Studi sperimentali

The Elementary Pragmatic Model: a new perspective in psychotherapy

Il Modello Pragmatico Elementare: una nuova prospettiva in psicoterapia

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SUMMARY. This article describes the Elementary Pragmatic Model (EPM), that focuses on the interactions and changes that can occur between two parties. The model has undergone experimentations using the "Synthesis and Scission Sentences" procedure (SISCI Sentences) described in this work. To develop a new psychotherapy method firstly it was assessed whether the SISCI Sentences revealed differences between normal and disturbed subjects, and then whether some sentences derived from the SISCI procedure – using a specific automated program – really do have an impact even on non clinical subjects. Finally, we report some examples of clinical use of the sentences obtained with the described procedure.

KEY WORDS: Elementary Pragmatic Model, sentences, psychotherapy.

RIASSUNTO. Questo articolo descrive il Modello Pragmatico Elementare (EPM) basato sulle interazioni ed i cambiamenti che possono avvenire fra due soggetti interagenti. Il modello è stato sottoposto a sperimentazione tramite il test "Sintesi e scissione frasi" (SISCI frasi) descritto nell'articolo. Lo sviluppo di un nuovo metodo psicoterapeutico è stato studiato anzitutto sul percorso se il SISCI frasi mostra delle differenze fra soggetti normali e soggetti patologici ed in secondo luogo se alcune frasi selezionate tramite la procedura SISCI-frasi con un programma automatizzato mostrano un reale impatto sui pazienti. Infine vengono riportati degli esempi sull'uso clinico di frasi ottenute col procedimento citato in precedenza.

PAROLE CHIAVE: Modello Pragmatico Elementare, frasi, psicoterapia.

INTRODUCTION

This article consists of five sections that illustrate a new procedural pathway that can be adopted in the field of psychotherapy and counseling. In the first section the Model of the Mind defined as the Elementary Pragmatic Model (EPM), developed over the last decades particularly in Italy, in Portugal and in the USA, is described. The second section is focused on a test that allows experimental applications of the EPM: the Synthesis Scission test (SISCI). The results of application of the SISCI in clinical subjects, to assess whether differences are revealed as compared to non clinical subjects, are reported in the third section. The fourth section proposes a psy-chotherapy method based on the use of sentences with a strong psychological impact, selected according to an automated EPM-linked method. In this fourth section on experimental procedure consisted of a comparison between two groups of non clinical subjects, one of which worked with the sentences we selected with the EPM method while the other group followed a different pathway. This experiment was conducted to highlight any specific effects derived from use of the sentences. In the fifth and last section, the possible methods for using the sentences in therapeutic mode are analyzed and some clinical cases are reported, in which use of the sentences during psychotherapy courses, or simple visits was found useful.

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INTRODUCTION TO THE ELEMENTARY PRAGMATIC MODEL (EPM)

The Model was first described in full in 1979 (1), and a complete description of clinical applications was then made in the course of the 1990s (2) and more recently in 2003 (3). Like other models of the mind, the EPM is a construction that promotes the study of psychological and psychopathological phenomena. The roots of the logic underlying the Model stem from the research originated by Gregory Bateson (4), in other words, they deal with an interactive perspective focused on understanding the human mind. The EPM is based on the concept that the starting point (see level 1 in **Figure 1**) is the issue of how a subject changes as a result of interaction. For example, how subject A changes to A1 following interaction with subject B. This first level is defined as the *Level of the triads*.

