

HYPNOTIC RESPONSIVITY OF THE DEAF: *The Development of the University of Tennessee Hypnotic Susceptibility Scale for the Deaf*

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Abstract: The purpose of these two studies was to develop and test a measure that assesses the hypnotic responsivity of deaf individuals. The University of Tennessee Hypnotic Susceptibility Scale for the Deaf (UTHSS:D) is a signed, videotaped version of a standard hypnotic induction with 12 standard suggestions. Experiment 1 compared the behavioral and subjective hypnotic responsivity of deaf and hearing individuals using the UTHSS:D and the Field Depth Inventory (FDI), respectively. As compared to hearing subjects, deaf participants were found to be less responsive to hypnosis when assessed behaviorally (UTHSS:D) and equally responsive to hypnosis when assessed subjectively (FDI). Experiment 2 undertook a more comprehensive examination of the hypnotic responsivity of deaf individuals, using hearing individuals as controls. Three dimensions of hypnotic responsivity were assessed: behavioral (UTHSS:D), subjective (FDI), and interpersonal (Archaic Involvement Measure). Additionally, correlates of hypnotic responsivity (absorption, attitudes, expectations) were examined for the two groups. In Experiment 2, no significant differences were found between the deaf and hearing participant groups on any measures of hypnotic responsivity or on any measure of the correlates of hypnotic responsivity.

Until recently, only five brief reports of hypnosis with the deaf were available (Bartlett, 1966; Erickson, 1964; Gaston & Hutzell, 1976; Gravitz, 1981; Martorano & Oestreicher, 1966). These clinical anecdotes, although limited in their generalizability, are in fact encouraging. Using innovative pantomime and lip-reading procedures, these authors have been able to obtain at least some hypnotic benefits for deaf patients

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presenting with dental, psychiatric, and medical difficulties. More recently, Matthews and Isenberg (1992) explored the hypnotic responsivity of the deaf by applying sign language to preexisting measures of hypnotic susceptibility such as the Stanford Hypnotic Clinical Scales (SHCS; Morgan & Hilgard, 1975).

There has been no way of comprehensively measuring the hypnotic responsiveness of the deaf. All standardized measures of hypnotic susceptibility are verbal in nature (Weitzenhoffer & Hilgard, 1959, 1962, 1963, 1967). To measure hypnotic susceptibility, hearing participants are administered a verbal hypnotic induction followed by verbally administered hypnotic suggestions (usually with the participant's eyes closed). The participant's hypnotic susceptibility score is the number of suggestions to which he or she responds positively. Although these scores, like standard Wechsler IQ scores, have proven to be psychometrically sound and remarkably stable over time, the measures themselves are transparently problematic for deaf individuals given their manual method of communication. Matthews and Isenberg (1992) used sign language in presenting the SHCS to deaf participants; they cautioned the reader as to the interpretation of the results due to the brevity of the measure.

The purpose of these two studies was to develop and test a measure that assesses the hypnotic responsivity of deaf individuals. This measure, the University of Tennessee Hypnotic Susceptibility Scale for the Deaf (UTHSS:D), is a signed, videotaped version of a standard hypnotic induction with 12 standard suggestions. The Stanford scales served as the model. Translated into American Sign Language (ASL), this videotape allows for the measurement of hypnotic susceptibility within a large portion of the deaf population. The videotaped hypnotic procedure has English/oral voice-overs and can be used with hearing populations as well as with the deaf. The text of the UTHSS:D was developed by Repka and Nash (1988). The translation of the text into sign language and the addition of appropriate modifications for working with deaf populations were completed with the consultation of a team comprised of a Comprehensive Skills Certificate (CSC)-level interpreter with 15 years' experience in the field of deafness and interpreting, an Interpretation Certificate/Translation Certificate-level interpreter with 10 years' experience in the field of interpreting, a clinical psychologist (Nash) with 10 years' experience in the field of hypnosis, and a graduate student (Repka) with 4 years' experience in the field of deafness and 2 years' experience in the field of hypnosis. Additionally, several deaf individuals and experts in the field of deafness were consulted to ensure accuracy of the signed ASL representation of the standard oral procedure. The UTHSS:D combines signed translations of hypnotic inductions with special non-verbal hypnotic techniques.

