PSYCHOMETRIC ANALYSIS OF THE HYPNOTIC INDUCTION PROFILE[1]

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Abstract: Psychometric analyses of the Hypnotic Induction Profile (HIP) of Spiegel (1974a), a sixteen point test designed to measure hypnotic capacity, are presented herein. Briefly summarized are the sequential phases of trance experience as monitored by the HIP. On the basis of a factor analysis of individual items entering into the HIP's of 1674 patients, two distinct factors emerged. One is defined largely by up-gaze and eye-roll, the other by some of the subsequent items. Two methods for scoring the HIP, a configurational method involving both factors (profile scoring) and an actuarial method using only items from the second factor (induction scoring), are defined. As expected from the factor analysis, eye-roll is little related to the HIP graded by either scoring method. The correlation of induction scoring with the eye-roll is .22 in a sample of 1023 patients. Such a correlation is significant, although it accounts for only 5 % of the variance that eye-roll and induction scoring have in common. That the low correlation may be a function of the relationship of hypnotizability to psychopathology is shown by a highly significant correlation ($r = .52$) between eye-roll and induction scores in a population selected as non-psychotic. The usefulness of the HIP in relation to psychodiagnosis has been demonstrated elsewhere and is not the subject of this paper. Evidence is presented bearing on the reliability of the profile and induction scores, both yielding satisfactory reliabilities. Some validity information is given through satisfactory correlations with existing standardized scales. The HIP and Stanford Hypnotic Susceptibility Scale (Weitzenhoffer & Hilgard, 1959) correlate .55.

The purpose of this paper is to present the results of reliability and construct validity studies which were carried out in order to stand-

300

ardize the Hypnotic Induction Profile (HIP) of Spiegel (1974a). A number of articles have been published dealing with the clinical significance of hypnosis as measured by the HIP, both as a diagnostic aid and a therapeutic tool (Spiegel, 1960; Spiegel, 1963a; Spiegel, 1965; Spiegel, 1974b; Spiegel, Fleiss, Bridger & Aronson, 1975; Spiegel & Linn, 1969); while other articles have discussed the implications of the HIP for the theoretical understanding of hypnosis (Spiegel, 1963b, 1972).

In both theory and design, the HIP is in many ways a departure from other available measures of hypnotizability. Hypnosis is often mistakenly defined as a dazed, sleep-like state in which the subject readily obeys commands from the hypnotist. More often it is referred to as a "susceptibility." "Susceptibility" is defined by the Stanford Hypnotic Susceptibility Scales (SHSS) of Weitzenhoffer and Hilgard (1959) "according to the number of times a subject acts like a hypnotized person . . . [p. 5]." The HIP postulates that hypnosis is a complex perceptual alteration involving a receptive, attentive, concentration capacity that is inherent in the patient and can be tapped by the examiner.[4]

The HIP was developed to provide a measure useful in the clinical setting where hypnosis is employed to facilitate therapeutic intervention. It evolved out of a need for a rapid measure of hypnotizability which could easily be integrated into a diagnostic interview.

The present form of the HIP is clinically feasible, rapid, and structured. The HIP manual (Spiegel, 1974a, Spiegel, 1976) gives specific instructions for the administration and scoring of the HIP. In brief, it is a 5- to 10-minute clinical evaluation of hypnotic capacity using an eye-roll, arm levitation method. The profile measures one continuous experience that flows from one phase to another.

