

INTERACTIONAL PHENOMENOLOGY OF MATERNAL AND PATERNAL HYPNOSIS STYLES

Katalin Varga, Éva I. Bányai, Emese Józsa and Anna C. Gósi-Greguss

Center for Affective Psychology, Eötvös Loránd University, Budapest, Hungary

Abstract

The study introduces an interactional analysis of subjective data (PCI and DIH questionnaires) from hypnotist and subject along with the concept of hypnosis styles (maternal/paternal scores), in a real-simulator design. It was expected that the subjective experiences of maternal and paternal hypnotists (and their subjects) are different: 1) maternal style is more emotional regarding both interactional and experience parameters, while paternal style is rather cognitive and sovereign; 2) subjects can experience subjective signs of alteration of their consciousness with both hypnosis styles; 3) while hypnotizing, maternal hypnotists are more likely to feel the alterations of their own level of consciousness, while paternal hypnotists remain reality-oriented. The correlational analysis of our data confirmed the above expectations and strengthened the construct of 'hypnosis style'. Only slight, but characteristic differences could be observed between real and simulating interactions. Copyright © 2008 British Society of Experimental & Clinical Hypnosis. Published by John Wiley & Sons, Ltd.

Key words: hypnosis styles, interactional synchrony, simulators, subjective experiences

Introduction

Experimental hypnosis has been approached by our laboratory from an interactional point of view for decades: we have been investigating both parties in a hypnosis interaction, i.e. not only the subject, but the hypnotist as well (see, for example, Haley, 1958; 1963; Diamond, 1984, 1987; Sheehan and McConkey, 1982; Bányai, 1985). On the basis of our research we described typical differences in the subjective experiences of hypnotists (Varga, Bányai and Gósi-Greguss, 1999). In certain cases, the hypnotist reported their deep involvement many times relying on bodily cues during the hypnotic procedure: we called this *physical-organic* involvement. In other cases, the hypnotist offered professional remarks, and during the exploration of subjective experiences they interpreted and analyzed the hypnotic session: so their involvement was more an *analytic-cognitive* kind (Bányai, Gósi-Greguss, Vágó, Varga and Horváth, 1990).

Beside the differences in subjective experiences, the hypnotists' verbal behaviour and several further interaction synchrony parameters differed markedly in line with the above types. The *physical-organic style* was characterized by more personal verbal behavior and by more frequent and vigorous occurrence of interactional synchrony parameters (such as posture mirroring, simultaneous movement, breathing together), and more frequent eye contact and proximity, while a more informal way of expressing emo-

tions referred to a more personal atmosphere of this style. The analytic-cognitive style was characterized by the absence of these parameters, and the hypnotist slightly inhibited the subject's independent initiatives and verbal behaviour (see details in, for example, Bányai et al., 1990; Bányai, 1991, 2002).

These two basic forms of involvement closely resembled the hypnosis styles described by Ferenczi (1909/1965), so we gave the same name to them: physical-organic style is now called *maternal hypnosis style*, which is based on love, while analytic-cognitive style is called *paternal hypnosis style*, which is based on fear (Bányai, 2002). These names, of course, are metaphorical, and they do not mean (simply) the direct reoccurrence of the appropriate parent-infant relationship patterns; the styles only resemble them in some respects.

However, these styles may provide an appropriate basis to examine the nature of subjective experiences of the participants of the hypnosis interaction along with the hypnosis styles. In our earlier reports, we presented some data where both the subjects' (Ss) and the hypnotists' (Hs) subjective feelings regarding the session have been analyzed (Varga, Bányai and Gósi-Greguss, 1994). Recently, we also reported a new instrument designed for characterizing the hypnotic interaction itself by the participants (hypnotist and subject; Varga, Józsa, Bányai and Gósi-Greguss, 2006).

In the present study we analyzed the subjective data of the participants of the hypnosis interaction along with the concept of hypnosis styles. We expected that the maternal style is characterized by the occurrence of positive emotions and by mutuality in interactional-experience parameters, while in the case of the paternal style, we expected these to be absent, togetherness to be not very 'symbiotic', and the hypnotist to be rather insular and sovereign. We expected that both of these styles can lead the subjects into an altered state of consciousness, maternal hypnotists being more in tune with the subject in this respect as well (that is, reporting an alteration of their own consciousness while hypnotizing), but paternal hypnotists remaining in their usual normal waking state.

Method

Design

In a laboratory experiment, each of four hypnotherapists (2 females, 2 males) hypnotized 8 young, healthy volunteer subjects (4 females, 4 males/2 highs, 2 mediums, 2 lows and 2 simulators) after screening by HGSHS:A (Shor and Orne, 1962) and SHSS-C (Weitzenhoffer and Hilgard, 1962).

Ss proven to be extremely low hypnotizables were used as simulators. Simulating instruction was given to them right before the main session, in accordance with the procedure described by Orne (1972).

A free relaxation induction followed by a free analgesia suggestion was used. Analgesia was tested by a standardized cold pressor test, and then standardized age regression and trance-logic suggestions were administered. The hypnosis session was closed by free dehypnosis and a brief inquiry.

The subjective experiences of the participants were screened with the PCI (Phenomenology of Consciousness Inventory) and DIH (Dyadic Interactional Harmony) questionnaires (for details see below) immediately after completing the session.

This procedure created an adequate basis for our question, because the hypnotists could form a rapport, induce hypnosis and administer an analgesia suggestion freely. Standard hypnosis scales dictate the behavior of the hypnotist (including their words) so

much that they do not leave much opportunity for the manifestation of their own characteristic hypnosis style.