The second level grows out of this first one, because the triads yield four possibilities, four "coordinates", namely: 1) acceptance of the other person's world; 2) maintenance of one's own world; 3) sharing; 4) accept-
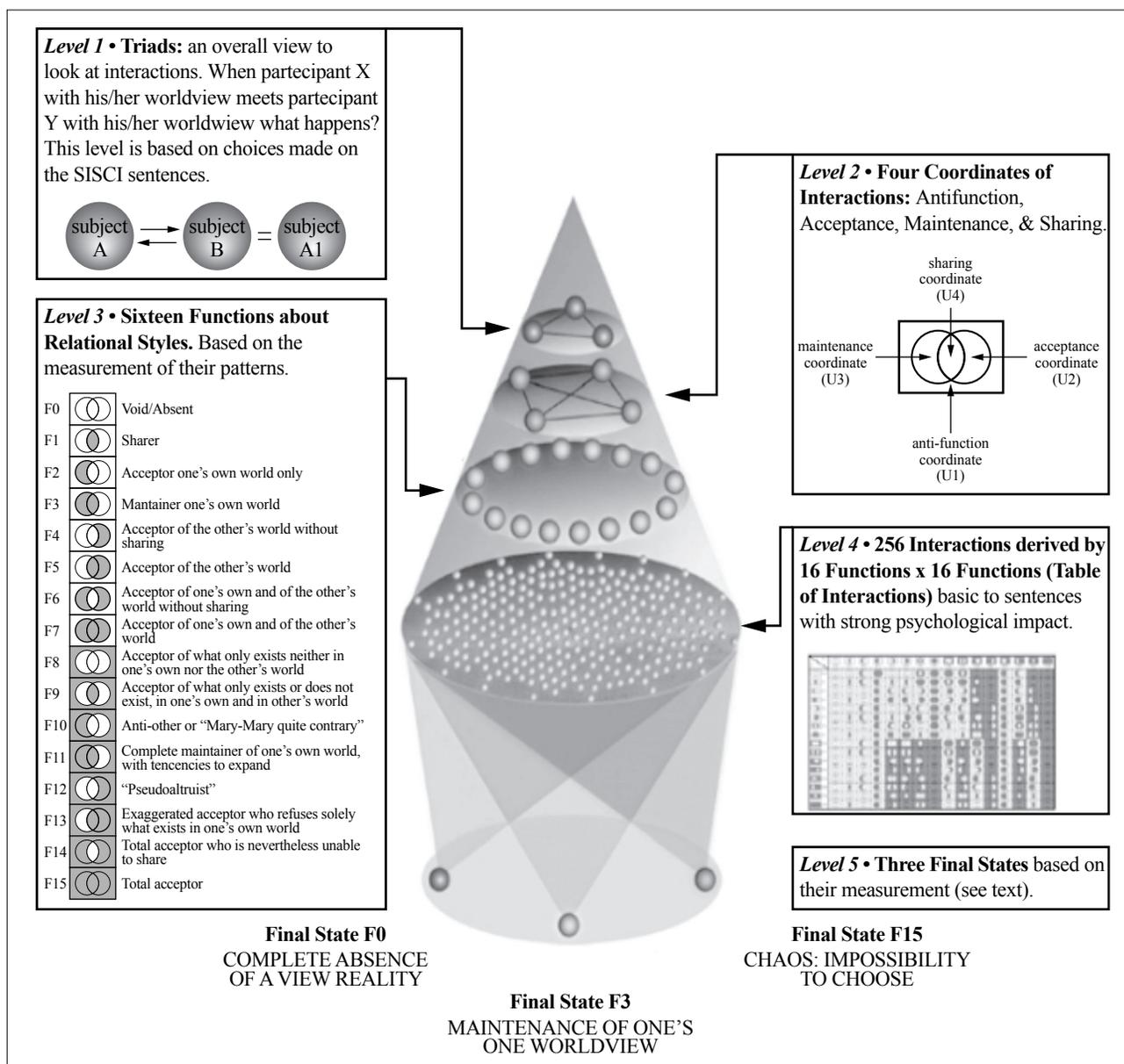

Figure 1. Five Levels of the Elementary Pragmatic Model.

ance of what does not exist either in one's own or the other person's world (for further clarification see the explanation of the SISCI test in the next pages).

The third level of the Model is focused on the fact that the above four possibilities, or four coordinates, can be subdivided into sixteen functions (that we can call "relational styles"), consisting of all the possible combinations of the four second level elements. To illustrate how the sixteen functions work, the sixteen Venn diagrams are shown in **Figure 1**. Each diagram has four spaces: the combinations deriving from systematically filling in one, two, three or four spaces give rise to the sixteen possibilities, or sixteen functions. After close reflection the meaning of each function in relational terms has been expressed in common language; this covers the following range from 0 to 16: 1) emptiness; 2) sharing; 3) withdrawal into one's own world; 4) maintenance of one's own world; 5) passive acceptance of the other person's world without sharing; 6) acceptance of the other person's world; 7) oscillation between one's own world and the other person's without sharing; 8) mediation between one's own world and the other person's; 9) abstraction; 10) creatively pursuing a goal; 11) Mary-Mary quite contrary; 12) dictatorship; 13) pseudo-altruism; 14) excessive acceptance of the other person's world; 15) metaphorical acceptance; 16) total acceptance, in the sense of an inability to choose.