The first phase involves the measurement of the eye-roll sign (ER) which is a fixed physical sign that approximately indicates hypnotic capacity. The ER is the distance between the edge of the lower eyelid and the lower edge of the cornea, measured while the patient looks upward as he closes his eyelids. The induction phase includes instructions for the initial arm levitation and posthypnotic compliance. The formal trance and induction ceremony are terminated, and transition into the testing of posthypnotic responsivity begins. During the next phase the patient's posthypnotic compliance is measured with the

[4] Labeling is not a benign issue. Although the term "susceptibility" is used to imply that there is individual variance within any level of hypnotizability, this label unfortunately connotes gullibility, weakness, and vulnerability. "Hypnotic capacity" is a more appropriate label which preserves the notion of individual variance within a group without introducing biases.

posthypnotic arm levitation (L), thus structuring the situation so that the patient can discover a non-instructed but emergent sensation, the control differential (CD). The L is a measurement of the rapidity and style (including measured reinforcement signals) with which the patient raises his arm in response to the posthypnotic signal. The CD is a measurement of the patient's sensory experience of relatively more control in the "non-hypnotized" arm. The exit phase involves the cut-off (CO), a measurement of the patient's readiness to relinquish the posthypnotic program. The procedure is concluded with the patient's subjective reports of amnesia (A) and the spread of physical sensations from the hand that was touched by the examiner (F or float).

The operator, using a carefully standardized procedure, elicits 16 points of information, 6 of which are used in the scoring. Hypnotic capacity is relatively stable for any given individual (Morgan, Johnson, & Hilgard, 1974; Spiegel, 1976). As a consequence of this, the HIP score is derived from a matrix of points, a configuration around the same behavior. It appears that this monitoring of one continuous phenomenon can give equivalent, if not more clinically relevant information than other more traditional methods.

FACTOR ANALYSIS: THE BASIS OF TWO SCORING METHODS

The Patient Sample

The HIP was standardized on 3232 patients in psychotherapy. The HIP was part of the first treatment session, and in most cases patients were seen for therapy only one time. The data was collected over a period of 3½ years and analyzed in two blocks. The first sample consisted of the 1674 patients who were examined during the period of time from 1970 to 1972. The second consisted of the 1558 patients who were seen between 1972 and 1974. The primary reason for gathering information was to facilitate patient care. Its incorporation into research was always retrospective.

There were no significant differences between the two samples other than a shift in the distribution of sexes. The patients represented a well-educated, middle to upper class population. The most frequent reason for seeking treatment was to stop smoking (60%). The second most frequent problem was diagnosed as character disorder (9%) and the third, obesity (7%).

Method and Results

Factor analysis postulates that measures are correlated because they tap different aspects of one or more underlying dimensions or

"factors." The method is used to identify the number of underlying factors and to cluster the original measures on the basis of how much of the factors they succeed in tapping.

It was hypothesized at first that hypnotizability was a unidimensional trait, and as a measurement of hypnotizability, the HIP would be unifactorial. Each one of the 1674 patients from the first sample was scored on every item of the HIP. These scores were subjected to a factor analysis in order to discover which items on the HIP best measured the underlying dimension of hypnotizability.

Table 1 presents the correlations among 10 items of the HIP. It shows two clusters of highly intercorrelated items. The first cluster apparent in the correlation matrix and confirmed by the factor loadings consists of the 3 measurements made during the instruction or so-called "pre-induction" phase. The second cluster consists of 5 measurements taken during the trance experience or "induction" phase. The other 2 measurements taken during trance experience have little if any correlation with other items. The pattern of this correlation matrix suggests two factors underlie the data.

The existence of two factors is confirmed by the formal factor analysis. The lower portion of Table 1 presents the correlations found after rotation between each of the 10 contributory items and each of the two factors. (One experimental item, amnesia, correlates with neither factor, and another, tingle, correlates only moderately with one of the two factors.)

One factor is called the Structural Baseline Factor (SBL) which is composed of three items: up-gaze, eye-roll sign (ER), and initial arm