Procedure

Immediately after completing the hypnosis sessions the following tests were administered:

PCI

The Phenomenology of Consciousness Inventory (PCI; Pekala, 1982; Pekala, Steinberg and Kumar, 1986), measuring the subjective alteration of consciousness on 26 dimensions: *Altered Experience* (body image, time sense, perception, meaning), *Positive Affect* (joy, sexual excitement, love), *Negative Affect* (anger, sadness, fear), *Attention* (direction, concentration), *Imagery* (amount, vividness), *Self-awareness*, *Altered Awareness*, *Arousal*, *Rationality*, *Volitional Control*, *Memory*, and *Internal Dialogue*.

Although we also developed the 5 factor-based scales of PCI, using the z-scoring method suggested by Kumar, Pekala and Cummings 1996 (see Varga, Józsa, Bányai, Gósi-Greguss and Kumar, 2001), in the present analysis, we are reporting the individual subscales of PCI, not the aggregated ones based on the factor structure of the test.

DIH

In order to measure the way the interactants perceive their own interaction, we used a recently developed test called the Dyadic Interactional Harmony (DIH) questionnaire (see Appendix A. Note: the name of the questionnaire and the numbers indicating the subscales do not appear in the version given to the subjects and the hypnotists.) The main characteristic of this measure is its direct focus on the interaction itself, evaluated by the participants of the interaction. The participants characterize their interaction, scoring each item (e.g. intimate, calming, tense, etc.) on a Likert-type scale from 1 to 5. The DIH questionnaire yields 4 subscales: Intimacy; Communion; Playfulness; and Tension (Varga et al., 2006).

The participants were asked not to discuss their feelings following the session. Immediately after the termination of the hypnosis session, Ss and Hs independently filled in the tests. After this, a debriefing discussion ended the experiment.

Judgment of hypnosis styles

First the basic categories of hypnosis styles was defined on the basis of our previous research data and experiences (see Appendix B for the written instructions given to the raters). Four expert judges trained in psychotherapy and in hypnosis were invited to rate the 32 hypnosis sessions of this study independently. The verbatim transcripts of the hypnosis sessions served as a basis of judgment. All indications of name, gender, and hypnotic susceptibility of the participants were eliminated from the transcripts.

Results and discussion

Reliability of judgment of hypnosis styles

In order to assess the judges' aggregate reliability (that is, the composite reliability of the judges) *effective reliability* was calculated (Rosenthal and Rosnow, 1991). The consistency of judgments was also assessed by calculating Cronbach's alpha coefficient (Cronbach, 1951). We considered reliability acceptable if both measures of reliability were above 0.60. Since there was no statistically significant difference between the simu-

Table 1. Inter-rater reliability of judgments of hypnosis styles (Bányai, 2002)

Hypnosis style	Average inter-rater reliability (r)	Number of raters (N)	Effective reliability*	Cronbach's alpha
Maternal	0.44	4	0.76	0.76
Paternal	0.38	4	0.71	0.71
Sibling	0.32	4	0.66	0.58
Love-like	0.19	4	0.48	0.44

*Calculated as $N*r/[1 + (N - 1)r]$ (Rosenthal and Rosnow, 1991).

lator and the real subjects in any of these measures, the two groups will be treated together in the inter-rater reliability analysis.

As shown in Table 1, reliability measures were acceptable in the case of maternal and paternal styles (shown in bold), so we used only these two styles for further analysis.

Descriptive statistics

Each of the hypnotic sessions were characterized by

- a score on both maternal and paternal styles (average of the four raters), and
- the interactants' scores of their own subjective experiences measured by the administered paper and pencil tests (DIH and PCI).

The average scores and their standard deviations can be seen in Appendix C for all of the measured parameters, calculated for both the total sample and for the sample without the simulators.

Correlations between hypnosis styles and measures of subjective experiences

To characterize the relationship between the hypnosis styles and the subjective experiences, intercorrelations were calculated. The results are shown both for the whole sample ($N = 32$ interactions) and for the sample without simulators ($N = 24$ interactions).

The relationships between maternal and paternal scores and DIH factor-scores of hypnotists and subjects are shown in Figures 1a and 1b.

As we can see at first glance – although the correlations themselves are moderately high and because of the low sample size they are not significant – the *pattern* of the results is obvious. All of the correlations between maternal score and DIH scales are positive in every case both for hypnotists and subjects, while they are negative with paternal scores, leading to significant pattern differences.

There is a noticeable difference in the results between participants and hypnotists: in the case of subjects the lowest correlations were between maternal-paternal scores and the DIH *intimacy* scale (these correlations are close to zero), while in case of hypnotists these are the highest correlations (most of them are significant). Although on the grounds of correlation we cannot conclude cause and effect, this result may imply that hypnotists tend to judge their own intimacy score in a given situation according to their judged style (i.e. in case of maternal style, they report higher intimacy scores, while in case of paternal style, they report the lack of intimacy). Subjects, on the contrary, seem to score their intimacy independently of the style of the hypnotist.

