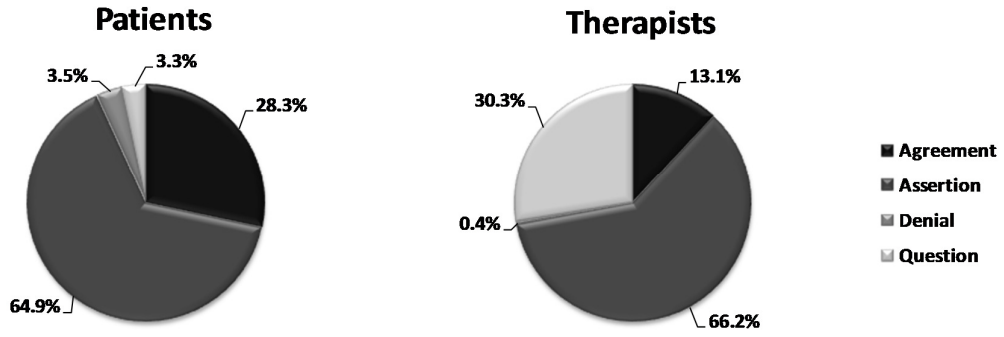

Figure 3. Distribution of Basic Forms (TACS-1.0, Valdés, et al., 2010), percentages by actor (N=1016).

Communicative Intention. For the analysis of the communicative purpose of the verbalizations, all the speaking turns of both participants were considered (N_P=353; N_T=339), which were coded according to one of the three Communicative Intentions in the Action dimension of the TACS-1.0 (*explore*, *attuning*, or *resignify*). An association was observed between the participant's role and the communicative purpose of the verbalizations in the conversation, χ^2 (2, N =692) =71.07, *p*=.00. This situation remained constant even when analyzing Therapy A (χ^2 (2, N =320) =23.54, *p*=.00) and Therapy B (χ^2 (2, N =372) =50.79, *p*=.00) separately.

As Figure 4 shows, these results were mainly encountered in the association between the patient's role and the *Explore* Communicative Intention (P=49.6%, T=19.8%), as well as between the therapist's role and the *Attuning* (T=22.1%, P=9.9%) and *Resignify* Communicative Intentions (T=58.1%, P=40.5%).

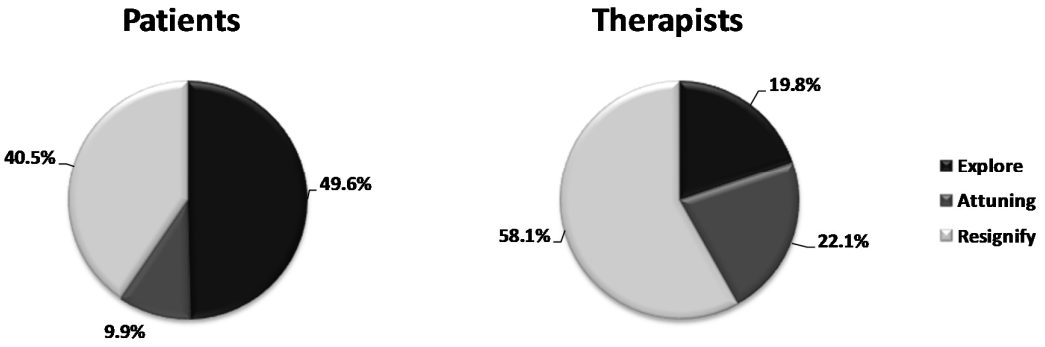

Figure 4. Distribution of Communicative Intentions (TACS-1.0, Valdés, et al., 2010), percentages by actor (N=692).

Technique. For the analysis of the methodological resources that support the communicative purpose of the verbalizations, all the speaking turns of both participants were considered (N_P=213; N_T=213), which were coded according to one of the three techniques in the Action dimension of the TACS-1.0 (some coinciding with psychotherapeutic ones, and others typical of everyday interaction). An association was observed between the participant's role and the type of technique used in the conversation, χ^2 (1, N =426) =229.00, *p*=.00.

As Figure 5 shows, these results were mainly encountered in the association between the patient's role and the use of techniques typical of everyday interaction such as *Argumentation* (P=81.7%, T=18.3%) and *Narration* (P=10.8%, T=0.0%). The results were also observed in the association between the therapist's role and the use of psychotherapeutic techniques such as: *Interpretation* (T=36.6%, P=0.9%), *Reflection* (T=22.5%, P=1.4%) and *Confrontation* (T=19.2%, P=3.3%).

It must be pointed out that the same was found to be true when analyzing Therapy A (χ^2 (1, N =206) =99.45, *p*=.00) and Therapy B (χ^2 (1, N =220) =135.82, *p*=.00) separately. Both patients tended to use the same techniques typical of quotidian interaction (*Argumentation* and *Narration*); however, although both therapists used the same classical psychotherapeutic techniques, therapist A mostly used *Interpretation*, followed by *Reflection* and *Confrontation*, while therapist B also favored the *Interpretation* technique but followed by *Confrontation* and *Reflection*.

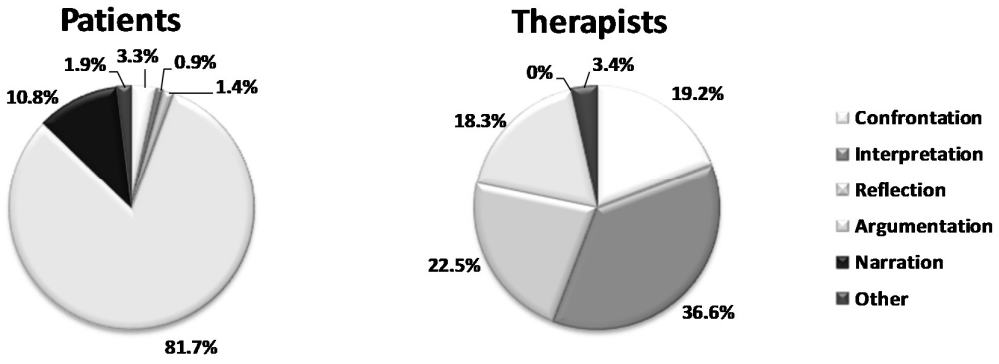

Figure 5. Distribution of Communicative Techniques (TACS-1.0, Valdés, et al., 2010), percentages by actor (N=426).

Domain. For the analysis of the object of therapeutic work, all the speaking turns of both participants were considered (N_P=353; N_T=339), which were coded according to one of the three Domains in the Content dimension of the TACS-1.0 (*Cognitive*, *Affective*, or *Behavioral*). This time, no association was observed between the participant's role and the type of therapeutic work object present in the utterances during the conversation (see Table 2), a situation which was also detected

when analyzing Therapy A and Therapy B separately. Thus, in the Change Episodes analyzed, the Communicative Actions of patients and therapists referenced, in similar proportions, contents belonging to the *Cognitive* (P=50.4%, T=52.2%), *Affective* (P=28.3%, T=34.2%), and *Behavioral* Domain (P=21.3%, T=13.6%).

Table 2. Distribution of Domains (TACS-1.0), percentages by actor

Domain (TACS-1.0)	Patients		Therapists	
	f	%	*f*	%
Behavioral Domain (actions)		62	46	38
Cognitive Domain (ideas)	178	50.1	177	49.9
Affective Domain (emotional)	100	46.3	116	53.7

Note. The percentages show the presence of the different Domains during the speaking turns analyzed (N=692).

Reference. For the analysis of the references of Communicative Actions --the protagonist of therapeutic work-- all the speaking turns of both participants were considered (N_P=353; N_T=339), which were coded according to one of the six Reference types in the Content dimension of the TACS-1.0 (the speaker *him/herself*, *somebody else present* in the session, *a third party*, the *therapeutic relationship*, the *relationship with a third party* outside the session, or a *neutral* reference). An association was observed between the participant's role and the type of reference of the Communicative Actions performed during the conversation, χ^2 (5, N =692) =405.91, *p*=.00. This situation was also detected when analyzing Therapy A χ^2 (5, N =320) =148.87, *p*=.00) and Therapy B χ^2 (5, N =372) =263.57, *p*=.00) separately.

Table 3.Distribution of References (TACS-1.0), percentages by actor

REFERENCE (N=692)	Patients		Therapists	
	f	%	*f*	%
Referred to the main protagonists of the conversation				
+ References to the speaker herself (I, mine, me)	228	96.6	8	3.4
+ References to somebody else present in the session (You)	13	6	205	94
+ References to the therapeutic relationship	24	28.6	60	71.4
Referred to other people outside of the session				
+ Reference to a third party (Him, her, they)	35	64.8	19	35.2
+ Reference to the relationship with a third party (We)	37	68.5	17	31.5
Neutral reference	16	34.8	30	65.2

Note. The percentages show the presence of the different References during the speaking turns analyzed (N=692).

As Table 3 shows, these results were mainly encountered in the association between the patient's role and References to the *speaker herself* (P=64.6%, T=2.4%), to a *third party* (P=9.9%, T=5.6%), and to the *relationship with a third party* (P=10.5%, T=5.0%); likewise, the therapist's role was observed to be associated with References to *somebody else present* in the session (T=60.5%, P=3.7%), References to the *therapeutic relationship* (T=17.7%, P=6.8%), as well as with *neutral* ones (T=8.8%, P=4.5%).

Association Between the Participant's Linguistic Style (LIWC-2007) and his/her Role

Linguistic Inquiry and Word Count (LIWC-2007) captured 88.02% of the words uttered by patients and therapists (N=27,974 words) during all the speaking turns present in the 38 Change Episodes analyzed. When applied to the total number of words uttered according to the participants' role, LIWC captured 89.72% of all the patients' words (N=17,196 words) and 86.33% of all the therapists' words (N=10,778 words). This situation was also detected when analyzing Therapy A (P= 87.51%, T= 86.80%) and Therapy B (P= 91%, T= 86.06%) separately. Therefore, the system reliably captured over 86% of the words uttered, regardless of the participant's role and the therapy.

The association between the different LIWC categories and subcategories with the participant's role was established considering the total number of words uttered during the speaking turns present in the Change Episodes (N=692).

Table 4. Distribution of Personal Pronouns (LIWC), percentages by actor

PERSONAL PRONOUNS (N=692)	Patients		Therapists	
	f	%	*f*	%
Referred to the main protagonists of the conversation				
+ First person singular personal pronouns (I)	295	69.9	127	30.1
+ Pronouns referencing the self (mine, me)	299	69.2	133	30.8
+ Second person singular personal pronouns (You)	66	23.5	215	76.5
Referred to other people outside of the session				
+ Personal pronouns referencing others (He, her, their)	261	49.6	265	50.4
+ First person plural personal pronouns (We)	20	50	20	50

Note. The percentages show the presence of the different Personal Pronouns during the speaking turns analyzed (N=692).

Personal Pronouns. Considering the total number of personal pronouns used by the participants during the speaking turns analyzed (N_P=353; N_T=339), an association was detected between the participant's role and the *first person singular*, χ^2 (1, N =692) =154.50, *p*=.00, pronouns *referencing*

the self, χ^2 (1, N =692) =152.43, *p*=.00, and the *second person singular*, χ^2 (1, N =692) =143.43, *p*=.00, a situation which was observed even when analyzing both therapies separately.

As Table 4 shows, this result is especially clear in the association between *the second person singular* and the therapist's role (T=63.42%, P=18.70%), as well as in the association between the patient's role and the *first person singular* (P=83.57%, T=37.46%) and *pronouns referencing the self* (P=84.70%, T=39.23%). In contrast, there were no significant differences between the participants regarding the use of *first person plural personal pronouns* (P=5.67%, T=5.67%) and the use of *personal pronouns referencing others* (P=73.94%, T=78.17%).

Table 5. Distribution of verbalizations referencing Psychological Processes (LIWC), percentages by actor

	Pacientes		Terapeutas	
PSYCHOLOGICAL PROCESSES (LIWC-2007)	f	%	f	%
Behavioral processes	87	58.4	62	41.6
Cognitive processes	322	53.5	280	46.5
Affective processes	167	51.9	155	48.1

Note. The percentages show the presence of the different psychological processes during the speaking turns analyzed (N=692).

Psychological Processes. Considering the total number of words referencing Psychological Processes (*Affective*. *Cognitive*, and *Behavioral*) uttered by the participants during the speaking turns analyzed (N_P=353; N_T=339), it was not possible to detect any associations with the participant's role (a situation which was also observed when analyzing both therapies separately). That is, both patients and therapists mostly uttered words referencing *Cognitive* Processes (P=91.22%; T=82.59%), followed by *Affective* Processes (P=47.31%; T=45.72%) and *Behavioral* Processes (P=24.65%; T=18.29%) (see Table 5).

LIWC and TACS-1.0: Comparison of common categories

The last part of the study involved the comparison of the categories shared by both systems. Thus, at the communicative level, the Domain and Reference categories of the Content dimension of the TACS-1.0, correspond to the Psychological Processes and Personal Pronouns categories of LIWC.

Domain and Psychological Processes. No significant differences were found between the percentages of each of the TACS-1.0 Communicative Action Domains and the percentages of words referencing Psychological Processes (LIWC-2007). The percentage of speaking turns manually coded

with the presence of *Affective*, *Cognitive*, and *Behavioral* Domains was similar to the percentage of speaking turns in which the Word Count Software identified contents referencing *Affective*, *Cognitive*, and *Behavioral* Processes (see Table 2 and Table 5). That is, at the communicative and linguistic levels, the patients verbalized similar percentages of Communicative Actions with *Behavioral* Domains and Processes (TACS=62%; LIWC=58.4%), with *Cognitive* Domains and Processes (TACS=50.1%; LIWC=53.5%), and with *Affective* Domains and Processes (TACS=46.3%; LIWC=51.9%). The same situation was detected in the case of therapists, who verbalized similar percentages of Communicative Actions with *Behavioral* Domains and Processes (TACS=38%; LIWC=41.6%), with *Cognitive* Domains and Processes (TACS=49.9%; LIWC=46.5%), and with *Affective* Domains and Processes (TACS=53.7%; LIWC=48.1%).

Reference and Personal Pronouns. Likewise, no significant differences were found between the percentages of the References of Communicative Actions and the percentages of Personal Pronouns, when both referenced other actors external to the therapy. The percentage of speaking turns manually coded as referencing a *third party* (he, she, they) and the *relationship with a third party* (we) was similar to the percentage of speaking turns in which the word count software identified the presence of *personal pronouns referencing others* (he, she, they) and *first person plural pronouns* (we) (see Table 3 and Table 4). That is, at the communicative and linguistic levels, the patients verbalized similar percentages of Communicative Actions with Reference to a *third party* and *Personal pronouns referencing others* (TACS=64.8%; LIWC=49.6%); likewise, they verbalized similar percentages of Communicative Actions with Reference to the *relationship with a third party* and *first person plural Pronouns* (TACS=68.5%; LIWC=50%). The same situation was detected in the case of therapists, who verbalized similar percentages of Communicative Actions with Reference to a *third party* and *Personal pronouns referencing others* (TACS=35.2%; LIWC=50.4%); likewise, they verbalized similar percentages of Communicative Actions with Reference to the *relationship with a third party* and *first person plural Pronouns* (TACS=31.5%; LIWC=50%). In contrast, significant differences were found between the percentages of the References of Communicative Actions and the percentages of Personal Pronouns, when both referenced the main actors of the therapeutic conversation. The percentage of speaking turns manually coded as *referencing the self* (I, me) and *another person present* (you) was different from the percentage of speaking turns in which the Word Count software identified *first person singular pronouns* (I) and *second person singular pronouns* (you) (see Table 3 and Table 4). That is, at the communicative level, the patients verbalized a higher percentage of Communicative Actions *referencing themselves* in comparison with the percentage of *first person singular pronouns* at a linguistic level, Z=8.136, p<.0002 (TACS=96.6%, LIWC=69.9%); in contrast, the therapists

verbalized a higher percentage of Communicative Actions referencing *another person present*, in comparison with the percentage of *second person singular pronouns*, Z=5.319, p<.0002 (TACS=94%; LIWC=76.5%). However, in spite of the differences in the percentages of these categories, each analysis system revealed the same significant differences between the participants of the therapeutic conversation.

Conclusions

Linguistic styles may illustrate how people express their thoughts and affects in conversation. Even though some linguistic characteristics, such as the use of certain personal pronouns or verb tenses, may not provide information about what an individual is speaking about, they can clarify his/her subjective perception of him/herself and of different situations.

Communicative Actions in this study were analyzed using the Therapeutic Activity Coding System (TACS-1.0), which has proven to be a tool capable of accounting for the complexity and multidimensionality of communicative interaction in psychotherapy (Valdés, et al., 2010). The results made it possible to establish an association between the participant's role and the Basic Forms of verbalizations, their Communicative Intentions, Techniques, and References, although not with the Domain, that is to say, the object of therapeutic work.

Regarding the formal structure of the verbalizations, the patients during Change Episodes tended to admit (*Agreement*) or not admit (*Denial*) as true what the therapists said; in contrast, the latter tended to interrogate the patients to obtain certain information (*Question*). Nevertheless, it was noteworthy that in Change Episodes both participants made a similar percentage of statements which they wanted to be received as true (*Assertion*). Their proportion in comparison with the other Basic Forms may indicate that utterances with said formal structure carry the weight of therapeutic work.

With respect to the communicative purpose of the verbalizations, the patients tended to convey a content, clarify it, or direct the other participant's attention towards certain aspects of the conversation (*Explore*), while the therapists favored understanding, giving feedback, and sympathizing with the contents conveyed by the patients (*Attuning*), while at the same time they constructed and consolidated new meanings with the patients (*Resignify*) based on the contents provided by them. These Communicative Actions of patients and therapists are intended to allow the latter to gradually construct new Subjective Theories through a successive process of resignification, facilitated by the therapists and fostered during the conversation.

With respect to the techniques used to support the communicative purpose of the verbalizations, the patients tended to support, give an example, generalization, or justification for the contents discussed

(*Argumentation*), and to refer to a succession of events that happened during a certain period (*Narration*); in contrast, the therapists tended to understand, express, and translate the patients' contents to new forms of expression (*Interpretation*), to mirror the patients' affective, cognitive, and/or behavioral states (*Reflection*), and sometimes compare them with their own assertions (*Confrontation*). Therefore, the TACS-1.0 did not only identify the classical techniques used by the therapists and which characterize the psychodynamic approach, but also distinguished the communicative resources of patients, which are usually typical of everyday interaction.

Regarding the object of therapeutic work, during Change Episodes both patients and therapists tended to verbalize contents associated to the realm of ideas (*Cognitive* Domain), followed by contents belonging to the world of emotions (*Affective* Domain), and contents connected to actions (*Behavioral* Domain). These results may be reflecting not only a certain consistency in the activity conducted by both participants during the conversation, but also a shared object of therapeutic work.

Regarding the protagonists of therapeutic work, during Change Episodes the patients tended to verbalize contents about or towards themselves (*Reference to the self*), contents about or towards a third person outside the session (*Reference to a third party*), or contents about their relationship with another party outside the session (*Reference to the relationship with a third party*); in contrast, the therapists tended to verbalize contents about or towards the patients (*Reference to the other person present*), contents belonging to the current relationship between the two participants (*Reference to the therapeutic relationship*), or contents without a clear reference, because they omit the subject of the communication (*Neutral Reference*), which may reflect the asymmetry and the communicative attunement between the participants during the conversation in relevant segments of the session.

On the other hand, for the analysis of some characteristics of the Linguistic Style present in the utterances of patients and therapists, the Spanish version of Linguistic Inquiry and Word Count (LIWC-2007) was used, which captured above 86% of the total number of words analyzed. This software not only was susceptible of being adapted to the analysis methodology of Change Episodes, but also showed to be so sensitive that it revealed differences and similarities between the characteristics of patients' and therapists' speech during the relevant segments of the sessions, which ensures a high degree of consistency when applying it to the study of psychotherapeutic processes.

The results support an association between certain linguistic characteristics and the participant's role. For example, regarding the use of personal pronouns, during Change Episodes the patients tended to utter the personal pronoun “I” (*First person singular*) and personal pronouns such as “Me” (*Referencing the self*); in contrast, the therapists favored the use of the personal pronoun “You” (*Second person singular*). However, it must be pointed out that in the Change Episodes analyzed both participants used the personal pronoun “We” (*First person plural*) along with “He”, “She”, or “They”

(*Pronouns referencing others*), in similar percentages. This linguistic result can also be interpreted as a sign of asymmetry and communicative attunement, especially when considering that certain studies show that the use of first person personal pronouns might be a clear indicator of the speaker's position during verbal interaction. Thus, the participant who uses the personal pronoun "I" less frequently tends to have a higher status in the conversation (Chung & Pennebaker, 2007).

Concerning the verbalization of words which account for psychological processes (*affective*, *cognitive*, and *behavioral*), both patients and therapists tended to utter words referencing *cognitive* processes (I think, think [imperative], I guess, idea, among others), followed by words that reference *affective* processes (feel, anger, calm, among others), and words that reference *behavioral* processes (I argue, I'll call, hugged, among others). As in the case of the TACS-1.0, these results may reflect the presence of a sustained and shared therapeutic work by patients and therapists, which facilitates the successive resignification process that prepares therapeutic change.

Finally, a comparison between the two analysis systems reveals that Linguistic Inquiry and Word Count (LIWC-2007) contains categories and subcategories which facilitate a more microanalytic view of the Content dimension of the Therapeutic Activity Coding System (TACS-1.0, Valdés, et al., 2010), but which is consistent with it. In this regard, the manual coding of the object of therapeutic work (Domain of the Communicative Action) conducted during Change Episodes was confirmed by the results obtained using the automatic system for counting words referencing psychological processes. That is to say, it was not possible to differentiate patients and therapists in terms of their verbalization of *cognitive*, *affective*, and *behavioral* contents neither at a communicative nor at a linguistic level. This was also observed when comparing the manual coding of the Reference of Communicative Actions (protagonist of the object of therapeutic work) with the count of personal pronouns uttered by the participants. It must be pointed out that although there were variations in the percentages provided by the two systems, which can be explained by their way of analyzing their categories, the differences between the participants within each analysis system were the same. For instance, while LIWC can count how many times the personal pronouns "You" and "I" are uttered in a speaking turn, the TACS-1.0 codes the same speaking turn as referencing the *therapeutic relationship* (you and I, and I and you). Both results are important when analyzing what happens in the therapist-patient conversation.

