

ATTITUDES AND BELIEFS ABOUT HYPNOSIS: A MULTICULTURAL STUDY

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Abstract

The aim of this study is to examine the effects of having personal experience and information about hypnosis over the beliefs and attitudes toward hypnosis, using a sample of students from Spain, United States, Portugal and Romania. The factor structure of the Revised Valencia Scale of Attitudes and Beliefs toward Hypnosis-Client Version, as well as its psychometric properties are also analyzed. An exploratory factor analysis of the scale was conducted and an 8-factor model solution similar to the one found in other versions of this scale was obtained: Help, Personal Control, Magical Solution, Interest, Collaboration, Fear, Memory/Trance and Marginal. Results also indicated that participants who had previously experienced hypnosis and/or based their knowledge of hypnosis on scientific sources scored, in general, higher in factors indicating positive attitudes and correct beliefs about hypnosis. Copyright © 2008 British Society of Experimental & Clinical Hypnosis. Published by John Wiley & Sons, Ltd.

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Introduction

It is widely acknowledged that the assessment of people's attitudes and beliefs toward hypnosis is relevant for several reasons. The first one is that it has been found that holding positive attitudes toward hypnosis is associated to positive outcomes of the therapy (Barber, Spanos and Chaves, 1974; Schoenberger, Kirsch, Gearan, Montgomery and Pastyrnak, 1997; Chaves, 1999). Secondly, attitudes are very important in the establishment of rapport and in increasing sensations of relaxation and well-being (Sheehan, 2001). Moreover, in some studies it has been found that attitudes have an influence on absorption (i.e. involvement in imaginary activities of everyday life) and hypnotic suggestibility (Barber and Calverley, 1964; Spanos and Barber, 1974; Spanos and McPeake, 1975; Sheehan and Perry, 1977).

A variety of studies have examined the sources of information on which people base their knowledge about hypnosis and the attitudes they hold toward it. Barling and De Lucchi (2004) found in their study that people whose source of information was their personal experience with hypnosis showed significantly more accurate knowledge about

hypnosis and less fear to be hypnotized. In addition, they showed more positive attitudes toward hypnosis than those whose source of information was stage hypnosis/television presentations. The same results were found in McIntosh and Hawney's (1983) study, conducted with a sample of patients in Scotland and in Gow, Mackie, Clohessy, Cowling, Maloney and Chant's (2006) study with an Australian sample. Likewise, research carried out with a sample of students from Hong Kong (Yu, 2006) showed that there was not much information available and that most of it was entertainment focused. Moreover, the participants presented misconceptions and negative attitudes toward hypnosis and reported their reluctance to be hypnotized (Yu, 2004; 2006).

Studies conducted in different countries regarding students' beliefs and attitudes toward hypnosis have revealed that they hold misconceptions concerning the nature of hypnosis, such as that hypnosis is an altered state of consciousness, wherein subjects experience hypnotic effects without any conscious effort to make them happen; that hypnotic suggestions enable people to recall things that they would not remember otherwise; that hypnotized people forget what happened during hypnosis; and that it could force them to tell the truth about things they would normally lie about (McConkey and Jupp, 1985–86). Similar findings were reported by Daghish and Wright (1991) in their study with a sample of Scottish students. In addition, Channon (1984) found that Australian medical students did not consider hypnosis as a major medical treatment modality and relatively few physical problems were perceived as being amenable to be treated with hypnosis.

A multicultural study conducted by Green, Page, Rasekhy, Johnson and Bernhardt (2006) assessed students' attitudes and beliefs about hypnosis in four countries (Australia, Germany, United States and Iran) using three different scales. Results indicated that, regardless of the fact that responses to some items varied by country, a number of views and attitudes about hypnosis were not specific to the students' culture.