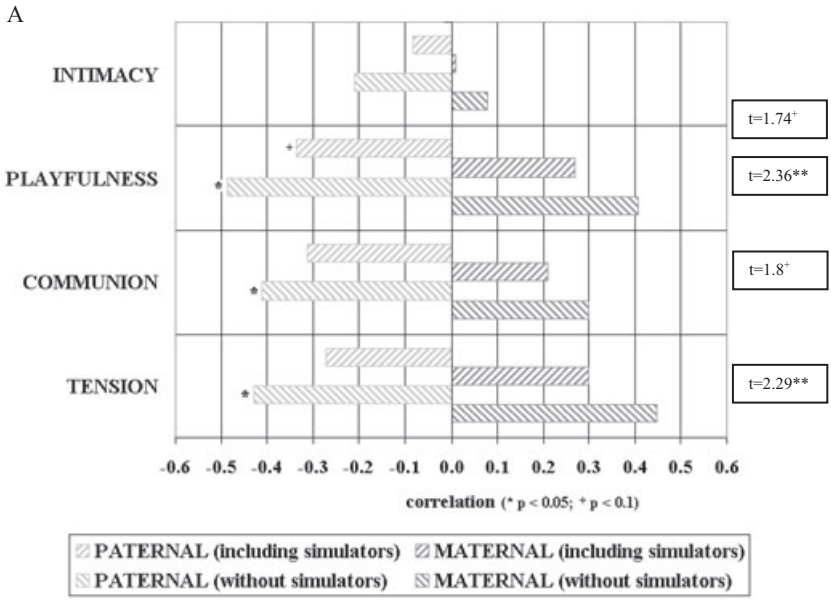


Figure 1a. Correlations between hypnosis styles and DIH scores: results of subjects.

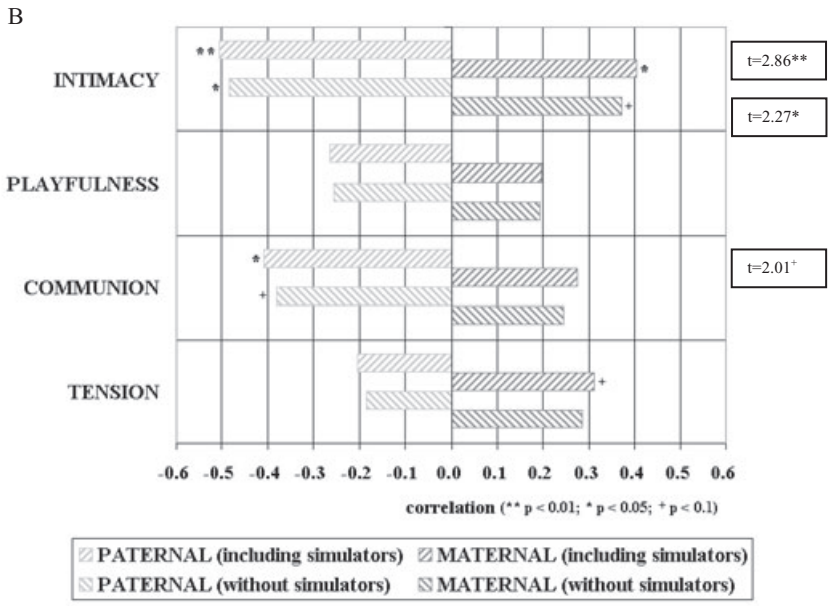


Figure 1b. Correlations between hypnosis styles and DIH scores: results of hypnotists.

Note: In the small boxes t refers to the difference of correlations, † p < 0.1, * p < 0.05, ** p < 0.01. The difference between these correlations was calculated according to Williams’s T2 statistic that tests whether two dependent correlations (here: correlation of maternal style and a given DIH subscale and paternal style and a given DIH subscale) that share a common variable (here: the given DIH subscale) are different. This test is the one recommended by Steiger (1980) for this purpose (the same method is used in figures 2a, 2b, 3a and 3c).

It is another interesting result that the correlations calculated with the inclusion of the simulators are always lower than those without them in the case of the subjects, while in case of the hypnotists, the situation is reversed: the correlations with the simulators are higher than those calculated without them. Thus, real subjects produced more obvious, stronger relationships between hypnotist styles and DIH scores – in the expected direction, the presence of simulators slightly weakened this pattern. Hypnotists, on the other hand, seemed to be a little ‘more present’ in the interactions when the simulators were involved than with real Ss only (even if the hypnotists were not aware of the simulators). It looks as if they showed a stronger or more prototypical variant of their style when they encountered simulators.

Among the numerous indices of PCI, we will discuss only the *Altered Experience* main scale with its component subscales (alterations in body image, time sense, perception, and meaning) and the *Affect* main scale with its subscales here. These scales are the most important from the point of view of our question: how much are the components of the altered of state of consciousness experienced in the cases of the maternal and paternal hypnosis styles, and what kinds of emotions accompany them in both participants of the hypnosis interaction?

Figures 2a and 2b show the correlation between PCI's *Altered Experience* main scale (and its subscales) and hypnosis style scores both for the subjects (a), and the hypnotists (b).

The difference is palpable: on the whole, the *Altered Experience* of the subjects is either independent from the styles (correlations are close to zero) or shows positive correlations with both styles (except for alteration of *Body Image* and *Meaning*: they show a very moderate negative correlation with paternal style). Since the highest correlations are around 0.2 here, it can be concluded that the Ss can experience the most important components of an altered state of consciousness with either hypnosis style. Thus, the experience, or the lack of experience of an altered state of consciousness of the Ss seems to be independent of the style of hypnosis.

Hypnotists scoring their own alteration of consciousness by PCI show the connection unambiguously with (their own) hypnosis style (see Figure 2b). The maternal style produced significant positive correlations while the paternal style produced significant negative correlations. The more the colleague was maternal in style, the more *Altered Experience* during hypnosis they reported, while the more they were characterized by paternal style, the more they reported the lack of these alterations. In the latter case, the hypnotists' experience of body image, time sense, perception, and meaning remained similar to the reality orientation of the normal waking state.