Future analyses should include more specific LIWC-2007 categories to make it possible to take a more microanalytic look at the Domain category of the TACS-1.0, analyze how the different categories behave as the therapeutic process progresses, and replicate the analyses in other segments of the sessions, in order to add more consistency to the results obtained.

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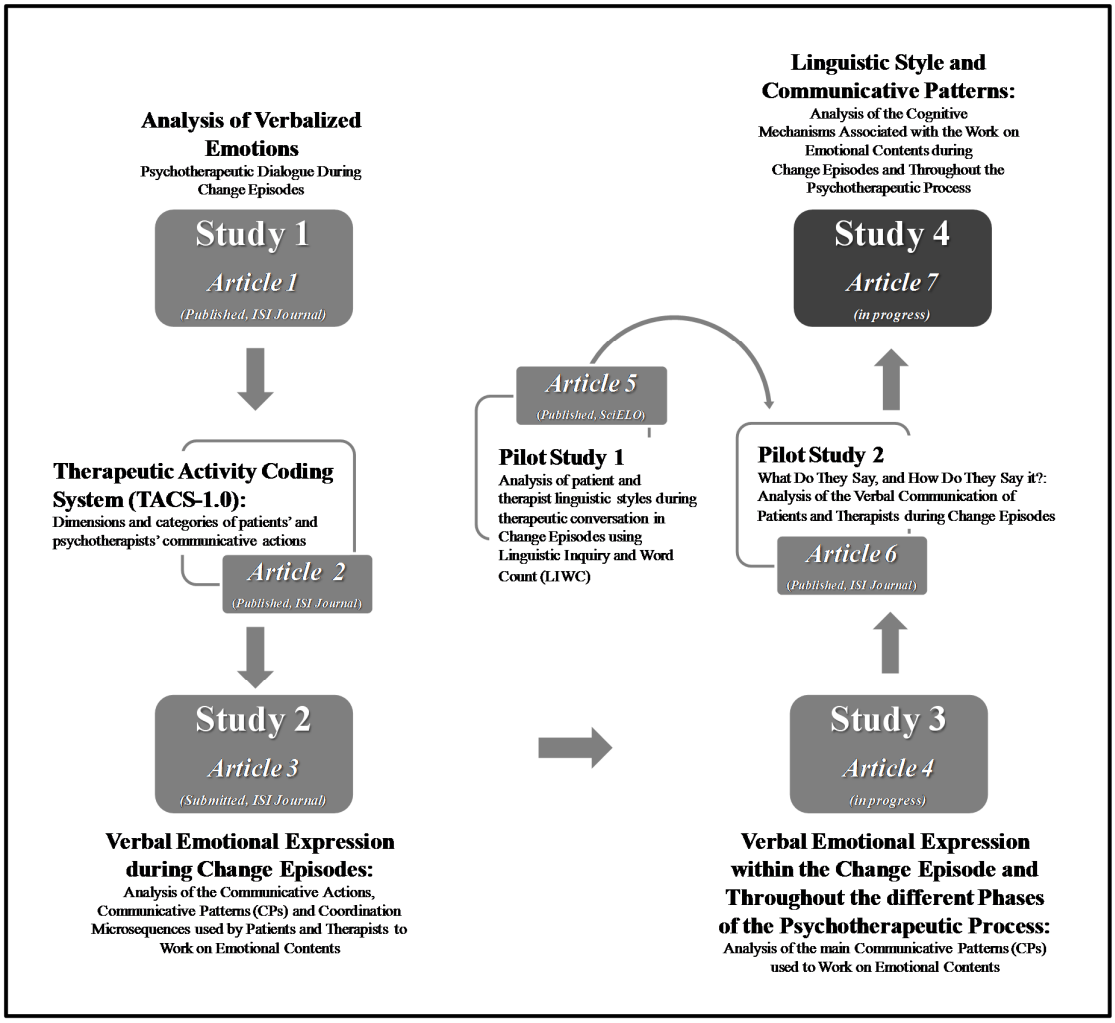

Fourth specific objective: to determine which cognitive mechanisms are present in patients' and therapists' verbal emotional expressions during Change Episodes and throughout the psychotherapeutic process.

Manuscript in progress (2011)

Linguistic Style and Communicative Patterns: Analysis of the Cognitive Mechanisms Associated with Work on Emotional Contents During Change Episodes and Throughout the Therapeutic Process [16]

Valdés N.

Abstract

The evocation of the personal meanings of patient's emotional experience during therapy involves a discursive transformation process, in which the meanings of certain contents are conjointly constructed during the therapeutic conversation (Greenberg, 2002; Kogan & Brown, 1998; Sluzki, 1992). Three main Communicative Patterns (CPs) used to work emotional content during Change Episodes were identified in previous studies: Affective exploration, Affective attunement and Affective resignification (Valdés, Manuscript in progress). Objective: To analyze the words verbalized by patients and therapists during the use of the main Communicative Patterns (CPs) in order to determine the cognitive mechanisms (cause, insight, tentative and certainty) involved in the work of emotional contents during Change Episodes. Method: A mixed methodology was used to analyze 38 Change Episodes (1.016 speaking turn segments) and 19 Stuck Episodes (581 speaking turn segments) which were identified within two psychodynamic therapies. Patients' and Therapists' verbal expressions were analyzed using the Therapeutic Activity Coding System (TACS-1.0, Valdés, Tomicic, Pérez, & Krause, 2010) and the Cognitive Mechanisms were analyzed using the Linguistic Inquiry Word Count (LIWC-2007, Pennebaker, Booth, & Francis, 2001). Results show that patients adopted some linguistic structures verbalized by their therapists throughout the therapy when both of them were using the Affective resignification pattern.

Keywords: Change Episodes, cognitive mechanisms, linguistic style, resignification.

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During the therapeutic conversation, therapists' and patients' verbal expressions take the form of Communicative Patterns (CPs), which allow them to coordinate communication within themselves and with the other participant during therapeutic activity (Valdés, Krause, Tomicic, & Espinosa, 2011b), and, more specifically, during their work on emotional contents in Change Episodes. These patterns have made it possible not only to characterize patients' and therapists' verbalizations within each phase and throughout the therapeutic process, but also to differentiate the type of therapeutic activity performed during Change and Stuck Episodes (Valdés, 2011b). On the other hand, sufficient evidence has accumulated over the last three decades to conclude that physical and mental health is correlated with the type of words used during conversation (Lepore & Smyth, 2002; Niederhoffer & Pennebaker, 2002; Pennebaker, 1997; Pennebaker, Mayne, & Francis, 1997; Stiles, 1992), which reflect the way in which psychological processes are structured. A person's linguistic style may display his/her subjective way of understanding him/herself and the situations he/she encounters (Pennebaker & King, 1999; Valdés, Krause & Álamo, 2011a), and may also be an indicator of certain characteristics of his/her personality and social processes (Pennebaker, Mehl, & Niederhoffer, 2003). However, the most important aspect is that the words that a person uses in conversation have a deep impact on the listener, because, if a person can consciously decide which words to use when conveying different contents in speech, such words may also be processed consciously or unconsciously by the other participant (Pennebaker, et al., 2003). Based on the assumption that psychotherapy is a process which involves a series of phases characterized by the performance of certain activities which lead to the achievement of specific goals, and that speakers' linguistic style reflects the cognitive mechanisms[17] necessary for working on certain contents during relevant moments of the therapy, the present study will analyze the words verbalized by patients and therapists during their use of Communicative Patterns (CPs) in order to determine which cognitive mechanisms are activated while working on emotional contents during Change Episodes.

In psychotherapy research, there is growing interest in studying the process through which interpersonal relationships are configured and, more specifically, how emotions are exchanged via verbal expressions, which results in a specific relationship form between the patient and his/her therapist. There is evidence suggesting that successful therapies are distinguished by certain specific characteristics of the affective exchange and the emotional experience present in the patient-therapist dyad. Thus, speaking about certain emotional contents during the therapy has an influence on a person's physical and mental health --doubting this would be tantamount to doubting the effectiveness of

[17] The present study will employ the Cognitive Mechanisms category of LIWC-2007 to classify the words used by the participants of the therapeutic conversation, depending on whether they reflect *cause*, *insight*, *tentativeness*, or *certainty*.

psychotherapy. The objective of the present study is to determine how this process occurs, in order to explain patient change based on a more detailed knowledge of verbal emotional expressions during the therapeutic process. The most concrete description of emotional expression at the verbal level is the use of words referencing emotional contents, and in this sense, human language has shown to be a powerful producer of labels for the expression of emotional states (Schröeder, 2003). The ability to use words that express emotional contents is associated with automatic valuations and involuntary physiological changes. This ability allows individuals to regulate what they are thinking and feeling, and to express it verbally at the same time; however, it is not simple to access the subjective experiences of others, as each emotion belongs to a family of related emotional contents and not to a specific type of emotion (Ekman, 1999). Also, the fact that some verbal expressions are recognized as a sign of certain emotions does not necessarily mean that they are the result of an underlying affective state.

Text analysis has been used to identify multiple psychological dimensions in speakers' discourse. In fact, this has resulted in the identification of two methodological strategies for the analysis of texts in psychology. The first of them involves the analysis of each of the phrases in a text in order to generate codes, which have made it possible to identify individuals with different medical diagnoses (Gottschalk, Stein, & Shapiro, 1997), personality traits (Weintraub & Aronson, 1964), and cognitive and emotional dynamics (Stiles, 1992). The second analysis strategy is based on a count of the words that a person uses in his/her discourse. Like the previous approach, this has not only made it possible to establish differences between a series of medical and psychiatric diagnoses (Bucci, 1997; Mergenthaler, 1996; Rosenberg, Schnurr, & Oxman, 1990; Schnurr, Rosenberg, & Oxman, 1992; Stein, Folkman, Trabasso, & Richards, 1997), but has also helped to characterize certain cognitive processes (Lee, Park, & Seo, 2006), emotional processes (Kahn, Tobin, Massey, & Anderson, 2007), and some personality traits (Mehl, Gosling, & Pennebaker, 2006). During therapeutic conversation, emotions generally take the form of narrations with emotional contents which took place in the past, or of emotional contents whose occurrence is anticipated in the session (Ekman, 1999). Based on the notion that emotional work is a common denominator of all therapeutic approaches, Hölzer, Pokorny, Kächele and Luborsky (1997) developed at computer system that classifies and codes emotional words, which has shown that therapists use more emotional words than their patients, that there is a significant correlation between the therapist's approach and the presence of certain types of emotions, and that the most effective therapies are those that include more emotional words.

In the same line of research, Gervasio, Taylor and Hirshfield (1992) developed a computer-aided system for performing linguistic analyses of patient-therapist interaction during the therapeutic dialog (MacCALAS), which allowed them to group verbs into three groups depending on their semantic

nature (static, action, and process verbs) and the function that they fulfill during conversation. Using this system, Anderson, Bein, Pinnell and Strupp (1999) showed that in successful therapies, therapists used more action verbs and fewer static verbs during highly affective segments, whereas patients tended to use static and process verbs. These results appear to indicate not only that therapists are more attuned than their patients with the present state of the emotion being worked on during the session, but also that there are linguistic differences between patients and therapists, such as the therapists' more informative discourse, and their more efficient use of simpler and clearer words.

Another concept which has helped to explain verbal emotional expressions is Referential Activity (RA), which refers to a person's ability to integrate emotions with the verbal symbolic code, that is, with the words that give them meaning (Bucci, 1992, 1997), based on the codes of information processing present in the Multiple Code Theory (subsymbolic, nonverbal symbolic, and verbal symbolic processing). It has been observed that RA varies throughout the therapeutic process, remaining low while the patient has not yet expressed his/her experience in a linguistic form, and rising when this association is completed through a psychotherapeutic process which fosters a better connection between emotions and the words that give them meaning (Bucci, 1997; Stigler & Pokorny, 2001). Everything seems to indicate that patients' description of events using concrete, specific, and creative language is positively correlated with therapeutic change (Mergenthaler & Bucci, 1999; Roussos & Leibovich, 2002). In this regard, the discourse of patients with the lowest emotional participation levels is characterized by narratives full of descriptions of external and impersonal events, while patients with higher levels tend to provide descriptions richer in personal details and attain more successful therapeutic outcomes (Mohr, Shoham-Salomon & Beutler, 1991; Rudkin, Llewelyn, Hardy, Stiles & Barkham, 2007).

In the context of research on disclosure writing, the Linguistic Inquiry and Word Count, (LIWC-2007) was developed by Pennebaker, Francis and Booth (2001). It has contributed to several studies demonstrating that people can improve their psychological wellbeing after writing about traumatic experiences (Chung & Pennebaker, 2007; Graybeal, Sexton, & Pennebaker, 2002; Niederhoffer & Pennebaker, 2002; Pennebaker & King, 1999; Slatcher, Vazire, & Pennebaker, 2008; Stirman & Pennebaker, 2001). The program can capture and calculate percentages of words in a text according to a variety of linguistic and psychological categories and subcategories, which make it possible to describe certain characteristics of a person's linguistic style and predict his/her linguistic wellbeing. This system has been shown to be highly reliable in English-speaking countries. After the introduction of transcultural studies, it was translated and validated for the Spanish language by Ramírez-Esparza, Pennebaker and García (2007). The Spanish version of LIWC maintained the 72 linguistic categories of the English one, which are grouped into five broad dimensions: (a) standardized linguistic categories

(pronouns, negations, assertions, articles, prepositions, and numbers); (b) categories referencing psychological processes (cognitive, affective, sensory-perceptual, and social processes); (c) categories referencing relativity (time, space, and movement); (d) categories referencing personal contents (job, pleasurable activities, and physical states, among others); and (e) experimental categories (fillers, hesitations, etc.). The Spanish version employs a dictionary which includes 7515 words and word roots. Most of the differences between the two versions can be explained by the number of words included in each dictionary, as Spanish requires more verb conjugations and includes masculine and feminine nouns, accented and non-accented words, and a higher number of verb synonyms. This system has been used with different types of text by different researchers, who have found it is highly consistent (Alpers, et al., 2005; Mehl & Pennebaker, 2003; Pennebaker & King, 1999) and provides highly significant correlations in most categories of both versions, which indicates an adequate degree of correspondence (Ramírez-Esparza et al., 2007).

The most frequent criticism directed at most studies about word use is that they were conducted upon the basis of a specific therapeutic approach, often considering only one of the participants, and not analyzing the nature of language in itself. With this in mind, this article proposes a view of therapeutic language which includes both the performance of actions by the two participants when they speak and the transmission of contents which are directly associated with the object of therapeutic work. This twofold notion of verbal communication makes it possible to analyze therapeutic activity by identifying variable actions whereby patients and therapists influence each other without losing track of content, as both dimensions participate in the construction of psychological change. In order to do this, the Therapeutic Activity Coding System (TACS-1.0; Valdés, Tomicic, Pérez, & Krause, 2010b) was used, which has proven to be a tool capable of accounting for the complexity and multidimensionality of communicative interaction in psychotherapy. This system is based on a performative view of language, and includes parallel and non-inclusive dimensions of analysis which make it possible to extend this argument in terms of the notion that saying something is doing something (Reyes, et al., 2008). Patient and therapist verbalizations were termed Communicative Actions, because they have the double purpose of conveying information (Contents) and exerting an influence on the other participant and the reality constructed by both (Action); therefore, this classification system considers both the influence and the content of Communicative Actions. The TACS-1.0 (Valdés, et al., 2010b) is made up by five categories of analysis; three of them belong to the Action dimension while two belong to the Content dimension. The categories that include 22 Action codes are: Basic Form (formal structure of the utterance), Communicative Intention (communicative purpose expressed during the utterance), and Technique (methodological resources present in the utterance, some of which coincide with therapeutic techniques while others are typical

of everyday interaction). On the other hand, the nine Content codes are: Domain (whether the object of therapeutic work is mostly cognitive, affective, or behavioral) and Reference (protagonist of the object of therapeutic work). These five categories and the 31 codes they include were developed using, firstly, a discovery-oriented methodology followed by inter-rater reliability studies which showed good agreement indexes (Valdés, et al., 2010b).

A study by Valdés et al. (2011a) analyzed the Communicative Actions and some characteristics of the Linguistic Styles of patients and therapists during the therapeutic conversation in Change Episodes, in order to determine the type of actions performed and the type of contents conveyed by the speakers to influence the other participant and configure new realities. This study revealed that Linguistic Inquiry and Word Count (LIWC-2007) contains categories and subcategories which facilitate a more microanalytic view of the Content dimension of the Therapeutic Activity Coding System (TACS-1.0), but which is consistent with it. The manual coding of the object of therapeutic work (Domain) conducted during Change Episodes was confirmed by using the automatic system for counting words referencing psychological processes. That is to say, it was not possible to differentiate patients and therapists in terms of their verbalization of cognitive, affective, and behavioral contents neither at a communicative nor at a linguistic level. This was also observed when comparing the manual coding of the Reference of Communicative Actions (protagonist of the object of therapeutic work) with the count of personal pronouns uttered by the participants (Valdés, et al., 2011a).

Another study developed by Valdés (2010) showed an association between certain linguistic/psychological characteristics and the participant's role (patient or therapist). For example, the patient used more personal pronouns in the first person singular, emotional contents with a positive valence, and words that reflected causality-related cognitive subprocesses; in contrast, the therapist tended to use personal pronouns in the second person singular, emotional contents with a negative valence, and words that reflected insight-related cognitive subprocesses. However, some linguistic/psychological characteristics were shared by both participants and may reflect a certain degree of continuity and consistency in their activity during the conversation; likewise, this may be interpreted as a sign of communicative attunement during the therapeutic activity that characterizes relevant or significant segments (Valdés, 2010). This is the case, for example, of studies that prove that the use of first person personal pronouns are a clear indicator of the speaker's position in verbal interaction: the participant who uses the personal pronoun “I” less frequently tends to have a higher status in the conversation (Chung & Pennebaker, 2007; Valdés, et al., 2011a). However, since every conversation is coordinated, reciprocal, and follows rules jointly established by the speakers (Slugoski & Hilton, 2001), it is often difficult to detect which participant is leading the conversation, and who is simply following the other.

Like in nonverbal communication, Linguistic Style Macthing (LSM) is based on the assumption that the words that a person uses in conversation covary turn-by-turn according to those used by the other speaker (Capella, 1996). It is thought that the words used by one of the participants prepare the other participant to respond in a certain way. Therefore, both participants are able to influence each other at the level of the words that they use in conversation, in the same way that their nonverbal behavior influences the other (Chartrand & Bargh, 1999). In a similar line, Communication Accommodation Theory (CAT), developed by Giles and Coupland (1991), has made it possible to explain how people adapt their verbal expressions to those of the other participant not only to gain social approval but also to make communication more efficient. This theory is based on individuals' ability to strategically negotiate their social distance with those they interact with, so that such distance can be created, maintained, and/or reduced depending on the situation (Shepard, Giles, & Le Poire, 2001). This is consistent with the hypothesis advanced by Pennebaker and King (1999) about the existence of a sort of interpersonal synchrony at the level of the words used by the speakers during the conversation. Thus, if language makes it possible to understand the way in which people perceive themselves and the world, then the existence of synchrony between the speakers' linguistic styles may indicate the presence of harmony in the way in which each of them organizes the words that communicate their psychological styles.

The present study meets microprocess research criteria, since it focuses on the analysis of segments of the session regarded as relevant for change and which function as "windows" into the therapeutic process (Elliott & Shapiro, 1992). Nevertheless, it also focuses specifically on the analysis of the verbalizations of patients and therapists which foster such change at the communicative and the linguistic levels. The study is intended to answer the following research questions: depending on the therapeutic phase, which cognitive mechanisms are at present in therapists' and patients' verbalizations while they use the different Communicative Patterns for working on emotional contents during Change Episodes, and, are there any differences in the behavior of such cognitive mechanisms depending on the phase of the therapeutic process?.

Method

Sample

Two short weekly individual psychodynamic therapies (A and B), conducted by male psychoanalysts with a vast clinical experience, were analyzed. Both patients were female, had a similar reason for seeking help, and gave their informed consent to participate in the present study (see Table I).

Table I. Characteristics of the sample

	Psychotherapeutic Processes	
	Therapy A	Therapy B
Patients	Woman	Woman
Age	38 years old	43 years old
Focus of therapy	Development of mourning for separation and recent losses	Expression of needs; strengthen autonomy; increase quality of relationships
Psychotherapeutic approach	Psychodynamic approach	
Therapists	2 Psychoanalyst-Psychiatrists (Men)	
Total number of sessions (N=39)	18	21
Change Episodes (N=38)	14	24
Speaking turns (N=825)	352	473
Total of number of segments (N=1016)	437	579
Segments coded with a type of content (N=692)		
Segments coded with emotional contents and *f* >5 (N=161)	81	80
Stuck Episodes (N=19)	7	12
Speaking turns (N=449)	213	236
Total number of segments (N=581)	289	292
Segments coded with a type of content (N=383)		
Segments coded with emotional contents and *f* >5 (N=61)	45	16

Note. The same sample was used in the study *"Verbal Emotional Expression During Change Episodes: Analysis of the Communicative Patterns used by Patients and Therapists to Work on Emotional Contents"* (Valdés, et al., 2011b).

All sessions in both therapies were included (N=39), during which 38 Change Episodes were identified, delimited, transcribed, and analyzed (A=14, B=24). Each episode was made up by patients' and therapists' speaking turns (N=825), which begin with the start of one participant's verbalization and end when the other's starts (Krause et al., 2009). Each speaking turn was segmented depending on the presence of two or more Communicative Patterns (CPs) within a single turn. Thus, out of the 1016 segments available, only 692 were coded with some type of content (cognitive, emotional, or behavioral).

