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PHENOMENOLOGICAL ASPECTS OF HYPNOTIC INTERACTIONS: *The Effect of Kinship*^{1,2}

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Abstract: This study analyzes the relationship of various measures of hypnosis as a function of kinship. Subjects with varying degrees of kinship (mono- and dizygotic twins, siblings, and parent–child pairs) participated. The Stanford Hypnotic Susceptibility Scale, Form A (SHSS:A), as well as other measures—including the Dyadic Interactional Harmony (DIH) and the Phenomenology of Consciousness Inventory (PCI)—were used with both subjects and hypnosis practitioners. Findings indicated that the phenomenological experience of hypnosis is not determined genetically. The subjects apparently evaluated the session as related to the degree of kinship. MZ twins—on the basis of reactive interactional pattern—evaluate the hypnotic interaction similarly. This was not true for SHSS:A scores or the phenomenological aspects of the state (PCI). These findings were interpreted within the sociopsychobiological model of hypnosis.

The alteration of consciousness is a universal experience of mankind (Farthing, 1992). Everyday conscious awareness is just the tip of the iceberg (Vaitl et al., 2005); widely divergent methods of inducing altered states of consciousness (ASsC) have been developed in all human cultures, from the beginning of history until today.

Among these methods are some special ones, in which the alteration is induced in an interpersonal context. Interactional theories, for example, conceptualize hypnosis as an interactional process, a social

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encounter between hypnotherapist and subject (see, e.g., Bányai, 1985, 1991, 1998, 2002b; Bányai, Gősi-Greguss, Vágó, Varga, & Horváth, 1990; Diamond, 1984, 1987; Fourie, 1983; Haley, 1958; Lynn & Rhue, 1991; Lynn et al., 1991; Nash, 1991; Sheehan, 1991). These approaches emphasize the importance of “rapport,” the special relationship between the two participants (Baker, 2000; Baker & Levitt, 1989; Bányai, 1991; Barabasz & Watkins, 2005; Diamond, 1984, 1987; Levitt & Baker, 1983; Perry & Sheehan, 1978; Sheehan, 1980; Sheehan & Dolby, 1979).

The hypnotist (H) is also affected in this procedure. Free phenomenological reports regarding hypnosis demonstrated the special involvement, even subjective realization of (own) alteration of consciousness in cases of *hypnotists* as well (Varga, Bányai, & Gősi-Greguss, 1999). This illustrated the need to develop or modify methods suitable for (a) tapping the phenomenology of the hypnotist also and for (b) interrelating the subjective feelings of both participants of hypnotic interaction (see, e.g., Parallel Experiential Analysis Technique [Varga, Bányai, & Gősi-Greguss, 1994], based on Experiential Analysis Technique of Sheehan & McConkey, 1982; the Dyadic Interactional Harmony [DIH] developed in our laboratory [Varga, Józsa, Bányai, & Gősi-Greguss, 2006]; or the five-scale version of the questionnaire of Phenomenology of Consciousness Inventory [PCI] of Pekala and colleagues [Pekala & Nagler, 1989; Pekala, Steinberg, & Kumar, 1989; Varga, Józsa, Bányai, Gősi-Greguss, & Kumar, 2001]). We have collected large amounts of data about the phenomenological involvement of hypnotic interactants using these methods (our findings have been reported elsewhere: Varga, Bányai, & Gősi-Greguss, 1996, 1997, 1999, 2000; Varga, Józsa, Bányai, & Gősi-Greguss, 2006, 2009).

Extended research under well-monitored, standardized circumstances makes hypnosis unique among the ASsC. Since the development of standardized susceptibility scales, most of which are based on the Stanford Hypnotic Susceptibility Scales (SHSS:A,B,C, Weitzenhoffer & Hilgard, 1959, 1962), the induction and test suggestions can be administered in an effectively controlled manner. This makes it possible to investigate hypnosis in various international and cultural circumstances.

These studies indicate that hypnotizability, which varies between individuals, is a highly stable trait (Piccione, Hilgard, & Zimbardo, 1989). The norms of standardized hypnotizability scales in various languages and samples repeatedly confirmed low variability in the distribution of susceptibility.

The individual stability of hypnotic responsiveness implies that it derives partly from biologically determined factors with a certain level of genetic contribution. Increasing numbers of molecular genetic studies report a potential association between the Catechol-O-Methyltransferase (COMT) gene and hypnotizability (Lichtenberg,



Bachner-Melman, Ebstein, & Crawford, 2004; Lichtenberg, Bachner-Melman, Gritsenko, & Ebstein, 2000; Raz, 2005; Raz, Fan, & Posner, 2006; Szekely et al., 2010).