In contrast to the pattern given on the DIH by the hypnotists, in this case (PCI) the presence of simulators slightly moderated this connection, as if maternal hypnotists could experience these alterations less with simulators, and paternal ones needed less to indicate the lack of alteration – in this case they tend to keep the ordinary waking experience-modes as compared to the cases of hypnotizing real subjects.

As can be seen in Figures 3a and 3b, both the *Positive Affect* and the *Negative Affect* main scales and their subscales of PCI showed the same pattern both in the subjects and the hypnotists: maternal hypnosis was correlated with the experience and expression of emotions – either positive or negative – while paternal style showed a reverse relationship.

There was only one important exception to this pattern: the more maternal the style, the less the hypnotist reported sexual excitement. Interestingly, no opposite pattern was seen in paternal style: its higher level did not predict increased sexual experiences.

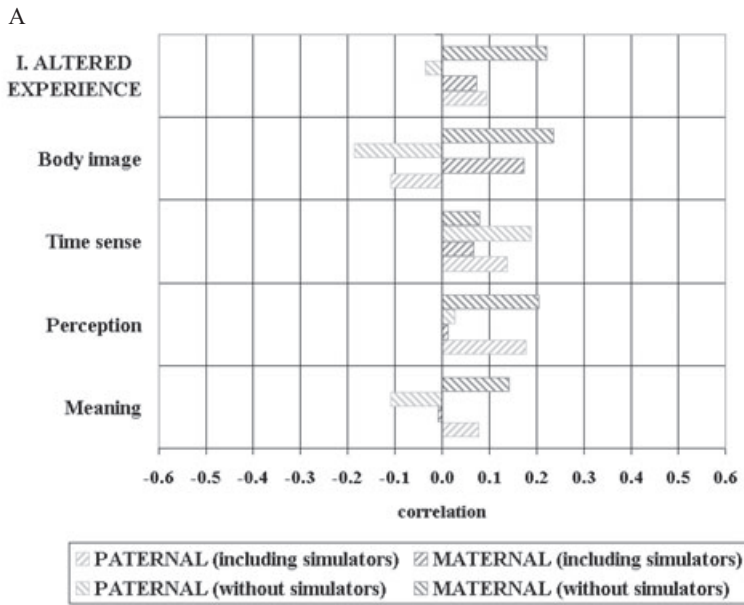


Figure 2a. Correlations between hypnosis styles and PCI Altered Experience factor scores: results of subjects.

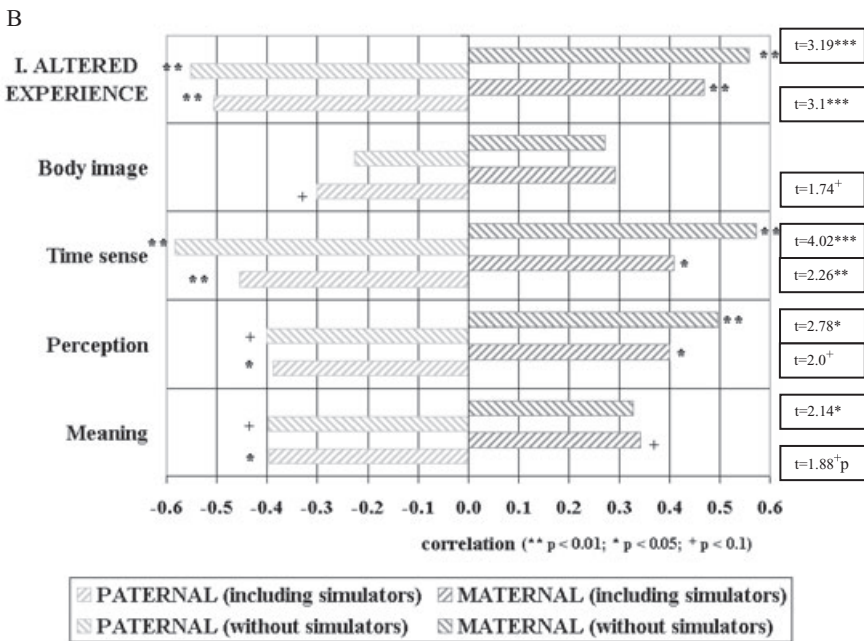


Figure 2b. Correlations between hypnosis styles and PCI Altered Experience factor scores: results of hypnotists.

Note: In the small boxes t refers to the difference of correlations, ⁺p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.005.

A

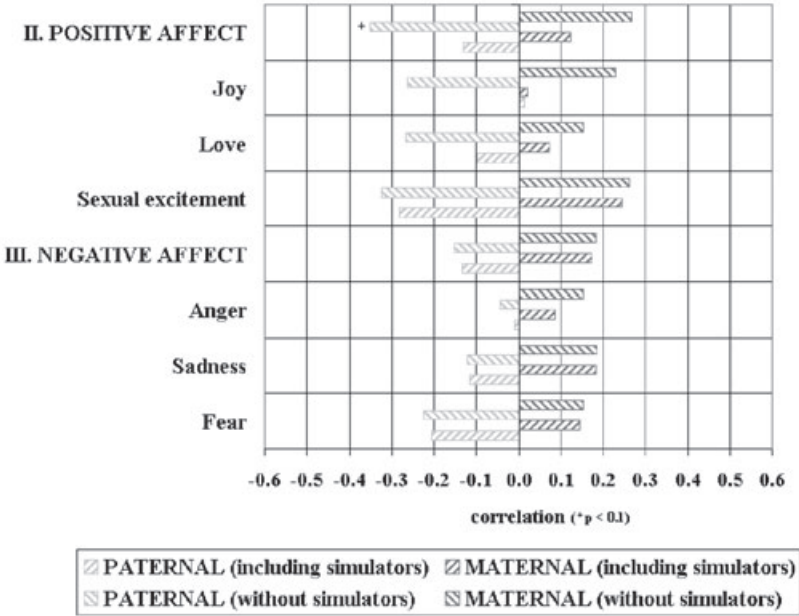


Figure 3a. Correlation between hypnosis styles and PCI affect factors: results of subjects.