As the objective of this study was to analyze the patterns used by patients and therapists specifically to work on emotional contents during the conversation, it only considered the segments which included one of the Communicative Patterns (CPs) used for this end, and which displayed a frequency above 5 for at least one of the participants (patient and therapist).

Each of these segments was made up by the total number of words verbalized by the speaker during them (see Figure I). In addition, in order to have a group for comparison, 19 Stuck Episodes were

identified (A=7, B=12), which were delimited, transcribed, coded, and analyzed to identify in them the Communicative Patterns (CPs) more frequently used for working on emotional contents (f>5). Therefore, the total sample was constituted by 222 segments with a Communicative Pattern (CP), 161 of which were Change Episodes and 61 Stuck Episodes.

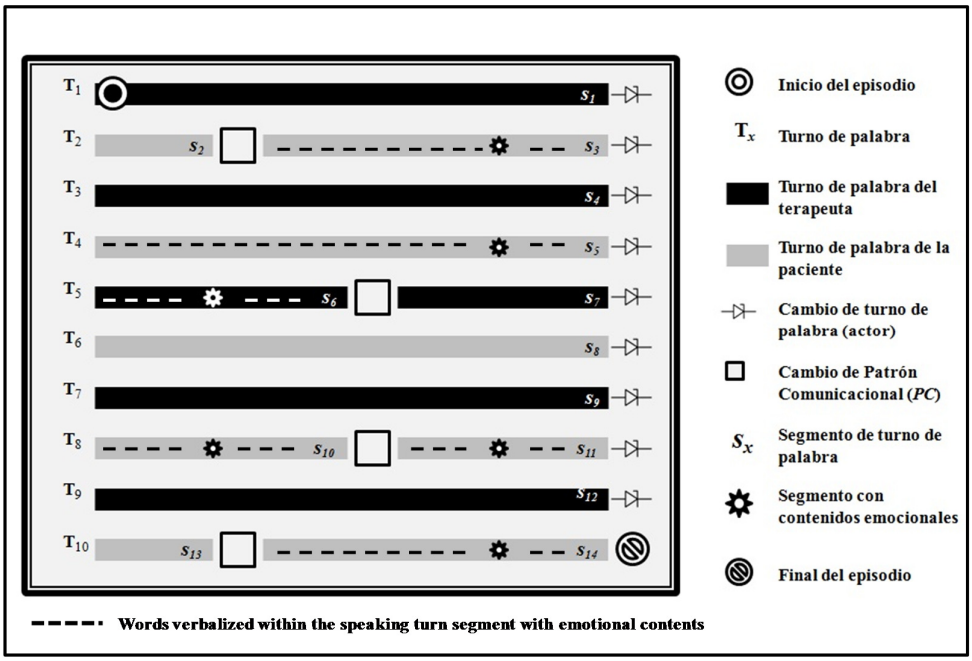

Figure I. Segmentation of speaking turns. According to the manual, this episode contains 10 speaking turns (T_x), 14 speaking turn segments (S_x), 6 speaking turn segments with emotional contents (S_3, S_5, S_6, S_{10}, S_{11} and S_{14}) and all the words uttered during each of them (- - -).

Procedure and data analysis

Therapeutic Outcome and Change. Therapeutic outcome was estimated using the Outcome Questionnaire (OQ-45.2), developed by Lambert, Hansen, Umpress, Lunnen, Okiishi and Burlingame (1996), and validated for Chile by Von Bergen and De la Parra (2002). A high total score in the questionnaire means that the patients reported a high level of unhappiness with their high quality of life, which is expressed through their symptoms, interpersonal relationships, and social role. The interpretation of the results was based on a cut-off score (in Chile, 73) derived from comparing a clinical sample with a non-clinical one, which led to the identification of a functional and a dysfunctional population and resulted in a Reliable Change Index (RCI) which determines whether the patient's change at the end of the treatment was clinically significant (RCI for Chile = 17; Jacobson & Truax, 1991). In this case, Patient A started the therapy with a total score of 68 and ended it with 48.4 (RCI=19.6), whereas Patient B started the therapy with a total score of 111 and ended it with 91

(RCI=20). This means that both patients displayed a significant degree of change during the therapy, even though Patient A started below the cut-off score and Patient B above it.

On the other hand, from the perspective of Generic Change Indicators (GCI, Krause et al., 2007), both therapies were successful, considering the number of change moments during the session (A=14, B=24) and their level in the hierarchy of indicators (Altimir, et al, 2010; Echávarri, et. al, 2009). GCIs are grouped into three levels which reflect the evolution of the change process. As Figure II shows, the largest percentage of change indicators was associated with an increase in the patients' openness to new forms of understanding (Level II). The consolidation of the structure of the therapeutic relationship (Level I) was more frequent during the initial phase of the therapy; also, both patients were capable of constructing and consolidating a new way of understanding themselves (Level III). Therefore, it can be concluded that both therapies displayed a positive evolution from the point of view of Generic Change Indicators (GCI).

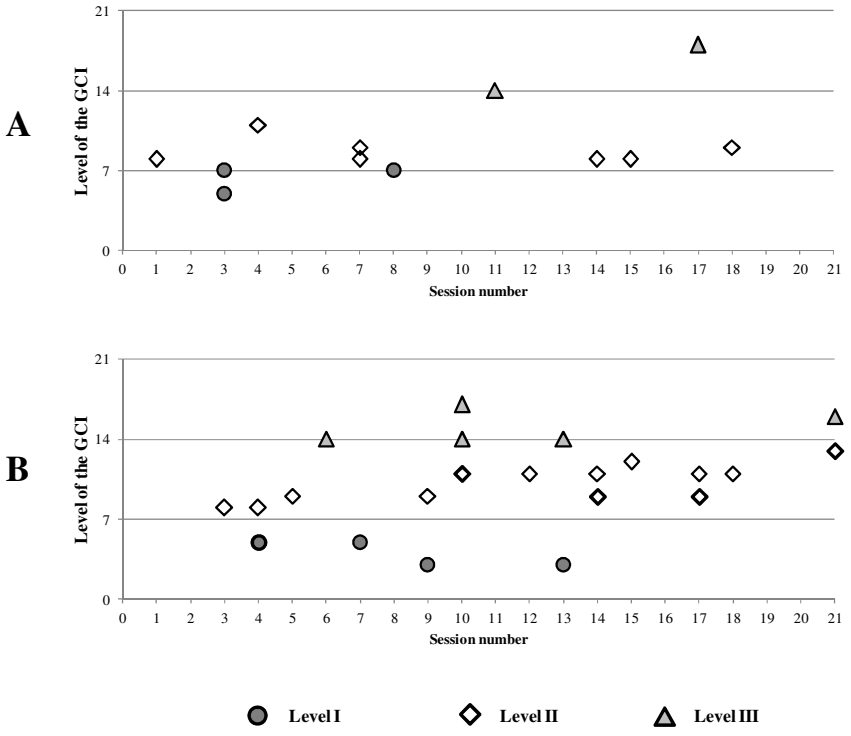

Figure II. Distribution of Generic Change Indicators (GCI) in therapies A and B.

Delimitation of Change Episodes and Stuck Episodes. Both therapies were recorded audiovisually and observed through a one-way mirror by expert raters trained in the use of: (a) the protocol for guiding observation and for detecting change moments; (b) the hierarchical List of Change Indicators (Krause, et al., 2007); and (c) the List of Stuck Episode Topics. The sessions were listed in chronological order and transcribed to facilitate the subsequent delimitation of Change Episodes.

As shown in Figure III, the moment of change marks the end of the episode. Said moment of change must meet the criteria of theoretical correspondence, novelty, topicality, and consistency; that is, it must match one of the indicators from the List of Generic Change Indicators, be new, occur during the session, and persist over time (Krause, et al., 2007; Valdés, et al., 2005). Afterwards, using a thematic criterion, the beginning of the therapeutic interaction referring to the content of the change moment is tracked in order to define the start of the Change Episode.

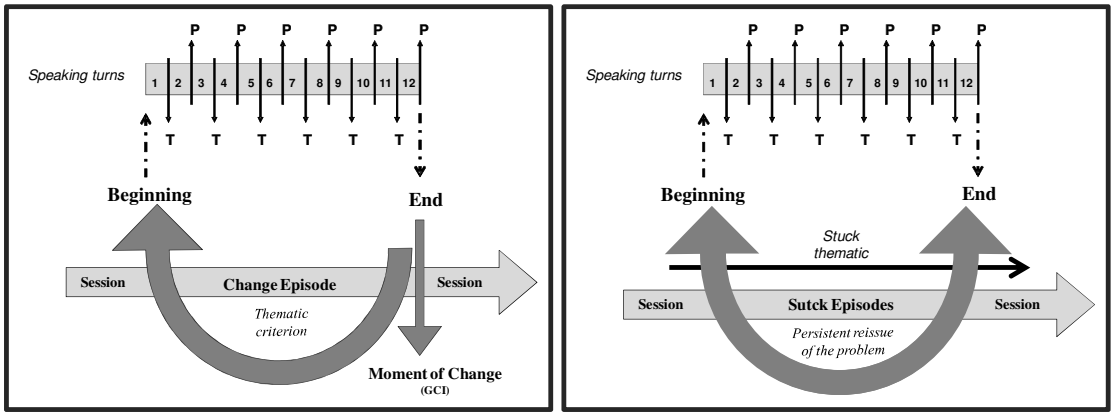

Figure III. Delimitation of Change and Stuck Episodes (Valdés, et al., 2011b).

In the case of Stuck Episodes, it was necessary to identify the existence of periods of the session in which there was a temporary halting of the patient's change process due to a reissue of the problem, that is, episodes of the session characterized by a lack of progressive construction of new meanings, or an argumentative persistence in the patient's discourse which did not contribute to the objective of change (Herrera, Fernández, Krause, Vilches, Valdés, & Dagnino, 2009). A stuck episode must meet the criteria of theoretical correspondence, novelty, and nonverbal consistency; that is, it must match one of the topics from the List of Stuck Moment Topics, occur during the session, and be nonverbally consistent with the topic of the stuck. In addition, Stuck Episodes must comply with the following methodological criterion: be at least three minutes long and be at least 10 minutes apart from a Change Episode in the same session.

Configuration of Communicative Patterns (CPs). The Therapeutic Activity Coding System (TACS-1.0, Valdés, et al., 2010b) was used for manually coding patients' and therapists' verbalizations in each speaking turn segment during Change and Stuck Episodes. These coding were independently performed by trained observers, following the Coding Manual prepared for this process (Krause, et al.,

2009, unpublished). Once all segments in both episode types were coded, the resulting code configuration of each of them was analyzed. This combination was termed Communicative Pattern (CP), and was made up by six digits which correspond to each of the TACS-1.0 categories (Valdés, et al., 2011b). The first digit corresponds to the coding of the Basic Form category, the second digit to the Communicative Intention category, the third to the Domain category, the fourth to the Reference category, and the last two to the Technique category. Each Communicative Pattern (CP) is made up by two levels separated by a hyphen (for example, CP213-101). The first level includes the first three digits and is referred to as Structural Level (Valdés, et al., 2011b).This level corresponds to specific contents associated with the object of therapeutic work, which is transmitted with a certain purpose and using a particular formal structure. The second level includes the last three digits and is referred to as Articulative Level (Valdés, et al., 2011b). This level specifies the Communicative Pattern (CP) used, and is associated with the participant that emits the information (the protagonist of therapeutic work in that given moment) and with the presence or absence of any techniques (communicative or therapeutic) used by the speaker to provide support for the purpose of his/her verbalization (Communicative Intention). In other words, a Communicative Pattern (CP) can have the same characteristics at the Structural Level, but, at the same time, it can be articulated differently depending on the circumstances present in a given moment of the conversation, which does not affect its structure. Nevertheless, in this study, Communicative Patterns (CPs) were only analyzed considering their Structural Level (see Table II).

Table II. Characteristics of the Communicative Patterns used to work on emotional contents

Communicative Patterns (CPs)	Characteristics
Affective Exploration (CP213)	This Communicative Pattern is used by patients only, regardless of the type of episode. At the Structural Level, it is characterized by the presence of the Assert basic form, and is used to convey a content, clarify it, and/or direct the other participant's attention to certain emotional contents during therapeutic conversation.
Affective Attunement (CP223)	This Communicative Pattern is used by therapists only, regardless of the type of episode. At the Structural Level, it is characterized by the presence of the Assert basic form, and is used to show understanding, generate harmony, or provide feedback about certain emotional contents verbalized by the patients during the therapeutic conversation.
Affective Resignification (CP233)	This Communicative Pattern is used by patients and therapists during Change Episodes, and only by therapists during Stuck Episodes. At the Structural Level, it is characterized by the presence of the Assert basic form, and is used to co-construct and/or consolidate new meanings for certain emotional contents during therapeutic conversation.

Note. Results presented in the article *"Analysis of Verbal Emotional Expression in Change Episodes and Throughout the Psychotherapeutic Process: Main Communicative Patterns Used to Work on Emotional Contents"* (Valdés, 2011).

Finally, Change and Stuck Episodes were analyzed in terms of the Communicative Patterns (CPs) and their specific types used by patients and therapists when they worked on emotional contents during the conversation. Therefore, the analysis involved the total number of emotional segments identified during Change Episodes (N=161) and Stuck Episodes (N=61), that is, those with "3" as their third digit, which means that they were given the Affects code in the Domain category of the TACS-1.0 (Valdés, et al., 2011b).

A reliability analysis was carried out to evaluate the coders' degree of agreement about the speaking turn segments in Change and Stuck Episodes. In order to do this, 15% of the total number of segments was selected at random (N=268). SPSS 19.0 was used to calculate Cohen's Kappa for each of the five TACS-1.0 categories (Valdés, 2010b). The Kappa indexes obtained were: Basic Form (k=0.95, *p*=.00), Communicative Intention (k=0.70, *p*=.00), Technique (k=0.51, *p*=.00), Domain (k=0.73, *p*=.00), and Reference (k=0.79, *p*=.00). Therefore, the reliability of the raters' coding of both episode types ranged from average to very good.

***Identification of Cognitive Mechanisms associated to Linguistic Style*.** The words uttered by patients and therapists during their speaking turns in Change and Stuck Episodes were analyzed using Linguistic Inquiry and Word Count (LIWC-2007). The Spanish version of LIWC maintained the 72 linguistic categories of the English one, which are grouped into five broad dimensions: (a) standardized linguistic categories; (b) categories referencing psychological processes; (c) categories referencing relativity; (d) categories referencing personal contents; and (e) experimental categories. LIWC-2007 employs a dictionary which includes 7515 words and word roots. The system identifies and counts the total number of words from each category and sub-category of each dimension. This system was previously used in order to study patient-therapist verbal interaction during Change Episodes, and revealed some differences and similarities in the Communicative Actions and the Linguistic Style of both speakers during therapeutic conversation in such episodes (Valdés, et al., 2011a; Valdés, 2010). However, the present study also considered Stuck Episodes in order to compare their results with those of Change Episodes; in addition, only the Psychological Processes of LIWC-2007 was used --more specifically, the cognitive mechanisms subcategory. Thus, the total sample of 222 text segments was analyzed in order to identify, in each of them, the presence of words referencing the following cognitive mechanisms: (a) *cause*, that is, words reflecting the presence of a basic cognitive skill involving the speaker's attempts to explain something through an underlying logical pattern to connect the reasons behind certain phenomena or processes and their effects (e.g., therefore, because, motive); (b) *insight*, that is, words revealing the speaker's higher level of awareness or deeper understanding of the central aspects of the meaning ascribed to a certain content previously inaccessible but now

experienced as novel (e.g., face, admit, believe); (c) *tentativeness*, that is, words showing the speaker's consideration of different alternative meanings for certain contents (e.g., maybe, for example, consider); and (d) *certainty*, that is, words revealing the speaker's higher degree of assurance about something that he/she regards as true and which he/she does not doubt (e.g., never, always, assurance).

Data analysis involved two successive stages. The first stage consisted in the application of the Chi Square test (χ^2) in order to establish whether there was an association between the different patterns, the participant's role, and the phase of the therapy. The second stage involved calculating the *Z-ratio* to compare independent proportions, and estimating 95% Confidence Intervals (CI) when the value of *Z* could not be estimated.

Results

This study was carried out to determine the behavior of the Communicative Patterns (CPs) used for working on emotional contents during Change Episodes, upon the basis of the cognitive mechanisms associated with the verbalization of certain types of words by patients and therapists during Change Episodes, along with their behavior throughout the psychotherapeutic process.

The analysis of all the words contained in the 222 text segments taken from Change and Stuck Episodes revealed that Linguistic Inquiry and Word Count (LIWC-2007) captured 87.14% of the words uttered by patients and therapists (N=8227 words) during the 161 text segments present in the 38 Change Episodes analyzed, and 86.73% of the words uttered by patients and therapists (N=3106) during the 61 text segments present in the 19 Stuck Episodes considered. When applied to the total number of words uttered during Change Episodes according to the participants' role, LIWC-2007 captured 85.53% of all the patients' words (N=4622) and 86.33% of all the therapists' words (N=3605). A similar situation was observed in Stuck Episodes, as LIWC-2007 captured 85.95% of the patients' words (N=1826) and 87.79% of the therapists' words (N=1280). Therefore, LIWC-2007 reliably captured over 85% of the words uttered, regardless of the participant's role and the episode type.

Since each of the text segments analyzed may or may not contain one of these cognitive mechanisms, or may include more than one cognitive mechanism, the total number of times that the patients and the therapists used each Communicative Pattern (CP) was considered to be 100%, in order to calculate the percentage of each cognitive mechanism (*cause*, *insight*, *tentativeness*, and *certainty*)[18]

[18] For presenting the results, the Communicative Patterns used for working on emotional contents (Affective Exploration, Affective Attunement, and Affective Resignification) will be underlined, while cognitive mechanisms (cause, insight, tentativeness, and certainty) will be *italicized*.

during the speakers' use of each pattern. As shown in Table III, during Change Episodes it was not possible to observe significant differences between patients and therapists in terms of the cognitive mechanisms present during the Affective Resignification of emotional contents. No significant differences were found between both episode types in terms of the cognitive mechanisms present during the patients' Affective Exploration, or with respect to the cognitive mechanisms present during the therapists' Affective Resignification or their displays of Affective Attunement. Therefore, the cognitive mechanisms present in the Communicative Patterns (CPs) used for working on emotional contents did not provide enough evidence to establish differences between both episode types.

Table III. Distribution of the presence of each cognitive mechanism during each Communicative Pattern (CP), by episode type and participant's role

Cognitive Mechanisms according to the Communicative Pattern (CP)	Change Episode			Stuck Episode		
	Patient	Therapist	Total (*f*)	Patient	Therapist	Total (*f*)
Affective Exploration (CP213)	42	0	42	35	0	35
CP213 - Cause	61.90 (26)	0.00 (0)		62.86 (22)	0.00 (0)	
CP213 - Insight	59.52 (25)	0.00 (0)		60.00 (21)	0.00 (0)	
CP213 - Tentative	61.90 (26)	0.00 (0)		62.86 (22)	0.00 (0)	
CP213 - Certainty	47.62 (20)	0.00 (0)		37.14 (13)	0.00 (0)	
Affective Attunement (CP223)	0	20	20	0	3	3
CP223 - Cause	0.00 (0)	25.00 (5)		0.00 (0)	0.00	
CP223 - Insight	0.00 (0)	40.00 (8)		0.00 (0)	33.33 (1)	
CP223 - Tentative	0.00 (0)	30.00 (6)		0.00 (0)	33.33 (1)	
CP223 - Certainty	0.00 (0)	20.00 (4)		0.00 (0)	33.33 (1)	
Affective Resignification (CP233)	37	62	99	0	23	23
CP233 - Cause	54.05 (20)	41.94 (26)		0.00 (0)	52.17 (12)	
CP233 - Insight	56.76 (21)	54.84 (34)		0.00 (0)	56.52 (13)	
CP233 - Tentative	59.46 (22)	46.77 (29)		0.00 (0)	47.83 (11)	
CP233 - Certainty	37.84 (14)	29.03 (18)		0.00 (0)	30.43 (7)	
Total (*f*)	79	82	161	35	26	61

Note. The scores are expressed as a percentages (%) with their respective frequencies en parentheses. The totals are expressed as frequencies (*f*).

Analysis of Cognitive Mechanisms within each Phase of the Therapeutic Process. Each phase of the therapy was analyzed separately in order to detect the cognitive mechanisms present in patients' and therapists' verbalizations while they used Communicative Patterns (CPs) during Change Episodes. During the initial phase, the patients performed a larger proportion of Affective Explorations [Z=3.098, p=.002] in comparison with the proportion of Affective Resignifications (70.00% and 30.00%, respectively). On the other hand, the therapists performed a larger proportion of Affective Resignifications, [Z=2.708, p=.01] in comparison with the proportion of Affective Attunement displayed (66.67% and 33.33%, respectively).

In addition, during the initial phase, the proportion of Affective Resignifications performed by the therapists was larger that carried out by the patients [Z=2.907, p=.00] (66.67% and 30.00%,

respectively) (see Table IV). The analysis of the cognitive mechanisms which accompanied the Communicative Patterns present in the initial phase revealed that the presence of words showing *cause* and *tentative* in the patients' verbalizations was 46.66% [95% CI =24.08 - 63.79] more frequent during Affective Explorations than during Affective Resignifications. The presence of words reflecting *insight* in the patients' verbalizations was also 33.33% [95% CI =11.00 - 51.99] more frequent during Affective Explorations, however, the presence of words reflecting *certainty* in the patients' verbalizations was observed only during Affective Explorations.