Developed by Repka and Nash, this is a traditional hypnotic induction followed by 12 suggestions, videotaped and produced in ASL with

English voice-overs. As with the Stanford-type measures of hypnotic susceptibility, this scale contains 12 items that measure hypnotizability (a higher score being indicative of greater hypnotic susceptibility for the individual). The items of the UTHSS:D are (in order of presentation): eye closure, hand lowering, finger lock, moving hands together, arm rigidity, arm raising, communication inhibition, bug hallucination, arm immobilization, smell hallucination (onion), hypnotic dream, and posthypnotic automatic writing. The participant watches the UTHSS:D in the presence of a research assistant who administers nonverbal cues when instructed by the tape. Touching was included in this procedure because of the importance of touch in the deaf community and because it enabled the experimenter to communicate easily with the deaf participants. Nonverbal cues were administered to help induce or deepen trance and to set up challenge items that measure susceptibility. More specifically, the participant was given a prehypnotic suggestion that while hypnotized if his or her eyes happen to close, that person will be touched on the foot by the research assistant prompting the participant to open his or her eyes yet remain hypnotized. Additionally, a deepening technique was employed, where it was suggested to the participant that as the research assistant touched him or her on the shoulders with increasingly more pressure, the participant would become more deeply hypnotized. Finally, touching was included in certain challenge items such as finger lock. In this specific item, with cuing from the tape, the research assistant applied pressure to the participant's hands to increase the perception for the participant that his or her hands were in fact "locked" together. Administration time for the UTHSS:D was approximately 45 minutes.

As an exploratory investigation, Experiment 1 compared the behavioral response to hypnosis of hearing and deaf individuals, using the UTHSS:D. Additionally, the subjective experience of hypnosis for the two participant groups was assessed with the Field Depth Inventory (FDI; Field, 1965). Experiment 2 attempted to replicate Experiment 1 and examined how measures of archaic involvement, absorption, expectancy, and attitudes covary with UTHSS:D scores.

EXPERIMENT 1

This study assessed the behavioral hypnotic responsivity of hearing and deaf individuals, using the UTHSS:D. Hypnotic responsivity was also measured subjectively using the FDI. Preliminary descriptive statistics and univariate analyses were obtained.

METHOD

Participants

The deaf group consisted of 38 profoundly, prelingually deaf individuals from Knoxville, Tennessee and from Gallaudet University, a

college for deaf individuals in Washington, DC. There were 14 males and 24 females in this group. Mean age was 30.2 years ($SD = 10.1$). The hearing (control) group consisted of 23 University of Tennessee students (12 males and 11 females). Mean age was 26.5 years ($SD = 9.7$). The difference in age between the two groups was not significant, $t(48) = 1.43$, ns. Within the deaf group, the average age of onset of deafness was prior to the first birthday. All participants included in the deaf sample exemplified proficiency in ASL. All were paid \$10.00 for participation.

Procedure

The participant arrived for the experimental session and was met by the senior author (R. R.). The participant was given a consent form to read and sign, and then completed a demographic form. The participant was told that he or she would be brought to another room where the participant should remain silent while a research assistant would help him or her to experience hypnosis. The senior author accompanied the participant into the experimental room and seated the participant next to the research assistant. The research assistant was blind to the hearing status (deaf or hearing) of the experimental participants from the University of Tennessee. However, the research assistant was not blind to the group membership of the participants assessed at Gallaudet University. The research assistant turned on the tape version of the UTHSS:D, which also included English voice-overs. As the participant followed the hypnotic procedure (UTHSS:D), the research assistant scored the participant's responses to the items presented in the UTHSS:D. Additionally, the research assistant administered the nonverbal techniques of the procedure when prompted by the tape. The UTHSS:D was administered on an individual basis. Participants went through the hypnotic procedure with their eyes open except when prompted by the tape to close them.

Following termination of the UTHSS:D, the participant was administered a written copy of the FDI. The FDI consists of 37 true-false items that tap the individual's experience of hypnosis. It has been demonstrated to measure the subjective experience of hypnosis in three areas: absorption and unawareness, automaticity, and discontinuity from normal waking experience (Field, 1965). Hearing and deaf participants followed the same procedures.