In the present study, the effects of the sources of information about hypnosis and personal experience over attitudes towards hypnosis are examined with a sample of students from the following countries: Spain, United States, Portugal and Romania. The assessment instrument is the *Revised Valencia Scale of Attitudes and Beliefs toward Hypnosis-Client Version* (Capafons, Alarcón, Cabañas and Espejo, 2003; Capafons, Cabañas, Espejo and Cardeña, 2004). The original version of this scale consisted of 28 items based on several questionnaires (McConkey and Jupp, 1985–86; McConkey, 1986; Spanos, Brett, Menary and Cross, 1987; Keller, 1996; Nickisson, 1997; Eimer and Freeman, 1998) and on the seven misconceptions about hypnosis proposed by Capafons (1998). An exploratory factor analysis (Capafons et al., 2003) turned out six factors, namely, Automatism, Help, Personal Control, Interest, Magical Solution and Collaboration. One item was eliminated because of low loading in the factor analysis. A total of seven items were added: three items were aimed to form a new factor regarding memory recollection associated to hypnosis; three other items to create a new factor related to the idea that hypnosis is not considered as a part of scientific research; and a final item was added to the Magical Solution factor. Confirmatory factor analysis using a sample from 5 Spanish-speaking countries confirmed this 34-item version measuring eight attitudinal factors: Automatism, Help, Personal Control, Interest, Magical Solution, Collaboration, Memory and Marginal (Capafons et al., 2004).

Subsequently, this version of the scale was modified and enlarged resulting in a revised 37-item version. Thus, the wording of some items was improved and items containing two ideas were split into two different items. The psychometric properties and factorial structure of this revised version of the scale were examined using a Portuguese

sample (Carvalho, Capafons, Kirsch, Espejo, Mazzoni and Leal, 2007). An 8-factor structure was obtained: Interest/Liking, Memory/Magic, Help, Control, Cooperation, Marginal, Fear and Automaton. Additionally, the scale showed good internal consistency and reliability.

Finally, Capafons, Morales, Espejo and Cabañas (2006) adapted the revised client version of the scale to assess therapists' attitudes and beliefs about hypnosis. A confirmatory factor analysis was performed on this version (Capafons, Espejo and Mendoza, 2008). Results revealed statistical confirmation for the 8-factor model solution: Fear, Memory, Help, Control, Collaboration, Interest, Magic and Marginal. This structure was similar to the one found in the revised client version (Carvalho et al., 2007). The scale also showed adequate psychometric properties, including good internal consistency and test-retest reliability (Capafons et al., 2008).

In view of the similarity of the factor structures obtained in the above mentioned research for the different versions of the VSABH with different cultures, in this study we expected to find a similar 8-factor model solution. However, the main goal of this research was to assess the hypothesis that those students who have had personal experience with hypnosis and/or have obtained their knowledge about hypnosis from scientific sources will show more positive attitudes toward hypnosis and will hold fewer misconceptions about it.

Method

Participants

The sample consisted of undergraduate Psychology students attending universities in four countries, namely, University of Valencia, Spain (38.8%); Ohio State University at Lima, United States (36%); Babes-Bolyai University, Romania (14.1%); and University of Coimbra and University of Algarve, Portugal (11.1%).

Spain

A total of 1,103 students completed the questionnaire; 19.9% were male and 80.1% were female. The average age was 20.9 (SD = 5.7) and 96.9% had not been hypnotized previously. 49.7% had never received any information about hypnosis before their participation in this study. Of the remaining 50.3%, 32.4% had received information about hypnosis in courses taught in the University or elsewhere and by reading scientific articles; and 67.7% had indicated that their information about hypnosis came from other readings, television and other sources.

United States of America

Of the 1,024 participants from the US, 35.2% were male and 64.8% were female (M age = 22.8, SD = 7.2). 92.4% of participants had never been hypnotized and 71.7% had never received information about hypnosis. Among those who had received information about hypnosis, 18.4% indicated that their sources were courses in the University or elsewhere and scientific texts.

Romania

Of the 402 respondents from this country, 14.4% were male and 85.6% were female. The average age was 20.3 (SD = 1.3) and only 1.5% had been hypnotized. 62.3% had received information about hypnosis and among them, 39.8% based their knowledge on scientific information.

Portugal

The Portuguese sample comprised 315 participants – 21.9% were male and 78.1% were female (M age = 21.4, SD = 3.7). 40% of respondents had been hypnotized previously and 49.2% had received information about hypnosis. Among those who had received information, 33.7% indicated their sources were scientific material (training courses in the University or elsewhere and scientific readings).

Measures

The *Revised Valencia Scale of Attitudes and Beliefs toward Hypnosis-Client Version* (Capafons et al., 2003; Capafons et al., 2004; Carvalho et al., 2007; see Appendix) consists of 37 items assessing beliefs and attitudes toward hypnosis. The items are rated on a 6-point scale from ‘totally agree’ (1) to ‘totally disagree’ (6).

Participants also completed a questionnaire including questions about whether they had been previously hypnotized and the sources wherefrom they had obtained their knowledge about hypnosis if they had any, as well as demographic questions.