The fourth level of the Model (**Figure 1**) is shown in the table of interactions, that summarizes the result of the formal model of changes that occur as a result of the interaction between two relational styles (between two functions). This allows a theoretical forecast to be made of how the interactions may alter the relational style of interacting subjects (5). In other words, the fourth level refers to all possible combinations and permutations (16x16), producing a table of 256 possible *interactions* that constitute a finite, identifiable system. This table provides a theoretical forecast of what happens when one relational style interacts with another. This table can also be used as the blueprint for creating sentences with a strong psychological impact, that we are now adopting in psychotherapy and counseling (6,7).

Finally, the fifth level stems from a mathematical analysis of the 256 possible interactions, reducing them to three final states that are the bottom-line essence of cognitive functioning (**Figure 1**): 1) emptiness; 2) maintenance of one's own world; 3) chaos in the sense of being unable to choose. In other words, the concept underlying the fifth level is the link between the fundamental styles of each subject undergoing the SISCI test (see below), corresponding to the functions F0 (mental emptiness), F3 (maintenance of one's own world) and F15 (chaos in the sense of being unable to choose), that determines which combination of the three states best fits the coordinates obtained with the experimental test mentioned above (8).

SISCI SENTENCES PROCEDURE

The 90 SISCI-Sentences procedure was constructed with the aim of producing a method to evaluate the EPM through the use of sentences. It should be noted that originally, the first SISCI procedure[1] was not based on sentences but on 90 ink-blot figures derived from Holtzman (9). The 90 sentences administered in a revision of the SISCI were generated from a long list of sentences based on certain procedures developed to allow dreams to be interpreted according to the EPM (10). Briefly, the contents of dreams are recorded in a computer program and processed, first of all freely and then on the basis of the table of interactions (see level 4 of the Model in the previous section and in **Figure 1**), that allows them to be interpreted on the basis of the Model. At the end of processing each dream, a sentence emerged that illustrated the participants' knowledge of themselves and/or how they perceived the world. For example, the sentence "Many paths lead to doubt" originates from dream contents that lead to doubt and uncertainty, and from the consideration that the EPM table of interactions indicates that there are no less than eight possibilities that will yield F6 (that is the EPM function corresponding to doubt). This method generated an extremely large number of sentences that were adopted to create reflections on the self and on one's own reality, i. e., the world (11).

From among the 500+ sentences that emerged using this process, the first author, assisted by a group of therapists also possessing a specific experience with the EPM, selected 90 sentences. A comparative study was also conducted, to see whether there is any difference between the use of statements or questions. It was found that statements foster more maintaining and sharing and less antifunction and accepting. Translated into the three final functions (in level 5 of the EPM, see section 1 and **Figure 1**) this means more maintenance of one's own world and less chaos and emptiness, so we can say that statements yield better results as compared to questions (12).

Some examples of these sentences include:

– You're anxious because you want to give birth to yourself.
– Even dreams can make you stronger.
– Some sentences can open up worlds.

– You need to turn to the abstract in order to get new answers.
– The fear of feeling bad makes me feel bad.
– Sometimes reality is like a dream fulfilled.
– You're looking for something that can completely fulfil you.
– Some sentences are passwords that open up the heart of our mind.
– Some things can't change.
– Many paths lead to doubt.

The 90 SISCI-sentences were administered individually as well as in groups, following exactly the same procedure adopted with the original SISCI-Figures (3). In Stage 1, the 90 sentences selected from the vast array of sentences derived from the EPM are presented to participants, one at a time on a computer screen. As regards the speed of presentation, each sentence is shown for just a few seconds. At the beginning of the procedure, participants are asked to record on a specific form which sentences they find "more interesting, more exciting, which they liked more, or might have the greatest impact on their thinking". While the sentences are being projected on a screen, the subjects must immediately check off, crossing, on the provided form those that affect them most strongly. These choices represent participants' worldview, their perceptions of reality. Then, at the beginning of Stage 2, participants are told: "You have already made your choices. However, other choices exist, like the following ones. Do not check your form, concentrate strictly on the sentences shown on the screen". Then, one at a time, forty sentences (randomly selected) are shown. This second presentation reveals a different point of view, an overall worldview to which participants can adhere or not adhere, conform or not conform.

In Stage 3, participants are asked to choose and record once more their choices among the complete set of 90 sentences, as they did in the first presentation. The purpose of this third presentation is to evaluate how participants' worldviews have been affected by the second presentation (sentences chosen by the therapist as alternatives to those chosen by the subject). In short, the test involves a choice of sentences with a strong psychological impact in Stage 1, followed by a "perturbation" phase in Stage 2 (definable as presenting the "worldview of others" obtained by random selection), and then, in Stage 3, making another choice among the original set of sentences. Overall, the three phase trial lasts about 40 minutes.