B

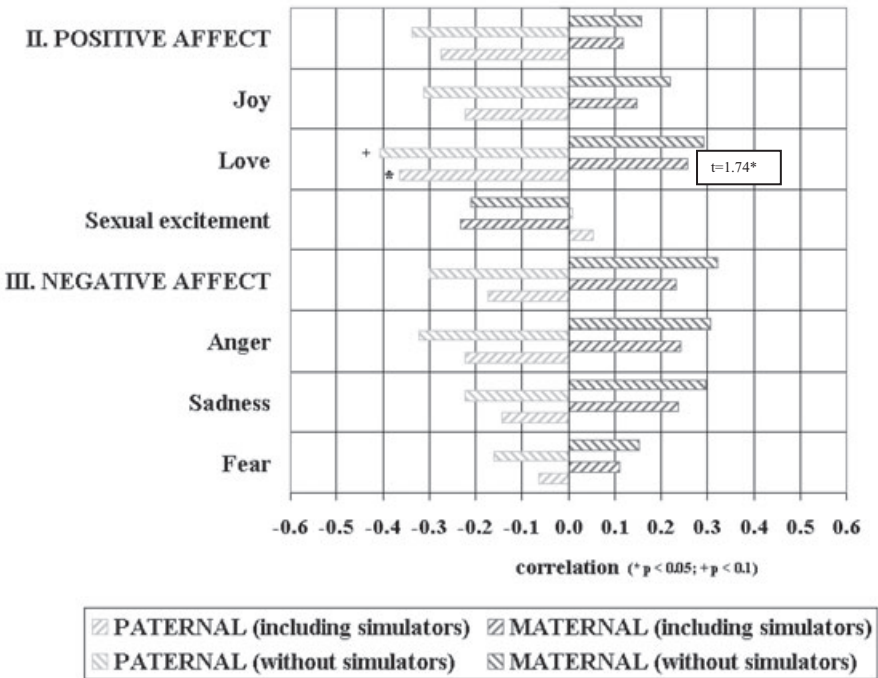


Figure 3b. Correlation between hypnosis styles and PCI affect factors: results of hypnotists
 Note: In the small box t refers to the difference of correlations, *p < 0.05.

Conclusions

Obviously, this single study with a relatively low number of interactions between Ss and Hs cannot be the basis of far-reaching conclusions. Nevertheless, some promising possibilities can be discerned.

To our knowledge, no systematic study has been made regarding the involvement of the hypnotists in the interaction while hypnotizing simulators. Orne (1972) reported some non-systematic observations indicating that it is obvious for an external observer if the S is simulating, while the hypnotist cannot tell the reals from the simulators. Our data seem to indicate that the interactional analysis of the subjective data of the Hs and the Ss might be a fruitful direction in the attempt of finding good indices of simulating hypnosis.

During the interpretation of our results it is important to emphasize again the fact that the *style* scores and *experience* data came from very different kinds of characteristics of the given interaction. While the *style* scores were rated by independent judges on the basis of the verbatim transcripts (!) of the hypnosis sessions, raters being unaware of the basic data of the interactants (age, gender, real or simulating status, etc.), the *experiential* data, on the other hand, were the interactants' self-reported answers, either scoring their own experiences (PCI) or the interaction itself (DIH).

Our data strengthen the construct of 'hypnosis style', as the *pattern* of correlations of subjective experience data and style scores are in line with our theoretical expectations. In case of *maternal style*, subjects can experience the alteration of consciousness while their hypnotist 'follows' (or 'leads'?) them into the domains of alteration independently of the level of maternity. This happens through interactions in which emotions increase with maternity in both interactants, and with increasing maternity they both consider their relationship to be increasingly playful but a bit more strained, based on cooperation. Higher maternity is also accompanied by a higher intimacy-experience on the side of hypnotists. *Paternal style* also makes it possible for the subjects to experience the alteration of consciousness subjectively, but in this case, either the subjects, or the hypnotists are moderate in the experience and expression of emotion, and there is no place for togetherness, playfulness, or intimacy in the situation.

Looking at the results from another point of view, these results serve as validation indicators for the subjective experience tests applied in this study, since hypnosis styles can be described and confirmed with several other parameters beyond the direct judgment of style (see Bányai, 1998, 2002).