Until now only one study (Morgan, 1973; Morgan, Hilgard, & Davert, 1970) has directly investigated the heritability of hypnotic ability. The research focused only on the susceptibility scores of the hypnotized subjects (Ss).

Many influential theorists and researchers of ASsC (Haley, 1958; Ludwig, 1972, 1983; Pekala & Kumar, 1989; Pekala et al., 1986; Tart, 1972, etc.), and of hypnosis in particular (Orne, 1959; Sheehan & McConkey, 1982; Vaitl et al., 2005) state that the core phenomena lie at the level of phenomenological experience. The genetic contribution to the variance of subjective experience seems equally interesting as behavioral scores of susceptibility.

Our laboratory expanded upon the work of Morgan (1973) by (a) measuring the phenomenological aspects (apart from the behavioral scores of susceptibility) and by (b) including the investigation of the hypnotist (apart from the Ss). According to our earlier findings, hypnotic interactions do differ in the level of concordance between the subjective reports of the hypnotist and of the subject. Some hypnotic dyads show high agreement and a similar pattern, while others differ in their reports of their subjective feelings regarding the hypnosis session. The effect of kinship on this aspect was never systematically tested.

In this article, we focus on the phenomenological data of the interactants (H and S). The dependence of susceptibility (hypnotizability score) on kinship will be discussed only as comparison for that of the phenomenological ones, as detailed analysis of this has been reported elsewhere (Bányai, Józsa, Métneki, Gősi-Greguss, & Varga, 2006).

METHOD

Subjects

The participants were the Ss and the Hs of individual hypnosis sessions. Sixty-two monozygotic (MZ) twins, 60 dizygotic (DZ) twins, 62 siblings, and 94 parent–child pairs. Altogether 278 healthy volunteer Ss, 190 (68.3%) females (average age 36.8), and 88 (31.6%) males (average age 31.4) were hypnotized by 1 of 10 Hs. In 25% of the sessions, it was a male; in 75% of the sessions, female hypnotists delivered the hypnosis.

Members of monozygotic twins, dizygotic twins, siblings, and parent–child pairs were invited to the laboratory, and hypnotizability was tested using the standard protocol of the SHSS:A. To prevent influencing each other (e.g., by discussing their experiences), the relatives



were hypnotized at the same time in separate experimental chambers by different hypnotherapists.

In addition to standardized hypnosis sessions (in which the hypnotizability of Ss was measured), two questionnaires were administered to Ss as well as their Hs. The H and the S completed the various questionnaires independently. The PCI tapped the phenomenological aspect of being hypnotized and hypnotizing, whereas DIH measured as participants evaluated the interaction itself (for detailed descriptions, see below). The interactants had not known each other previously and met for the first time in the experimental hypnosis sessions.

Procedure

The Ss for the studies were recruited by posters (placed on Internet forums and notice boards at various universities and colleges) asking for healthy volunteers for a hypnosis experiment to determine hypnotizability.

The standardized protocol of the SHSS:A (Weitzenhoffer & Hilgard, 1959) was administered. The following tests were administered immediately after completing the hypnosis sessions.

Instruments

The Archaic Involvement Measure (AIM) measures the deep, transference-like feelings in hypnosis (Nash & Spinler, 1989), some additional items for the negative feelings, and parallel versions of these scales for the hypnotist (Bányai et al., 1990; this is not discussed in this article; for details, see Tauszik, Bányai, Varga, Gósi-Greguss, & Józsa, 2006).

The Phenomenology of Consciousness Inventory (PCI) measures the subjective alteration of consciousness on 26 dimensions (Pekala et al., 1986). In the statistical analysis, we used the five factor-based scales of the PCI, using the z-scoring method suggested by Kumar, Pekala, and Cummings (1996; see also Varga et al., 2001).

The five PCI factor-based scales used in this study, and their definitions, are as follows:

- Dissociative control (PCI DC): Higher factor scores reflect alterations in (a) trance effects associated with altered state of awareness and altered experiences (body image, time sense, perception, visual imagery, and meaning) and (b) ego-executive functioning (Fromm et al., 1981) and reality orientation associated with decreases in memory, rationality, volitional control, and internal dialogue (i.e., the classic suggestion effect: Bowers, 1981, 1992; Weitzenhoffer, 1978).
- Positive affect (PCI PA): Higher factor scores reflect more joy, more sexual excitement, more love, altered meaning, altered body image, and altered perception.