According to this methodology, there are four possibilities for scoring participants' choices:

1. Two alternatives, according to whether in Stage 3 participants chose (n001) or did not choose (n000) a sentence that was not chosen in Stage 1 and was not presented in Stage 2.
2. Two other alternatives according to whether in Stage 3 participants chose (n011) or did not choose (n010) a sentence not chosen in Stage 1 but which was shown in Stage 2.
3. Another two alternatives, according to whether in stage 3 participants chose (n101) or did not choose (n100) a sentence that was chosen in stage 1 but was not shown in stage 2.
4. Finally, two other alternatives according to whether in stage 3 participants chose (n111) or did not choose (n110) a sentence which was chosen in Stage 1 and was shown in Stage 2.

These 8 alternatives represent the four main Coordinates in the EPM. According to the relative frequencies of occurrence of the four alternative possibilities in the same participant, four Coordinates emerge:

a. Anti-function: $U1 = n(001)/(n(001)+n(000))$.
b. Maintenance: $U2 = n(101)/(n(101)+n(100))$.
c. Acceptance: $U3 = n(011)/(n(011)+n(010))$.
d. Sharing: $U4 = n(111)/(n(111)+n(110))$.

It should be noted that thanks to the logic and the methodology underlying this research, the process according to which the 90 Sentences were selected can also be analyzed in greater detail. As a first step serving to set up a hypothesis for future possible structured interventions, the 90 SISCI-Sentences were classified in the following way:

– 001, if the sentence was not chosen at the first presentation, was not present in the random selection (as one of the 40 randomly selected sentences), but was chosen at the second presentation; alternatively, 000 if it was not chosen at the first presentation, was not present in the random selection, and was not chosen at the second presentation (Anti-function Coordinate).
– 011, if the sentence was not chosen at the first presentation, was present in the random selection (as one of the 40 randomly selected sentences), and was chosen at the second presentation; alternatively, 010, if it was not chosen at the first presentation, was present in the random selection, but was not chosen at the second presentation (Acceptance Coordinate).
– 101, if the sentence was chosen at the first presentation, was not present in the random selection (as one of the 40 randomly selected sentences), and was cho-

sen at the second presentation; alternatively, 100 if it was chosen at the first presentation, was not present in the random selection, and was not chosen at the second presentation (Maintenance Coordinate).
– 111, if the sentence was chosen at the first presentation, was present in the random selection (as one of the 40 randomly selected sentences), and was chosen at the second presentation; alternatively, 110 if it was chosen at the first presentation, was not present in the random selection, and was not chosen at the second presentation (Sharing Coordinate).

The results obtained from this research were processed in terms of these four Coordinates and of 16 styles obtained following a mathematical computation described in De Giacomo et al. (13), and in greater detail in Silvestri (5) and refined in Guerriero (8). The scoring system is based on the changes that occur in the overall responses of participants from the first to the second presentation, measured in terms of repeated interactions, as described by the patterns emerging from the sixteen styles (F0 to F15). A standard, control mean was calculated on non clinical participants' results so as to evaluate results obtained at the SISCI in clinical populations. At each interaction, a change occurred in the participants' pattern according to the EPM Table of Interactions (3) (pp. 122-3). In this way, after a certain number of interactions (13), participants' profiles crystallized and could be summarized in only three simpler, final states: emptiness (F0), maintenance of one's own world (F3), and the inability to choose, or chaos (F15), following a mathematical procedure described by De Giacomo et al. (6), and by Guerriero (8). These three final states mean that cognitive functioning can be reduced in its essence to a skeleton that is the final blend of the three fundamental states: emptiness, maintenance of one's own world, and chaos (6) (see also the description of the EPM in section 1 and **Figure 1**).

RESULTS OF THE ADMINISTRATION OF THE SISCI-SENTENCES PROCEDURE TO CLINICAL PARTICIPANTS

The aim of this research was to see whether the SISCI procedure, when applied in clinical practice, could indicate specific anomalies, or differences, as compared to non clinical subjects. No differences would have shown that the test had little value in the clinical field and was not therefore clinically useful for psychotherapy applications. On the contrary, the test clearly demonstrated differences between clinical and non clinical subjects, and also seemed to show differences even within the different clinical groups. This study was focused on the patterns obtained with the administration of the SISCI sentences procedure to three groups of psychiatric patients: 1) 32 diagnosed with depression; 2) 52 diagnosed with schizophrenia; 3) 25 diagnosed with eating disorders (ED), as compared to a control group consisting of 124 undergraduates. The aim of this study was to evaluate whether any differences were revealed between the control group and the three groups of patients in terms of the four coordinates (U1, U2, U3, U4) and the three final states (F0, F3, F15). The one-way ANOVA method was applied for statistical analysis to assess the significance of differences, the Tukey post test for multiple comparisons, Bartlett's Statistics to check for the homogeneity of variance of the ANOVA model, the Kolmogorov and Smirnov Test to check for a normal data distribution.