RESULTS

Because the gender ratio for the deaf and hearing groups differed (63% female vs. 47% female, respectively), a 2×2 analysis of variance (ANOVA) was performed to determine the effect of gender and group membership on the behavioral measure of hypnotic susceptibility. A significant main effect was found for group membership, $F(1, 59) = 7.39$, $p < .05$, with deaf participants scoring significantly lower. On the

UTHSS:D, the deaf group mean score was 5.1 ($SD = 2.3$) and the hearing group mean score was 7.0 ($SD = 3.2$), $F(1, 59) = 6.30$, $p < .05$. The main effect for gender was not significant, $F(1, 59) = 0.20$, ns. No significant difference between the deaf and hearing participants was noted on the subjective measure of hypnotic depth, the FDI. The deaf and hearing groups' mean scores were 19.4 ($SD = 7.52$) and 18.1 ($SD = 7.61$), respectively, $F(1, 55) = 0.40$, ns.

Preliminary assessment of the internal reliability of the UTHSS:D produced a Cronbach alpha (Nunnally, 1978) of 0.72. The Pearson correlation between the UTHSS:D and the FDI was 0.48 for the deaf group and 0.54 for the control group.

EXPERIMENT 2

Experiment 2 gathered further data on the UTHSS:D and examined more comprehensively the hypnotic responsivity of deaf individuals relative to the hypnotic responsivity of hearing individuals. It was expected that the results of Experiment 2 would essentially replicate the earlier findings of Experiment 1 and perhaps account for group differences.

In Experiment 2, the hypnotic responsivity of all participants was measured in three ways: behaviorally with the UTHSS:D, subjectively with the FDI, and interpersonally with the Archaic Involvement Measure (AIM; Nash & Spinler, 1989). In regard to the latter measure, the interpersonal relationship between the hypnotist and participant has been hypothesized to be an important parameter of hypnotic responsivity (Gill & Brenman, 1959; Shor, 1979). Nash and Spinler (1989) developed the AIM to assess this interpersonal relationship: the participant's transference-like experience during hypnosis. In the present study, hypnotic responsivity was assessed comprehensively to determine whether deaf participants were globally less responsive to hypnosis or whether their response was compromised on some specific dimension of hypnosis.

Additionally, Experiment 2 undertook an examination of those mediating variables hypothesized to influence hypnotic responsivity. These variables include the personality characteristic known as absorption and social psychological variables such as attitudes toward hypnosis and expectations about hypnosis.

The personality characteristic described as "the ability to become absorbed in activities or fantasies" (absorption) is thought to be a consistent predictor of hypnotic susceptibility (J. R. Hilgard, 1974; Nadon, Laurence, & Perry, 1987; Sheehan, 1967; Tellegen & Atkinson, 1974). It was hypothesized that deaf individuals may manifest decreased hypnotizability because their deafness may compromise development of imaginative processes related to absorption.

Several researchers have suggested that attitudes and expectations about hypnosis affect the individual's hypnotic responsivity. Two mea-

asures, Attitudes Toward Hypnosis (Spanos, Brett, Menary, & Cross, 1987) and an expectancy measure developed by the experimenters, were administered to participants to determine the effects of these two variables on hypnotic responsivity. It was hypothesized that an individual's attitudes and expectancies about hypnosis may have a very important mediating effect on his or her ability to become involved in the imaginative experiences thought to be related to hypnosis. The three mediating variables (absorption, attitudes, and expectation) were assessed in Experiment 2 to determine whether differences in hypnotizability between deaf and hearing individuals were related to, or were accounted for by, differences in personality, attitudes, or expectation.

METHOD

Participants

Twenty-six profoundly, prelingually deaf Gallaudet University undergraduate students (8 males and 18 females) and 24 hearing University of Tennessee undergraduate students (10 males and 14 females) were recruited to participate in this project for extra-credit points in a psychology course. The mean age for the deaf participants was 21.4 years ($SD = 1.8$), and for the hearing participants the mean age was 20.5 years ($SD = 3.5$). The difference in age was not significant, $t(48) = 1.15$, ns.