- Negative affect (PCI NA): Higher factor scores reflect more anger, sadness, fear, and arousal, but low rationality.
- Visual imagery (PCI VI): Higher factor scores reflect more visual imagery (amount and vividness).
- Attention to internal processes (PCI IA): Higher scores reflect greater alterations in time sense and perception, greater absorption, inward directed attention, altered state of awareness, internal dialogue, and low imagery vividness.

To measure the way interactants perceived their own interaction, we used a recently developed test called the *Dyadic Interactional Harmony* (DIH) questionnaire (Varga, Józsa, Bányai, & Gósi-Greguss, 2006; the questionnaire is available upon request from the corresponding author). The name of the questionnaire did 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 themselves. The participants characterize their interaction, scoring each item (e.g., intimate, calming, tensed, etc.) on a Likert-type scale from 1 to 5. The DIH yields four subscales: (a) Intimacy, (b) Communion, (c) Playfulness, and (d) Tension.

The participants were asked not to discuss their feelings following the session. Immediately after the termination of the hypnosis sessions, Ss filled in the tests (Hs as well, independently of the Ss). After this, a debriefing discussion ended the experiments.

RESULTS

The relationship between the variables will be expressed in intraclass correlations (ICC).⁴ When the two members of relatives (e.g., the 2 persons of a twin pair) were compared, we indicate it by “S-S,” when the subject and the hypnotist of the same session are compared “S-H” appears. The S-S intraclass correlations of hypnotic susceptibility are presented in Table 1. As it can be seen all the correlations are low and nonsignificant.

Table 2 shows the S-S intraclass correlations of the PCI scales. As can be seen, there are significant moderate-to-high correlations between the members of MZ twins on dissociative control and positive and negative affect. DZ twins show moderate significant correlation on the

⁴This type of correlation is used to determine a correlation between two variables when it is not clear which variable should be X or Y for a given row of data. There are various ways to calculate ICC; we used the formula: $r_i = \frac{s_b^2 - s_w^2}{s_b^2 + s_w^2}$, where s_b is the variance based on between groups and s_w is the variance based on within groups.



Table 1

The S-S Intraclass Correlations of Hypnotic Susceptibility

S-S Intraclass correlations SHSS:A	Monozygotic twins	Dizygotic twins	Siblings	Parent- Child pairs
Correlations	.22	.15	.17	.07

Table 2

The S-S Intraclass Correlations of the PCI Scales

S-S Intraclass correlation PCI	Dissociative Control	Positive affect	Negative affect	Visual imagery	Attention to internal processes
Monozygotic twins	.35*	.52**	.36*	.22	.13
Dizygotic twins	.14	.19	.27	.34*	.04
Siblings	.14	.39*	.08	-.06	.45**
Parent-Child pairs	.11	-.02	.12	.08	-.11

* $p < .05$. ** $p < .01$.

Table 3

The S-H Intraclass Correlations of the PCI Scales

S-H Intraclass correlation PCI	Dissociative control	Positive affect	Negative affect	Visual Imagery	Attention to internal processes
Monozygotic twins	-.04	.04	.1	-.03	.13
Dizygotic twins	.31*	.34**	-.04	.24	.09
Siblings	.01	.2	-.18	-.03	.2
Parent-Child pairs	.03	-.06	-.1	-.1	.04

* $p < .05$. ** $p < .01$.

visual imagery scale, siblings on positive affect and attention to internal processes.

Table 3 presents the S-H intraclass correlations of the PCI scales. All of the correlations are close to zero and nonsignificant, except for the moderately significant correlations on dissociative control and positive affect in cases of DZ twins.

Table 4 presents the S-S intraclass correlations of the DIH scales. In the case of MZ twins, high and highly significant correlations appear, with only the exception of the playfulness scale. Apart from this all of the correlations are close to zero and nonsignificant.

Table 4
The S-S Intraclass Correlations of the DIH Scales

S-S Intraclass correlations DIH	Intimacy	Communion	Playfulness	Tension	Eroticism
Monozygotic twins	.58**	.55**	.17	.40*	.44**
Dizygotic twins	.28	.24	-.01	.1	.08
Siblings	.07	-.02	-.03	.18	-.1
Parent-Child pairs	.11	.06	.10	.19	.07

* $p < .05$. ** $p < .01$.