Results (**Tables 1, 2**) showed that as far as the four coordinates are concerned: 1) in schizophrenic participants all four coordinates were significantly different from the controls; 2) in depressed participants only U2 and U3 were altered; 3) in ED only U3 was significantly different from in controls. As far as the three final states were concerned: 1) in schizophrenic participants F3 and F15 were significantly different from in controls; 2) in depressed participants all three states were different from in controls; 3) in Eating Disorders only F3 was different from in controls.

RESEARCH ON THE ADMINISTRATION OF SENTENCES TO NON-CLINICAL PARTICIPANTS TO ASSESS THE IMPACT OF THE USE OF THE SENTENCES IN A HEALTHY CONTROL GROUP

The second study was conducted to test whether the sentences have any type of impact on non clinical subjects, in this case university students. We decided to test these subjects because it was unlikely that they could have been able to reach this career level, passing a difficult entrance test, if they had suffered from some mental disturbance, so they were suitable candidates for a healthy controls group. To undergo the SISCI procedure, the study sample, consisting of 67 university students, was randomly subdivided into two subgroups (Group A: 28 students; Group B, 39 students), both belonging to the same population. The two groups were assigned different tasks: Group A participants had the task of working at home for half an hour for seven days, browsing the list of 90 sentences and then writing down on a diary considerations about the

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Table 1. Comparisons among the 4 EPM coordinates in 3 clinical groups administered the SISCI-Sentences procedure

	Control group		Eating Disorders			Schizophrenia			Depression		
	N=124		N=25			N=52			N=32		
	Mean	SD	Mean	SD	p value	Mean	SD	p value	Mean	SD	p value
U1 (Antifunction)	0.114	0.135	0.153	0.108	not significant	0.185	0.181	p≤0.05 significant	0.167	0.145	not significant
U2 (Acceptance)	0.082	0.074	0.158	0.140	not significant	0.209	0.217	p≤0.001 extremely significant	0.163	0.138	p≤0.05 significant
U3 (Maintenance)	0.848	0.131	0.733	0.140	p≤0.05 significant	0.691	0.209	p≤0.001 extremely significant	0.679	0.203	p≤0.001 extremely significant
U4 (Sharing)	0.787	0.182	0.698	0.147	not significant	0.653	0.224	p≤0.001 extremely significant	0.707	0.191	not significant

Table 2. Comparisons among 3 final states of the EPM in 3 clinical groups administered the SISCI-Sentences procedure

	Control group		Eating Disorders			Schizophrenia			Depression		
	N=124		N=52			N=25			N=32		
	Mean	SD	Mean	SD	p value	Mean	SD	p value	Mean	SD	p value
F0	0.208	0.168	0.221	0.192	not significant	0.384	0.109	not significant	0.312	0.207	p≤0.05 significant
F3	0.609	0.196	0.459	0.260	p≤0.001 extremely significant	0.092	0.082	p ≤ 0.01 significant	0.364	0.166	p≤0.001 extremely significant
F15	0.072	0.057	0.153	0.108	not significant	0.158	0.208	p≤0.001 significant	0.152	0.169	p≤0.05 significant

sentence or sentences selected by the experimenter, according to the automated method described in De Giacomo et al. (13).

Group B participants were also assigned the task of working for half an hour a day, but this time writing down notes on an exercise book according to the following indications: On Day 1, to write about their personal history starting from childhood, and referring in particular to their school years. On Day 2, to write about their home, the arrangement of the rooms, furniture, pictures hung on the walls, etc. On Day 3, to write about the neighborhood: streets, houses, bars, shops and neighbors, etc. On Day 4, to write about their Country, in terms of positive and negative aspects of the geography and characteristics of the inhabitants. On Day 5, to write about the clothes they preferred and why, and how their tastes had changed over the years. On Day 6, to write about holiday travel and what had struck them the most. On Day 7, to write about what means of transportation they used and their positive and negative aspects (14).