Table IV. Distribution of the presence of each cognitive mechanism during each Communicative Pattern (CP), by episode type, therapeutic phase, and participant's role

Cognitive Mechanisms associated with each Communicative Pattern (CP)	Change Episode				Stuck Episode			
	Phases of the Psychotherapeutic Process				Phases of the Psychotherapeutic Process			
	Initial	Middle	Final	Total (*f*)	Initial	Middle	Final	Total (*f*)
Patients								
Affective Exploration (CP_{213}) (*f*)	21	15	6	42	3	20	12	35
CP_{213} - Cause	53.33 (16)	20.00 (6)	21.05 (4)		100.00 (3)	40.00 (8)	91.67 (11)	
CP_{213} - Insight	43.33 (13)	30.00 (9)	15.79 (3)		100.00 (3)	45.00 (9)	75.00 (9)	
CP_{213} - Tentative	53.33 (16)	20.00 (6)	21.05 (4)		66.67 (2)	55.00 (11)	75.00 (9)	
CP_{213} - Certainty	36.67 (11)	16.67 (5)	21.05 (4)		0.00	35.00 (7)	50.00 (6)	
Affective Attunement (CP_{223}) (*f*)				0				0
Affective Resignification (CP_{233}) (*f*)	9	15	13	37				0
CP_{233} - Cause	6.67 (2)	30.00 (9)	47.37 (9)					
CP_{233} - Insight	10.00 (3)	26.67 (8)	52.63 (10)					
CP_{233} - Tentative	6.67 (2)	33.33 (10)	52.63 (10)					
CP_{233} - Certainty	0.00 (0)	26.67 (8)	31.58 (6)					
Therapists								
Affective Exploration (CP_{213}) (*f*)				0				0
Affective Attunement (CP_{223}) (*f*)	11	5	4	20	0	2	1	3
CP_{223} - Cause	15.15 (5)	0.00 (0)	0.00 (0)		0.00 (0)	0.00 (0)	0.00	
CP_{223} - Insight	12.12 (4)	9.09 (2)	7.41 (2)		0.00 (0)	0.00 (0)	12.50 (1)	
CP_{223} - Tentative	12.12 (4)	9.09 (2)	0.00 (0)		0.00 (0)	0.00 (0)	12.50 (1)	
CP_{223} - Certainty	9.09 (3)	4.55 (1)	0.00 (0)		0.00 (0)	0.00 (0)	12.50 (1)	
Affective Resignification (CP_{233}) (*f*)	21	18	23	62	1	15	7	23
CP_{233} - Cause	18.75 (6)	34.78 (8)	44.44 (12)		0.00 (0)	47.06 (8)	50.00 (4)	
CP_{233} - Insight	37.50 (12)	43.48 (10)	44.44 (12)		0.00 (0)	52.94 (9)	50.00 (4)	
CP_{233} - Tentative	40.63 (13)	30.43 (7)	33.33 (9)		0.00 (0)	52.94 (9)	25.00 (2)	
CP_{233} - Certainty	21.87 (7)	13.04 (3)	29.63 (8)		0.00 (0)	29.41 (5)	25.00 (2)	
Total (*f*)	62	53	46	161	4	37	20	61

Note. The scores are expressed as a percentages (%) with their respective frequencies in parentheses. The totals are expressed as frequencies (*f*).

A comparison of the words used by the patients with those used by the therapists when performing Affective Resignifications during Change Episodes in the initial phase of the therapy revealed that: (a) verbalizations with words reflecting *tentative* were 33.96% [IC al 95% =12.91 - 51.74] more frequent among the therapists; (b) verbalizations with words showing *insight* were 27.50% [IC al 95% =6.14 -

45.94] more frequent among the therapists; c) verbalizations with words reflecting *certainty* were 21.88% [IC al 95% =6.17 - 38.75] more frequent among the therapists; and (d) verbalizations with words reflecting *cause* were similarly frequent in both participants.

During the middle phase, no significant differences were observed in the proportion of Affective Explorations and Affective Resignifications performed by the patients (50.00% and 50.00%, respectively), however, significant differences remained in the proportion of Affective Resignifications and Affective Attunement displayed by the therapists [Z=3.618, p=.00] (77.27% and 22.73%, respectively). Also, the proportion of Affective Resignifications was still mostly performed by the therapists during the middle phase, [Z=1.997, p=.05] (77.27% and 50.00%, respectively) (see Table IV). The analysis of the cognitive mechanisms which accompanied the Communicative Patterns (CPs) present in this phase showed a similar proportion of verbalizations with words reflecting *cause*, *insight*, *tentative*, and *certainty* in the patients, while they performed both Affective Explorations and Affective Resignifications during Change Episodes. There were no significant differences between patients and therapists in the proportion of verbalizations with words reflecting *cause*, *insight*, *tentative*, and *certainty* while they performed Affective Resignifications during the middle phase.

During the final phase of the therapy, the patients performed a larger proportion of Affective Resignifications [Z=2.271, p=.02] compared with the Affective Explorations carried out (68.42% and 31.58%, respectively) during this phase; likewise, the Affective Resignifications performed by the therapists continued to be 70.37% [95% CI =45.39 - 82.96] more frequent than the Affective Attunement shown to the patients. During the final phase of the therapy, there was a 16.76% difference between the Affective Resignifications performed by the therapists and the patients (85.19% and 68.42%, respectively); however, such difference was not significant [95% CI = -7.21 - 40.88] (see Table IV). The analysis of the cognitive mechanisms which accompanied the Communicative Patterns (CPs) used in Change Episodes during the final phase revealed that the patients' verbalizations with words that reflected *insight* were 36.84% [95% CI =6.64 - 59.36] more frequent during Affective Resignifications than during Affective Explorations. Likewise, patients' verbalizations with words reflecting *tentative* were 31.58% [IC al 95% =1.01 - 55.22] more frequent while they performed Affective Resignifications. However, during Change Episodes in the final phase of the therapy, the proportion of patients' verbalizations with words reflecting *cause* and *certainty* was similar during Affective Exploration and Affective Resignifications. During this phase, there were no significant differences between patients and therapists in terms of words reflecting *cause*, *insight*, *tentative*, and *certainty* when performing Affective Resignifications.

When Stuck Episodes were analyzed in order to contrast them with Change Episodes, no significant differences were observed in the cognitive mechanisms used by the patients when using Affective

Exploration in any of the phases of the therapeutic process; similarly, no significant differences were observed in the case of the therapists' Affective Resignifications and Affective Attunement. The comparison of both episode types did not reveal any significant differences in the cognitive mechanisms used by the therapists when performing Affective Resignifications. However, it was observed that the patients' Affective Explorations with words reflecting *tentative* were 35.00% [95% CI =7.95 - 56.86] more frequent during Stuck Episodes from the middle phase of the therapy, and 53.95% [95% CI=17.98 - 74.36] more frequent during the final phase. Affective Explorations with words reflecting *cause* were 70.62% [95% CI =35.57 - 84.91] more frequent during Stuck Episodes from the final phase of the therapy, and when accompanied by words reflecting *insight*, they were 50.00% [95% CI =23.56 - 78.31] more frequent during this phase. Therefore, it was shown that the presence of cognitive mechanisms during the patients' Affective Explorations in Stuck Episodes increased as the process progressed, while the opposite was true for Change Episodes.

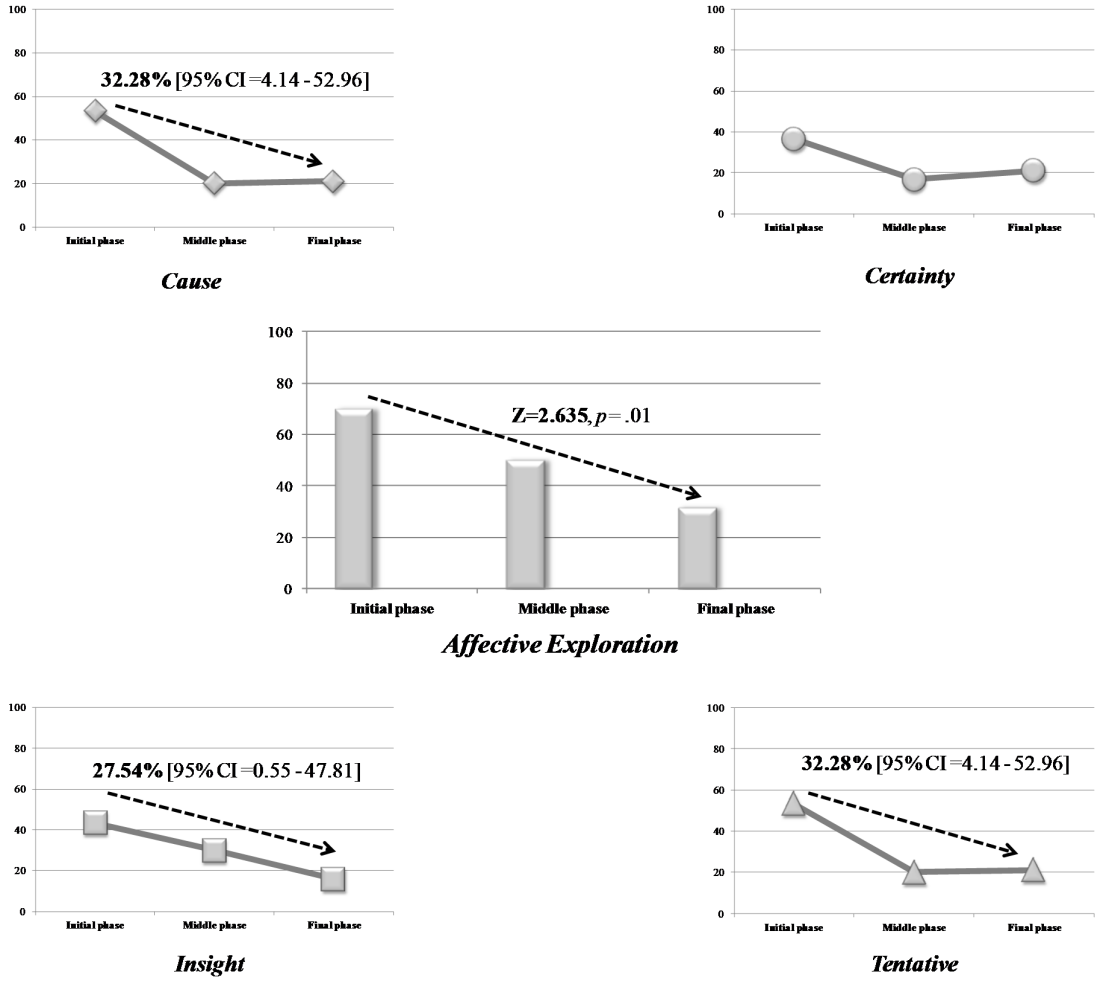

Figure IV. Cognitive mechanisms present in the patients' Affective Exploration during Change Episodes, by therapeutic phase.

Comparison of the Cognitive Mechanisms present in Change Episodes between the three Therapeutic Phases. A comparison of the phases of the therapeutic process in terms of the proportion of the patients' Affective Exploration revealed that, compared with the initial phase, the patients performed fewer Affective Explorations in the final phase of the process [*Z*=2.635, *p*=.01] (70.00%, 31.58%). Based on this finding, the three phases of the therapy were compared in order to establish the existence of significant differences in the cognitive mechanisms present in the patients' verbalizations while they performed Affective Explorations during Change Episodes. The results show that the patients' Affective Explorations during the initial phase displayed a more extensive presence of words reflecting *cause* and *tentative* [Z=2.679, *p*=.01] in comparison with the middle phase. Although no significant differences were observed between the middle and the final phases with respect to these cognitive mechanisms, their presence was 32.28% [95% CI =4.14 - 52.96] less frequent during the final phase compared to the initial phase (see Figure IV). Compared to the initial phase, Affective Explorations with words reflecting *insight* were 27.54% [95% CI =0.55 - 47.81] less frequent during the final phase of the therapy; however, no significant differences were observed between the therapeutic phases regarding the Affective Explorations with words reflecting *insight* and *certainty*.

Among the therapists, no significant differences were observed in the Affective Attunement shown during the phases of the therapeutic process; likewise, no significant differences were found regarding the presence of words reflecting *cause*, *insight*, *tentative*, and *certainty* while showing Affective Attunement to their patients. However, compared with the final phase, Affective Attunement with words reflecting *cause* was only observed during the initial phase of the process [95% CI =0.07 - 30.92].

The patients performed a larger proportion of Affective Resignifications [*Z*=2.635, *p*=.01] (68.42%, 30.00%) during the final phase, in comparison with the initial phase of the therapy (see Figure V). No significant differences were observed between the phases of the therapeutic process in terms of Affective Resignifications with words revealing *insight*; however, in comparison with the initial phase, the following was observed: (a) words reflecting *cause* were 23.33% [95% CI =3.52 - 41.85] more frequent during the middle phase of the therapy; (b) words reflecting *tentative* were 26.66% [95% CI =6.33 - 45.19] more frequent during the middle phase; and (c) words reflecting *certainty* were 26.67% [95% CI =9.79 - 44.45] more frequent during the middle phase of the therapy.

Although no significant differences were observed between the middle and the final phases regarding these cognitive mechanisms, in comparison with the initial phase: (a) Affective Resignifications with words reflecting *cause* were 40.70% [95% CI =15.88 - 62.17] more frequent during the final phase; (b) Affective Resignifications with words reflecting *insight* were 42.63% [95% CI =16.52 - 63.71] more frequent during the final phase; c) Affective Resignifications with words

reflecting *tentativeness* were 45.96% [95% CI =20.42 - 66.57] more frequent during the final phase; (d) Affective Resignifications with words reflecting *certainty* were 31.58% [95% CI=11.79 - 53.99] more frequent during the final phase of the process. Also, during the final phase of the therapy, Affective Resignifications with words reflecting *cause* were more frequently used by the therapists [Z=2.135, *p*=.03].

No significant differences were observed throughout the therapeutic process in terms of the presence of cognitive mechanisms in the therapists' discourse while they performed Affective Resignifications and showed Affective Attunement to their patients during Stuck Episodes. Similarly, no differences were observed in the patients' Affective Explorations, except for those performed with words reflecting *cause*, which were 52.67% [95% CI =17.21 - 71.04] more frequent during the final phase of the therapy compared with the middle phase.

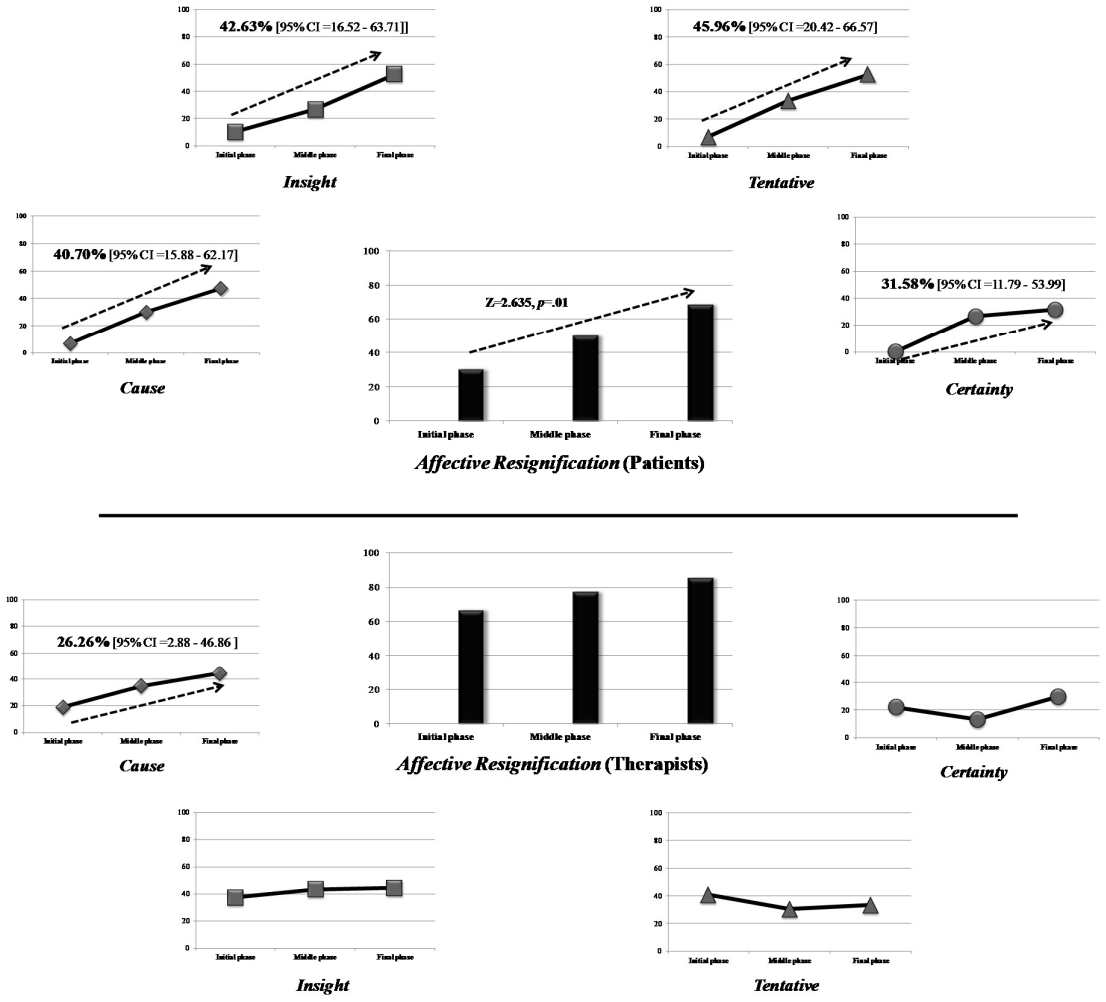

Figure V. Cognitive mechanisms present in the patients' and the therapists' Affective Resignifications during Change Episodes, by therapeutic phase.

Conclusions

The objective of this study was to describe the behavior of the main Communicative Patterns (CPs) used for working on emotional contents, based on certain cognitive mechanisms associated with specific types of words uttered by patients and therapists during the conversation, in Change and Stuck Episodes. The first important finding was that the cognitive mechanisms (*cause*, *insight*, *tentative*, and *certainty*) present during the use of Communicative Patterns (Affective Exploration, Affective Attunement, and Affective Resignification), did not provide enough information to distinguish Change Episodes from Stuck Episodes, as the proportion of Affective Explorations performed by the patients with words reflecting *cause*, *insight*, *tentative*, and *certainty* was similar in both episode types, while the same situation was observed in the case of the therapists' Affective Resignifications and Affective Attunement. Also, no significant differences between patients and therapists were observed within Change Episodes in terms of the cognitive mechanisms present during their Affective Resignifications. Therefore, it could be concluded that, when working on emotional contents during Change Episodes, the patients verbalized words reflecting the presence of certain cognitive mechanisms while they provided information, clarified points, and/or steered the conversation towards certain emotional contents (Affective Exploration). However, the same cognitive mechanisms were also present in the therapists' verbalizations when they displayed understanding, generate harmony and/or provided feedback to their patients about certain emotional contents (Affective Attunement), and when they constructed new meanings for such contents with their patients (Affective Resignification). Thus, it could be inferred that these cognitive mechanisms are present during the therapeutic conversation, regardless of the participant's role and the type of episode, and that they are involved in all sorts of verbal expressions during the therapeutic activity: from verbalizations performed in order to review, select, and transmit information connected with the emotional contents worked on during the session, to verbalizations carried out in order to establish new connections between the elements of the patients' personal histories. However, the main finding of this study was to demonstrate that the main differences in the presence of these cognitive mechanisms were found within each Communicative Pattern (CP), within each phase, and throughout the therapeutic process. The study confirmed the notion that meaning is not something static contained in the words that a person uses, but a product of the way in which words are employed to regulate communication (Harré & Gillett, 1994; Nitti, Ciavolino, Salvatore, & Gennaro, 2010). This is why patients' and therapists' verbalizations were analyzed in terms on the semantic contents present during their use of Communicative Patterns (PCs), that is, considering the context in which such verbalizations were performed (Gonzales, Hancock, & Pennebaker, 2010; Niederhoffer & Pennebaker, 2002; Nightingale & Cromby, 1999; Pickering, & Garrod, 2004).

In Change Episodes from the initial phase of the therapy, the patients verbalized a larger proportion of Affective Explorations compared with the proportion of Affective Resignifications performed during this phase. The results show that both Communicative Patterns were accompanied by the verbalization of words reflecting *cause*, *tentative*, and *insight*; however, these cognitive mechanisms were much more frequent during Affective Explorations from the initial phase. The verbalization of words reflecting *certainty* was only observed during Affective Exploration, and not in Affective Resignifications. in other words, during Change Episodes from the initial phase of the therapy, the patients focused on providing information, clarifying points, and/or steering the conversation towards certain emotional contents (Affective Exploration), uttering words that allowed them to: (a) explain to their therapists how they used to connect reasons and effects associated with such emotional contents (*cause*) (1)[19]; (b) communicate to their therapists the meanings ascribed to certain emotional contents which they had used to understand themselves up to that point (*tentative*) (2); and (c) transmit to their therapists the central, conscious, and non-novel aspects of such meanings (*insight*) (3). The most noteworthy finding was that the patients' use of Affective Explorations was accompanied by words which allowed them to transmit aspects of their personal histories which were not only totally known by them but also regarded as unquestionably true (*certainty*) (4). On the other hand, during the initial phase of the therapy, the therapists performed a larger proportion of Affective Resignifications in comparison with the proportion of Affective Attunement displayed; in addition, both of these elements were also less frequent among patients. Such Affective Resignifications performed by the therapists were mostly accompanied by words reflecting *tentative*, *insight*, and *certainty*, whereas the proportion of words reflecting *cause* was similar in both participants' Affective Resignifications. Therefore, from the initial stage onwards, the therapists' therapeutic work was focused on the construction of new meanings for certain emotional contents about the patients (Affective Resignification), which was accompanied by words that allowed them to: (a) propose various alternative meanings for certain emotional contents which had so far received other meanings (*tentative*) (5); (b) develop patients' awareness and foster a deeper understanding of the central aspects of certain emotional contents which had been not wholly conscious up to that point, but which had become novel (*insight*) (6); and (c) transmit the new meanings with an assurance resulting from knowledge about certain aspects of the patients' personal histories (*certainty*) (7). The therapists' affective Resignifications during Change Episodes from the initial phase of the therapy were accompanied by words which allowed them to

[19] Examples of patient and therapist utterances appear in Appendix A. References for quotations appear at the end of each example in the following order: first, the speaker's role (P_A=Patient A, T_A=Therapist A, P_B=Patient B, T_B=Therapist B), followed by the Change Episode number, and the speaking turn number.

negotiate new explanations about the relationship between certain reasons and the effects associated to certain emotional contents (*cause*) (8). This result goes hand in hand with the fact that one of the objectives of therapists is to help patients to learn how to distinguish a contingent relationship from one of causality, that is, they want patients to know how to determine when two phenomena occur simultaneously and when one phenomenon produces another (Perales, Catena, Ramos, & Maldonado, 1999). An indicator of this situation may be the presence of words reflecting *tentative* and *certainty* in the patients' verbalizations during the initial phase, since this cognitive skill might be associated with a type of inductive thought which allowed them to expand their knowledge of themselves when communicating to their therapists the meanings that they so far had used to explain some aspects of their personal history (Garnham & Oakhill, 1996).