TABLE 1

CORRELATIONS BETWEEN 10 COMPONENTS OF THE HYPNOTIC INDUCTION
PROFILE (N = 1674) AND ROTATED FACTOR ANALYSES

	1	2	3	4	5	6	7	8	9	10
Correlations:										
1. Up Gaze	--									
2. Eye-Roll	.77	--								
3. Arm Levitation	.37	.37	--							
4. Tingle	.03	.05	.11	--						
5. Dissociation	.09	.12	.21	.27	--					
6. Levitation	.17	.21	.40	.20	.43	--				
7. Control Differential	.06	.11	.28	.22	.58	.59	--			
8. Cut Off	.10	.10	.21	.20	.48	.43	.70	--		
9. Amnesia	-.05	-.05	-.02	.02	.03	-.05	.02	-.01	--	
10. Float	.14	.16	.27	.20	.46	.48	.57	.43	.07	--
Factor Loadings:										
SBL[a]	.90	.92	.54	.00	.05	.22	.03	.03	-.12	.13
HIF[b]	.03	.08	.31	.40	.76	.70	.88	.77	.12	.73

[a] SBL = Structural Baseline Factor.

[b] HIF = Hypnotic Induction Factor.

levitation. These three measures are indicators of potential success in initiating and sustaining the trance experience. Represented here is the inherent biological, structural or learned trait present in most people which we hypothesize is responsible for trance capacity. The second factor is called the Hypnotic Induction Factor (HIF) which is composed of five items: dissociation (Di), posthypnotic arm levitation (L), control differential (CD), cut-off (CO), and float (F). These measures appear to be indicators of the actual success in maintaining the trance experience once it has been effected through specific instructions.

Implications of the Two Factor Model

The hypothesis that hypnotizability and scores on the HIP are unidimensional was not validated. The results suggest two theoretical models for interpreting the HIP which are reflected in the two scoring methods.

The profile scoring is based on the hypothesis that the relationship between an inherent potential for experiencing hypnosis and the sustained level of the trance experience will be significant; it involves aligning key items from both SBL and HIF. The different profile grades (intacts, decrements, softs, increments, averagings, special zeros)[5] indicate different kinds of relationships between the two factors.

The induction method of scoring is established upon another hypothesis — that hypnotizability, like other psychological variables, will be unidimensional. Hence, the induction scoring is restricted to items that measure only success in maintaining trance (HIF). This method gives a purely empirical measure based solely on the results of the factor analysis.

METHODS OF SCORING THE HIP: RATIONALE AND RESULTS

The Profile Score

The Hypnotic Profile Score describes a response pattern or profile configuration which is established by the patient as his responses to trance are recorded and represented by components of both SBL and HIF factors. The purpose of this score is to tap and trace the patient's flow of concentration from a stage of customary awareness or preinduction phase through the trance experience or induction phase. The score is derived from three central components of the HIP: ER which is part of the SBL factor, and L and CD which are parts of the HIF

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[5] These profile grades are described specifically in the HIP manual (Spiegel, 1974a).

factor. Other HIP items are not essential to the profile score. They are part of the induction score, and/or fill in the clinical picture outlined by the profile configuration, and form the procedure for entering and exiting the trance state. Hypnotizability as reflected by the profile score is not an either/or phenomenon, but extends from non-hypnotizable (grade 0) through extremely hypnotizable (grade 5), including slightly hypnotizable (grade 1), moderately hypnotizable (grade 2), highly hypnotizable (grade 3), and very highly hypnotizable (grade 4).

An intact profile (see Figure 1) greater than intact grade zero, connotes hypnotizability. The intact profile is one in which ER, L, and CD all score greater than zero — these scores remain in the zone of

FIG. 1. Sample score sheet for an intact profile.

attentive concentration. The configurations of straight intacts, increments, averagings, and grade 5's all fall within this zone.[6]

A straight zero profile is one in which all of the above three items score zero,[7] thereby forming a profile wholly outside the zone of attentive concentration. It is considered intact, but it represents non-hypnotizability. The decrement profile begins in the zone of concentration by scoring a positive ER, but collapses out of it with a score of zero for CD. It is thereby considered a "non-intact" pattern, and it represents a refractory or dysjunctive capacity for trance experience. Decrements are not representative of hypnotizability. Although both the straight grade zero and decrement pattern indicate a lack of hypnotizability, they are considerably different structurally and clinically. It is hypothesized that the straight zero's non-hypnotizability reflects an absence of the inherent capacity for trance, whereas the decrement profile seems to indicate that the necessary biological substructure is present, but there is a pathological inability to focus through and sustain contact with it for any period of time.