Table 5
The S-H Intraclass Correlations of DIH Scales

S-H Intraclass correlations DIH	Intimacy	Communion	Playfulness	Tension	Eroticism
Monozygotic twins	.03	.16	.11	.05	.17
Dizygotic twins	.32*	.31*	.19	.19	.01
Siblings	.2	-.01	.08	-.15	-.03
Parent-Child pairs	.13	.18	.07	-.09	.17

* $p < .05$.

The S-H intraclass correlations of the DIH scales are presented in Table 5. Apart from the significant moderate correlations between DZ twin members and their hypnotists, all of the correlations were close to zero and nonsignificant.

Heritability estimates the relative contributions of differences in genetic and environmental factors to the total phenotypic variance in a population. There are various ways to determine the heritability index.

In cases of twin studies, the heritability index is based upon a comparison of the variance of a measured feature between the members of MZ twins and that of DZ twins.⁵ The numerical values range from 0.0

⁵It is important to understand that heritability expresses how much of the total phenotypic *variation* in a population is attributable to *variation* among individual genotypes compared to *variation* in their environment. It does not tell the extent to which genes and environment actually determine the phenotype. Heritability is specific to the population and environment under analysis in the given study. It characterizes the population not the individual.

The heritability index follows the formula of $h^2 = \frac{\sigma^2_{w(dt)} - \sigma^2_{w(mt)}}{\sigma^2_{w(dt)}}$, where $\sigma^2_{w(dt)}$ is the variance in the DZ group, $\sigma^2_{w(mt)}$ is the variance in the MZ group. Consequently, a negative h^2 value means that the variance of the MZ group is higher than that of the DZ one.



(genes do not contribute at all to phenotypic individual differences) to 1.0 (genes are totally responsible for individual differences).

The heritability of PCI scales in our sample proved to be low: It was 0.15, -0.2, -0.45, 0.24, and 0.31 on the five scales of the PCI. In the cases of the DIH scales, the heritability indexes were -0.82, 0.12, -0.21, -1.22, -0.52.⁶ These heritability values imply that in most cases there is no significant difference between the variance of values of MZ twins and DZ twins, or, in cases of negative heritability values, members of MZ twin groups show greater variance than do members of DZ groups. All these data show that, in the population observed, there is no strong genetic contribution to the variance in the way people experience hypnosis and subjectively evaluate their hypnotic interaction.

DISCUSSION

According to our data, the only moderately high significant intraclass S-S correlation on PCI is the *positive affect* scale in cases of MZ groups; all the others are either nonsignificant or significant but moderate. This implies that relatives of various kinship do not experience the phenomenology of hypnosis in ways strongly resembling each other.

The heritability data of the PCI also support that there is no strong genetic determination of this feature (PCI scales) in the population studied, so the phenomenological aspect of hypnotic trance seems to be based mostly on environmental factors. As this was the first hypnotic experience of our subjects, it is likely this phenomenological report is related to their experiences of everyday situations, spontaneous trance states (during absorbed playing, drama, sports, religious experiences, etc.). Research data of Josephine Hilgard showed that the way people experience these everyday situations is closely related to the way they will experience hypnosis (Hilgard, 1970).

It is surprising that the way interactants evaluated their recent hypnosis interaction on the DIH was very similar in cases of MZ twins but not in any other S-S dyads (even cases of DZ twins).⁷

⁶As you can see, in the subscales of Intimacy and Tension, the h^2 is very high and negative. This is due to the fact that the variance of the MZ group is much higher than the DZ group. In the special case of the tension subscale, the heritability index proved to be larger than 1 (that is, -1.22.), because the variance of the MZ group is more than two times bigger than that of the DZ group.

⁷If we calculate the intraclass correlations only for the subgroup of the same-sex DZ twins, in cases of the PCI subscales, only the *visual imagery* subscale becomes more highly correlated (compared to the total sample of DZ twins, where we also found a significant—but moderate—correlation). In the case of the DIH subscales, all the intraclass correlations remain nonsignificant, except for communion, where it becomes significant and moderately high ($r = .41$).



The average PCI scores of MZ twins are not significantly different from those of the other groups (with the exception that MZ twins gave smaller scores on attention to internal processes subscale than did siblings). On the DIH scale, however, the MZ group gave significantly higher averages than the other groups. The only exception was communion, in which MZ and DZ groups were similar to each other, significantly exceeding the other two groups). So, MZ members of our sample gave relatively higher scores when evaluating the hypnosis interaction (on DIH) but did not deviate from the other groups when their actual phenomenological experiences were reported (PCI).