In contrast with the previous phase, during the middle phase the patients performed a similar proportion of Affective Explorations and Affective Resignifications. Both Communicative Patterns (CPs) were accompanied by the verbalization of words that reflected *cause*, *insight*, *tentative*, and *certainty*. In other words, during Change Episodes from the middle phase of the therapy, the patients continued providing information, clarifying points, and/or steering the conversation towards certain emotional contents about themselves (Affective Exploration), but now while they constructed new meanings for such emotional contents with their therapists' aid (Affective Resignification). These patterns were accompanied by the verbalization of words which allowed them to: (a) continue providing some cause-effect relationships associated with such emotional contents, while at the same time they participated with the therapists in the search for new explanations about these relationships (*cause*) (9); (b) communicate meanings ascribed to certain emotional contents, while at the same time opening up to new meanings (*tentative*) (10); (c) become more aware about the central aspects of certain emotional contents which used to be inaccessible, but which they started to regard as novel (*insight*) (11); and (d) transmit aspects of their personal history that they considered true, but questioning them (*certainty*) (12).

The therapists, just like in the initial phase, continued using a larger proportion of Affective Resignifications in comparison with the Affective Attunement that they displayed; in addition, their resignification work was much more frequent than that of patients. Nevertheless, no significant differences were observed between the patients and the therapists during the middle phase in terms of the cognitive mechanisms present in the Affective Resignifications performed by both. Therefore, in the middle phase, the therapists' therapeutic work was still focused on the construction of new meanings for certain emotional contents (Affective Resignification), along with the verbalization of words that allowed them to: (a) continue proposing new meanings for certain emotional contents (*tentative*) (13); (b) continue developing the patients' awareness of the novel aspects that they had not

considered before (*insight*) (14); (c) introduce the new meanings with an assurance based on greater knowledge of the patients' history (*certainty*) (15); and (d) continue negotiating new cause-effect relationships associated with certain emotional contents, but now with a more active response by the patients (*cause*) (16).

The patients performed a larger proportion of Affective Resignifications during Change Episodes from the final phase of the therapy, in comparison with the proportion of Affective Explorations carried out during this phase. This is a relevant finding in itself; however, it must be complemented by the fact that the cognitive mechanisms *tentative* and *insight* were more frequently present in these Affective Resignifications, whereas *cause* and *certainty* were present in the same proportion during Affective Resignifications and Affective Explorations in this phase. Therefore, although the patients continued providing information, clarifying points, and/or steering the conversation towards certain emotional contents about themselves (Affective Exploration), the bulk of the work performed during the final phase was focused on the construction and/or consolidation of new meanings for emotional contents (Affective Resignification). The patients' use of these Communicative Patterns (CPs) was accompanied by words which allowed them to: (a) continue developing a deeper comprehension of the new meanings ascribed to certain meanings during the therapeutic conversation (*insight*) (17); (b) continue displaying openness to the alternative meanings offered by the therapists, while being capable of proposing new meanings for emotional contents (*tentative*) (18); (c) continue providing some cause-effect relationships which they do not consider novel, while at the same time participating with the therapists in the search for new explanations for such relationships (*cause*) (19); and (d) continue communicating aspects of their personal history, but staying open to the possibility of questioning them (*certainty*) (20).

During the final phase, the therapists continued performing a larger proportion of Affective Resignifications in comparison with the Affective Attunement displayed; however, unlike in the other two phases, no significant differences were observed between the proportion of Affective Resignifications used by the patients and the therapists, nor in the cognitive mechanisms present in the Affective Resignifications carried out by both. Therefore, the therapists' therapeutic work remained the same as in the two previous phases, that is, it was still focused on the construction of new meanings for certain emotional contents (Affective Resignification), along with the verbalization of words that allowed them to: (a) continue negotiating new alternative meanings for certain emotional contents (*tentative*) (21); (b) continue offering new cause-effect relationships associated with certain emotional contents, but now with a more active response by the patients (*cause*) (22); (c) continue developing the patients' awareness of the novel aspects that they had not considered before (*insight*) (23); and (d)

introduce the new meanings with an assurance based on greater knowledge of the patients' history (*certainty*) (24).

A comparison of the phases of the process revealed that the patients, during Change Episodes from the final phase, performed fewer Affective Explorations than during the initial phase. In addition, these Affective Explorations at the beginning of the therapy were mostly accompanied by words that allowed the patients to communicate cause-effect relationships associated to certain emotional contents (*cause*), along with the main meanings ascribed to such contents (*tentative*). The proportion of Affective Explorations with these characteristics was significantly smaller during the middle phase, and especially when comparing the final and the initial phases of the therapy. On the contrary, there were no differences throughout the process regarding Affective Explorations accompanied by words which made it possible to communicate central, conscious, and non-novel aspects of emotional contents (*insight*), just as there were no differences in Affective Explorations accompanied by words which allowed the patients to communicate certain aspects of their personal history, wholly known by them and perceived as true (*certainty*). However, some differences were observed in the Affective Explorations accompanied by verbalizations reflecting *insight*, because they were less frequent during the final phase than during the initial phase (Pennebaker, et al., 1997).

No differences were observed throughout the process in the Affective Attunement displayed by the therapists during Change Episodes; likewise, there were no differences in the verbalization of words revealing *cause*, *insight*, *tentative*, and *certainty* when using this Communicative Pattern (CP). Nevertheless, there was more Affective Attunement associated with words revealing *cause* during the initial phase of the process than during its final phase. Therefore, the therapists showed understanding, generated harmony, and/or provided feedback about certain emotional contents referring to the patients (Affective Attunement) throughout the therapeutic process, and always less frequently than they performed Affective Resignifications. Also, the therapists' Affective Attunement was always accompanied by words which allowed them to: (a) display their discernment and empathic comprehension of the information provided by the patients about what certain emotional contents meant to them (*certainty-tentative*) (25); y (b) demonstrate that they were more aware of the patients' life history (*insight*) (26).

Some differences were observed throughout the process with respect to the patients' Affective Resignifications, since they were more frequent during Change Episodes from the final phase of the therapy than during the initial phase. On the contrary, the therapists performed the same proportion of Affective Resignifications throughout the process. Also, no significant differences were observed in the patients' Affective Resignifications accompanied by words reflecting *insight*; however, some differences were observed between the initial and the middle phases with respect to the patients'

Affective Resignifications accompanied by words reflecting *cause*, *tentative*, and *certainty*. Thus, the patients constructed and/or consolidated new meanings for certain emotional contents (Affective Resignifications) throughout the therapy, verbalizing words that allowed them to communicate their growing awareness of certain aspects of such contents, previously inaccessible, but gradually perceived as novel (*insight*). This especially significant considering the evidence that more self-knowledge is associated with the patient's change during the therapeutic process (Connolly Gibbons et al., 2009; Palma & Cosmelli, 2008). Nevertheless, the middle phase of the therapy displayed a stronger presence of Affective Resignifications with words that allowed the patients to show more openness to alternative meanings (*tentative*), participate with the therapists in the search for new explanations for certain cause-effect relationships (*cause*), and show openness to questioning certain emotional contents (*certainty*). All these aspects remained constant during the final phase of the therapy, and there were no differences with the middle phase, although the differences became more evident when comparing the final and the initial phases. During the last therapeutic phase, the patients' Affective Resignifications accompanied by words reflecting *cause*, *insight*, *tentative*, and *certainty*, were much more frequent than during the initial phase; in addition, they were as frequent as the therapists' Affective Resignifications. It could be advanced that the patients, as the therapy progressed, adopted not only some of the Communicative Patterns (CPs) used by the therapists, but also certain linguistic structures employed by them while applying these patterns during the conversation. This phenomenon became more evident during the middle phase of the therapy, and may be regarded not only as a communicative indicator of a change in the patients' way of interpreting their experience (Chambers & Bickhard, 2007; Gennaro et al., 2010), but also as a sign of the presence of semantic tracking (Plecia & Gervasio, 1994) or structural priming (Bock, Dell, Chang, & Onishi, 2007; Branigan, Pickering, & Cleland, 2000), during which there may exist some degree of coordination and modification of verbal expression, as a mechanism for adapting to the other participant of the therapeutic conversation (Giles & Coupland, 1991; Ireland, & Pennebaker, 2010; Pickering & Garrod, 2004). In contrast, no differences were observed throughout the process regarding the therapists' cognitive mechanisms when performing Affective Resignifications, except for those accompanied by words reflecting *cause*, which were more frequent during the final phase of the therapy than in the initial one. In other words, throughout the therapeutic process, the therapists offered new cause-effect relationships associated with certain emotional contents (*cause*), although this type of work was much more frequent towards the end of the therapy. Therefore, the patients were influenced by their therapists' actions, whose directive nature is revealed when co-constructing new meanings during the therapeutic process (Kallestad, Valen, McCullough, Svartberg, Høøglend, & Stiles, 2010).

This study made it possible to establish certain characteristics of verbal emotional expression during the participants' work on emotional contents, based on the analysis of the Communicative Patterns (CPs) present in the patients' and the therapists' verbalizations throughout the therapeutic process. In addition, it revealed significant differences during the therapy with respect to the behavior of some of these Communicative Patterns (CPs) when associated with certain cognitive mechanisms present in the verbalizations of both participants during Change Episodes. It can be concluded, for example, that the patients' verbalization of words reflecting *insight*, *cause*, *tentative*, and *certainty* when performing Affective Explorations during the initial phase of the therapy, may be the external and observable expression of certain organizational cognitive skills, such as remembering, selecting, and transmitting information about their personal history associated with the emotional contents worked on during the session, and which are necessary for establishing new connections in latter phases of the therapy; likewise, these cognitive mechanisms, together with the Affective Resignifications performed from the middle phase onwards, may be the external and observable expression of elaborative cognitive skills, necessary to attain a deeper understanding of the meanings ascribed to certain emotional contents during the conversation. Since therapy is regarded as an intrinsically dialogic process (Linell, 2009), the resignification of contents takes place successively throughout the process, and becomes evident when the patients are able to gradually establish new connections based not only on known information but also on novel meanings transmitted during the conversation (Bowden, Jung-Beeman, Fleck, & Kounios, 2005; Bowden & Jung-Beeman, 2007).

Considering this, therapeutic conversation may be based on a type of inductive reasoning which discards the possibility of reaching absolute conclusions about anything and which privileges the infinite construction of meanings during the whole therapy. Thus, it was not surprising to discover that, as the therapy progressed, words reflecting *tentative* were gradually less verbalized by the patients during Affective Explorations, and more frequently during Affective Resignifications. This may be a communicative indicator that the patients are actually expanding their knowledge about certain aspects of themselves, and giving room to uncertainty. Finally, no significant differences were observed throughout the process regarding words that reflected *certainty* when they accompanied the patients' Affective Explorations, because they were sure about the information that they provided during the session. However, there were differences throughout the process regarding words that reflected *certainty* when they accompanied Affective Resignifications, especially during the final phase of the therapy. This may be a verbal sign of the patients' higher degree of certainty about the emotional contents resignified during the therapy, and of the possibility of formulating new hypotheses about themselves which had to be justified based on the therapeutic bond, or on their extratherapeutic context (Garnham, & Oakhill, 1996).

The main limitation of this study was that only two psychotherapeutic processes were analyzed. Although this resulted in a large number of speaking turns per identified episode, only a small number of these speaking turns included Communicative Patterns (CPs) used for working on emotional contents. The methodology developed should be replicated with a larger number of processes, or even with different therapeutic approaches, so as to confirm the findings presented.

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APPENDIX A: Examples

(1) e.g., *"and physical fear too, because I heard him yell a lot. I don't remember him hitting me, but I was really scared of him"*, (P_A-CE_2-194).

(2) e.g., *"at that point when I started remembering that, I tried to put myself in the place of what I thought in that moment, and why I didn't ask, because I was afraid, it really was that. So I started asking myself that sort of questions. Sometimes, somethings that are not, like, true, happen to me, but I think about them, and that is really problematic for me"*, (P_B-CE_7-35).

(3) e.g., *"it's like I go home sad, doubtful, with a lot of questions, and that distracts me from what I have to do, for example, sometimes I am doing something and i remember something that you asked me, and I start thinking about it and I stop doing what I have to do"*, (P_B-CE_8-8).

(4) e.g., *"I was scared, I always thought of myself as a lucky person, first because I had the least problems for studying, I got married, I felt that I had made a good choice, he was a good person, a good provider, who gave us love, and I felt I was lucky"*, (P_A-CE_2-200).

(5) e.g., *"guilt in the sense of questioning things, or, for example, questioning your mother"*, (T_B-EC_7-18).

(6) e.g., *"it's that, you know, maybe he hasn't been clear enough. It may be that he gets angry too, that he sees you as a small girl, and not as a grown woman"*, (T_B-CE_6-155).

(7) e.g., *"it seems that you, considering this thing you told me about being cautious, caring about your image, it seems that you are sort of afraid of resembling your father at some point, and that's why you care about your image"*, (T_A-CE_2-205).

(8) e.g., *"I mean, this way of dealing with things about your family. Many things have happened, so you now feel a bit trapped. It has partly been the result of not finding another way of sorting things out, things have persisted until you reach a crisis, you get ill, and you face those consequences"*, (T_B-CE_5-221).

(9) e.g., *"you know? I've been afraid of coming, and I think, 'why haven't I talked about this?', because I'm afraid that if people find out at work, for example, they might manipulate the situation"*, (P_B-CE_{16}-107).

(10) e.g., *"maybe I went to the other extreme. Some people at work think I am very methodical, and no, I'm really disorganized. And most of the time I'm happy, happy but serious, I don't know if you understand"*, (P_A-CE_7-193).

(11) e.g., *"at the end of the week I reached the conclusion that it's me who doesn't want him to go, I have him trapped here, but it's just that I don't let him go. I hadn't accepted that before, it's a new thing... there I am, alone. That is my reality, although it may be hard, and hurtful, but that is my reality"*, (P_A-CE_8-92).

(12) e.g., *"I'm very worried, the other day I dared to mention that I was in therapy and someone said 'that's not for you', and so that made me doubt, but then I said 'no, my therapist said it would be good for me and that is what I have to do'. But in that moment I doubted, I questioned... in fact I was ashamed of saying I was coming here"*, (P_B-CE_{15}-101).

(13) e.g., *"so, we could say that you are really afraid of these feelings. That somehow, these feelings of sadness, of loss, depression, are quite good per se, but you feel very uncomfortable feeling them"*, (T_A-CE_6-102).

(14) e.g., *"it seems that you feel that you're going to be told off, what else may happen, that there may come a punishment if you don't behave in this way in your life in general, you are always very fearful of what may happen"*, (T_B-CE_{13}-82).

(15) e.g., *"what happens is that, as we have seen, since you were a child, disagreements have equaled violence, and violence when you were a child was very painful for you, so if people are strong or firm with you, you quickly think that they are doing the same thing with you"*, (T_B-CE_{14}-138).

(16) e.g., *"maybe you decorated your house according to what you think is more appropriate, and not according to your tastes, what you like deep inside. It's as if you were afraid of expressing what is inside you, as if you were devaluing what is yours"*, (T_A-CE_9-49).

(17) e.g., *"on the one hand, it may be that I didn't want to depend on anyone, but on the other I'm angry that this is over because I'll have nobody to discuss my things with"*, (P_B-CE_{22}-79).

(18) e.g., *"what happens is I've usually cried since I was little, but everyone told me that crying was not good for anything. I mean, those are words that I remember. My mum cried a lot, and it was no good. So maybe I'm usually like this, when I talk to someone I try not to show this weak aspect, and deep inside I'm embarrassed by it"*, (P_A-CE_{12}-35).

(19) e.g., *"maybe in my personal life I'm isolated... maybe it's hard for me to let out my personal stuff, because I think that what's happening to me is more emotional. It's like a feeling, because the picture is clear in my mind, I mean, I'm fully aware of the situation I'm in"*, (P_A-CE_{12}-41).

(20) e.g., *"I mean, in fact I'm unsure... I know I will make mistakes, but I also know that changes are gradual... because as you said, maybe I didn't notice beforehand, but now I do"*, (P_B-CE_{19}-39).

(21) *"there are five sessions left, and it seems that you're wondering how you will maintain that bond with me, what you've learned, what you've understood, even when the therapy is over. So I feel that when you get mad at me, you leave me out, and so you get more lonely"*, (P_B-CE_{21}-135).

(22) e.g., *"I had that feeling for a while, I'm not sure but maybe you convey that sensation because you don't commit yourself, or maybe you do but it doesn't show because you don't date to express your feelings... because you think that they are very bad, you leave and it seems like you're not interested"*, (P_A-CE_{10}-59).

(23) e.g., *"maybe for you getting better also involves more requirements, because you have to face life differently, and that can also be hard for you"*, (P_B-CE_{19}-30).

(24) *"because you're afraid of something, you're afraid of committing, and I'll be here, cold and distant, and I'll go 'mm', and then strike back. You're afraid that I'll get angry, and then you'll feel really bad"*, (P_A-CE_{14}-263).

(25) e.g., *certainty*: *"so you feel overwhelmed, you feel that everyone wants something from you"*, (T_B-CE_{11}-8); *tentativeness*: *"we can say then that it hasn't been long, but that it has felt like a long time for you... this conflict is very intense for you, it tortures you, you must have the feeling that it will never end"*, (T_A-CE_5-63).

(26) *"you were afraid of breaking all the norms and being embarrassed"*, (T_A-CE_2-193); and c) give back to the patients certain information related with the emotional contents worked on (*cause*, ie., *"I'm telling this to you because it seems that it's really complicated for you"*, (T_B-CE_6-61).

As a final reflection, the following are the main conclusions obtained in the present Doctoral Thesis, whose general objective was to ***"determine the characteristics of the verbal expressions used by patients and therapists for working on emotional contents, and to analyze the behavior of these verbal expressions throughout the psychotherapeutic process"***. In order to attain this objective, four studies and two pilot studies were conducted, which used an analysis methodology that involved all or some of the following five levels of the therapeutic conversation: therapy, session, episode, speaking turn, and word. The data analysis process was always discovery-oriented (Hill, 1990), thus, some questions were used to guide each of the studies in order to attain the specific objectives.

The activation and expression of affective experience are important elements for explaining psychotherapeutic change (Dreher, et al., 2001; Hill, et al., 1992; Timulak, 2007), since they not only make it possible to regulate the interaction between the participants of therapeutic dialog, but are also associated with patients' increase of insight. Upon this basis, the first specific objective of this Doctoral Thesis was established: ***"to determine the differential characteristics of the verbal emotional expression of patients and therapists during Change Episodes"***. In order to attain this first objective, ***Study 1*** was conducted, which intended to determine patients' and therapists' verbal emotional expressions during Change Episodes and throughout the psychotherapeutic process (Valdés, et al., 2010a)[20]. The first phase of the study included a description of emotional expressions using a discovery-oriented qualitative methodology (Hill, 1990; Mahrer & Boulet, 1999), whereas its second phase involved a quantitative methodology for analyzing the distribution of verbal emotional expressions during the phases of the psychotherapeutic process. The levels of analysis of therapeutic conversation considered in this first study were the following: word, speaking turn, episode, session, and therapy. The questions that guided this study were the following: what are the characteristics of patients' and therapists' verbalizations in terms of the communicative actions used?, what basic emotions are present in patients' and therapists' verbalizations?, are there any differences between the therapies in terms of the emotional contents present in patients' and therapists' verbalizations?, are there any differences between patients and therapists in terms of the reference and the valence of the emotional contents verbalized?, and finally, what is the behavior of the communicative actions, basic emotions, reference, and valence of the emotional contents verbalized throughout the psychotherapeutic process?.

[20] First published article, ISI Journal.

We were able to demonstrate that both psychotherapeutic processes analyzed were very similar, not only in the quantity of verbal emotional expressions present, but also in the communicative actions found in the speech of each participant, their basic emotion types, and their reference and valence. However, the emotional contents of verbal expressions were different among patients but not among psychotherapists, which led us to hypothesize that the contents of verbal emotional expressions were related to the dynamics or main problem presented by each patient (Valdés, et al., 2010a).