In evaluating maternal and paternal styles, it also has to be stressed that from the point of view of the alteration of consciousness of subjects, any style can be favourable; this is in line with the opinion of experts in the field that the best indicator of the alteration of consciousness is the subjective experience of the person (Haley 1958; Tart 1972; Pekala et al., 1986; Pekala and Kumar, 1989; Farthing, 1992). Thus, the experience of alteration is not dependent on style, rather, it is probably based on some other factor (that is not analyzed here). Because PCI is a state-indicator, experience of alteration might depend on some other, trait-like parameter(s) of the subject, as is suggested in studies about the stability of hypnotizability (e.g. Piccione, Hilgard and Zimbardo, 1989). As we saw, the emotional features of styles were more colourful as we had previously supposed: the results do not imply that one of the styles – either maternal or paternal – would be more positive by all means than the other. Maternal style was accompanied by the more intense appearance of *every* kind of emotion measured by PCI, including negative ones, and this tendency was reflected in the result that beside positive DIH scales the *tension*

scale of the DIH *also* fits the general pattern: the more characteristic the maternal style (according to the judgment of the raters), the more tension in the interaction was manifested in subjects' – and to some extent in the hypnotists' – opinion. So the maternal style is characterized by a *generally* more overt presence of emotions, whether positive or negative.

Since hypnosis styles are related to the hypnotists' other, overt behavioral parameters – e.g. smiling, touch, eye contact, words used, calling the subjects by their first name (for more details see e.g. Bányai, 2002) – it is possible that those underlying characteristics which mediate the style of the *actual* hypnosis to the independent raters can evidently mediate to the subject what kind of hypnosis they expect with the given hypnotist as well. Hereby the subject can sense – probably at a non-conscious level – what kind of relationship patterns they should mobilize (recollect or fantasize) along which they can organize their interactional expectations or experiences in connection with the actual hypnosis.

In effect, the development of a given style is surely not a unidirectional process going from the hypnotist to the subject; it is rather construed along constant 'message-exchanges' between subject and hypnotist. Presumably, if the participants come to an understanding in this 'style-bargain', a kind of typical pattern is formulated in the harmony of their subjective experiences (e.g. regarding mutuality). If this bargain remains one-sided, then one of the participants cannot enforce their stable or momentary needs for relationship patterns (Bowlby, 1980), so we will find higher disharmony in the experiences, and there will be no 'clear' experience-patterns of mutual attunement, either.

Acknowledgements

The preparation of this paper has been supported partly by OTKA grant No. 34454 to Éva I. Bányai and OTKA grant No. 062210 to Anna C. Gósi-Greguss. The authors would like to thank László Mérő, Anna Székely, and András Vargha for their useful advice on the statistical analysis of the data.

References

- Bányai ÉI (1985) A social psychological approach to the understanding of hypnosis: The interaction between hypnotist and subject. *Hypnos* 18: 186–210.
- Bányai ÉI (1991) Toward a social-psychobiological model of hypnosis. In: SJ Lynn, JW Rhue (eds) *Theories of Hypnosis: Current Models and Perspectives*. New York: London Guilford Press, 564–98.
- Bányai ÉI (1998) The interactive nature of hypnosis: research evidence for a socialpsychobiological model. *Contemporary Hypnosis* 15: 52–63.
- Bányai ÉI (2002) Communication in different styles of hypnosis. In: CAL Hoogduin, CPDR Schaap, HAA de Berk, (eds) *Issues on Hypnosis*. Nijmegen Cure & Care Publishers, 1–19.
- Bányai ÉI, Gósi-Greguss AC, Vágó P, Varga K, Horváth R (1990) Interactional approach to the understanding of hypnosis: theoretical background and main findings. In: R Van Dyck, P Spinhoven, AJW Van Der Does, YR Van Rood, W De Moor (eds) *Hypnosis: Current Theory, Research and Practice*. Amsterdam: Free University Press, 53–69.
- Bowlby J (1980) *Attachment and Loss: Vol. III. Loss: Sadness and Depression*. New York: Basic Books.
- Cronbach LJ (1951) Coefficient alpha and the internal structure of tests. *Psychometrika* 16: 297–334.