Within the deaf participant group, the average age of onset of deafness was prior to the first birthday. Eighty-four percent of the participants were congenitally deaf, with the remaining 16% being adventitiously deaf (after birth). Eighty-five percent of the deaf participants described themselves as predominantly ASL users. The other 15% of the sample stated that they knew and used ASL, but preferred alternate modes of communication (total communication, sign English, oral).

Homogeneity within the deaf sample, and comparative competency levels to the hearing sample, were preserved as the deaf participant sample included only those individuals who described themselves as profoundly, prelingually deaf, comfortable with ASL, and having achieved at least a sixth-grade reading level as measured by the American College Test (personal communication, Neil Reynolds, 1990). All individuals were paid \$10.00 for their participation.

Instrumentation

The UTHSS:D and the FDI were also used in Experiment 2. Additionally, the following four measures were administered to participants.

Archaic Involvement Measure (AIM; Nash & Spinler, 1989). The AIM is a 20-item Likert-type scale measure that assesses an individual's "archaic" involvement with the hypnotist during the hypnotic procedure in three areas: perceived power of the hypnotist, positive emotional bond to the hypnotist, and fear of negative appraisal.

Tellegen Absorption Scale (TAS; Tellegen & Atkinson, 1974). The TAS is a 37-item true-false inventory that assesses an individual's propensity to become highly involved in sensory and imaginative experiences in nonhypnotic contexts. In numerous investigations, this measure has been predictive of hypnotic responsivity at significant levels (Nadon, Hoyt, Register, & Kihlstrom, 1991).

Attitudes Toward Hypnosis (Spanos et al., 1987). This is a 15-item Likert-type scale measure that taps attitudes about hypnosis on three dimensions: positive attitude toward hypnosis, relationship of hypnosis with mental stability, and notions about hypnosis as a non-fear-provoking experience. Scores on items are summed for this measure, with a higher score indicating more positive attitude in the three dimensions described above.

Expectancy Measure. A five-item Likert-type scale measure was developed by the authors to assess individual expectancies about hypnosis. This measure was designed to tap expectancies about hypnosis in the following areas: overall responsivity, depth, relaxation, generalized reality orientation disruption, and involuntariness (see the appendix for text of measure). All but the initial item on this measure were scaled from 1 to 7. The initial item required participants to guess what they would score on the hypnotic susceptibility scale, and was thus scaled from 0 to 13. A linear transformation was performed on this item so as to adjust it to a 7-point scale (scores on this item were multiplied by .5833). The scores on each item were then summed to obtain the participant's score on the Expectancy Measure.

Adaptations of Instruments

The FDI, AIM, TAS, and Attitudes Toward Hypnosis measure are traditionally paper-and-pencil measures. For the present study, these measures were carefully adapted to videotape and audiotape to meet the individual needs of the two participant groups. To ensure comprehension of the material in these scales, each was translated into ASL (by a CSC-level interpreter with 15 years of experience in interpreting) and videotaped with English voice-overs. This methodology is necessary because the English (oral) language and the language of the deaf (participants of the study), ASL, are not equivalent, and therefore it was necessary to present the stimuli of the experiment in the native languages of the two different participant groups (Schein, 1984). For each of these measures, the deaf or hearing participant was given the standard written version of the measure along with the video/audio version. The participant was able to pause the videotape, look down at the written form, think about his or her answer, and write down the answer. Although not placed on videotape (because of its brevity), the Expectancy Measure

was either signed or read aloud to the participant depending on the hearing status of the individual.

Consonant with a standard methodology to ensure the equivalency of the videotaped, signed versions of the above paper-and-pencil measures (Clark & Clark, 1977), videotaped versions of the paper-and-pencil measures were given to a deaf individual fluent in English and ASL who was instructed to translate the measures. (This deaf individual holds a master's degree in human services and is on the faculty at the University of Tennessee.) The deaf individual's written English translations of the measures were compared to the published written versions. The comparisons were made to ensure that the signed versions were accurate renderings of the paper-and-pencil instruments. The individual also translated the entire UTHSS:D form, sign language to English. In addition, the resulting English translation was compared to the voice-over version used in the videotape. The English and ASL versions were considered equivalent as the propositional content of the signed and written forms was the same (Clark & Clark, 1977).