Four specific types of communicative actions were identified: (a) to show an emotion of another (to reflect an emotion to the other person); (b) to explore an emotion (to inquire into emotional components; (c) to express an emotion (to experience an emotion while speaking); and (d) to narrate an emotion (to recount an affective situation of the past). The communicative actions used by psychotherapists and patients to work with the emotional experience during psychotherapeutic dialogue were based on an accurate decoding and encoding of verbal emotional expressions and emotion signals which enhance and sustain the therapeutic relationship as a social interaction; at the same time, they regulate interpersonal relationships throughout life (Ekman, 1999). The results show that psychotherapists explored and showed the emotions of patients, while patients expressed and narrated different kinds of emotions. One of the most important findings of ***Study 1*** was the existence of a complementarity in the way psychotherapists and patients verbalize emotions throughout the psychotherapeutic processes, a result which was confirmed in later studies. The reference of verbal emotional expressions also suggests a complementarity in the way psychotherapists and patients verbalize emotions during the psychotherapeutic processes, providing access to the regulation of the mutual interaction that appears as a significant element in the further course of the psychotherapeutic process (Valdés, et al., 2010a).

Also, the percentage of emotional expressions verbalized by psychotherapists and patients was rather similar in both processes (A and B); nevertheless psychotherapists had a tendency to show a higher percentage of emotional words in their verbalizations. Our findings confirmed the results by Hölzer et al. (1997) referred to a tendency of psychotherapists to use more verbal emotional expressions than their patients. Specifically, during both psychotherapeutic processes anger and fear were the most frequently verbalized basic emotions during psychotherapeutic dialogue. These emotions are not only important in any psychotherapy; they are also essential in the psychodynamic approach, because they eliminate the source of irritation, eliminate the obstacles between gratifications, and even destroy bad objects such as primitive anger (Gomberoff, 1999). In the initial phase of the psychotherapeutic process, the most frequent expressions were those related to the basic emotion of fear, and during the middle phase there was a major increase in verbal expressions related to the basic emotion of anger (Valdés, et al., 2010a).

Our expectation of an increase in pleasant emotional expressions throughout the process was not confirmed. Pleasant emotions were present in a low frequency during the change episodes of both psychotherapeutic processes, even though it was possible to observe a tendency to increase during the final phase of the psychotherapeutic process. When emotions were classified according to their valence, there was evidence that pleasant emotions were related with an open, flexible and complex cognitive organization, as well as with the ability to integrate different types of information. This is also related with a more creative way of solving problems and with the ability to make more sensible and right judgments when taking decisions (Fredrickson, 2003).

When analyzing the different phases of the processes, significant differences were observed in basic emotions and the reference of verbal emotional expressions, while communicative actions and valence remained in the same proportion throughout the psychotherapeutic process (Valdés, et al., 2010a). However, as mentioned earlier it was possible to observe a tendency for unpleasant emotions to increase in the middle phase of the psychotherapeutic process, and a tendency for them to decrease in the final phase of the process. These findings are consistent with those of Leising, Rudolf, Oberbracht & Grande (2006), who concluded that the subjective emotional experience of patients changes in the course of a psychotherapeutic process, so that a better therapy outcome is associated with an increase in emotional variability and a decrease in the proportion of negative emotions.

Finally, ***Study 1*** made it possible to develop a system that assumes that the emotional payload in linguistic contents is made up by explicit emotions shown through emotional words, which can be used to describe how words with an affective meaning are used within a sentence (Valdés, et al., 2010a). It allows for a complete and differentiating assessment of affective qualities in both patients and psychotherapists during the psychotherapeutic dialogue. This system resulted in a list of emotional contents using a methodology similar to that employed by Leising, Rudolf & Grande (2000) for the development of the Clinical Emotions List as a way to assess and differentiate patients' emotional profiles as an indicator of subjective affective significance (Leising et al., 2003). Above all things, the results of the ***Study 1*** highlighted the need to use a classification system which made it possible to perform a more rigorous and thorough analysis of all the relevant dimensions present in patients' and therapists' verbalizations during the therapeutic conversation (Valdés, et al., 2010a). This system should differentiate the verbal expressions of both participants, describe the behavior of such verbal expressions throughout the psychotherapeutic process, and distinguish episode types. In order to do this, the Therapeutic Activity Coding System (TACS-1.0, Valdés, Tomicic, Pérez, & Krause, 2010b)[21]

[21] Second published article, ISI Journal.

was used, which involves parallel and non-inclusive analysis dimensions that make it possible to understand language not as a mere reflection of reality but as one of its constitutive elements. This system was developed in accordance with the idea that the process of psychotherapeutic change is co-constructed both by the patient's and the therapist's Communicative Actions. It is assumed that "to say something is to do something" (Krause, de la Parra & Arístegui, 2006; Reyes et al., 2008; Searle, 1969, 1979), and therefore, patient-therapist therapeutic dialog configures a new reality which is part of the patient's psychological change. At the same time, language also involves the transmission of contents by the speaker which are directly associated with the object of therapeutic work. This twofold notion of communication --performance of actions and conveyance of contents-- led to the use this system, because it made it possible to analyze therapeutic dialog through the identification of the verbal actions whereby both actors influence each other. Of course, care was taken to avoid losing track of content, as both dimensions participate in the construction of psychological change. It must be mentioned that this system is of a generic nature, which permits a simultaneous analysis of therapeutic activity in terms of its specificity and of its common traits, because it was not built upon the basis of specific psychotherapeutic model or a specific intervention system (Valdés, et al., 2010b).

The TACS-1.0 (Valdés, et al., 2010b) has been proven to be a reliable system for coding the Communicative Actions present in patient-therapist dialog during relevant episodes in psychotherapies of different modes and theoretical approaches. Four of the five categories that it includes (Basic Forms, Communicative Intentions, Domain, and Reference), displayed agreement between raters equal to or better than levels considered substantial or good ($kp \geq 0.61$, Landis & Koch, 1977); in contrast, the Technique category displayed the lowest observer agreement value. Nevertheless, the agreement levels in this category remained within a range of values regarded as moderate or acceptable ($0.41 \geq kp \geq 0.60$, Landis & Koch, 1977), especially if we consider that, of all the TACS-1.0 categories, this one includes the largest number of codes. For all these reasons, the TACS-1.0 can be said to be an analysis tool capable of revealing the complexity and multidimensionality of communicative interaction in psychotherapy (Valdés, et al., 2010b).

Study 2 was conducted upon the basis of these elements, and was probably the most important one, because it was aimed at determining and comparing the Communicative Actions present in the patients' and therapists' verbalizations during Change Episodes (Valdés, Krause, Tomicic & Espinosa, 2011b)[22]. This second study made it possible to fulfill the first specific objective of this Doctoral Thesis, based on the analysis of the following levels of the therapeutic conversation: speaking turn and episode. The

[22] Manuscript submitted, ISI Journal.

methodology used involved the control of variables such as: the gender of patients and therapists (female and male, respectively), a similar reason for seeking help, the therapeutic approach used, the therapists' clinical experience, a significant therapeutic outcome from the point of view of OQ-45.2 (Lambert, et al., 1996; Von Bergen, & de la Parra, 2002), and the evolution of change considering Generic Change Indicators (Krause, et al., 2007). In addition, Stuck Episodes were also analyzed to contrast the results obtained with those of Change Episodes. A Stuck Episode is a period of time during the session in which there is a temporary halting of the patient's change process due to a reissue of the problem. These episodes are characterized by a lack of progressive construction of new meanings, or by an argumentative persistence in the patient's discourse which does not contribute to the objective of change (Herrera, Fernández, Krause, Vilches, Valdés, & Dagnino, 2009).

The first part of ***Study 2*** provided an answer for the following research question: regardless of the type of contents worked on during the therapeutic conversation, which are the main characteristics of patients' and therapists' verbal expression during Change and Stuck Episodes? (Valdés, et al., 2011b). Therefore, the TACS-1.0 (Valdés, et al., 2010) was used to analyze the Communicative Actions (Basic Form, Communicative Intention, Technique, Domain, and Reference) of the participants during both types of episode, in order to identify the characteristics that differentiate their verbalizations depending on the episode type considered.

The verbal expressions of patients and therapists during the therapeutic conversation were first analyzed in their most basic dimension, that is, their formal structure (Basic Form). The results show that, regardless of the type of episode and the contents discussed, the therapeutic conversation was characterized by a larger number of verbal expressions in the form of *questions* by the therapist, and a larger number of *assent* and *deny* forms by the patient (Valdés, et al., 2011b). Even more so, it is characterized by a more extended presence of verbal expressions in the form of *assertions* about "something" which is regarded as true by one of the speakers. This finding showed that patients' and therapists' therapeutic work during the conversation is mainly performed through verbal expressions with this type of formal structure, regardless of the episode type considered. However, a comparison of both episode types showed that the therapists *assented* more during Stuck Episodes, while the patients in these episodes *denied* and tended to *ask* more than during Change Episodes (Valdés, et al., 2011b). This result was interpreted as a verbal action used by the patients to resist the construction of new meanings during the moments of the session characterized by the persistence of an argumentative discourse which did not contribute to the objective of change, due to a reissue of the problem (Herrera, et al., 2009). On the other hand, the larger proportion of *assent* by the therapists in Stuck Episodes was interpreted as a verbal action which led patients to continue providing more of the same information, which, in contrast with that transmitted during Change Episodes, was not relevant for the progressive

construction of new meanings. These two Basic Forms, more extensively present during Stuck Episodes, are thus regarded as verbal micromarkers of the temporary halting of the change process (Valdés, et al., 2011b).

The analysis of the communicative purpose present in each of the speakers' verbal expressions (Communicative Intention) also contributed to understanding the therapeutic conversation. Therefore, in Change Episodes some of the patients' verbal expressions were performed in order to challenge meanings, establish new associations, and/or approve new ways of understanding certain contents provided by the therapists (*resignify*). In other words, there was active collaboration by the patients in response to the resignification work carried out by the therapists (Valdés, et al., 2011b). In contrast, during Stuck Episodes the patients' verbal expressions were limited to providing information, clarifying points, and/or steering the conversation towards certain contents (*explore*), without displaying a collaborative response to the therapists' resignification attempts, who also consistently showed understanding, generated harmony, and provided feedback (*attune*), regardless of the episode type. The presence of this active collaboration by the patients during Change Episodes is a verbal micromarker of the progressive construction process of new meanings, whereas the absence of such active collaboration in Stuck Episodes is a verbal micromarker of the temporary halting of the process (Valdés, et al., 2011b).

The methodological resources used by speakers to support the purpose of their verbalizations (Communicative and Therapeutic Techniques) also provide information that enriches the comprehension of therapeutic conversation. During Change Episodes, the patients' verbal expressions were characterized by the use of Communicative Techniques such as *narration* and *argumentation*. During these episodes, the therapists tended to use Therapeutic Techniques such as *interpretation* and *reflection*. However, a noteworthy finding was that, during Change Episodes, the therapists also used the *argumentation* technique (Valdés, et al., 2011b). In contrast, the patients' verbal expressions during Stuck Episodes were characterized by the absence of Techniques (Communicative or Therapeutic) to support the purpose of their verbalizations. The verbal expressions of the therapists during Stuck Episodes were characterized by the use of the *confrontation* technique (Valdés, et al., 2011b). This result should not be surprising, as this is one of the most widely used techniques in the psychodynamic approach, especially when making the patient face his/her own defenses (Salerno, Farber, McCullough, Winston & Trujillo, 1992). Therefore, the use of certain Techniques instead of others will depend on the specific function that they will fulfill when supporting the speaker's communicative purpose; yet, their use may also be associated with certain moments of the session, for instance, when the patient is constructing a change, or when the participants are attempting to resolve a Stuck Moment (Valdés, et al., 2011b). The more extensive presence of Techniques in the patients' verbal expressions

during Change Episodes, along with the therapists' use of the *argumentation* Technique, constitute another verbal micromarker of the construction of new meanings; in contrast, the patients' lack of use of Techniques together with the therapists' use of the *confrontation* Technique are a verbal micromarker of the temporary halting of the process during Stuck Episodes (Valdés, et al., 2011b).

Therapeutic conversation can also be understood considering the object of therapeutic work (Domain), that is, the types of contents present in patients' and therapists' verbal expressions. It was possible to conclude that the therapeutic conversation was mainly characterized by the use of verbal expressions limited to thoughts and emotions, regardless of the type of episode. However, the results show that the therapists used more verbal expressions to work on the *affects* Domain during Change Episodes, whereas the patients used more verbal expressions to work on the *ideas* Domain during Stuck Episodes (Valdés, et al., 2011b). In other words, in moments of the session without co-construction of new meanings, the patients' discourse was limited to cognitive content work, while during moments of the session in which there was change, the therapist's discourse was limited to emotional content work. This result has been associated with certain defensive processes of the patients (intellectualization) during Stuck Episodes, concretized and expressed through verbalizations characterized by the presence of cognitive contents rather than affective contents (Vaillant, 1995). This was regarded as another verbal micromarker of the temporary halting the change process (Valdés, et al., 2011b).

Regarding the protagonist of therapeutic work (Reference), regardless of the type of episode and the type of contents discussed, the patients made more verbalizations *about themselves*, *referencing a third party,* and *referring to the relationship with a third party*, while the therapists favored verbalizations *about the other person present*, *the therapeutic relationship,* and verbalizations *with a neutral reference* (Valdés, et al., 2011b). This was the only dimension of analysis which did not reveal any micromarkers differentiating a Change Episode from a Stuck Episode. This result confirms the existence of a communicative complementariness of roles which establishes the patients as the protagonists of their own psychotherapeutic change (Reyes, et al, 2008; Valdés, et al., 2010a). It also confirms the findings of ***Study 1*** about the existence of verbal micromarkers which reflect the complementariness between the participants of the psychotherapeutic dialog (Valdés, et al., 2011b).

Study 2 findings are important due to the novelty of its results, but also because they demonstrated the existence of elements that characterize therapeutic communication during Change and Stuck Episodes, based on certain differences and similarities between patients' and therapists' verbal expressions, regardless of the types of contents that they worked on (Valdés, et al., 2011b). Thus, the patients' discourse during Change Episodes was characterized by the verbalization of *assertions* about *cognitive* and *emotional* contents *referred to themselves*, *a third party,* or *the relationship with a third*

party. These *assertions* were made with the dual purpose of *exploring* (providing information, clarifying a point, and/or steering the conversation towards certain contents) and *resignifying* (co-constructing new meanings for such contents with their therapists). In order to achieve this double purpose, the patients used *narration* and *argumentation* as Communicative Techniques. In contrast, the patients did not *resignify* during Stuck Episodes, and the only purpose of the *assertions* made was to *explore* contents during the conversation, most of which were *cognitive*. Another key characteristic of Stuck Episodes is that the patients *denied* more often than in Change Episodes, and used fewer techniques to support the communicative purpose of their verbalizations (Valdés, et al., 2011b).

On the other hand, the therapists' discourse during Change Episodes was also characterized by the verbalization of *assertions* about *cognitive* and *emotional* contents, which referred *to the other person present* (patients), *to the therapeutic relationship*, and/or which had a *neutral reference*. These *assertions* were made with the dual purpose of *resignify* (co-constructing new meanings for such contents with the patients), and to *attune* (show understanding, generate harmony, and/or provide feedback about certain contents). In order to meet the first objective, the therapists used *interpretation* as a Therapeutic Technique and *argumentation* as a Communicative Technique. In order to achieve the second goal, they used *reflection* as a Therapeutic Technique (Valdés, et al., 2011b). It was shown that the therapists' *assertions* in Stuck Episodes had the same purposes that they had in Change Episodes; however, most of these *assertions* were aimed at *exploring* contents during the conversation. Another key characteristic of Stuck Episodes was that the therapists *assented* more often than during Change Episodes, and used the *confrontation* Therapeutic Technique more frequently to support the communicative purpose of their verbalizations.

The analysis of the characteristics of patients' and therapists' verbal expression in both episode types revealed three verbal micromarkers which characterize the therapeutic conversation during Change Episodes: (a) the presence of verbal expressions in the patients' discourse, which are performed in order to construct new meanings (*resignification*); (b) the presence of *argumentation* in the therapists' discourse, as a Communicative Technique supporting the purpose of the verbalization; and (c) the presence of more verbal expressions by the therapists to work on *emotional* contents (Valdés, et al., 2011b). The first verbal micromarker was interpreted as an active collaboration response by the patients in the construction of their own change, whereas the second verbal micromarker reflects the therapists' attempts to concretize the newly co-constructed meanings in the patients' immediate external experience. The third verbal micromarker was even more interesting, because it reflects the therapists' attempts to generate emotional involvement in the patients during the psychotherapeutic process, as a factor which promotes cognitive and behavioral changes. This result is consistent with the proposal by Greenberg (2002) about the need to integrate cognition and affect for emotional

processing to be optimal. In other words, once the emotional experience has been recognized (*explored*), it is necessary for patients to adapt cognitively to this experience (*by resignifying it*) as the only possibility of giving a different meaning to their experience (Castonguay, et al., 1996; Goldman, et al., 2005). In addition, four characteristic verbal micromarkers were identified in Stuck Episodes: (a) the presence of more verbal expressions by the therapists using the *confrontation* Technique; (b) the presence of a larger number of verbal expressions with the Basic Form *deny* in the patients' discourse; (c) the presence of more verbal expressions with the Basic Form *assent* in the therapists' discourse; and (d) the presence of more verbal expressions used by the patients to work on *cognitive* contents (Valdés, et al., 2011b). The first verbal micromarker was interpreted as a verbal action by the therapists to show the patients the contradictions in their discourse or behavior. This result is consistent with Coderch (1990) regarding the use of confrontation as one of the essential techniques of psychodynamic psychotherapy, which focuses on aspects that are conscious or very close to the patient's consciousness. This technique is performed for patients to reflect about certain major loose ends, omissions, or contradictions in their discourse, and not to help them to discover new meanings. However, this author also states that confrontation must be used carefully, as patients may perceive it as a judgment or criticism. The second verbal micromarker was interpreted as the patients' resistance to the construction of new meanings during episodes characterized by a temporary halting of the change process. The third verbal micromarker was interpreted as a verbal action by the therapists, which appears to encourage the patients to continue providing more information which is finally irrelevant for the change process. The fourth verbal micromarker involves an intellectualization of the therapeutic conversation by the patients, which is reflected through a more extensive work on cognitive contents (Valdés, et al., 2011b). Based on these results, it was possible to conclude that each of these verbal micromarkers fosters and/or reinforces the temporary halting of the change process which characterizes Stuck Episodes.

These first results of ***Study 2*** made it possible to differentiate the characteristics of each participant of the therapeutic conversation depending on the type of episode, and regardless of the contents discussed. However, since the general objective of this Doctoral Thesis is to determine the characteristics of the verbal expressions used for working on emotional contents, new research questions were introduced in response to the results obtained so far: are any verbal expression patterns used by patients and therapists for working on emotional contents during Change Episodes?, and, if so, what are the general and specific characteristics of these patterns depending on the type of episode and the participant's role? In order to do this, the TACS-1.0 (Valdés, et al., 2010b) code configuration for each speaking turn analyzed was studied. This configuration was termed Communicative Pattern (CP), and was made up by six digits which correspond to each of the TACS-1.0 categories. Thus, each

Communicative Pattern (CP) was configured by a first level that includes the first three digits and which was termed Structural Level. This level reflects the contents worked on during the therapeutic conversation (Domain), which are transmitted with a certain purpose (Communicative Intention), and which use a certain formal structure (Basic Form).The second level includes the last three digits and is referred to as Articulative Level. This level is specifically associated with the participant that emits the information, that is, the protagonist of therapeutic work at that point (Reference), who may or may not use a methodological resource (Technique) to support the purpose of his/her verbalization. Therefore, a Communicative Pattern (CP) is defined as "the combination of Communicative actions present in the speaker's verbalization, which has a certain formal structure that is used to express a communicative purpose about a given content, with a given reference, and with the potential support of methodological resources" (Valdés, et al., 2011b, pp.115).

As the first specific objective of this Doctoral Thesis was to "***determine the differential characteristics of patients' and therapists' emotional verbal expression during Change Episodes"***, this part of ***Study 2*** only analyzed the speaking turns coded with the *affects* code in the Domain category of the TACS-1.0 (Valdés, et al., 2010b), that is, those that had been assigned number "3" as their third Communicative Pattern digit (e.g., CP213), which indicates that the speaker's object of therapeutic work during that verbalization was emotional content (Valdés, et al., 2011b). According to their Structural Level, three Communicative Patterns (CPs) were identified in patients and therapists when they worked on emotional contents during therapeutic conversation. The name of each of these patterns was chosen based on its main characteristics at the Structural Level, that is, according to the speaker's communicative purpose associated with the object of therapeutic work. The three Communicative Patterns (CPs) identified were: (a) *Affective Exploration* (CP213), which was used only by the patients to give information, clarify a point and/or direct the focus of the conversation towards certain emotional contents; (b) *Affective Attunement* (CP223), which was used only by therapists to show understanding, generate harmony, or provide feedback to the patients about certain emotional contents; and (c) *Affective Resignification* (CP233), which was used to jointly construct and/or consolidate new meanings for certain emotional contents (Valdés, et al., 2011b). It was noteworthy that all three patterns included instances of *assertion*, but that none displayed the *question* form, even though the general analysis of the first part of ***Study 2*** showed that it was the second most used Basic Form by the therapists, and despite the fact that it is one of the most frequent interventions in psychodynamic therapy (Hill, 1989; Wiser & Goldfried, 1998). Therefore, it was concluded that the verbal expressions used by the therapists while working on emotional contents tend to lack *questions*, and that this type of Basic Form is part of the formal structure of the Communicative Patterns used to

work on other content types (such as cognitive contents), or of patterns used depending on the type of episode (Valdés, et al., 2011b).

The results of ***Study 2*** also showed that, during Change Episodes, the *Affective Exploration* pattern was only used by the patients, the *Affective Attunement* pattern was only used by the therapists, and the *Affective Resignification* pattern was employed by both patients and therapists, but mostly by the latter. In contrast, although during Stuck Episodes the patients also used the *Affective Exploration* pattern exclusively, it was the only pattern that they employed during these episodes. In other words, the *Affective Resignification* pattern was only used by the therapists during Stuck Episodes (Valdés, et al., 2011b). The low proportion of the *Affective Attunement* pattern during Stuck Episodes was considered a fifth verbal micromarker which reflects a lesser degree of understanding and/or a smaller amount of feedback by the therapist in episodes characterized by a temporary halting of the change process.