The two groups then underwent the SISCI-sentences procedure a second time to evaluate whether there were any statistically significant differences between them. The ANOVA test and the Tukey-Kramer multiple comparisons post test were applied, demonstrating that there was now a statistically significant difference as regards coordinate U2 (acceptance) and the final state F15 (Chaos in the sense of being unable to choose). Results (**Table 3**) showed a reduction in the inability to choose, or "chaos", among participants in Group A, the experimental group that had worked for seven days with the sentences, but not in Group B participants. The reduction in the chaos function (F15)

Table 3. Statistically significant differences between 2 groups of non-clinical participants on 2 measures from the SISCI-Sentences procedure

	Experimental Task A N=28		Control Task B N=39		
	Mean	SD	Mean	SD	p value
F 15	0.03	0.04	0.059	0.064	p<0.04
U 2	0.089	0.048	0.112	0.038	p<0.036

*Note: The complete list of 90 Sentences is available on request from the first and second authors of this article.

was interpreted as a positive element that encouraged us to use the sentences in disturbed subjects in whom, as pointed out in the above section, the chaos function is increased.

GENERAL ASPECTS OF SENTENCE SELECTION

In this section we focus on the meaning of the choice of certain sentences, as may occur during the SISCI procedure described above. It should be made clear from the outset that participants are led to choose certain sentences rather than others due to a realization that: 1) these choices seem to represent their cognitive organization; 2) these sentences may help them understand the nature of how they think; 3) promote reflection that is coherent with their own thinking. Sentences selected by participants and patients seem to reveal a particular affinity with their own world, in relation to their level of education, experience, emotions, passions and feelings. For example, the content of a certain sentence might correspond to our perception of what the world (i. e. reality) is like, prompting us to reflect and to draw conclusions about the validity of our perceptions.

Another important element is that the sentence does not say something banal, or obvious, but is in some way original, surprising and seemingly opens a previously closed door. It makes us look at real life events and how our mind works in a different light. We are brought up short, and many patients say: "Well I never! I hadn't thought of that", or "I didn't think of it like that!".

There could be an esthetic component in a sentence: it sounds pleasant, musical, like a harmonious chord, and arouses the sort of feeling we get from hearing poetry. For example the sentence "Wear dream-tinted glasses", might be administered in the form of advice,

encouraging one to adopt a certain cognitive approach, as if participants were in an art gallery and their attention was captured by a certain picture.

Inevitably, the length or brevity of the sentence can have an important effect on its impact. For example, the sentence "You get angry to keep calm" expresses a fairly complex concept in only five words. This seeming simplicity causes people to start thinking about it so as to understand it better and integrate it into their own experience, even though the sentences are very compact, somewhat like slogans, that are also very short but need to be very penetrating, like mantras.

The really interesting thing about some sentences is their metaphorical grounds. They tend to capture a certain essence without stating it, a core truth that is not expressed but yet is perceived. We know that metaphors prompt us to look for a hidden meaning, leading us and sometimes even obliging us, as if we were drawn into a whirlwind, to reflect on something that concerns ourselves or mankind in general. We sometimes feel that a metaphor has allowed us to discover something we hadn't realized, that we knew subconsciously but had never acknowledged (15,16).

We should also be aware that a sentence, perceived either as a metaphor or taken literally, can pose a sort of cognitive task to be carried out, a pathway to follow in order to gain a better understanding of oneself and/or of one's perception of the world. It should be noted that according to the logic of the EPM framework (**Figure 1**), a certain sentence may be inferred to act in one the following ways (6,11,17): 1) to nullify and negate oneself; 2) to force one to read the text; 3) to close in on oneself, making the sentence relevant to one's own experience; 4) to confirm one's own views of reality; 5) to lead to a passive acceptance; 6) to a full acceptance; or 7) even to doubt; to 8) mediate among different points of view; 9) to seem strange, to the point of being kept in the forefront of one's thinking; 10) to make one understand and give one an idea of other possibilities; 11) to make one go back on one's thinking in a critical frame; 12) to feel it as an imposition; 13) to make one accept it in one's own best interests; 14) to surprise and please, enabling one to accept it; 15) to make one think in terms of metaphors; and finally 16) to confuse one to the point of forcing further reflection.

Additionally, we should bear in mind that these sentences could help to achieve cognitive clarity, in the sense of filling a gap in one's thinking and helping to clarify a certain mental situation, providing a certain point of reference where no reference was previously available or adequate. Sometimes the sentences a participant chooses or receives seem to act as containers

that can be filled with alternative or new mental contents. Of course, the impact of a sentence can vary, because some sentences have a universal impact, others a strong impact only on certain groups of participants, while others may have an impact only on a single individual.