Procedure

On arrival, the participant was given a consent form to read and sign, and then completed a demographic form. The participant was asked to watch and respond to the taped versions of the TAS and the Attitudes Toward Hypnosis measure. The order of presentation of these two measures was randomized across participants.

On completion of these two measures, the participant was brought into the experimental room and introduced to the research assistant. The research assistant turned on the taped version of the UTHSS:D, and the participant watched the introduction. After the introduction was completed, the assistant paused the tape, gave the participant a copy of the Expectancy Measure, and signed or read aloud this measure, in accordance to the communication needs of the participant. The research assistant was not blind to group membership. After completing this measure, the tape of the UTHSS:D was taken off pause, and the hypnotic induction proper began. As in Experiment 1, at points during the procedure the assistant touched the participant when prompted by the tape. After the procedure was finished, the participant was asked to describe his or her dream experience during the hypnosis procedure.

Finally, the participant was administered the taped versions of the AIM and the FDI. As with the other two measures (TAS and Attitudes Toward Hypnosis), the AIM and the FDI were administered in an alternating fashion. The participant was instructed to stop the tape if he or she needed additional time to answer the question posed. The participant was also directed to consult with the research assistant if he or she did not understand the question. The total procedure took approxi-

mately 2 hours. The same procedure was used with both participant groups. As in Experiment 1, all participants followed the procedures with their eyes open except when instructed by the tape to close them. Participants completed all procedures on an individual basis.

RESULTS

Univariate Analyses on Measures of Hypnosis

Table 1 provides a summary of deaf and hearing group means and univariate analyses on the respective measures of hypnotizability. The behavioral response of deaf and hearing participants to hypnosis was not significantly different as measured by the UTHSS:D. On the UTHSS:D, the deaf group mean score was 5.5 ($SD = 3.4$), and the control group mean score was 5.5 ($SD = 4.0$), $t(48) = 0.968$, ns. On the subjective measure of hypnotic responsivity, the FDI, the deaf group scored a mean of 19.4 ($SD = 7.9$), and the hearing group scored a mean of 18.4 ($SD = 10.3$). The difference between the groups on the FDI was not significant, $t(48) = 0.40$, ns. On the AIM, the interpersonal measure of responsivity to hypnosis, no significant difference was noted between the two participant groups. The deaf sample obtained a mean score of 70.6 ($SD = 28.1$), and the hearing (control) sample obtained a mean score of 61.4 ($SD = 29.2$), $t(48) = 1.13$, ns. A multivariate analysis of variance (MANOVA) comparing the deaf and hearing participant groups across all three measures of hypnotic responsivity was not significant, $F(3, 48) = 0.815$, ns.

Univariate Analyses on Psychosocial Variables

Univariate analyses comparing group means were computed for the psychosocial variables posited to mediate hypnotic responsivity: the TAS (measuring absorption), Attitudes Toward Hypnosis (measuring attitudes), and Expectancy About Hypnosis (measuring expectancies). These results are summarized in Table 2. No significant group differences emerged.

UTHSS:D Item Analyses

Table 3 provides a summary of item-by-item analyses of the UTHSS:D, comparing deaf and hearing groups. No significant differences were found when comparing the deaf and hearing groups on individual items of the UTHSS:D.

Comparison of Susceptibility Levels

Mean scores for susceptibility levels (0-4, low; 5-7, medium; 8-10, high; 11-12, very high; E. R. Hilgard, 1965) were compared across the hearing and deaf participant groups and are presented in Table 4. No significant differences were measured between the groups at the four levels of hypnotic susceptibility.

Table 1
Hearing and Deaf Group Means on Measures of Hypnotic Responsivity

Group	Measures of Hypnotic Responsiveness		
	UTHSS:D	FDI	AIM
Hearing (<i>n</i> = 24)	5.5 (<i>SD</i> = 4.0)	18.4 (<i>SD</i> = 10.3)	61.4 (<i>SD</i> = 29.2)
Deaf (<i>n</i> = 26)	5.5 (<i>SD</i> = 3.4)	19.4 (<i>SD</i> = 7.9)	70.6 (<i>SD</i> = 28.1)
	<i>t</i> (48) = 0.04, ns	<i>t</i> (48) = 0.40, ns	<i>t</i> (48) = 1.13, ns

Note. UTHSS:D = University of Tennessee Hypnotic Susceptibility Scale for the Deaf; FDI = Field Depth Inventory; AIM = Archaic Involvement Measure.