Both the questionnaire items and the VSABH-C were translated from the Spanish original versions into English and Romanian by two psychologists who are bilingual in these languages. The Portuguese version used for this study was the one validated by Carvalho et al. (2007), which had been also back-translated by a bilingual Spanish person to ensure the accuracy of the translation.

Procedure

The VSABH-C and the questionnaire were distributed to the students, who were told that their data would be confidential and anonymous. Also, participants were asked to write down an identifier so that in a subsequent study their responses in the retest could be matched and compared with their previous responses. Participation was voluntary and did not include any type of compensation.

Analyses

The whole sample was used for all the analyses. First, an exploratory factor analysis (EFA) was conducted using the Statistical Package for Social Sciences (SPSS) for Windows version 15.0. Principal-axis extraction was utilized with an oblique rotation (oblimin with Kaiser normalization, delta = 0.2). The selection of this method was based on the hypothesis that the factors of the scale would be correlated with each other. Cronbach’s alpha coefficients for each factor were used to determine the internal consistency of the scale (Cronbach and Meehl, 1951).

Correlations among factors and between factors and age were estimated for the whole sample. In addition, exploratory t-tests were conducted to examine gender differences.

Finally, t-tests with Bonferroni correction for each factor ($\alpha/8$) were performed to assess whether scientific knowledge and personal experience with hypnosis facilitate positive attitudes and reduce misconceptions about hypnosis. These t-tests were aimed at determining whether there were differences between participants responding affirmatively and negatively to the following items: a) ‘having been hypnotized’; b) ‘having been hypnotized by a professional’; c) ‘having received information about hypnosis’; and d) ‘having received scientific information about hypnosis (training courses at the university, other courses and other scientific readings)’.

Results

Exploratory factor analysis resulted in an 8-factor solution that accounts for 56.1% of the common variance (Tables 1 and 2). Item 21 presented the lowest loading of all (−0.346) and only four items loaded high and simultaneously in several factors: item 7 (factors 2, 3, 6 and 8), item 29 (factors 1 and 4) and items 16 and 22 (factors 2 and 6). Items 16 and 29 were retained in the highest factor loading, since they were more related to the content of the factor. However, items 7 and 22 were eliminated.

Table 1. Factor loading for the 37-item Revised VSABH-C

	Help	Control	Magical Solution	Interest	Collaboration	Fear	Memory/ Trance	Marginal
Item 10	0.753	−0.125	0.151	−0.463	0.322	−0.144	0.234	0.093
Item 37	0.738	−0.103	0.060	−0.428	0.295	−0.127	0.354	0.094
Item 12	0.737	−0.019	0.075	−0.380	0.379	−0.084	0.329	0.057
Item 23	0.727	−0.117	0.099	−0.430	0.290	−0.089	0.342	0.059
Item 1	0.625	−0.066	0.144	−0.434	0.376	−0.140	0.291	0.090
Item 17	0.427	−0.373	0.235	−0.365	0.146	−0.192	0.156	−0.011
Item 25	0.149	−0.738	−0.129	−0.193	0.015	−0.392	−0.239	0.225
Item 15	0.142	−0.731	0.001	−0.185	0.027	−0.341	−0.158	0.111
Item 14	0.018	−0.643	−0.052	−0.091	−0.011	−0.331	−0.271	0.117
Item 24	0.120	−0.419	−0.113	−0.111	0.098	−0.166	−0.074	0.037
Item 21	−0.002	−0.346	0.103	−0.040	0.000	−0.013	−0.002	−0.071
Item 6	0.202	0.036	0.614	−0.174	−0.008	0.163	0.370	−0.271
Item 5	0.023	0.066	0.543	−0.064	−0.160	0.116	0.197	−0.280
Item 9	0.241	−0.106	0.488	−0.217	−0.023	0.117	0.317	−0.182
Item 7	−0.004	0.432	0.478	0.037	0.125	0.442	0.373	−0.426
Item 26	0.508	−0.115	0.074	−0.920	0.211	−0.347	0.236	0.053
Item 27	0.494	−0.136	0.051	−0.910	0.219	−0.381	0.214	0.080
Item 28	0.427	−0.227	0.228	−0.774	0.127	−0.295	0.248	−0.050
Item 29	0.444	−0.214	0.316	−0.493	0.104	−0.077	0.341	−0.137
Item 2	0.372	−0.015	−0.096	−0.210	0.611	−0.057	0.128	0.040
Item 13	0.331	−0.032	−0.190	−0.189	0.599	−0.053	0.182	0.068
Item 8	0.222	−0.141	−0.126	−0.125	0.549	−0.032	0.020	0.029
Item 3	0.241	0.074	0.264	−0.192	0.387	0.039	0.306	−0.214
Item 20	−0.162	0.310	0.041	0.312	−0.046	0.781	0.162	−0.277
Item 18	−0.079	0.188	0.178	0.242	0.026	0.772	0.200	−0.241
Item 19	−0.025	0.354	0.199	0.139	0.080	0.632	0.252	−0.370
Item 4	−0.178	0.141	0.095	0.389	0.021	0.620	0.084	−0.193
Item 22	−0.073	0.502	0.277	0.112	0.053	0.521	0.290	−0.420
Item 16	0.331	−0.474	0.185	−0.371	0.167	−0.508	0.017	0.029
Item 32	0.299	0.151	0.231	−0.245	0.198	0.138	0.692	−0.230
Item 30	0.376	0.029	0.259	−0.308	0.110	0.069	0.678	−0.129
Item 31	0.183	0.190	0.188	−0.103	0.106	0.223	0.669	−0.188
Item 33	0.261	0.157	0.112	−0.174	0.331	0.084	0.386	−0.299
Item 36	−0.057	0.097	0.172	0.048	−0.008	0.277	0.180	−0.609
Item 35	−0.151	0.021	0.216	0.069	−0.038	0.229	0.131	−0.599
Item 11	−0.074	0.065	0.359	0.013	−0.029	0.132	0.078	−0.434
Item 34	−0.062	−0.046	0.187	−0.016	0.079	0.099	0.112	−0.404