- Diamond MJ (1984) It takes two to tango: some thoughts on the neglected importance of the hypnotist in an interactive hypnotherapeutic relationship. *American Journal of Clinical Hypnosis* 27: 3–13.
- Diamond MJ (1987) The interactional basis of hypnotic experience: on the relational dimensions of hypnosis. *International Journal of Clinical and Experimental Hypnosis* 35: 95–115.
- Farthing GW (1992) *The Psychology of Consciousness*. New Jersey: Prentice Hall.
- Ferenczi S (1909/1965) Comments on hypnosis. Trans. Jones, E. In: RE Shor, and MT Orne (eds) *The Nature of Hypnosis: Selected Basic Readings*. New York: Holt, Rinehart and Winston, 177–8.
- Haley J (1958) An interactional explanation of hypnosis. *American Journal of Clinical Hypnosis* 1: 41–57.
- Haley J (1963) How hypnotist and subject maneuver each other. In: J Haley (ed.) *Strategies of Psychotherapy*. New York: Grune and Stratton.
- Kumar VK, Pekala RJ, Cummings J (1996) Trait factors, state effects and hypnotizability. *International Journal of Clinical and Experimental Hypnosis* 44: 232–49.
- Orne MT (1972) On the simulating subject as a quasi-control group in hypnosis research: what, why and how. In: E Fromm and RE Shor (eds) *Hypnosis: Research Developments and Perspectives*. Chicago: Aldine-Atherton, 399–443.
- Pekala RJ (1982) *The Phenomenology of Consciousness Inventory (PCI)*, Thorndale, PA: Psychophenomenological Concepts.
- Pekala RJ, Steinberg J, Kumar VK (1986) Measurement of phenomenological experience: phenomenology of consciousness inventory. *Perceptual and Motor Skills* 63: 983–89.
- Pekala RJ, Kumar VK (1989) Phenomenological patterns of consciousness during hypnosis: relevance to cognition and individual differences. *Australian Journal of Clinical and Experimental Hypnosis* 17: 1–20.
- Piccione C, Hilgard ER, Zimbardo PG (1989) On the stability of measured hypnotizability over a 25 year period. *Journal of Personality and Social Psychology Review* 57: 289–95.
- Rosenthal R, Rosnow RL (1991) *Essentials of Behavioral Research: Methods and Data Analysis*. New York: McGraw-Hill.
- Sheehan PW, McConkey KM (1982) *Hypnosis and Experience: The Exploration of Phenomena and Process*. Hillsdale, New Jersey: Lawrence Erlbaum.
- Shor RE, Orne EC (1962) *Harvard Group Scale of Hypnotic Susceptibility*. Palo Alto, CA: Consulting Psychologists Press.
- Steiger JH (1980). Tests for comparing elements of a correlation matrix. *Psychological Bulletin* 87: 245–51.
- Tart CT (1972) *Altered States of Consciousness*. New York: Anchor Book Doubleday and Company Inc.
- Varga K, Bánayai ÉI, Gósi-Greguss AC (1994) Parallel application of the experiential analysis technique with subject and hypnotist: a new possibility for measuring interactional synchrony. *International Journal of Clinical and Experimental Hypnosis* 42(2): 130–9.
- Varga K, Bánayai ÉI, Gósi-Greguss AC (1999) Hypnotists' phenomenology: toward the understanding of hypnotic interactions, *Hypnos* 26: 181–93.
- Varga K, Józsa E, Bánayai ÉI, Gósi-Greguss AC, Kumar VK (2001) Phenomenological experiences associated with hypnotic susceptibility. *International Journal of Clinical and Experimental Hypnosis* 49(1): 19–29.
- Varga K, Józsa E, Bánayai ÉI, Gósi-Greguss AC (2006) A new way of characterizing hypnotic interactions: Dyadic Interactional Harmony (DIH) Questionnaire. *Contemporary Hypnosis* 23(4): 151–66.
- Weitzenhoffer AM, Hilgard ER (1962) *Stanford Hypnotic Susceptibility Scale, Form C*. Palo Alto, CA: Consulting Psychologists Press.

Appendix A

The Dyadic Interactional Harmony (DIH) questionnaire given to the participants.

Date: Name:

Please consider your **recent interaction**.

Please indicate how much the following features characterized your recent interaction.

Circle the corresponding number: 1 meaning not at all, 5 meaning: completely.

The numbers in between indicate gradual steps between the two extremes.

SYMPATHY ²	1 - 2 - 3 - 4 - 5	SELF-DISCLOSURE	1 - 2 - 3 - 4 - 5
COOPERATION ²	1 - 2 - 3 - 4 - 5	TENSION ⁴	1 - 2 - 3 - 4 - 5
ANXIETY ⁴	1 - 2 - 3 - 4 - 5	OPENNESS ³	1 - 2 - 3 - 4 - 5
MUTUAL CONFIDENCE ²	1 - 2 - 3 - 4 - 5	DOMINANCE	1 - 2 - 3 - 4 - 5
CONSTRAINED ⁴	1 - 2 - 3 - 4 - 5	TENDERNESS ¹	1 - 2 - 3 - 4 - 5
ATTUNEMENT ²	1 - 2 - 3 - 4 - 5	HARMONY ²	1 - 2 - 3 - 4 - 5
UNDERSTANDING ²	1 - 2 - 3 - 4 - 5	RIGOUR	1 - 2 - 3 - 4 - 5
SUBORDINATION	1 - 2 - 3 - 4 - 5	HUMOUR ³	1 - 2 - 3 - 4 - 5
LIKING ¹	1 - 2 - 3 - 4 - 5	INTIMACY ¹	1 - 2 - 3 - 4 - 5
PATIENCE ²	1 - 2 - 3 - 4 - 5	CLUMSINESS	1 - 2 - 3 - 4 - 5
RELAXED ⁴	1 - 2 - 3 - 4 - 5	EXCITEMENT	1 - 2 - 3 - 4 - 5
COMPETITION	1 - 2 - 3 - 4 - 5	PLAYFULNESS ³	1 - 2 - 3 - 4 - 5
BOREDOM	1 - 2 - 3 - 4 - 5	ACCORD / CONSONANCE ²	1 - 2 - 3 - 4 - 5
CORDIAL ¹	1 - 2 - 3 - 4 - 5	INTIMATE ¹	1 - 2 - 3 - 4 - 5
RESERVED	1 - 2 - 3 - 4 - 5	DEFENSELESSNESS ⁴	1 - 2 - 3 - 4 - 5
EROTICISM/SENSUALITY ¹	1 - 2 - 3 - 4 - 5	SHALLOWNESS	1 - 2 - 3 - 4 - 5
HAPPINESS ¹	1 - 2 - 3 - 4 - 5	WARMTH ¹	1 - 2 - 3 - 4 - 5
MUTUALATTENTION ²	1 - 2 - 3 - 4 - 5	INSPIRING ³	1 - 2 - 3 - 4 - 5
SINCERITY	1 - 2 - 3 - 4 - 5	MUTUALITY ²	1 - 2 - 3 - 4 - 5
REJECTION	1 - 2 - 3 - 4 - 5	ABANDONED	1 - 2 - 3 - 4 - 5
INFORMALITY	1 - 2 - 3 - 4 - 5	AGITATING ³	1 - 2 - 3 - 4 - 5
LOVE ¹	1 - 2 - 3 - 4 - 5	EASY-FLOWING ^{3 & 4}	1 - 2 - 3 - 4 - 5
FEAR ⁴	1 - 2 - 3 - 4 - 5	PASSION ¹	1 - 2 - 3 - 4 - 5
FREEDOM ³	1 - 2 - 3 - 4 - 5	DISTANCE	1 - 2 - 3 - 4 - 5
PERSONAL	1 - 2 - 3 - 4 - 5	CLOSENESS	1 - 2 - 3 - 4 - 5