Table 2
Hearing and Deaf Group Means on Psychosocial Variables

Group	Measure of Hypnotic Responsiveness		
	TAS	Attitudes	Expectancy
Hearing (<i>n</i> = 24)	22.7 (<i>SD</i> = 8.9)	66.3 (<i>SD</i> = 13.5)	23.2 (<i>SD</i> = 4.4)
Deaf (<i>n</i> = 26)	23.3 (<i>SD</i> = 6.1)	67.8 (<i>SD</i> = 10.9)	21.3 (<i>SD</i> = 4.4)
	<i>t</i> (48) = 0.28, ns	<i>t</i> (48) = 0.45, ns	<i>t</i> (48) = 1.52, ns

Note. TAS = Tellegen Absorption Scale; Attitudes = Attitudes Toward Hypnosis; Expectancy = Expectancy Measure.

GENERAL DISCUSSION

Experiment 1, comparing deaf and hearing participants on the UTHSS:D and the FDI, suggested that deaf participants were less susceptible to hypnosis than hearing participants when susceptibility was assessed behaviorally (UTHSS:D), but were as equally responsive to hypnosis when susceptibility was assessed subjectively (FDI).

Experiment 2 was designed to investigate more comprehensively the hypnotic responsivity of the deaf, again using hearing individuals as controls. Experiment 2 investigated three distinct dimensions of hypnotic responsivity: behavioral (UTHSS:D), subjective (FDI), and interpersonal (AIM). Unlike Experiment 1, Experiment 2 found no significant difference between deaf and hearing participants on the UTHSS:D. In fact, no significant group differences were found across a host of hypnotizability and personality/attitudinal variables. When hypnotic responsivity is assessed behaviorally (UTHSS:D), subjectively (FDI), and interpersonally (AIM), deaf and hearing individuals are equally responsive.

Table 3
Hearing and Deaf Group Item Analyses for Experiment 2

Item	Hearing	Deaf	<i>t</i> ^a
Eye closure	0.46	0.50	0.29
Hand lowering	0.79	0.69	0.79
Finger lock	0.46	0.35	0.80
Move hands together	0.54	0.54	0.02
Arm rigidity	0.54	0.58	0.25
Arm raising	0.50	0.42	0.54
Communication inhibition	0.58	0.73	1.09
Bug hallucination	0.25	0.35	0.73
Arm immobilization	0.29	0.42	0.96
Smell hallucination (onion)	0.46	0.27	1.38
Hypnotic dream	0.33	0.50	1.19
Posthypnotic automatic writing	0.21	0.15	0.49

a. No *ts* found to be significant.

Table 4
Hearing and Deaf Group Comparison of Susceptibility Levels

Group	Hypnotizability Score (UTHSS:D)			
	Low (0-4)	Medium (5-7)	High (8-10)	Very High (11-12)
Hearing	1.73 <i>SD</i> = 1.6 <i>n</i> = 11	6.00 <i>SD</i> = 0.82 <i>n</i> = 4	9.17 <i>SD</i> = 0.98 <i>n</i> = 6	11.0 <i>SD</i> = 0.00 <i>n</i> = 3
Deaf	2.18 <i>SD</i> = 1.3 <i>n</i> = 11 <i>t</i> (20) = .76, ns	6.29 <i>SD</i> = 0.76 <i>n</i> = 7 <i>t</i> (9) = .59, ns	8.67 <i>SD</i> = 1.03 <i>n</i> = 6 <i>t</i> (10) = .86, ns	11.50 <i>SD</i> = 0.71 <i>n</i> = 2 <i>t</i> (3) = .000, ns

Note. Category cutoffs from E. R. Hilgard (1965, p. 236).