Study 2 also identified specific types of these Communicative Patterns (CPs) according to their Articulative Level, that is, taking into account which participant is the protagonist of therapeutic work at a given moment, and whether he/she uses a technique to support the purpose of his/her verbalization. In the case of *Affective Exploration*, the patients exclusively performed *emotional descriptions* (CP213-100) and *argumentative emotional clarifications* (CP213-101 and CP213-501). The first specific type was used by the patients to provide novel information about emotional contents referencing themselves, while the second type was used to clarify certain emotional contents about themselves or their relationships with a third party, using arguments, examples, generalizations, or justifications (Valdés, et al., 2011b). The presence of these specific types of *Affective Exploration* during Change Episodes was interpreted as verbal actions performed by the patients in order to communicate contents which were later used by the therapists to conduct more specific interventions which would allow the patients to attain more identification, understanding, and emotional regulation. Nevertheless, this action of putting into words their innermost feelings and retelling their personal history to themselves also allowed them to become more aware of their own experience. This result was interpreted in accordance with Goldman, Greenberg and Pos (2005), who state that it is a step prior to the resignification work to be later carried out. In contrast, during Stuck Episodes, the use of these specific types had to do with the inclusion of arguments deemed irrelevant for the change process.

Regarding the *Affective Attunement* pattern, only one specific type was indentified, which was termed *emotional empathy* (CP223-212). This specific type was only used by the therapists, especially during Change Episodes, in situations in which they verbally mirrored their patients' affective states expressed by them "here and now", in order to show understanding, generate harmony with them, or provide feedback about such emotional contents (*Affective Attunement*). The therapists' use of this

pattern was interpreted as a way of reinforcing the patients' active purveyance and clarification of information, without adding new meanings (Valdés, et al., 2011b). These results confirm the fact that, for change to be constructed, it is not only necessary to perform complex therapeutic interventions: in some moments it is enough to generate communicative coordination, which for some authors may be associated with moments of meeting (Mitchell & Black, 2004; Stern, 2004; Ávila, 2005) or with the therapist's empathic understanding (Gabbard, et al., 1994; Wiser & Goldfried, 1998; Rubino, Barker, Roth, & Fearon, 2000).

Contrary to the other patterns, *Affective Resignification* is characterized by adding more complexity to the therapeutic activity, in the sense of introducing new meanings for certain emotional contents. Six specific types of this pattern were identified, four of which reflect the collaborative work of patients and therapists during Change Episodes. These four specific types are: *emotional self-resignifications* (CP233-100), *argumentative emotional self-resignifications* (CP233-101), *emotional resignifications* (CP233-200) and *argumentative emotional resignifications* (CP233-201). The first two specific types are associated with the patient and the last two with the therapist. The four specific types are used to provide an explanation, integrate contents, or establish a connection between them, based on the use of argumentation as a Communicative Technique (Valdés, et al., 2011b). The other two specific types of the *Affective Resignification* pattern are only used by the therapists regardless of the episode type: *interpretative emotional resignifications* (CP233-207) and *transferential emotional resignifications* (CP233-407). Both specific types use interpretation as a Therapeutic Technique, in order to ascribe new meanings to certain emotional contents which go beyond the meanings that the patient could attach to them by herself. The first of them has to do with the configuration and reconfiguration of the information provided by the patients, while the second focuses the conversation on the most immediate situation during the conversation, that is, the therapeutic relationship. Several studies demonstrate the effects of interpretations on patients (Caspar, et al., 2000; Perääkylää, 2004) and on the relationship between the participants during the therapy (Cashwell, Skinner, Lewis, Young & Cashwell, 2001; Connolly, Crits-Christoph, Barber & Luborsky, 2000; Høøglend, Johansson, Marble, Bøøgwald & Amlo, 2007; Joyce, Duncan & Piper, 1995). Another of the main findings of ***Study 2*** was to demonstrate the existence of two patterns used by the therapists in order to concretize the new meanings co-constructed during Change Episodes: *argumentative emotional resignifications* and *transferential emotional resignifications*. In the first case, the therapists use arguments (Communicative Technique) typical of the extraterapeutic context, whereas in the second case they make interpretations (Therapeutic Technique) about the therapeutic relationship developed during the session (Valdés, et al., 2011b).

After demonstrating the existence of Communicative Patterns (CPs) used by patients and therapists to work on emotional contents during Change Episodes, a last research question was introduced to guide ***Study 2***: what temporal interaction sequences can be found between these patterns depending on the type of episode?. This last part of ***Study 2*** made it possible to identify 11 Communicative Microsequences observable while the participants worked on emotional contents during Change Episodes. Two of them were temporal coordination sequences of the speaker's own discourse (self-coordination), while nine were temporal sequences of communicative coordination with the other speaker. It was a relevant finding to demonstrate the existence of Self-Coordination Microsequences only in the patients' discourse, and not in the therapists'(Valdés, et al., 2011b). That is, during the same speaking turn, the speakers apart from accepting the therapists' words as true (*assent*), continued providing information and/or clarifying certain emotional contents (*Affective Exploration*), or continued concretizing new meanings based on immediate situations and external to the therapy (*Affective Resignification*). The latter temporal sequence was only identified during Change Episodes.

With respect to the Communicative Coordination Microsequences identified in Change Episodes, it must be specified whether the antecedent verbalization belongs to the patient or the therapist (Valdés, et al., 2011b). When the therapist's response was preceded by a verbalization by the patient, four microsequences were identified. The first was an *Assent* by the therapist in response to an *Affective Exploration* by the patient, while the second was an *Affective Attunement* by the therapist also in response to an *Affective Exploration* by the patient. In both cases, the therapist does not add more complexity to the activity performed in that moment, but instead listens actively and understands empathically the information provided by the patients, which leads them to provide more of the same information. These two Communicative Coordination Microsequences were observed in episodes of both types, nevertheless, the following, only present in Change Episodes, are the most complex ones: *Assent* by the therapist in response to an *Affective Resignification* by the patient, and an *Affective Resignification* by the therapist also in response to an *Affective Resignification* by the patient. In the first one, the therapist's response was interpreted as a verbal micromarker of the acceptance of the patient's resignification, which allowed her to continue elaborating the new meanings which they themselves were ascribing during the conversation. In the second one, the therapist's response remained at the same complexity level and within the same domain of therapeutic work, and so this was the only Communicative Coordination Microsequence considered to be a verbal micromarker of collaborative work while co-constructing new meanings for certain emotional contents (Valdés, et al., 2011b). For Ávila (2005), these results show that therapists adjust their interventions according to their patients' needs, but also considering the level of participation and openness of the conversation.

In contrast, when the patient's response was preceded by a verbalization by the therapist, two Communicative Coordination Microsequences were clearly identified in Change Episodes. Both involve an *Assent* by the patient in response to an *Affective Attunement* or an *Affective Resignification* by the therapist. The first microsequence was interpreted as a verbal micromarker that the patients were feeling understood and that they were accepting the therapists' feedback; on the other hand, the second microsequence was interpreted as a verbal micromarker of the patients' acceptance of the new meanings proposed by the therapists (Valdés, et al., 2011b).

Another relevant result of ***Study 2*** was the identification of Communicative Coordination Microsequences exclusive to Stuck Episodes: in the first one, an *Affective Exploration* by the patient is followed by an *Affective Resignification* by the therapist, while in the second, an *Affective Resignification* by the therapist is followed by an *Affective Exploration* by the patient. Both microsequences were interpreted as verbal micromarkers of the therapists' constant interest in taking the patients to more complex levels of therapeutic activity, while the patients continued responding verbally at a lower complexity level, associated with the purveyance of arguments which were mostly irrelevant for the process of construction of new meanings. These verbal micromarkers are opposed to the verbal micromarkers of collaborative work identified in Change Episodes (Valdés, et al., 2011b).

In brief, ***Study 2*** demonstrated the existence of communicative characteristics which differentiate patients' and therapists' verbal expressions during Change Episodes. It also helped to identify general and specific verbal expression patterns used by patients and therapists for working on emotional contents during Change Episodes. In addition, it resulted in the identification of Self-Coordination Microsequences by the patients, and Communicative Coordination Microsequences between the verbalizations of both speakers. Nevertheless, the main result of this study was the identification of specific verbal micromarkers at the level of Communicative Actions, Communicative Patterns (CPs), and Coordination Microsequences, which make it possible to establish differences between both episode types (Valdés, et al., 2011b).

The present Doctoral Thesis is associated with process research, therefore, it regards psychotherapy as a process which goes through a series of phases characterized by the performance of actions leading to the attainment of certain therapeutic objectives. A ***Study 3*** (Valdés, 2011a)[23] was conducted in order to fulfill the second specific objective of this Doctoral research, which was "***to determine the behavior of patients' and therapists' verbal emotional expressions in Change and Stuck Episodes"***. The first

[23] Unpublished manuscript.

part of ***Study 3*** described and compared the behavior of Communicative Patterns (CPs) in the initial and final stages of both types of episode, while the second part involved the same type of comparative analysis, during and between the different phases of the psychotherapeutic process. The levels of analysis considered in the first part of ***Study 3*** were the speaking turn and the episode. Two levels were added for the second part of the study: the session and the therapy (Valdés, 2011a). ***Study 3*** was conducted in order to answer the following questions: which are the main characteristics of therapeutic conversation during the initial and final stages of Change Episodes?; what are the main characteristics of therapeutic conversation during each of the phases of the psychotherapeutic process?; which are the differences and similarities between patients' and therapists' verbalizations, depending on the therapeutic phase and the type of episode?. The results of the first part of this third study showed differences in the behavior of Communicative Patterns (CPs) within Change Episodes. The start of these episodes was characterized by the use of *Affective Resignification* by the therapists, along with the patients' use of *Affective Explorations*. On the contrary, at the end of Change Episodes, the patients continued performing *Affective Explorations*; however, and most relevantly, they simultaneously used *Affective Resignification* in the same proportion as the therapists. This result was interpreted as a sign of collaborative work between the participants (Valdés, 2011a). A different situation was observed within Stuck Episodes, as the patients continued performing *Affective Explorations* throughout the episode, while the therapists carried out the same resignification work during the whole episode. Therefore, based on these results, it can be concluded that during Change Episodes therapeutic work led to the emergence of a Change Moment in the patients, which was characterized by the participants' joint use of *Affective Resignification* patterns (Valdés, 2011a).

The second part of ***Study 3*** was aimed at fulfilling the third specific objective of the present Doctoral Thesis: ***"to determine the behavior of patients' and therapists' verbal emotional expressions in each phase of the therapy and throughout the psychotherapeutic process"***. The results of this second part also showed differences in the behavior of Communicative Patterns (CPs) from each of the phases of the psychotherapeutic process. The initial phase of the therapy was mainly characterized by the patients' use of *Affective Exploration*, but additionally, both participants performed *Affective Resignifications* to co-construct new meanings for the emotional contents verbalized (Valdés, 2011a). This result is consistent with the notions advanced by some authors (Beutler, Clarkin, & Bongar, 2000; Kernberg, Yeomans, Clarkin, & Levy, 2008) about the need for an open attitude and an adequate level of participation by the patients in the initial sessions of the therapy. In other words, the therapists' discourse may have been perceived by the patients as a possibility for insight or new perspectives, which were accepted without resistance to change. This resembles the idea proposed by Beutler and Clarkin (1990) about the existence of directive interventions which are more effective when the

patients are open to being influenced by another speaker. However, during the initial phase of the therapy, resignification work was mostly performed by the therapists, who simultaneously showed *Affective Attunement* to their patients (Valdés, 2011a). This result confirms previous findings (Sachse & Elliott, 2002; Wiser & Goldfried, 1998) about the usefulness of therapists' reflection and empathy as necessary elements for patients to attain a high level of therapeutic work during the therapy.

The middle phase of the therapeutic process was again characterized by the patients' use of the *Affective Exploration* pattern, and by both participants' use of *Affective Resignifications*. However, resignification work continued to be mostly performed by the therapists. The main difference with the initial phase was that, during the middle phase, the patients performed exploration and resignification work in a similar proportion, whereas the therapists continued co-constructing and consolidating the new meanings ascribed to certain emotional contents while showing *Affective Attunement* to their patients (Valdés, 2011a).

During the final phase of the therapy, patients and therapists continued performing *Affective Resignifications* together, however, this work was conducted in a similar proportion by both participants, in contrast with previous phases in which the therapists had been predominant. Even though the patients also performed *Affective Explorations* during the last phase of the therapy, they were less frequent than resignifications carried out to consolidate new meanings. An important finding of ***Study 3*** was the significant increase in the therapists' resignifications of emotional contents referencing the therapeutic relationship, which had remained low during previous phases (Valdés, 2011a). These changes in verbal expressions related with transferential work were interpreted as another verbal micromarker in Change Episodes, associated with a lower degree of resistance by the patients during the final phase of the therapy. This is similar to the ideas advanced by Novick (1997) about the working-through of transference being one of the criteria for the termination of therapy. Another relevant finding was that the therapists displayed less *Affective Sympathy* during the final phase than during previous phases. This result appears to support the idea that the more extensive presence of this Communicative Pattern (CP) during the initial phase of the therapy may have been associated with the therapist's interest that the patient performed more therapeutic work, in order to decrease his use of this CP once the patient had reached the desired level (Valdés, et al., 2011b).

A comparison of the different phases of the therapeutic process revealed three important results: (a) during Change Episodes from the final phase of the therapy, the patients used *Affective Exploration* less frequently than during those from the initial phase, and *Affective Resignification* more frequently, a situation which is reflected by an increase in *argumentative emotional self-resignifications* even from the middle phase of the therapy onwards; and (b) although there were no differences in the work performed by the therapists during the phases of the therapeutic process, an increase in the use of

transferential emotional resignifications was observed during the final phase of the process, in comparison with the initial phase (Valdés, 2011a). All these results can be considered verbal micromarkers that differentiate one episode type from the other, as no changes were observed in the patterns used by both participants during Stuck Episodes, neither withing them or throughout the therapy. Finally, two additional verbal micromarkers were identified which make it possible to differentiate both episode types: (a) the therapists' use of *argumentative emotional resignifications* during Change Episodes, as a way to create a tight connection between the new meanings acquired in the intratherapeutic context and the patient's immediate extratherapeutic context; and (b) an increase in the proportion of *transferential emotional resignifications* during Change Episodes from the final phase of the therapy, while Stuck episodes from the final phase continued displaying a larger proportion of *interpretative emotional resignifications* (Valdés, 2011a).

In brief, the results of ***Study 3*** show that *exploration* and *resignification*, at least in association with work on emotional contents, are not strictly separable phases of the therapy, as some authors propose (Hill, 2004). Upon the basis of the results generated by the present Doctoral Thesis, it is proposed that they be considered as communicative purposes conducted throughout the therapy by both participants of the therapeutic conversation, in varying proportions, depending on multiple variables, such as the patient's resistance, his/her openness to new situations, the presence of collaborative work between the participants, the type of episode, the therapist's empathy, etc. For example, it was demonstrated that *exploration* work can be carried out by the patients even towards the end of the therapy, and that *resignification* work by the therapists can be observed during Stuck Episodes even if it does not necessarily lead to a change in the patient (Valdés, 2011a).

The last specific objective of this Doctoral Thesis was ***"to determine which cognitive mechanisms are present in patients' and therapists' verbal emotional expressions during Change Episodes, and to analyze their behavior throughout the psychotherapeutic process"***. This fourth objective was approached through a study aimed at describing the behavior of the main Communicative Patterns (CPs) used for working on emotional contents, based on certain cognitive mechanisms associated with specific types of words uttered by patients and therapists during the conversation, in Change and Stuck Episodes (Valdés, 2011b)[24]. In ***Study 4***, a level of analysis was added which had not been included before: the word. Including this level of analysis in the present Doctoral Thesis is supported by the large number of studies which show that physical and mental health is positively correlated with the type of words used during conversation (Lepore & Smyth, 2002; Niederhoffer & Pennebaker, 2002;

[24] Unpublished manuscript.

Pennebaker, 1997; Pennebaker, Mayne, & Francis, 1997; Stiles, 1992), which also reflect the way in which psychological processes are structured. In other words, considering the patients' linguistic style during the therapeutic conversation may provide information about the subjective way in which they understand themselves and the situations that they face (Pennebaker & King, 1999). This is based on the assumption that the words that the therapist uses in conversation have a deep impact on the patient, because, if one participant can consciously or unconsciously decide which words to use when conveying different contents in speech, such words may also be processed consciously or unconsciously by the other participant (Pennebaker, Mehl, & Niederhoffer, 2003).

In order to achieve the last specific objective, the analysis involved the use of Linguistic Inquiry and Word Count (LIWC-2007), developed by Pennebaker, Francis and Booth (2001) as part of their work on emotional writing. The program can capture and calculate percentages of words in a text according to a variety of linguistic and psychological categories and subcategories, which make it possible to describe certain characteristics of a person's linguistic style and predict his/her linguistic wellbeing (Pennebaker, et al., 1997). More specifically, the study employed the Cognitive Mechanisms subcategory from the Psychological Processes category. Its purpose was to identify the presence of words reflecting the following cognitive mechanisms: *cause*, *insight*, *tentative*, and *certainty*. The first mechanism refers to the verbalization of words which reveal the presence of a certain basic cognitive skill associated with the speakers' attempts to explain something by connecting reasons and effects (e.g., therefore, because, motive). The second mechanism refers to the use of words which reflect an increase in awareness, or a deep understanding of the central aspects of the new meaning ascribed to a certain content (e.g., face, admit, believe). The third mechanism refers to the use of words which reflect the evaluation of various alternative meanings for certain contents (e.g., maybe, for example, consider). The last mechanism refers to the verbalization of words which reflect a growing assurance about the knowledge of something which is deemed to be true and not doubtful (e.g., never, always, certainty) (Valdés, 2011b).

Nevertheless, before conducting this last study, there was a previous stage during which two Pilot Studies were performed in order to: (a) check the translated and validated Spanish version of LIWC-2007 (Ramírez-Esparza, Pennebaker, & García (2007); and (b) demonstrate the usefulness of this system for the analysis of therapeutic conversation during Change Episodes. This step was taken considering that the most frequent criticism directed at most studies about word use is that they are conducted upon the basis of a specific therapeutic approach, considering only one of the participants, and not analyzing the nature of language in itself. ***Pilot Study 1*** was conducted in 2010 and proved that LIWC-2007 (Ramírez-Esparza, et al., 2007) was capable of capturing over 80% of the total

number of the words analyzed, on average (Valdés, 2010)[25]. This system was also adapted to the analysis methodology of Change Episodes, which showed its sensitivity for detecting significant differences between the patients' and the therapists' discourse along with significant divergences between therapeutic phases (Valdés, 2010). The results showed that the patient used more personal pronouns in the first person singular, emotional contents with a positive valence, and words that reflected causality-related cognitive subprocesses; in contrast, the therapist tended to use personal pronouns in the second person singular, emotional contents with a negative valence, and words that reflected insight-related cognitive subprocesses (Valdés, 2010). Some linguistic/psychological characteristics were shared by both participants and may reflect a certain degree of continuity and consistency in their activity during the conversation; likewise, this may be interpreted as a sign of communicative attunement during the therapeutic activity that characterizes Change Episodes (Valdés, et al., 2005; Valdés, 2010).

Pilot Study 2, conducted in 2011, analyzed patients' and therapists' Communicative Actions and some characteristics of their Linguistic Styles during Change Episodes, in order to determine which actions were performed and which contents were communicated by the speakers to influence each other and to construct new meanings together (Valdés, Krause, & Álamo, 2011a)[26]. This time, the system again managed to capture over 86% of the words analyzed, on average. This second pilot study revealed that LIWC-2007 (Ramírez-Esparza, et al., 2007) has categories and subcategories which facilitate a more microanalytic view of the Content dimension of the Therapeutic Activity Coding System (TACS-1.0, Valdés, et al., 2010b), which is also consistent with it. The manual coding of the object of therapeutic work (Domain) conducted during Change Episodes was confirmed by using the automatic system for counting words referencing psychological processes. That is to say, both at the communicative (TACS-1.0) and the linguistic levels (LIWC-2007), no differences were observed between the patients' and therapists' verbalization of cognitive, affective, and behavioral contents. This was also observed when comparing the manual coding of the Reference of Communicative Actions (protagonist of the object of therapeutic work) with the count of personal pronouns uttered by the participants (Valdés, et al., 2011a).

Based on the result of these two pilot studies, ***Study 4*** was aimed at reaching a deeper understanding of therapeutic language, considering both the performance of actions while speaking and the transmission of contents which are directly related with the object of therapeutic work (Valdés, 2011b).

[25] Third published article, SciELO Journal.
[26] Fourth published article, ISI Journal.

This twofold notion of verbal communication made it possible to analyze therapeutic activity by identifying variable actions whereby patients and therapists influence each other without losing track of content, as both dimensions participate in the construction of psychological change. ***Study 4*** was intended to answer the following research questions: depending on the therapeutic phase, which cognitive mechanisms are at present in therapists' and patients' verbalizations while they use Communicative Patterns (CPs) for working on emotional contents during Change Episodes?, and, are there any differences in the behavior of such cognitive mechanisms depending on the phase pf the therapeutic process?.

The first important findings of ***Study 4*** were to show that the cognitive mechanisms associated with each Communicative Pattern (PC) are not enough for differentiating the typical characteristics of each episode type, and that no differences could be observed in the cognitive mechanisms present in patients' and therapists' *Affective Resignifications* during Change Episodes. In other words, at this more microanalytic level, it was possible to demonstrate the existence of cognitive mechanisms which are present during therapeutic conversation regardless of the participant's role and the type of episode considered (Valdés, 2011b). However, differences were observed within each Communicative Pattern (CP), in each phase of the therapy, and throughout the psychotherapeutic process. Thus, the study confirmed the notion that meaning is not something static contained in the words that a person uses, but a product of the way in which words are employed to regulate communication (Harré & Gillett, 1994; Niederhoffer & Pennebaker, 2002; Nitti, Ciavolino, Salvatore & Gennaro, 2010; Pickering & Garrod, 2004).