It is surprising that the hypnotic susceptibility score does not show the same similarity in cases of MZ twins. As the scores on SHSS:A are based on behavioral manifestations, this implies that similar patterns of subjective evaluation of the interaction (expressed on the DIH) can be connected to different behavioral scores, and vice versa: The same behavioral score may hide divergent evaluational patterns.

Interestingly, there was great variance within the MZ group (compared to other groups), as expressed by the negative heritability index. This was especially evident in the cases of the intimacy and erotica scales of the DIH. On the basis of this, we can reject the possible interpretation that MZ twin members show high intraclass correlations to each other while evaluating their hypnosis sessions on the DIH, because they always give high scores on the DIH. On the contrary, MZ twins—as a group—can be characterized as showing high variance in their evaluations. Nevertheless, members of the same twin pair gave highly similar scores, while interacting with two different hypnotists.

In comparing the highly significant correlations between the members of MZ twins with the correlations between the scores of MZ subjects and their hypnotists, an interesting conclusion emerges. The members of MZ twins (but no other groups) correlate highly on DIH scores with *each other* (and not with their hypnotists), in spite of the fact that they interacted with two different hypnotists. They seemed to evaluate the session similarly to their cotwins and not to the person with whom they were actually interacting. We might suppose that they bring their own “interactional model” into the hypnotic situation (Burgoon, Stern, & Dillman, 1995). There is a stark difference between individuals with, for example, *secure* or *avoidant* attachment styles (Ainsworth, Blehar, Waters, & Wall, 1978). Various theories of intimacy predict that some people feel comfortable with closeness and intimacy and are willing to rely on others when needed, while others report being very uncomfortable getting close to and depending on others (see, e.g., Argyle & Dean, 1965, or Patterson, 1976). The “working models” described by attachment theories (e.g., Bowlby, 1980) are based on early personal history and determine the person’s feelings



in their adult relationships, such as when entering a hypnotic interaction. According to our results, it may be so strong that MZ twins are not really “disturbed” by the actual hypnosis situation. This could be considered a clear example of the proposal that the hypnotic situation serves as a *possibility* to activate this early-based model, proposed by a sociopsychobiological model (Bányai, 1998, 2002a, 2002b).

This finding is in line with the widely held assumption that twinship involves high levels of intimacy to the detriment of other relationships (Tancredy & Fraley, 2006). Studies show that adult twins express the greatest intimacy toward their cotwins (compared, e.g., to their closest friends), but this is true both for MZ and DZ twins. This means there is no greater intimacy among MZ twins than with DZ ones (Foy, Vernon, & Jang, 2001).

Martin and Gross (1979) found no significant differences between the MZ and DZ twin groups with regard to their expressed closeness with one another. Our data, however, show a difference between MZ and DZ twins as far as the similarity (concordance) of their phenomenological data related to a hypnotic experience is concerned. Morgan et al. (1970) also found that MZ twin pairs were rated by their parents as more alike in personality than DZ twins, even when only same-sex DZ twins were considered (the corresponding average similarity scores were, in a possible range of 0 to 10: 9.3 for MZ twins; 6.8 for same-sex DZ twins; and 5.7 for nontwin, same-sex siblings in Morgan’s study).

From this pattern of data, two types of interactional processes can be hypothesized. MZ twins may be similar to each other while evaluating the hypnosis session, because they follow the *reactive interactional* pattern: The environmental effects (in this case, the standardized hypnosis session with two different hypnotists) might appear to them as something subjectively the same. The other possibility is that the two members of MZ twins following the rules of evocative interaction evoke (almost) the same reaction from their interactional partners (in this case from their hypnotists). In the latter case, the independent hypnotists hypnotizing MZ twins should give similar scores to each other, as the members of MZ twins evoke similar reactions from them. To test this possibility, we correlated the scores of the 2 hypnotists who hypnotized the twins (or siblings, or parent–child pairs). All of these H-H correlations proved to be near zero and nonsignificant (the detailed results are available from the corresponding author). Thus, our data seem to support the *reactive interactional* pattern and not the *evocative interaction* pattern in cases of MZ twins.

Unfortunately, our data tell nothing about the question of whether this phenomenon is hypnosis specific or if MZ twins would give the same concordance with each other while interacting with two different partners in nonhypnotic settings (chess, music, sex, etc.)?



CONCLUSION

According to our data, the phenomenological aspects of hypnosis are not based on genetic determination but the way interactants evaluate the session (the interaction itself) seems to be closely related to the degree of kinship. MZ twins—most likely on the basis of a reactive interactional pattern—evaluate the hypnotic interaction very similarly to each other, possibly by activating early relational patterns (working models). This was not true for their behavioral responses to hypnosis (SHSS:A) or the phenomenological aspects of the state (PCI).