The first factor (eigenvalue of 6.17) accounts for 16.68% of the common variance and consists of the following items: 1, 12, 17, 23 and 27. It is called Help and describes hypnosis as a helpful technique to obtain therapeutic outcomes.

The second factor (eigenvalue of 5.1) accounts for 13.68% of the common variance. It is called Personal Control and its items are: 14, 15, 21, 24 and 25. The content of the factor indicates that hypnotized people control their acts and that hypnotic responses are voluntary.

The third factor (eigenvalue of 2.45) accounts for 6.61% of the common variance and it is formed by the following items: 5, 6, 7 (eliminated) and 9, whose content describes hypnosis as a Magical Solution to overcome problems, effortlessly and without regarding other necessary factors for changing.

The fourth factor (eigenvalue of 1.96) accounts for 5.31% of the common variance. It is called Interest and consists of the following items: 26, 27, 28 and 29. The content of the factor concerns the interest and pleasure that somebody shows for hypnosis or for being hypnotized.

The fifth factor (eigenvalue of 1.55) accounts for 4.20% of the common variance. It is called Collaboration and consists of the following items: 2, 3, 8 and 13. Its content refers to the need for collaboration between the hypnotist and the hypnotized person to achieve hypnotic responses.

The sixth factor (eigenvalue of 1.29) accounts for 3.48% of the common variance. Its items are the following: 4, 16, 18, 19, 20 and 22 (eliminated). It is called Fear, because its content is associated to being afraid of losing control while hypnotized, of being under the control of the hypnotist, of becoming trapped in a hypnotic trance and not being able to 'come out' of it.

The seventh factor (eigenvalue of 1.23) accounts for 3.32% of the common variance and consists of the following items: 3, 31, 32 and 33. It is called Memory/Trance and its content indicates the belief that hypnotized people are in a trance state that allows them to have access to memories of past events that otherwise they would not remember. It also refers to the description of hypnosis as a means of forcing people to tell the truth about everything they would normally lie about.

Lastly, the eighth factor (eigenvalue of 1.05) accounts for 2.83% of the common variance and is formed by the following items: 11, 34, 35 and 36. It is called Marginal and its content includes the beliefs that hypnosis is beyond the scope of scientific research and that the hypnotized person has some characteristics that are not normal.

Cronbach's alpha coefficients for each subscale are showed in Table 2. All factors presented a satisfactory internal consistency, being the lowest value for Magical Solution factor (consisting of only three items).

Correlations among factors are displayed in Table 3. Most of the factors show statistically significant correlations, which supports the choice of oblique rotation in the EFA. Moreover, as is shown in Table 3, age presents statistically significant correlations with Control, Magical Solution, Collaboration, Fear and Memory/Trance factors. However, this may be due to the large size of the sample. Since the absolute value of these correlations is practically nil, it can be asserted that the relation among those variables is very low.