The soft profile indicates that the pattern of integrated concentration veers toward the border of collapse but remains within the zone of attentive concentration well enough to permit the discovery of a positive CD. A soft profile has a positive ER, a zero L, and a positive CD. The soft profile indicates a borderline zone between the intact and decrement groups (Spiegel et al., 1975).

Overall hypnotizability distributions based on profile scoring are given in Figure 2. Approximately 50% of all patients are hypnotizable with grades 2 or 3. Some 10% are hypnotizable above and 10% are hypnotizable below this level. 16% to 18% are decrements and approximately 5% are zeros.

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[6] The straight intact, increment, averaging, and grade 5 profiles all score positive in the ER, L, and CD. In a straight intact profile, the ER and L scores are within one unit of each other. In an increment profile, the L score is more than one unit greater than the ER score. In the averaging profile, the L score is more than one unit less than the ER score. All grade 4's are potentially grade 5's. A grade 5 is identified by further testing for three characteristics: 1) global amnesia, 2) the ability to maintain posthypnotic sensori-motor alterations, and 3) the ability to experience regression in the present tense. A grade 4-5 is a grade 4 who shows some but not all the grade 5 phenomena. The small frequency of these non-straight variations within the intact zone led us to group them with the straight intacts. When a larger sample of these patterns is available, further independent analysis will be carried out.

[7] Less than 1% of the zero group are "special zeros." These patients have zero ER scores and either positive L scores or positive CD scores, but not both. We hypothesize that these rare cases are due to specific organic deficits in extra-ocular muscle innervation.
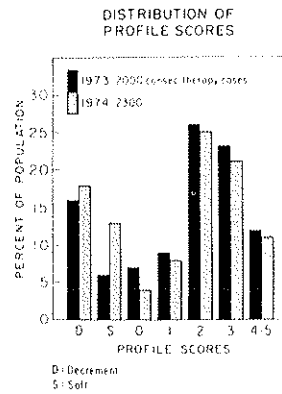
FIG. 2. Overall hypnotizability distribution based on profile scoring.

The Induction Score

Again, the purpose of the Hypnotic Induction Score is to describe the actual trance level achieved once hypnosis is effected through the induction procedure or instruction period. It is a measure of the subjective experience and motor expression of hypnosis.

The induction score for each profile is computed by adding the scores of the five components which have the greatest loadings on HIF factor: Di, L, CD, CO, and F. All five measures correlate approximately .70. Therefore no differential weighting is necessary. Item L (0–4 scale) is divided in half to give it equal weighting with the other four items (0–2 scales). In short, the induction score is $\frac{1}{2}$L + Di + CD + CO + F. (Note that the induction scoring method is linear and actuarial. As such it parallels the unidimensional methods employed by laboratory tests of hypnosis such as SHSS).

The induction score can vary from 0 to 10. The mean induction score for the first sample of 1674 patients was 6.7 with a standard deviation of 2.9. The mean for the second sample of 1558 patients was 6.5 with a standard deviation of 2.7. The distribution of induction scores for a subsample of 1339 is given in Figure 3.

The distribution is bimodal, indicating that two different and perhaps mutually exclusive kinds of response are being tapped by the induction method. Responses refractory to the trance experience seem to be represented by the first curve (0–3.5) while hypnotizability seems to be represented by the second curve (3.5–10). The two curves have an area of overlap indicating that a bridge exists between the two kinds of response. It is unusual for a scoring technique designed to be linear and unidimensional to segregate persons refractory to the
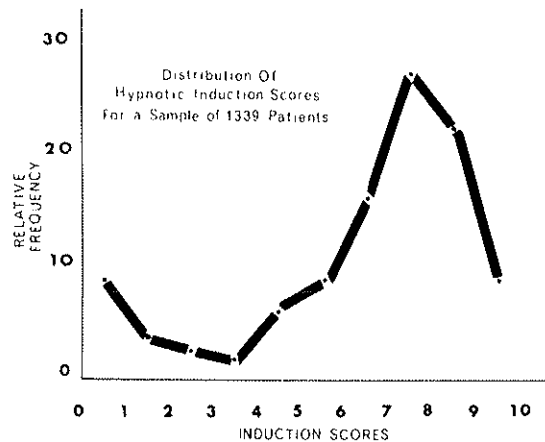
FIG. 3. Distribution of induction scores.

trance experience from those who show little or no capacity for hypnosis.