Clinical application of sentences

Once the clinician can rely on a sentence with a strong psychological impact, let's look at how it may be presented to the patient, how to "administer" it. In clinical practice, for example, before using the sentence we may ask patients to adopt a certain mental attitude, chosen from among one of 16 possible styles or "hats" (18) derived from the EPM (F0 mental emptiness, F1 pure sharing, F2 withdrawal, F3 maintenance, F4 passive acceptance, F5 acceptance, F6 doubt, F7 mediation, F8 abstraction, F9 creatively pursuing a goal, F10 Mary, Mary quite contrary, F11 dictatorship, F12 pseudoaltruism, F13 excessive acceptance, F14 metaphorical acceptance, F15 total acceptance).

It is also possible to use direct or indirect hypnosis techniques. To arouse expectancy it may also be useful, after the automated selection of sentences procedure, simply to tell patients: "These sentences are like chords that make the human soul resound. In our opinion this sentence can make your soul resound ", or else "This sentence has a great importance for your mental life and will help you to know yourself better". If the sentence raises a question or causes the patient to ask themselves a question, the professional can ask the patient what answer he or she would give to the question.

Various procedures can be adopted to arrive at the selection of a single, specific sentence after application of the SISCI-sentences procedure. After considerable experimentation and experience, we now adopt an automated program that selects the sentence to be displayed, because it has been shown to be highly objective and replicable.

The program suggests those sentences that may be best indicated as a means of bringing the participant's pattern towards a statistically average pattern, in terms of the EPM coordinates, styles, and final states. The program selects sentences that were not chosen by the patient, but that may modify the pattern and bring it nearer to the average, normal pattern (13).

A series of factors come into play to determine how effective a sentence proposed by the therapist will be for the patient: 1) describing experiences gained with patients seen years before who reported the importance that a particular sentence proposed to them in the past had had in their lives; 2) the perceived author-

ity of the therapist; 3) technical characteristics (the SISCI- sentences procedure is quite demanding, as it takes almost an hour to perform); 4) the fact that the therapist's presentation of the sentences is preceded by the so-called "pact with the devil" [i.e. the fact that the patient is willing to do anything to solve the problem (3)], or the "empty box" (telling the patient that there is a solution but s/he is not ready to receive it); 5) deferring presentation of the sentence, while creating a prolonged listening and understanding atmosphere that will induce the patient to adopt the attitude "now give me something"; and finally 6) the importance of the homework that the patient must do at home with the sentence (19), that is: the *homework prescription*.

This prescription may range from a simple to quite a complex form: 1) just reflect on the sentence; 2) repeat the sentence to the therapist during each visit; 3) think about it in moments of crisis; 4) repeat it a certain number of times at set intervals during the day; 5) write it down a certain number of times at moments of crisis; 6) repeat it at set intervals during the day; or finally 7) work on the sentence by considering the reason for its choice, for instance, how it fits into the subject's convictions, what associations it arouses in her/him, what episodes in her/his life are evoked by the sentence, how s/he would build on the sentence from her/his own point of view, and what story s/he would create around it.

Clinical examples of sentence administration

To provide a practical idea of the clinical application of the sentences, we report some examples below. The sentences presented to the patients all derive from the SISCI procedure described above. Of the set of 90 SISCI sentences, the one "administered" to the patient is selected by the automated procedure (13), and will tend to bring the subject's pattern nearer to the normal range of values.

Clinical Example 1

A 40-year-old patient, L. Lucia, with a combined schizo-affective clinical picture in a good state of compensation following pharmacological treatment, complained of a tendency to blush in situations with a sexual undertone. She was given the prescription to repeat the following sentence, selected with the above-described method, in such moments: "if you are surprised that a certain event gives rise to a link to another event, this means that a new door is opening", until the tendency to blush disappeared. By the following visit the patient was no longer complaining of the problem.

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Clinical Example 2

A schizophrenic, paranoid patient, now much improved, D. Alessandro, aged 35 years, a computer expert, reported that repeating a sentence 30 times, three times a day was a very useful exercise for him. The sentence was "Can you manage to abandon yourself to abandonment?". His comment: "At first, this second sentence was rather difficult for me to understand, and to apply to my days. Then I made this reflection and resolution: 'Each time I am assailed by reference ideas or depressing thoughts or anxiety', I will repeat it to myself three or four times, saying to myself: what I seem to feel is not true, it doesn't matter what I feel; I don't care what people who criticize me for my disease think. For me, abandoning myself to abandonment has meant being able to live with myself more easily, and also with other people I meet during the day. This sentence has allowed me to become more confident and to fight my problem".