With regard to the t-test performed for gender (Table 4), women showed higher scores than men in Collaboration, Fear and Memory/Trance factors; whereas men showed higher scores in Control and Marginal factors.

The t-tests conducted to determine the effect of scientific knowledge and personal experience with hypnosis (Table 4), revealed the following results. There were significant

Table 2. Internal consistency of factors

	N ítems	α
Help	6	0.82
Control	5	0.72
Magical Solution	3	0.59
Interest	4	0.85
Collaboration	4	0.59
Fear	5	0.78
Memory/Trance	4	0.69
Marginal	4	0.58

differences in all factors except for Collaboration and Magical Solution depending on whether participants had been hypnotized or not. Specifically, those participants who had been hypnotized showed higher scores in Help, Control and Interest factors and lower scores in Fear, Memory/Trance and Marginal factors. Significant differences were not found for participants who had been hypnotized by a professional.

Relative to the variable of having received information about hypnosis, except for Memory/Trance factor, all the other factors revealed statistically significant differences in the predicted direction, namely, participants who had received information about hypnosis showed higher scores in Help, Control, Interest and Collaboration factors and lower scores in Magical Solution, Fear and Marginal.

Finally, relative to the type of information received, there are statistically significant differences in all factors in the expected direction. Participants who had received scientific information showed higher scores in Help, Control, Interest and Collaboration factors and a lower score in Magical Solution, Fear, Memory/Trance and Marginal factors.

Discussion

The exploratory factor analysis of the *Revised Valencia Scale of Attitudes and Beliefs toward Hypnosis-Client Version* provided an 8-factor solution model. The factor structure obtained with this multicultural sample is similar to the one found in a previous study using a Portuguese sample (Carvalho et al., 2007) and to the structure obtained for the Therapist version of this scale with a Spanish sample (Capafons et al., 2008). Hence, this structure seems to be generalized to different cultures.

Overall, significant correlations among factors were in the expected directions, indicating that accurate beliefs about hypnosis are correlated with positive attitudes and that misconceptions are correlated with negative attitudes toward hypnosis. Similar results were found in previous studies (Capafons et al., 2004; Capafons, Morales, et al., 2006; Carvalho et al., 2007).

All internal consistency coefficients were acceptable for each factor of the scale. Therefore, the Revised VSABH-Client version presents adequate psychometric properties and is a good instrument to measure beliefs and attitudes toward hypnosis.

Relative to the effects of having experienced hypnosis, results indicated that participants who have been hypnotized previously scored higher in factors indicating positive

Table 3. Correlations among factors and correlations between factors and age

	Age	Help	Control	Magical Solution	Interest	Collaboration	Fear	Memory/Trance
Help	0.00	—	—	—	—	—	—	—
Control	0.056 (**)	0.151 (**)	—	—	—	—	—	—
Magical Solution	-0.049 (*)	0.209 (**)	-0.049 (**)	—	—	—	—	—
Interest	-0.02	0.520 (**)	0.171 (**)	0.192 (**)	—	—	—	—
Collaboration	-0.066 (**)	0.401 (**)	0.038 (*)	-0.03	0.226 (**)	—	—	—
Fear	-0.051 (**)	-0.188 (**)	-0.372 (**)	0.121 (**)	-0.355 (**)	-0.03	—	—
Memory/Trance	-0.067 (**)	0.348 (**)	-0.188 (**)	0.305 (**)	0.266 (**)	0.248 (**)	0.141 (**)	—
Marginal	-0.01	-0.101 (**)	-0.060 (**)	0.275 (**)	-0.02	-0.02	0.224 (**)	0.183 (**)

* p < 0.05; ** p < 0.01.

Table 4. t-tests for differences between means (N_{males} = 707; N_{female} = 2130)