Is there any other feature that is not present here, but is important to characterize your recent interaction? (You can write more than one):

Note: The index-numbers after the items indicate the subscale to which the item belongs: ¹*Intimacy*, ²*Communion*, ³*Playfulness*, ⁴*Tension*. Items without an index-number do not belong to any subscale, as their factor values were too small. Remark: 'easy-flowing' item scores inversely in the *Tension* subscale.

Appendix B

Instructions to rater for coding hypnosis styles:

Please indicate on the attached sheet how much each of the judged hypnosis sessions show the characteristics of the hypnosis styles below. A value of 1 on the sheet indicates that the given style is not characteristic at all of the given session, 7 means that the given style is fully characteristic of the given session.

1. *Maternal style*

Hypnosis is built mainly on positive emotions (on love, according to Ferenczi) between the participants (Shor and Orne, 1965). The hypnotist is very much with the hypnotized person. He/she mainly wants the hypnotized subject's desires and ideas to come true, and facilitates the independent initiatives of the hypnotized person. He/she places emphasis on the current condition and wishes of the subject. The atmosphere of hypnosis is emotionally comforting.

2. *Paternal style*

Hypnosis is built mainly on respect of authority (on fear, according to Ferenczi). The hypnotist leads and directs the hypnotized person (Shor and Orne, 1965). He/she mainly wants to realize his/her own ideas and intentions, and slightly limits independent initiatives of the hypnotized person. He/she does not place emphasis on the current condition and wishes of the subject. The atmosphere of hypnosis is mentally stimulating.

3. *Sibling style*

Hypnosis is built mainly on equality. The hypnotist almost goes together with the hypnotized person. He/she almost wishes to participate in the realization of the desires and ideas of the hypnotized subject, and accepts the independent initiatives of the hypnotized person. He/she places emphasis on togetherness. The atmosphere of hypnosis is intimate.

4. *Lover-like style*

Hypnosis is built mainly on erotic attraction. For the hypnotist, it is mainly the feelings and emotions elicited in him/her by the hypnotized person that are important. It is almost indifferent to him/her if the hypnotized subject's desires and ideas come true or not, or if the hypnotized person has independent initiatives. He/she places emphasis on his/her own feelings. The atmosphere of hypnosis depends on the response.

5. *Other, please specify.*

Hypnosis is built mainly on some other, not yet listed factor. Please specify this factor and give a short description of it in a style similar to the definitions above.

Appendix C

Descriptive statistics of hypnosis style, DIH and PCI

Measure (possible score)	Variable		Including simulators (N = 32)		Without simulators (N = 24)	
			average	SD	average	SD
Hypnosis style (1–7)	Maternality		3.71	1.44	3.78	1.43
	Paternality		3.58	1.48	3.51	1.46
DIH (1–5)	Intimacy	H	2.72	0.71	2.70	0.72
		S	2.36	0.69	2.31	0.71
	Playfulness	H	3.93	0.72	3.92	0.68
		S	4.24	0.57	4.18	0.61
	Communion	H	2.90	0.80	2.9	0.8
		S	3.00	0.80	3.00	0.80
	Tension	H	2.00	0.60	2.10	0.60
		S	2.02	0.31	1.99	0.34
PCI (1–6)	ALTERED EXPERIENCE	H	1.72	1.11	1.69	1.03
		S	2.73	1.30	2.48	1.29
	Body image	H	1.75	1.33	1.72	1.32
		S	2.95	1.75	2.76	1.86
	Time sense	H	2.67	1.95	2.65	1.80
		S	3.78	1.53	3.53	1.66
	Perception	H	1.21	1.23	1.21	1.14
		S	2.75	1.92	2.32	1.87
	Meaning	H	1.38	1.26	1.29	1.24
		S	1.76	1.61	1.59	1.53
	POSITIVE AFFECT	H	1.95	1.13	1.92	1.14
		S	1.88	1.12	1.92	1.06
	Joy	H	1.61	1.68	1.46	1.51
		S	1.91	1.54	1.85	1.36
	Love	H	0.83	1.29	0.92	1.36
		S	0.59	1.12	0.73	1.26
	Sexual excitement	H	3.41	1.73	3.38	1.70
		S	3.13	1.45	3.17	1.33
	NEGATIVE AFFECT	H	0.60	1.09	0.54	0.98
		S	0.38	0.81	0.36	0.89
Anger	H	0.70	1.45	0.65	1.46	
	S	0.42	1.00	0.19	0.62	

	Sadness	H	0.64	1.30	0.60	1.29
		S	0.39	1.14	0.48	1.31
	Fear	H	0.47	0.97	0.38	0.78
		S	0.31	0.89	0.42	1.01

H = Hypnotist, S = Subject

Address for correspondence:

Katalin Varga

Center for Affective Psychology

Eötvös Loránd University

Izabella utca 46 Pf. 755

Budapest

Hungary, H-1384

Email: vkata@vnet.hu