Theoretically the decrement group (profile scoring) and the 0–3.5 group (induction scoring) are both refractory to the hypnotic experience. Furthermore, the intact group (profile scoring) and the 3.5–10 group (induction scoring) both represent the hypnotizability continuum. The linkages between and within the two scoring methods are clarified by the results of the construct validity analysis and will be discussed in an ensuing paper (Spiegel, Fleiss, Janics, & Aronson, in press).

Eye-Roll

The major component of the SBL factor is the ER sign. Work on ER and its relation to hypnotizability was published in 1972 (Spiegel). The difficulty in clarifying the relationship between the ER sign and hypnotizability reflects the broader problem of bridging the gap between clinical importance and statistical quantification. Clinically, it has been clear for some time now that there is an important relationship between ER and hypnotizability. While no statistical relationships were reported, Spiegel (1972) pointed out that 3 out of 4 persons are capable of hypnosis, and that there appears to be a relationship between ER and specific levels of hypnotizability.

Further evaluation of the 1972 data has since been carried out to establish the relationship between ER and specific HIP grades. The data consisted of 1023 consecutive HIP's obtained in the context of psychotherapeutic consultation from October 1968 to June 1970. For the present analysis, three approaches to HIP scoring were used. The

TABLE 2

CORRELATIONS AMONG HIP SCORES AND WITH THE EYE-ROLL SIGN IN AN
UNSELECTED PATIENT POPULATION ($N = 1023$) AND IN A NON-PSYCHOTIC PATIENT
POPULATION ($N = 55$)

Scoring Method	ER	P	QP	I	ER
ER (Eye-Roll) ($N = 1023$)	—				
P (Profile)	.41*	—			
QP (Quasi-Profile)	.25	.94*	—		
I (Induction)	.22	.84*	.87*	—	
ER (Eye-Roll) ($N = 55$)	—	.65*	.51*	.52*	—

* Denotes statistical significance at $p < .001$. All other correlations are significant at $p < .01$.

profile and induction methods as already discussed, and for the purposes of this study only, a "quasi-profile" score was derived which follows the profile procedure except that ER is not included. The "quasi-profile" score is a two-point scale where the relationship between the two points, levitation and control differential, defines the final score. The "quasi-profile" score was developed to avoid inflating the correlation between the ER and the profile score due to the presence of the ER in both. For the purposes of quantification, the profile and "quasi-profile" scores were arranged along a seven-point continuum as follows:

Profile & Quasi-Profile Score[8]   D   S   0   1   2   3   4

Scaled Score   1   2   3   4   5   6   7

Correlations among the scores and of ER with the different scores are presented in Table 2.

These results show that in the overall patient population, ER is at best only slightly predictive of hypnotizability. Examination of the data indicates that the lack of strong correlation can be largely attributed to those patients showing soft and decrement profiles. In the light of a previous study (Spiegel et al., 1975) which showed a predictive relationship between decrement profiles and severe psychopathology, as well as a high incidence of softs in the psychotic range of the mental health-mental illness continuum, we examined the relationship between ER and hypnotizability in a population showing no signs of psychosis.