FACTORS	a		b		c		d		Gender	
	Mean Dif.	t	Mean Dif.	t	Mean Dif.	t	Mean Dif.	t	Mean Dif.	t
Help	0.34	4.8**	0.30	1.9	0.26	8.6**	0.32	9.8**	-0.09	-2.7
Control	0.72	8.1**	0.37	2.1	0.22	6.9**	0.35	9.3**	0.12	3.4**
Magical Solution	-0.20	-2.1	0.03	0.2	-0.21	-5.9**	-0.30	-7.9**	-0.10	-2.6
Interest	0.69	6.9**	-0.12	-0.6	0.32	6.9**	0.28	5.6**	0.10	1.9
Collaboration	0.13	1.9	0.10	0.7	0.16	5.2**	0.18	5.5**	-0.09	-2.9**
Fear	-0.89	-9.8**	-0.16	-0.9	-0.39	-10.3**	-0.48	-11.5**	-0.25	-5.9**
Memory/Trance	-0.33	-3.8**	0.02	0.1	-0.01	-0.3	-0.12	-3.2**	-0.28	-7.3**
Marginal	-0.24	-3.1**	-0.24	-1.5	-0.34	-11.5**	-0.37	-11.1**	0.18	5.1**

Note: a. having been hypnotized (N_{yes} = 133); b. having been hypnotized by a professional (N_{yes} = 60); c. having received information about hypnosis (N_{yes} = 1249); d. having received scientific information about hypnosis (N_{yes} = 811).

* p < 0.05 (with Bonferroni correction: 0.05/8 = 0.006).

** p < 0.01 (with Bonferroni correction: 0.01/8 = 0.001).

attitudes and correct beliefs about hypnosis and lower in factors indicating negative attitudes and myths about hypnosis. The same results were found in participants who had received scientific information about hypnosis.

These findings are consistent with those previously reported in the literature (McConkey, 1986; Green, 2003; Barling and De Lucchi, 2004; Capafons et al., 2005; Capafons et al., 2006; Carvalho et al., 2007) and highlight the relevance of disseminating accurate and scientific information about hypnosis among general public and students.

Future research should be addressed to confirm the factor structure of the scale through a confirmatory factor analysis and to assess test-retest reliability. A previous version of this scale showed to be sensitive to changes in attitudes and beliefs toward hypnosis brought about by interventions designed to modify them (Capafons, Cabañas, Alarcón, Espejo, Mendoza, Chaves and Monje, 2005; Capafons, Selma, Cabañas, Espejo, Alarcón, Mendoza and Nitkin-Kaner, 2006), therefore, continuing research will provide a confirmation of the sensitivity of this revised version.

References

- Barber TX, Calverley DS (1964) Empirical evidence for a theory of 'hypnotic' behavior: effects of pretest instructions on response to primary suggestions. *Psychological Record* 14: 457–67.
- Barber TX, Spanos NP, Chaves JF (1974) *Hypnotism: Imagination and Human Potentialities*. New York: Pergamon.
- Barling NR, De Lucchi DG (2004) Knowledge, attitudes and beliefs about clinical hypnosis. *Australian Journal of Clinical and Experimental Hypnosis* 32: 36–52.
- Capafons A (1998) Hipnosis clinica: una visión cognitivo-comportamental (Clinical hypnosis: a cognitive-behavioral perspective). *Papeles del Psicólogo* 69, 71–88.
- Capafons A, Alarcón A, Cabañas S, Espejo B (2003) Análisis factorial exploratorio y propiedades psicométricas del cuestionario de creencias y actitudes hacia la hipnosis-cliente (Exploratory factor analysis and psychometric properties of the scale on beliefs and attitudes toward hypnosis-client). *Psicothema* 15: 143–7.
- Capafons A, Cabañas S, Alarcón A, Espejo B, Mendoza ME, Chaves JF, Monje A (2005) Effects of different types of preparatory information on attitudes toward hypnosis. *Contemporary Hypnosis* 22: 67–76.
- Capafons A, Cabañas S, Espejo B, Cardeña E (2004) Confirmatory factor analysis of the Valencia scale on attitudes and beliefs toward hypnosis: an international study. *International Journal of Clinical and Experimental Hypnosis* 52: 413–33.
- Capafons A, Espejo B, Mendoza ME (2008) Confirmatory factor analysis of the Valencia Scale on Attitudes and Beliefs toward Hypnosis, Therapist Version. *International Journal of Clinical and Experimental Hypnosis* 56: 281–94.
- Capafons A, Morales C, Espejo B, Cabañas S (2006) Análisis factorial exploratorio y propiedades psicométricas de la escala de Valencia de actitudes y creencias hacia la hipnosis, versión terapeuta (Exploratory factor analysis and psychometric properties of the Valencia Scale of Attitudes and Beliefs toward Hypnosis-Therapist Version). *Psicothema* 18: 810–15.
- Capafons A, Selma ML, Cabañas S, Espejo B, Alarcón A, Mendoza ME, Nitkin-Kaner Y (2006) Change of attitudes toward hypnosis: effects of cognitive-behavioral and trance explanations in a setting of heterohypnosis. *Australian Journal of Clinical and Experimental Hypnosis* 34: 119–34.
- Carvalho C, Capafons A, Kirsch I, Espejo B, Mazzoni G, Leal I (2007) Factorial analysis and psychometric properties of the revised Valencia Scale of Attitudes and Beliefs Towards Hypnosis – Client Version. *Contemporary Hypnosis* 24: 76–85.