The finding in Experiment 1 that UTHSS:D scores were higher for hearing than for deaf participants does not square with the null findings on the same variable in Experiment 2. Although these differences across studies can be accounted for by chance variation—nonsignificance of 2×2 ANOVA (Group \times Study)—the trend deserves some attention. An appeal to the method of recruitment for the four participant groups may help in understanding the higher hypnotic responsivity of the hearing individuals participating in Experiment 1. The deaf participants in Experiment 1 and Experiment 2 and the hearing participants in Experiment 2 all were recruited for participation through sign-up sheets for psychology experiments placed on bulletin boards. Essentially, an individual

would designate a day and time for participation and then arrive at the research room at his or her chosen day and time. The hearing participants involved in Experiment 1 were recruited differently. For Experiment 1, the author initially attempted to recruit deaf individuals in the Knoxville area. As there is no college for the deaf in Knoxville, a majority of deaf participants used in Experiment 1 were older than college age. To attain a matched (older) sample, the researcher recruited older hearing individuals by placing general sign-up sheets in the mail rooms of the married student housing facilities. If interested in participating, these individuals were instructed to leave their names and telephone numbers. These individuals were then contacted by the experimenter (R. R.), who explained, in general terms, the details of the experiment and asked for participation. It is purely speculative, but it could be that this personal contact with the experimenter, this pursuit of the individual by the experimenter, encouraged positive attitudes and expectations about hypnosis and resulted in the overall greater behavioral hypnotic responsivity of this participant group.

Overall, the pattern of hypnotic responding for deaf and hearing individuals seems quite similar in extent and quality. Expectations, attitudes, and imaginativeness all correlate with hypnotic responsiveness for deaf individuals as they do for hearing individuals. Behavioral, subjective, and interpersonal aspects of hypnosis are comparable across groups. The present study supports in part the findings of Matthews and Isenberg (1992), which suggest that deaf and hearing participants are equally responsive to hypnosis when measured behaviorally (SHCS). However, Matthews and Isenberg's finding of increased resistance to the hypnotist on the part of the deaf participant was not supported in the present study, which found no significant differences between participant groups on the AIM, an interpersonal measure of hypnosis. The present study clearly expands on previous research by assessing hypnotic responsivity across three dimensions and by including the assessment of variables hypothesized to be correlated with hypnotic responsivity.

Appendix

The text of this measure is as follows with the following anchor points:

1. There will be twelve suggestions presented to you during the hypnosis procedure, how many do you think you will respond to? (overall responsiveness) (out of 12)
 2. During the hypnosis, how deeply hypnotized do you think you will be? (depth) 1 = not hypnotized at all, 7 = very deeply hypnotized.
 3. How relaxing do you expect hypnosis to be for you? (relaxation) 1 = not relaxing at all, 7 = profoundly relaxing.
 4. How different do you think you will feel during hypnosis than you do now? (GRO disruption) 1 = not different at all, 7 = profoundly different.
 5. When you respond to suggestion during hypnosis, how much will it seem to happen by itself as opposed to you helping it along? (involuntariness) 1 = When I respond to suggestion it will happen because I am helping it along, 7 = When I respond to suggestion it will happen by itself.
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**Hypnotische Reaktionsfähigkeit
der Tauben: Die Entwicklung der hypnotischen
Empfindlichkeitsskala für Taube von der Universität von Tennessee**

Renee J. Repka und Michael R. Nash

Abstrakt: Es war der Zweck dieser zwei Studien, ein Maß zu entwickeln und zu prüfen, das die hypnotische Reaktionsfähigkeit von tauben Individuen bewertet. Die Hypnoseempfindlichkeitsskala für Taube der Universität von Tennessee (UTHSS:D) ist eine unterzeichnete Magnetbandbildversion einer Standardhypnoseinduktion mit 12 Standardsuggestionen. Experiment 1 verglich die benehmensmäßige und subjektive Hypnosereaktionsfähigkeit bei tauben und hörenden Individuen durch Anwendung der UTHSS:D sowie beziehungsweise des Inventars für Tiefenbereich (FDI). Im Vergleich zu hörenden Subjekten fand man, daß taube Subjekte weniger reaktionsfähig auf Hypnose waren, wenn benehmensmäßig bewertet (UTHSS:D) und gleichwertig reaktionsfähig auf Hypnose waren, wenn in subjektiver Weise bewertet (FDI). Experiment 2 unternahm eine umfassendere Untersuchung der hypnotischen Reaktionsfähigkeit bei tauben Individuen, indem man hörende Subjekte als Kontrolle benutzte. Drei Dimensionen der Hypnosereaktionsfähigkeit wurden bewertet: benehmensmäßig (UTHSS:D), sub-