The data for this evaluation of patients showing no signs of severe personality disturbance or psychosis were collected as part of the clinical work-up, and the implication for both the therapist and the patient was that the information would facilitate the treatment proc-

[8] "D" represents "decrement"; "S" stands for "soft."

ess. The HIP was administered in the first interview, and shortly thereafter the patients were sent for independent full-scale psychological testing. The psychological evaluation consisted of the Wechsler Adult Intelligence Scale (1955), Machover Draw-a-Person Test (1949), Sentence Completion Test (1972), Visual Motor Gestalt Test (1946), Rorschach (1954), and the Thematic Apperception Test (1943).[9] A five-point clinical distribution was established, covering the range from healthy to obviously psychotic. The categories were (A) healthy; (B) moderate neurosis; (C) severe neurosis; (D) probable psychosis, severe character disorder, schizophrenia (latent); and (E) obvious psychosis. These categories are not mutually exclusive and represent a continuum. The psychological reports were evaluated in terms of these five categories by a psychiatrist who was not aware of the patients' HIP grade. Out of 105 consecutive cases, 55 patients showed no signs of severe disturbance, in other words, they fell into categories A, A-B, B, B-C.

The three scoring techniques described above were applied to the HIPs and product-moment correlations were calculated for each with ER. The results, which are presented in Table 2, support the hypothesis that the ER is predictive of hypnotizability in a population filtered to eliminate any persons showing signs of severe psychiatric disturbance.

RELIABILITY AND VALIDITY

Correlation Between Scores

The correlation coefficient relating the profile and induction scores is .84, indicating excellent concordance between the two scoring systems ($N = 1023$).

Inter-Tester Reliability

A reliability evaluation was carried out at the out-patient department of the Payne Whitney Clinic, Cornell Medical School, by two of the authors (H.S. and J.H.), one of whom was recently trained in the use of HIP. The testers independently completed HIPs on the same 53 patients. The raters had no knowledge of each other's evaluations and the order of the interviewing was systematically varied to eliminate biasing effects.

The intraclass correlation coefficient of reliability for the profile scores was .62, indicating adequate reliability. Scoring the same data using the induction scoring method the intraclass correlation coeffi-

cient was .75. These reliabilities compare favorably with reliability measures for well-trained raters using standardized rating scales.

Test-Retest Reliability

The senior author saw and tested 75 patients two times with a time lag of from a few months to 3 years. The test-retest reliability for these patients' profile scores was .66. Using induction scoring the test-retest reliability was .76.

Validity

The distribution of HIP scores compares well with the distribution found by using other measures (Weitzenhoffer & Hilgard, 1959). This gives a presumptive indication of HIP's validity. The stability of the distribution over time (see Figure 2) is a further indication of the HIP's reliability.

An unpublished validation study[10] indicates that the profile score correlates .55 with SHSS:C ($N = 70, p < .001$).

DISCUSSION

The results of the various studies reported here support the basic claim that HIP is a valid and reliable measure of hypnotizability. There are still, however, some perplexing questions, as we have tried to indicate by presenting data on the ER and alternative scoring techniques.

For the practitioner involved in a clinical interaction, especially in those cases where the patient's psychological stability is already known, the ER sign is significantly related to hypnotic capacity. There is strong clinical evidence that neurological deficits, drug usage, or other syndromes which severely distort concentration capacity will interfere with trance capacity. This leads to a dual hypothesis:

1. If the subject population is filtered so as to eliminate persons with concentration deficits, a significantly greater number than expected by chance will be hypnotizable. In other words, intact concentration is necessary for hypnotizability.

2. In the above group, there will be a highly significant correlation between their ER signs and their hypnotizability scores.

Research is now in progress trying to establish a relationship between personality styles and specific hypnotizability levels; initial results have been encouraging. Much more work is needed to clarify

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[10] Unpublished study reported in 1974 NIMH (grant #MH 19156) progress report (Unit for Experimental Psychiatry, 111 North 49th Street, Philadelphia, Pennsylvania 19139).

the relationship between hypnotizability, the ER sign, and personality styles. For this research to provide both practical and statistical significance care must be exercised in formulating research designs so that there is a rigorous integration of both the statistical and clinical perspectives.