- Channon LD (1984) Some preconceptions about hypnosis among pre-clinical students. *International Journal of Clinical and Experimental Hypnosis* 32: 356–61.
- Chaves JF (1999) Applying hypnosis in pain management: implications of alternative theoretical perspectives. In: I Kirsch, A Capafons, E Cardeña, S Amigó (eds) *Clinical Hypnosis and Self-regulation*. Washington DC: American Psychological Association.
- Cronbach LJ, Meehl PE (1951) Construct validity in psychological test. *Psychological Bulletin* 52: 281–302.
- Daglish MRC, Wright P (1991) Opinions about hypnosis among medical and psychology students. *Contemporary Hypnosis* 8: 51–5.
- Eimer BN, Freeman A (1998) *Pain Management Psychotherapy: A Practical Guide*. Nueva York: John Wiley and Sons.
- Gow KM, Mackie C, Clohessy D, Cowling T, Maloney R, Chant D (2006) Attitudes and opinions about hypnosis in an Australian city. *Australian Journal of Clinical and Experimental Hypnosis* 34: 162–86.
- Green JP (2003) Beliefs about hypnosis: popular beliefs, misconceptions and the importance of experience. *International Journal of Clinical and Experimental Hypnosis* 51: 369–81.
- Green JP, Page RA, Rasekhy R, Johnson LK, Bernhardt SE (2006) Cultural views and attitudes about hypnosis: a survey of college students across four countries. *International Journal of Clinical and Experimental Hypnosis* 54: 263–80.
- Keller RF (1996) Hypnosis belief survey. *Psychological Hypnosis* 5: 8–9.
- McConkey KM (1986) Opinions about hypnosis and self-hypnosis before and after hypnotic testing. *International Journal of Clinical and Experimental Hypnosis* 34: 311–19.
- McConkey KM, Jupp JJ (1985–86) A survey of opinions about hypnosis. *British Journal of Experimental Hypnosis* 3: 87–93.
- McIntosh IB, Hawney M (1983) Patients attitudes to hypnotherapy in a general medical practice: a brief communication. *International Journal of Clinical and Experimental Hypnosis* 31: 219–23.
- Nickisson JW (1997) *Hypnosis: attitudes, knowledge and prior experience among psychology and nursing students*. Published Dissertation, University of Northern Colorado, Co. USA.
- Schoenberger NE, Kirsch I, Gearan P, Montgomery G, Pastyrnak SL (1997) Hypnotic enhancement of a cognitive behavioral treatment for public speaking anxiety. *Behavior Therapy* 28: 127–40.
- Sheehan PW (2001) Memory and hypnosis. General considerations. In: G Burrows, RO Stanley, PB Bloom (eds) *International Handbook of Clinical Hypnosis*. Chichester: John Wiley and Sons.
- Sheehan PW, Perry CW (1977) *Methodologies of Hypnosis*. Hillsdale, NJ: Erlbaum.
- Spanos NP, Barber TX (1974) Toward a convergence in hypnosis research. *American Psychologist* 29: 500–11.
- Spanos NP, Brett P, Menary E, Cross W (1987) A measure of attitudes toward hypnosis: relationships with absorption and hypnotic susceptibility. *American Journal of Clinical Hypnosis* 30: 139–50.
- Spanos NP, McPeake JD (1975) Involvement in everyday imaginative activities, attitudes toward hypnosis and hypnotic suggestibility. *Journal of Personality and Social Psychology* 31: 594–8.
- Yu CK-c (2004) Beliefs and attitudes of Chinese regarding hypnosis and its applications. *Contemporary Hypnosis* 21: 93–106.
- Yu CK-c (2006) Sources of information about hypnosis and attitudes towards being hypnotised in Hong Kong. *Australian Journal of Clinical and Experimental Hypnosis* 34: 135–45.