During Change Episodes from the initial phase of the therapy, the patients tended to perform *Affective explorations*, verbalizing words that allowed them to: (a) explain the reasons and effects associated with certain emotional contents (*cause*); (b) communicate and clarify the meanings ascribed to certain emotional contents which they had used to understand themselves up to that point (*tentative*); and (c) transmit to their therapists the central, conscious, and non-novel aspects of such meanings (*insight*). However, the main verbal micromarker was that such *Affective Explorations* were accompanied by words which allowed them to convey elements of their personal lives, wholly known by them and also regarded as unquestionably true (*certainty*) (Valdés, 2011b). The therapists' work, from the initial phase onwards, focused on *Affective Resignifications* and on words that allowed them to: (a) propose various alternative meanings (*tentative*); (b) develop patients' awareness about the central aspects of certain emotional contents (*insight*); and (c) suggest new meanings with an assurance resulting from increasing knowledge about certain aspects of the patients' personal histories (*certainty*). For the therapists, the most relevant verbal micromarker was that these *Affective Resignificactions* were accompanied by words which reflected a negotiation of new explanations about the relationship

between reasons and effects associated with certain emotional contents (*cause*) (Valdés, 2011b). Therefore, the therapists' work in this first phase of the process is consistent with Perales, Catena, Ramos and Maldonado (1999): during this phase of the therapy, the patients' main task is to learn to distinguish up to when two phenomena occur jointly and when a phenomenon produces another. In order to do this, Garnham and Oakhill (1996) establish the existence of a type of inductive thought which allows patients two increase their knowledge about themselves when communicating meanings which they so far had used to explain some aspects of their personal history.

During Change Episodes from the middle phase of the therapy, the patients continued performing *Affective Explorations*, but simultaneously with *Affective Resignifications* (Valdés, 2011a). Both Communicative Patterns (CPs) were accompanied by words that allowed them to: (a) continue providing some cause-effect relationships associated with emotional contents, while at the same time participating in the search for new explanations about these relationships (*cause*); (b) continue communicating meanings ascribed to certain emotional contents, while at the same time opening up to new meanings (*tentative*); (c) become more aware about the central aspects of certain emotional contents which used to be nearly unconscious, but which they started to regard as novel (*insight*); and (d) transmit aspects of their personal history that they considered true, but questioning them (*certainty*) (Valdés, 2011b). During the middle phase, the therapists continued using a larger proportion of *Affective Resignifications* in comparison with the *Affective Attunement* that they displayed; in addition, their resignification work was more frequent than that of patients. Nevertheless, the main verbal indicator during this phase was the lack of significant differences between the patients and the therapists in terms of the cognitive mechanisms present in their *Affective Resignifications* (Valdés, 2011b). The therapists' *Affective Resignifications* were accompanied by words that allowed them to: (a) continue proposing new meanings for certain emotional contents (*tentative*); (b) continue developing the patients' awareness of the novel aspects that they had not considered before (*insight*); (c) introduce the new meanings with an assurance based on greater knowledge of the patients' history (*certainty*); and (d) continue negotiating new cause-effect relationships associated with certain emotional contents, but now with a more active response by the patients (*cause*).

It had already been shown in ***Study 3*** that the patients performed more *Affective Resignifications* than *Affective Explorations* during Change Episodes from the final phase of the therapy (Valdés, 2011a). An even more relevant finding was to observe that the cognitive mechanisms *tentative* and *insight* were more often present in such *Affective Resignifications*, which reflected: (a) a deeper understanding of the new meanings ascribed to certain contents (*insight*); and (b) more openness to alternative meanings offered by the therapists, while at the same time the patients managed to propose new meanings for emotional contents (*tentative*) (Valdés, 2011b). The therapists continued performing

more *Affective Resignifications* in comparison with the *Affective Attunement* that they displayed; in addition, no significant differences were observed between the proportion of *Affective Resignifications* performed by the patients and by the therapists (Valdés, 2011a). There were no significant differences between the participants in terms of the cognitive mechanisms present in their *Affective Resignifications* (Valdés, 2011b). On the other hand, therapists' therapeutic work remained stable in comparison with the two previous phases of the process, and involved the same cognitive mechanisms.

A comparison of the therapeutic phases revealed the following verbal micromarkers as the psychotherapeutic process progressed: (a) a decrease in patients' *Affective Explorations* accompanied by words reflecting *cause*, *tentativeness*, and *insight*; (b) a decrease in therapists' *Affective Attunement* accompanied by words reflecting *cause*; (c) during the middle phase, an increase in the patients' *Affective Resignifications* accompanied by words reflecting *cause*, *tentativeness*, and *certainty*; and (d) an increase in patients' *Affective Resignifications* accompanied by words reflecting *insight*, in a similar proportion as the therapists' *Affective Resignifications* (Valdés, 2011b). These results proved the association between Communicative Patterns (CPs) and some cognitive mechanisms inferred from the words verbalized by both participants. However, ***Study 3*** demonstrated that the patients gradually adopted their therapists' Communicative Patterns (CPs) (Valdés, 2011a); in addition, ***Study 4*** demonstrated that they also adopted certain linguistic studies (words) used by the therapists during the application of these patterns in the conversation. This communicative finding was more evident from the middle phase of the therapy onwards, and was interpreted as another indicator of the change in the patients' way of interpreting their experience. This phenomenon, which for some authors is regarded as an indicator of semantic tracking (Plecia & Gervasio, 1994) or structural priming (Bock, Dell, Chang, & Onishi, 2007; Branigan, Pickering, & Cleland, 2000; Giles & Coupland, 1991; Ireland, & Pennebaker, 2010; Pickering & Garrod, 2004), was interpreted as a micromarker of the coordination and modification of verbal expression, as a mechanism for adapting to the other participant during the therapeutic conversation.

The main limitation for implementing the studies carried out for achieving the general objective of the present Doctoral Thesis, was that they only analyzed two psychotherapeutic processes, which evidently makes it difficult to generalize the results found. The first concrete consequence of this limitation resulted from the small number of Stuck Episodes available: only one Stuck Episode was identified for every two Change Episodes. This specific situation often limited the statistic analyses performed to describe what happened during these periods of the session, characterized by a temporary halting of the change process. Another consequence of having analyzed only two processes was that the sample of speaking turns with emotional contents was considerably reduced, especially considering that cognitive contents are worked on during the session regardless of the therapeutic approach used.

Another limitation was not having evaluated the patients' subjective emotional experience during each session as such information would have made it possible to complement the verbal analyses performed. This is especially relevant as the patients' emotional regulation is not limited to verbal interventions, but is also closely associated with nonverbal communication. Nevertheless, in spite of all these limitations, it was possible to perform qualitative and quantitative analyses which support some of the current conceptualizations of verbal emotional expression. In future research, these studies should be replicated with a larger number of psychodynamic therapies, in order to confirm the findings of the present Doctoral Thesis, and to continue reformulating and consolidating the theories developed so far in the area of emotion and psychotherapy, highlighting the importance of the verbal expressions of both participants while working on emotional contents. In addition, it would be advisable to analyze Change and Stuck Episodes from therapies with other psychotherapeutic approaches, and thus determine whether the results are similar or different from those obtained in the present research. It would also be interesting to establish a connection between some of the Communicative Patterns (CPs) used for working on emotional contents and the evolution of the therapeutic alliance throughout the therapeutic process. For instance, this is the case of the larger number of *transferential emotional resignifications* performed by the therapists during the final phase of the therapy, and of the decrease in *emotional empathy* as the therapy progressed (Valdés, 2011b).

Emotional expression is complex by nature, and is often difficult to understand during the therapeutic process. All things considered, this research demonstrated that it is possible to detect certain characteristics of patients' and therapists' verbal emotional expression during conversation which can be used for reinforcing patients' work during Change Episodes, or to identify Stuck Episodes based on some of the characteristics of the conversation between the speakers. It must not be forgotten that it is the patient who needs to be understood and legitimized by a meaningful other, the expert therapist. Therefore, as a competent professional, he/she must not only demonstrate his/her expertise when using the techniques that characterize his/her therapeutic approach, but should also be more aware of the communicative actions that she/he must perform for structuring a verbal interaction that facilitates the emergence of change moments during the session. In this regard, the *verbal micromarkers* identified in this research play the same role as the *task markers* proposed by Rice and Greenberg (1984), as they allow the therapist to be more attentive not only to a message's content, but also to the verbal patterns used for working on certain contents during therapeutic conversation. In other words, certain verbal expressions of patients and therapists have a configuration which is typical of moments of the session involving more change construction, regardless of the content of the message verbalized.

If therapists knew these *verbal micromarkers*, there would be immediate consequences for their way of conducting psychotherapy, because would also be able to monitor the evolution of the psychotherapeutic process based on the work done with affective contents. It was demonstrated that this work is not performed in the same fashion throughout the therapy, but that it in fact differs depending on the phase of the therapeutic process, the type of episode, and the speaker's role in a given moment. Adequate training for the identification of these *verbal micromarkers* would allow therapists to be more attentive to their own and their patients' verbal patterns, which would facilitate the communicative coordination necessary for constructing change during conversation: when to become less active to facilitate patients' exploration and expression of feelings?, at which point of the session is it advisable for the therapist to add complexity to the therapeutic activity?, at which point of the session and how is it convenient to provide the feedback necessary for showing empathy?, in which moment of the session is it advisable to consolidate the new meanings constructed using *transferential emotional resignifications*? These are some of the questions that can be answered upon the basis of the results obtained by the present research.

The main implication of these findings for clinical practice, both for training and supervision, is that the importance of verbal communication should be highlighted during work on emotional contents, allowing therapists to receive training for the identification of the Communicative Patterns (CPs) used for working on such contents, in order to help patients to recognize, understand, integrate, or learn new meanings for certain emotional contents associated with psychotherapeutic change. In other words, this requires the development of a new skill which involves learning to listen to oneself and to the other speaker, paying attention not only to the object of therapeutic work but also to the rest of the communicative actions performed during the relevant episodes of the session.

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Annex 1. Informed Consent Letters

Pontificia Universidad Católica de Chile
Programa de Doctorado en Psicología
Escuela de Psicología

Consentimiento de participación en un estudio (paciente)

Yo_____, he sido invitado/a a participar en el estudio denominado **"Expresión emocional verbal del paciente y su asociación con el cambio psicoterapéutico: Análisis en múltiples niveles del acontecer psicoterapéutico".** Este es un proyecto de investigación científica acerca de la relación entre emoción y cambio durante procesos psicoterapéuticos. Su finalidad es aportar conocimientos científicos sobre aquellos aspectos de la comunicación emocional verbal y no verbal durante la terapia que favorecen un efecto positivo de esta.

Entiendo que en este estudio se grabarán – en video y audio - sesiones psicoterapéuticas, de las cuales yo participaré en calidad de consultante. Estas sesiones también serán observadas por un equipo de investigación a través de un espejo de visión unilateral. Asimismo, entiendo que contestaré un breve cuestionario sobre mi bienestar general, antes de ingresar a cada sesión de terapia y tres meses después de finalizada la terapia; y responderé al inicio de cada sesión un cuestionario sobre cómo me he sentido emocionalmente durante la última semana. La aplicación de estos cuestionarios será dirigida por un miembro del equipo de investigación y el tiempo que ocuparé en cada una de estas evaluaciones será de unos minutos. Seré contactado en forma personal al inicio y/o al final de la sesión para cada una de las evaluaciones que se realizarán en el Centro de Salud Mental.

También estoy informado/a de que se me realizará una entrevista acerca de mi experiencia terapéutica, tres meses después de finalizada la terapia. Esta entrevista será realizada por un miembro del equipo de investigación en el Centro de Salud Mental en un tiempo no más de una hora de duración y que tiene como finalidad conocer mi experiencia durante el proceso terapéutico.

Entiendo que la información será almacenada **confidencialmente**, no será publicada en su versión original ni en ningún formato que permita mi identificación. Además, esta información será utilizada con fines de investigación y docencia especializada.

También entiendo que mi participación es **voluntaria** y que, participe o no en este estudio, **recibiré todas las atenciones regulares** que realiza el Centro de Atención al que estoy asistiendo, y que la participación en el estudio no tendrá consecuencias negativas para mi proceso terapéutico. Asimismo, sé que **puedo negarme a participar o retirarme** en cualquier momento del estudio, o solicitar que los registros audiovisuales sean borrados, sin que esta decisión tenga un efecto negativo sobre la atención que yo recibo en dicho Centro o sobre la posibilidad de ser atendido/a nuevamente en otras ocasiones.

Estoy informado que mi terapeuta está en conocimiento de este estudio y que su consentimiento para participar en él no me obliga a aceptar mi propia participación.

Tuve la posibilidad de aclarar todas las dudas con el investigador responsable del estudio, tomar la decisión libremente y sin ningún tipo de presiones. He leído y entiendo este documento de consentimiento y estoy de acuerdo en participar en este estudio.

Participante	Investigador Responsable	Fecha y Hora

Si tiene alguna pregunta puede comunicarse con Nelson Valdés Sánchez, investigador del proyecto, al teléfono 3547294, Escuela de Psicología, Pontifica Universidad Católica de Chile, Vicuña Mackenna 4860, Comuna de Macul, Santiago o al 08-2188870. Contacto Comité de Ética de la Escuela de Psicología PUC al teléfono 3545883.

Pontificia Universidad Católica de Chile
Programa de Doctorado en Psicología
Escuela de Psicología

Consentimiento de participación en un estudio (terapeuta)

Yo_____, he sido invitado/a a participar en el estudio denominado **"Expresión emocional verbal del paciente y su asociación con el cambio psicoterapéutico: Análisis en múltiples niveles del acontecer psicoterapéutico".** Este es un proyecto de investigación científica acerca del cambio en procesos psicoterapéuticos.

Entiendo que en este estudio se grabarán – en video y audio - sesiones psicoterapéuticas, de las cuales yo participaré en calidad de terapeuta. Estas sesiones también serán observadas por integrantes del equipo de investigación a través de un espejo de visión unilateral. Asimismo, entiendo que se me realizará una entrevista acerca de mi visión de los cambios ocurridos en mi paciente en el proceso terapéutico, tres meses después de finalizada la terapia. Esta entrevista será realizada por un miembro del equipo de investigación y tendrá una duración aproximada de una hora.

Entiendo que la información será almacenada **confidencialmente**, no será publicada en su versión original ni en ningún formato que permita mi identificación. Además, esta información será utilizada con fines de investigación y docencia especializada.

También entiendo que mi participación es **voluntaria** y que puedo negarme a participar o retirarme en cualquier momento del estudio, sin que esta decisión tenga un efecto negativo sobre mi situación laboral. Estoy informado que mi consentimiento no obliga la participación de mi paciente en este estudio.

Tuve la posibilidad de aclarar todas las dudas con el investigador responsable del estudio, tomar la decisión libremente y sin ningún tipo de presiones. He leído y entiendo este documento de consentimiento y estoy de acuerdo en participar en este estudio.

Firma Fecha

Si tiene alguna pregunta puede comunicarse con Nelson Valdés, investigador del proyecto, al teléfono 3547294, Escuela de Psicología, Pontifica Universidad Católica de Chile, Vicuña Mackenna 4860, Comuna de Macul, Santiago o al 08-2188870. Contacto Comité de Ética de la Escuela de Psicología PUC al teléfono 3545883.

Annex 2. Ethical Certification

Santiago, 5 de noviembre de 2010

Señores
Presentes

Estimados Señores:

El Comité de Ética de la Escuela de Psicología de la Pontificia Universidad Católica de Chile, conformado por los académicos Marcela Cornejo, Andrés Haye y Vladimir López, ha revisado en detalle el proyecto "*Emoción y cambio: análisis en múltiples niveles del acontecer psicoterapéutico*", presentado como proyecto de tesis doctoral en el programa de Doctorado en Psicoterapia de esta escuela y cuyo investigador responsable es Nelson Valdés. El profesor guía de tesis de este proyecto es Mariane Krause.

Habiendo discutido el proyecto con el investigador, declaramos que el protocolo del proyecto se ajusta a los criterios de bioética y ética de investigación científica vigentes en FONDECYT en relación a los requerimientos de estudios con humanos y a la Ley N°20120. Adicionalmente, damos constancia que el investigador responsable ha considerado detenidamente las dimensiones éticas de su proyecto y ha generado una reflexión acerca de cómo asumir responsablemente las potenciales consecuencias de su trabajo de investigación. A continuación se señalan las principales razones en que se basa esta certificación.

El objetivo de este proyecto es determinar las características de la expresión emocional verbal y no verbal del paciente durante la conversación terapéutica en segmentos de la sesión con y sin momentos de cambio, su evolución, y su relación con la forma como evoluciona su experiencia emocional subjetiva y el cambio psicoterapéutico. Respecto a su **relevancia**, el investigador argumenta que radica en su eventual contribución al mejor conocimiento acerca de los patrones comunicativos de interacción y las diferencias lingüísticas entre terapeutas y pacientes, durante el proceso terapéutico. Además, se espera que los resultados que se obtengan puedan ser incluidos en la formación teórica y práctica de futuros terapeutas, indistintamente del enfoque terapéutico. Cabe señalar con respecto a la relevancia científica del proyecto, que este ha sido aprobado por el comité de tesis del programa de doctorado en psicoterapia.

En segundo lugar, respecto de la **evaluación de riesgos y beneficios** para los participantes del estudio, cabe indicar que el investigador no prevé riesgos asociados a la participación, de salud, costos económicos y otros, y se asegura la libertad de participación y de suspensión de esta sin desmedro de la calidad de la atención psicoterapéutica recibida en el caso de los participantes pacientes, ni de su estatus laboral en el caso de los terapeutas. El Investigador argumenta que los principales beneficios tanto para los pacientes como para los terapeutas, se observan en la terapia misma, ya que por un lado, al realizarse la filmación en un contexto de docencia, el terapeuta tiene la posibilidad de ser observado y supervisado en cada sesión por parte del grupo de expertos de cada institución, así como también tiene la posibilidad de recibir, al final del estudio, todas las sesiones grabadas como material de insumo para su perfeccionamiento como profesional. Por otro lado, es esperable que la motivación de los pacientes para participar en la investigación también tenga efectos positivos en los resultados terapéuticos. El paciente además obtendrá beneficios concretos a través de una rebaja en los honorarios que debe cancelar por el servicio recibido.

En tercer lugar, respecto de la **protección de los participantes**, el Investigador se ha acogido a las cartas de consentimiento que pacientes y terapeutas firmaron en el marco de un proyecto Fondecyt N°1080136: *Interacción terapéutica, expresión de emociones y alianza terapéutica: Estudio de los ingredientes esenciales para el cambio en psicoterapia*, (Mariane Krause, Investigadora Responsable*)* en el que se inserta esta investigación, cartas que se ajustan a los requerimientos y consideraciones éticas necesarias. En conversaciones con el Investigador, el Comité sugirió recontactar a estos participantes solicitando su autorización específica para este estudio, lo cual no fue considerado necesario por el Investigador ya que a su parecer los análisis realizados por él no revisten ninguna posibilidad de perjuicio para los participantes ni ponen en riesgo el anonimato comprometido.

Es importante señalar que el investigador ha fundamentado adecuadamente los procedimientos que le permitirán resguardar la confidencialidad de toda la información obtenida. En particular, respecto a la protección de la identidad de los participantes, se asegura un mecanismo de codificación que asegura que esta no sea difundida. Las grabaciones en audio y video de las terapias son transcritas y editadas por personal responsable que previamente ha firmado una carta de compromiso de resguardo de la confidencialidad y que les compromete a eliminar toda la información de sus computadores una vez completada su labor. De ese punto en adelante los participantes son indicados solamente según un esquema de codificación que protege su identidad.

Marcela Cornejo
Secretaria Ejecutiva
Comité de Ética
Escuela de Psicología
Pontificia Universidad Católica de Chile

CC. Sr. Patricio Cumsille, Subdirector de Investigación y Postgrado Escuela de Psicología.
Archivo Comité de Ética EPUC.

Annex 3. Sworn Declaration

Erklärung gemäß § 8 Abs. 1 Buchst. b) und c) der Promotionsordnung der Fakultät für Verhaltens- und Empirische Kulturwissenschaften

Promotionsausschuss der Fakultät für Verhaltens- und Empirische Kulturwissenschaften
der Ruprecht-Karls-Universität Heidelberg
Doctoral Committee of the Faculty of Behavioural and Cultural Studies, of Heidelberg University

Erklärung gemäß § 8 Abs. 1 Buchst. b) der Promotionsordnung der Universität Heidelberg
für die Fakultät für Verhaltens- und Empirische Kulturwissenschaften
Declaration in accordance to § 8 (1) b) and § 8 (1) c) of the doctoral degree regulation of Heidelberg University, Faculty of Behavioural and Cultural Studies

Ich erkläre, dass ich die vorgelegte Dissertation selbstständig angefertigt, nur die angegebenen Hilfsmittel benutzt und die Zitate gekennzeichnet habe.
I declare that I have made the submitted dissertation independently, using only the specified tools and have correctly marked all quotations.

Erklärung gemäß § 8 Abs. 1 Buchst. c) der Promotionsordnung der Universität Heidelberg für die Fakultät für Verhaltens- und Empirische Kulturwissenschaften

Ich erkläre, dass ich die vorgelegte Dissertation in dieser oder einer anderen Form nicht anderweitig als Prüfungsarbeit verwendet oder einer anderen Fakultät als Dissertation vorgelegt habe.
I declare that I did not use the submitted dissertation in this or any other form as an examination paper until now and that I did not submit it in another faculty.

Vorname Nachname
First name Family name: Nelson Valdés S.

Datum, Unterschrift
Date, Signature: Nelson Valdés Sánchez
August 6, 2015