Clinical Example 3

P. Rosa, aged 43, affected by a chronic paranoid disturbance in partial remission, perceived a negative influence that manifested with physical symptoms. She reported that she benefited from the repetition of the sentence "Even dreams can make you stronger" about ten times, at critical moments.

Clinical Example 4

R. Anna, a woman aged 55 years affected by a chronic paranoid disturbance with noise hallucinations, in good remission, reported that her problem improved when she repeated the sentence we had suggested: "You are searching for something that can fulfil you completely", many times to fight the voices she heard in her head.

Clinical Example 5

C. Teresa, a 26-year-old affected by a severe anxiety disturbance, said that her symptoms improved after using the sentence "To sail away, after hoisting the sails you must wait for the wind", that she was told to repeat thirty times a day, as well as at moments of crisis.

Clinical Example 6

Z. Lucia, aged 29 years, made magical connections among events and overcame her problem with the help of the sentence "Reflect on the succession and simultaneousness of events".

Clinical Example 7

L. Sabrina, aged 24, with a history of eating disorders and who later suffered from anxiety attacks, reported during a control visit that thinking about the sentence "Some sentences open up worlds" had helped her to overcome moments of crisis.

Clinical Example 8

G. Giovanna, a 27-year-old woman with a severe obsessive psychotic disturbance, felt that she owed her improvement to the sentence "Jealousy is like a dictatorship born of insecurity".

Clinical Example 9

P. Maria, aged 40, suffering from severe depression and anxiety, received pharmacological therapy and the sentence, selected by the automated method (13): "Have the courage to see yourself as you are", to be repeated 25 times, three times a day. At the next visit, she declared that a part of her problem, dizziness, had reduced by about 70%.

Clinical Example 10

B. Anna, aged 60 affected by an obsessive disorder combined with depression, felt deep anguish every morning as soon as she woke. Repetition forty times of the sentence "Your mental organization is such that the way you can see things is the way you do see them", and numbering the sentence on a sheet of paper each time, from 1 to 40, helped her to overcome these critical moments.

Clinical Example 11

G. Luigi, aged 46 years, affected by a chronic, severe obsessive disorder and who complained that he often got blocked in the middle of an action due to a sort of self-conditioned reflex, in treatment with psychodrugs but a poor responder, benefited from repetition of the sentence "Your uncertainty can paralyze those who depend on you".

Clinical Example 12

Another example of the use of a specific sentence is shown by the following episode: one patient did nothing but phone the therapist in the mornings to ask pointless questions. The therapist decided to propose the sentence "Your mindset means that the way you see is the way you see yourself", that the patient herself had chosen during the last visit, and asked her to

repeat the sentence twenty times before asking a question. The morning phone calls stopped.

Clinical Example 13

S. Simona, aged 26, who had suffered two acute episodes of paranoid psychosis, in treatment with three 4 mg tablets of perfenazine, was given a change of treatment, whereby one of the three tablets was replaced by repeating 30 times the sentence "Sometimes in dreams you fulfil your dreams", selected with the automated procedure described in De Giacomo et al. (13). The reduction in therapy did not show any adverse effect.

Another interesting point about the use of the sentences during psychotherapy is that sometimes a sentence administered by the therapist can stimulate the patient to create another sentence. There seems to be some sort of thread that links sentences prescribed by the therapist to the patient's own sentences. Perhaps this is due to the collaboration needed to identify sentences that are important for their own mental organization, that creates a sort of mental laboratory, stimulating pleasure in working with their own mind and finding a specific path in their lives. For example, a young patient with severe depression, P. Maria Teresa, changed some of the sentences proposed by the therapist, such as "Be what you are", mentioning a sentence that she was in the habit of saying to her boyfriend: "Do what you like with me", a sentence that showed her total submission to her partner.

Another young patient, S. Bina, in remission from a paranoid syndrome, used the sentence: "To be myself I need to introduce spaces inside chaos". Another patient reported that from her father she had literally received: a "fistful of love", while another reported that for her the most meaningful sentence was "I like to please".

Finally, it should be noted that although the SISCI-sentences procedure is strictly speaking an evaluation, in some cases it seems to fulfil a therapeutic role, as in the case of D. Laura, who overcame her anxiety crises while she was carrying out the SISCI procedure.

CONCLUSION

The EPM is a tool that can help to discover and understand differences among groups of pathological and functional participants. It can also be used as a tool for organizing psychotherapeutic interventions in a selective manner. The latest application of the Model, namely the use of "compass sentences" with a strong

psychological impact, has been shown to offer an interesting prospect for interventions in psychotherapy, in counseling and during single visits.

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