Twin relationships have been hailed as one of the most unique and intimate kinds of relationships. The primary focus of twin research has been on twins as a biological phenomenon, the twin relationship—twinship—has received less research attention.

Perhaps studying hypnotic interaction with twins will help us better understand both of these special interpersonal relationships: hypnotic interaction and twinship.

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Phenomenologische Aspekte hypnotischer Interaktionen : Der Effekt von Verwandtschaft

Katalin Varga, Éva I. Bányai, Anna C. Gósi-Greguss und Katalin Tauszik
Abstrakt: Diese Studie analysiert die Beziehung unterschiedlicher Maße von Hypnose als Funktion der Verwandtschaft. Menschen mit unterschiedlichen Verwandtschaftsgrades (ein- und zweieiige Zwillinge, Geschwister und Eltern-Kinder-Paare) nahmen teil. Die Stanford Hypnotic Susceptibility Scale, Form A (SHSS:A) und andere – inklusive Dyadic Interactional Harmony (DIH) und der Phenomenology of Consciousness Inventory (PCI) – wurden sowohl bei den Teilnehmern als auch bei den Hypnotisuren angewandt. Die Untersuchungsergebnisse deuten darauf hin, daß die phenomenologische Erfahrung von Hypnose nicht genetisch determiniert ist. Die Teilnehmer schätzten die Sitzung aber offensichtlich als abhängig vom Verwandtschaftsgrad ein. Eineiige Zwillinge – auf der Basis reaktiver interaktionaler Muster – schätzten die hypnotische Interaktion ähnlich ein. Dieses war beim SHSS:A oder dem phenomenologischen Aspekten



des Zustandes (PCI) nicht der Fall. Diese Ergebnisse wurden innerhalb des soziobiologischen Modells von Hypnose interpretiert.

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Les aspects phénoménologiques des interactions hypnotiques :
Les effets de la parenté

Katalin Varga, Éva I. Bányai, Anna C. Gösi-Greguss et Katalin Tauszik
Résumé: Les auteures de cette étude ont analysé la relation de diverses mesures hypnotiques en fonction du lien de parenté des participants. Des sujets ayant divers degrés de parenté (jumeaux monozygotes ou dizygotes, paires filiales, parentales ou filiales-parentales) y ont participé. L'échelle de susceptibilité hypnotique de Stanford, formulaire A (SHSS:A), et d'autres instruments de mesure — y compris l'échelle d'harmonie interactionnelle dyadique et l'Inventaire de la phénoménologie de la conscience — ont été administrés aux sujets et aux hypnotiseurs. Les résultats ont indiqué une absence de détermination génétique dans l'expérience phénoménologique de l'hypnose. Les sujets ont apparemment évalué la séance comme étant liée à leur degré de parenté. Les jumeaux monozygotes – sur la base d'un modèle interactionnel réactif – ont évalué de la même manière l'interaction hypnotique. Cela n'était pas le cas des résultats obtenus à l'aide de l'échelle SHSS:A, ni des aspects phénoménologiques de l'Inventaire de la phénoménologie de la conscience. Ces résultats ont été interprétés dans le cadre du modèle sociopsychobiologique de l'hypnose.

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Aspectos fenomenológicos de las interacciones hipnóticas:
Los efectos del parentesco

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Resumen: Este estudio analiza la relación de varias medidas de hipnosis en función del parentesco. Participaron sujetos con distintos niveles de parentesco (gemelos mono y dicigóticos, hermanos, y parejas de padres e hijos). La Escala Stanford de Susceptibilidad Hipnótica, Forma A (ESSH:A), junto con otras mediciones incluyendo el Cuestionario de Interacciones Diádicas Armoniosas (DHI) y el Inventario Fenomenológico de Conciencia, se utilizaron tanto en los sujetos como en los practicantes de hipnosis. Los resultados indican que la experiencia fenomenológica de hipnosis no está determinada genéticamente. Aparentemente los sujetos evaluaron la sesión relacionándola con el grado de parentesco. Los gemelos monocigóticos, en base al patrón reactivo de interacción, evaluaron las interacciones hipnóticas de forma similar. Esto no ocurrió con las puntuaciones de la ESSH:A o con los aspectos fenomenológicos del estado (PCI). Se interpretaron estos resultados bajo el modelo psicobiosocial de la hipnosis.

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