ektiv (FDI), und interspersönlich (archaische Einbeziehungsmaße). Zuzüglich wurden Korrelate der Hypnosereaktionsfähigkeit (Absorption, Verhalten, Erwartungen) für die zwei Gruppen untersucht. In Experiment 2, wurden keine bedeutende Unterschiede bei irgend welchen Maßen der Hypnosereaktionsfähigkeit zwischen den tauben und hörenden Subjektgruppen gefunden oder irgendeinen Maßen der Korrelate der Hypnosereaktionsfähigkeit.

La sensibilité à l'hypnose du sourd: Le developpement de l'Échelle de Susceptibilité à l'Hypnose de l'Université du Tennessee pour le Sourd

Renee J. Repka et Michael R. Nash

Résumé: Le but de ces deux études était de developper et de tester un instrument pour évaluer la susceptibilité à l'hypnose des individus sourds. L'Échelle de Susceptibilité à l'Hypnose de l'Université du Tennessee pour le Sourd (ÉSHUT:S) est une version sur bande magnétoscopique en langage signé d'une induction hypnotique standard comprenant 12 suggestions standardisées. L'Étude 1 comparait la sensibilité subjective et comportementale à l'hypnose d'individus sourds et non-sourds à l'aide, respectivement, du ÉSHUT:S et de l'Inventaire de Profondeur du Champ (IPC). En comparaison des sujets non-sourds, les sujets sourds sont moins suggestibles à l'hypnose lorsqu'évalués comportementalement (ÉSHUT:S) mais aussi sensible lorsqu'évalués subjectivement (IPC). L'Étude 2 a entrepris une évaluation plus complète de la sensibilité à l'hypnose des individus sourds en utilisant des sujets non-sourds comme contrôle. Trois dimensions de la sensibilité à l'hypnose ont été évaluées: comportementale (ÉSHUT:S), subjective (IPC), et interpersonnelle (Mesure d'Implication Archaïque). De plus, des corrélations à la sensibilité à l'hypnose (absorption, attitudes, attentes) ont été examinées pour les deux groupes. Dans l'Étude 2, aucune différence significative n'a été trouvée entre les sujets sourds et non-sourds sur les mesures de sensibilité à l'hypnose ou sur les mesures de corrélation à la sensibilité à l'hypnose.

Responsividad hipnótica del sordo: desarrollo de la Escala de Sugestibilidad hipnótica para sordos de la Universidad de Tennessee

Renee J. Repka y Michael R. Nash

Resumen: El propósito de estos estudios fue desarrollar y testar una medida que evaluara la responsividad hipnótica de individuos sordos. La Escala de sugestibilidad hipnótica para sordos de la Universidad de Tennessee (UTHSS:D) es una versión registrada en vídeo de una inducción hipnótica standard que contiene 12 sugerencias standard. El experimento 1 comparó la responsividad conductual y subjetiva de individuos sordos y oyentes usando la UTHSS:D y el Field Depth Inventory (FDI), respectivamente. Comparados con los sujetos oyentes, se encontró que los sujetos sordos respondían menos a la hipnosis cuando eran evaluados conductualmente (UTHSS:D), e igualmente respondientes a la hipnosis al ser evaluados subjetivamente (FDI). El experimento 2 intentó un examen más perspicaz de la responsividad hipnótica de los individuos sordos usando a los oyentes como control. Se evaluaron tres

dimensiones de la responsividad hipnótica: conductual (UTHSS:D), subjetiva (FDI), e interpersonal (Archaic Involvement Measure). Adicionalmente, se examinaron los correlatos de la responsividad hipnótica (absorción, actitudes, expectativas) de los dos grupos. En el experimento 2, no se encontraron diferencias significativas entre los grupos de los sujetos sordos y de los oyentes en ninguna de las medidas de la responsividad hipnótica o en cualquier medida de los correlatos de la responsividad hipnótica.