There are a number of arguments to be made in favor of each of the two methods of scoring HIP. Research is still in progress, and any decisions based on our present results are tentative, pending confirmation by future studies. The induction scoring method is statistically more reliable than the profile method. Correlation between the two methods is excellent ($r = .84$). The higher test-retest reliability of the induction method is to be expected since an increase in range tends to increase reliability. The induction method is based on five measurements and has a range from 0 to 10, whereas the profile method relies on three measures and has a range of seven hypnotizability categories. Consequently, differences between raters will affect the reliability more on one than on the other.

Perhaps the induction scoring method would be more appropriate for strictly experimental work with hypnosis. For clinical application the choice is not so clear. The induction method is a simple unidimensional scoring system. The HIP was designed to avoid just this linearity. By not utilizing SBL items, the induction score does not give any information about the continuity of concentration or the degree of its shift as the patient moves from the structural mode (SBL) to the trance experience (HIF). In effect, this dissociation makes separate identifications of the patient's potential trance capacity and his ability to express it. While in some contexts it may be appropriate to be concerned solely with behavior, in the therapeutic context we are interested in behavior as an expression of the patient's ability to use his inherent resources. Furthermore, the induction scoring system does not permit an adequate separation of low and non-hypnotizable patients into the decrement, soft, or zero categories identified by the profile method. This failure of the induction score to separate these categories clearly is a serious drawback, for our research reveals major clinical differences that are statistically corroborated among these groups (Spiegel et al., 1975). Although the profile scoring method has a somewhat lower statistical reliability, it nevertheless provides distinctly more useful clinical information than the induction method.

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Psychometrische Analyse des hypnotischen Induktionsprofils

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Abstrakt: Es werden hier psychometrische Analysen des Hypnotischen Induktions-Profils (HIP) dargeboten, das ein aus sechzehn Einzelheiten bestehender Test ist, Hypnosefähigkeit zu messen. Die durch HIP überwachten Sequenzphasen des Tranceerlebens sind hier kurz summiert. Auf Grund ei. er Analyse der individuellen Detailfaktoren, die die Resultate bei 1674 Patienten beeinflussten, traten zwei distinkte Faktoren hervor. Der eine war hauptsächlich durch Aufwärtsschauen und Augenrollen definiert, der andere durch mehrere, nachfolgende Einzelheiten. Zwei Methoden für die Bewertung des HIP werden hier definiert, nämlich eine strukturelle Methode, die beide Faktoren einschliesst (Bewertung der Profilsmasze) und

eine statistische Methode, die nur Einzelheiten des zweiten Faktors benutzt (Be-
wertung der Induktionsmasze). Wie von der Faktorenanalyse erwartet, wurde
durch das Messen mit beiden Methoden festgestellt, dass das Augenrollen nur in
geringem Masze mit dem HIP verbunden ist. Die Korrelation zwischen Induktions-
maszen und Augenrollen ist .22 bei einem Muster von 1023 Patienten. Solch eine
Korrelation ist bedeutend, obgleich sie nur 5 Prozent der Abweichung in Betracht
zieht, die Augenrollen und Induktionsmasze gemein haben. Dass die niedrige Korre-
lation möglicherweise eine Funktion der Beziehung zwischen Hypnotisierbarkeit
und Psychopathology ist, wird durch eine höchst bedeutende Korrelation (r = .52)
zwischen Augenrollen und Induktionsmaszen bei einem Bevölkerungsmuster, das
als nicht-psychotisch ausgewählt war, veranschaulicht. Die Nützlichkeit des HIP in
Beziehung zu Psychodiagnose ist anderswo demonstriert worden und ist daher nicht
das Thema dieser Abhandlung. Hier werden Beweise für die Zuverlässigkeit der
Profils-   und   Induktionsmasze   erbracht,   wobei   beide   zufriedenstellende
Verlässlichkeiten ergaben. Eine gewisse Bestätigung der Gültigkeit dieser Befunde
ergibt sich durch befriedigende Korrelationen mit existierenden, standardisierten
Maszstäben. Die Korrelation zwischen dem HIP und dem Stanford-Hypnoseemp-
find lichkeitsmaszstab ist .55.