10. What is your rank? 1 = Freshman 2 = Sophomore 3 = Junior 4 = Senior
 11. Which school do you attend: OSU-Lima Rhodes State College
 13. How old are you? _____ years VSABH-C

Next you will find certain questions that will help inform us about your opinions regarding hypnosis. It is not necessary for you to have previous experience with regard to the questions being asked, rather, it is important that you consider what could happen in certain situations. Please indicate the degree to which you agree with the following statements by circling the number that best reflects your opinion, based on the scale presented below.

1	2	3	4	5	6
Completely Disagree	Disagree Considerably	Disagree	Agree	Agree Considerably	Completely Agree

REMEMBER THAT THERE ARE NO RIGHT OR WRONG RESPONSES, AS WE ARE ONLY TRYING TO GET AN IDEA OF YOUR OPINION.

1. Hypnosis can be very helpful to others 1 2 3 4 5 6
2. Hypnosis implies effortful cooperation between the person performing the hypnosis and the client 1 2 3 4 5 6
3. The client must be in a hypnotic trance in order to fulfil the goals of the intervention 1 2 3 4 5 6
4. I am fearful about hypnosis 1 2 3 4 5 6
5. Under hypnosis, achievements can be reached without any effort on the part of the client. 1 2 3 4 5 6
6. Hypnosis can be used as a magical solution to solve problems. 1 2 3 4 5 6
7. I believe that, under hypnosis, a person is like an automaton at the mercy of the individual who is doing the hypnosis. 1 2 3 4 5 6
8. Hypnosis requires effort on the part of the person being hypnotized 1 2 3 4 5 6
9. Hypnosis is all that is necessary in treating most problems ... 1 2 3 4 5 6
10. Hypnosis can be very helpful in improving the effectiveness of treatments for which it serves as an adjunct 1 2 3 4 5 6
11. A hypnotized person is passive. 1 2 3 4 5 6
12. Hypnosis is a complement or a tool for improving psychological therapy 1 2 3 4 5 6

13. In order to hypnotize a person, his or her collaboration is necessary 1 2 3 4 5 6
14. A hypnotized person may ‘come out’ of hypnosis whenever he or she wishes. 1 2 3 4 5 6
15. Under hypnosis, a person maintains his or her volition, in terms of doing whatever he or she wants. 1 2 3 4 5 6
16. Hypnosis is a safe technique and poses few risks 1 2 3 4 5 6
17. Hypnosis boosts one’s capacity for self-control 1 2 3 4 5 6
18. I am afraid of getting ‘stuck’ in a hypnotic trance 1 2 3 4 5 6
19. I believe that under hypnosis, it is possible to lose control. . . . 1 2 3 4 5 6
20. Hypnosis is inherently dangerous. 1 2 3 4 5 6
21. Everything that occurs under hypnosis is caused by the client 1 2 3 4 5 6
22. Under hypnosis, it is possible to force people to do things that they do not want to do 1 2 3 4 5 6
23. Hypnosis facilitates therapeutic success. 1 2 3 4 5 6
24. If people do not agree with a suggestion, they may ignore it completely 1 2 3 4 5 6
25. People who are hypnotized maintain control over themselves 1 2 3 4 5 6
26. I would like to be hypnotized. 1 2 3 4 5 6
27. I would allow myself to be hypnotized if the opportunity presented itself. 1 2 3 4 5 6
28. I would like to be very hypnotizable 1 2 3 4 5 6
29. One learns more quickly under hypnosis. 1 2 3 4 5 6
30. What is recalled under hypnosis is always the truth 1 2 3 4 5 6
31. It is impossible to lie under hypnosis, even if the person who is hypnotized wants to do so. 1 2 3 4 5 6
32. One way of confirming whether an event occurred is if a person recalls it under hypnosis 1 2 3 4 5 6
33. Hypnosis involves a trance state. 1 2 3 4 5 6

- 34. Hypnosis developed external to the scope of scientific investigation. 1 2 3 4 5 6
- 35. In general, some of the fundamental characteristics of persons who are highly hypnotizable include: gullibility, ignorance, and psychological dependence 1 2 3 4 5 6
- 36. A person who is hypnotized is dissociated 1 2 3 4 5 6
- 37. Hypnosis is a complement to or a tool for improving medical treatments. 1 2 3 4 5 6

MAKE SURE YOU ANSWERED ALL OF THE QUESTIONS

Reprints and Spanish, Portuguese and Romanian translations of the scale to: Antonio Capafons, Facultat de Psicologia, Avda. Blasco Ibanez# 21, 46010, Valencia (Spain).

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