Analyse psychométrique du Profil d'Induction Hypnotique

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Résumé: L'article rapporte des analyses psychométriques du Profil d'Induction
Hypnotique (HIP) de Spiegel (1974a), une échelle de 16 points construite pour me-
surer la capacité hypnotique. Les phases séquentielles de l'expérience de la transe,
telles que décelées par le HIP, sont résumées brièvement. Sur la base d'une analyse
factorielle des item individuels qui constituent les scores de 1674 patients, deux
facteurs distincts surgissent: l'un, défini principalement par les item "fixation des
yeux vers le haut" et "roulement des yeux", l'autre, par certains item subséquents.
Deux méthods de cotation du HIP, une méthode de configuration impliquant les
deux facteurs (cotation par profils) et une méthode actuarielle basée uniquement
sur des item du second facteur (cotation de l'induction). Tel que prévu par l'analyse
factorielle, le roulement des yeux est peu relié au HIP, quelle que soit la méthode de
cotation. La corrélation de la cote d'induction et du roulement des yeux est de .22,
dans un échantillon de 1023 patients. Une telle corrélation est significative, bien
qu'elle ne rende compte que de 5% de la variance que le roulement des yeux et al
cote d'induction ont en commun. Le fait que cette faible corrélation puisse être
fonction de la relation entre l'hypnotisabilité et la psychopathologie est démontré
par une corrélation hautement significative (r = .52) entre le roulement des yeux et
les cotes d'induction dans une population choisie comme non-psychotique. L'utilité
du HIP par rapport au psychodiagnostic a été démontrée ailleurs et n'est pas le
sujet de cet article. Les résultats démontrent que la cotation de l'induction et la
cotation par profils ont toutes deux une fidélité satisfaisante. Certaines informa-
tions sur la validité découlent de corrélations satisfaisantes avec les échelles stand-
ardisées existantes. La corrélation du HIP et de l'Echelle de susceptibilité hypno-
tique de Stanford (Weitzenhoffer et Hilgard, 1959) est de .55.

Análisis psicométrico del perfil de inducción hipnótica

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Resumen: Este artículo presenta análisis psicométricos del Perfil de Inducción Hipnótica (HIP), test de 16 puntos diseñado para medir la capacidad hipnótica. Se exponen, brevemente resumidas, las fases secuenciales de la experiencia de trance tal como las define el HIP. A partir de un análisis factorial de los items individuales que intervienen en los HIP de 1.647 pacientes, se obtienen dos factores distintos; uno, ampliamente definido por los items "mirada fija" y "juego ocular", y el otro, por algunos de los items subsiquientes. Se definen dos sistemas de puntuación del HIP: un sistema configurativo que comprende ambos factores (puntuación del perfil) y un sistema actuarial que utiliza únicamente items del segundo factor (puntuación de la inducción). De acuerdo con lo previsto a partir del análisis factorial, el juego ocular guarda escasa relación con el HIP evaluado por uno u otro sistema. La correlación entre la puntuación de la inducción y el juego ocular es de .22 en una muestra de 1023 pacientes. Esta correlación es significativa, aunque sólo explica el 5% de la varianza común al juego ocular y a dicha puntuación. Una correlación altamente significative (r = .52) entre el juego ocular y las puntuaciones relativas a la inducción en una población seleccionada como no psicótica, sugiere que la baja correlación anteriormente mencionada puede deberse a la relación entre la susceptibilidad hipnótica y la psicopatología. La utilidad del HIP en relación con el psicodiagnóstico ha sido demostrada en otra parte y no constituye pues el objeto del presente artículo. Se pone en evidencia la fiabilidad satisfactoria de las puntuaciones del perfil y de la inducción, respectivamente. Las correlaciones, igualmente satisfactorias, con las escalas estandardizadas existentes proporcionan alguna información acerca de la validez. La correlación entre el HIP y la Escala de Susceptibilidad Hipnótica de Stanford es de .55.