Contemporary Hypnosis (1996)
Vol. 13, No. 2, pp. 94–99

CROSS-CULTURAL ASPECTS OF HYPNOTIZABILITY AND IMAGINATION

Leah Jacquith*, Judith W. Rhue, Steven Jay Lynn* and Jothiratnam Seevaratnam***

**Ohio University and **Ohio University College of Osteopathic Medicine, Athens, USA*

ABSTRACT

We tested 133 native Malaysian students at the University of Malaysia with the Harvard Group Scale of Hypnotic Susceptibility (HGHSS:A, Shor & Orne, 1962), the Creative Imagination Scale (CIS; Wilson & Barber (1978), the Tellegen Absorption Scale (TA; Tellegen, 1976), and the Betts Vividness of Mental Imagery Scale (QMI, Sheehan, 1967). These subjects were compared with a sample of 55 Malaysian volunteer college students enrolled at Ohio University. The average length of enrolment was 2.5 years and 459 college students (US residents) from Ohio University were also tested. The means of measures across all samples were comparable, with the exception that the Malaysian students scored lower on the CIS. However, we failed to secure significant correlations between hypnotizability and absorption and waking suggestion (CIS) in the Malaysian sample tested in Malaysia. In contrast, when Malaysian students resided in the United States, the correlations between hypnotizability and absorption and waking suggestion were all significant, as was the case with US residents. Our results imply that culture-based expectancies play a role in mediating the relationship between hypnotizability and measures associated with hypnotizability in Western cultures.

INTRODUCTION

It is generally assumed that hypnotizability and imagination are universal traits that are evident, in varying degrees, regardless of the cultural context in which these attributes are measured. Yet it is only within the past 15 years or so that this assumption has been examined. Most of the research to date has supported the cross-cultural validity of hypnotizability (e.g., Bongartz, 1985; Lamas, del Valle-Inclan & Blanco, 1989). Studies comparing American, German, Australian and Canadian samples suggest that the psychometric properties of the Harvard Group Scale of Hypnotic Susceptibility (Shor & Orne, 1962) are relatively stable across diverse cultures. Further, the pattern and magnitude of correlations of measures of hypnotic responsiveness, imagining in response to waking suggestion, imagery vividness, and absorption in hypnotic-like experiences are similar across Australian, American, and Polish samples. The absorption scale, in particular, exhibits a remarkable degree of cross cultural stability.

Altogether, these findings are indicative of a degree of 'cross-cultural validity' for measures of hypnosis and imagination. Indeed, the differences observed across cultural samples are often trivial and can probably be accounted for by a number of

factors, including the nature of the pre-induction talk, instructions that stress honesty of reporting, and subtle, trans-cultural differences in phrase meaning as a function of translation.

However, it is noteworthy that past research endeavours have been limited in focus to Western cultures that share widely held stereotypic notions of hypnosis. For example, even rather naive subjects in our culture hold well-developed beliefs concerning what it means for someone to be 'hypnotized'. For instance, almost all people in our culture believe that hypnosis is an altered state of consciousness that can have profound effects on at least some people. Finally, many persons in our society associate hypnosis with imagining and relaxation.

Shared expectancies, attitudes, and interpretations regarding hypnosis, hypnotic suggestions, and the link between hypnosis and imagination may account for the high degree of correspondence of findings across disparate cultures. If subjects from Western and non-Western cultures responded comparably on measures of hypnosis, imagination, and creativity, it would suggest that the relationship between these measures can transcend cultural differences and indeed, have an intrinsic relationship with one another. However, our confidence that an inherent relationship exists among these variables would be diminished if different patterns of correlations were observed among Western versus non-Western students with divergent attitudes and expectancies about hypnosis.

In our study we tested 133 native Malaysian students from Chinese, Indian and Malay backgrounds. Because hypnosis is not popularized in the mass media or literary tradition, stereotypic Western conceptions of hypnosis have not infiltrated the Malaysian culture. Indeed, an inspection of the card catalogue at the University of Malaysia, where our research was conducted, reveals not a single book or entry under the rubric 'Hypnosis'. None of our subjects reported ever having been hypnotized. All of our subjects were enrolled in the faculties of medicine, history, or English, traditionally recognized for the superlative English language proficiency of their students.

The experimenter/hypnotist was a native of Malaysia who was a clinical psychology graduate student at Ohio University. Student volunteers were recruited through campus notice board and lecture hall announcements.

Subjects participated in groups ranging in size from 30 to 40 students. Subjects were given a brief introduction to hypnosis, based on the introductory material in the Harvard Group Scale.

Subjects were also reassured that no 'black arts' were involved and the need for cooperation and honesty in responding was stressed. A brief question and answer period followed. The Creative Imagination Scale of Wilson and Barber (1978)was then administered, followed by the Harvard induction which, like the CIS, was self-scored for their responses. Subjects received a packet of materials that contained the following measures: the Tellegen Absorption Scale (1980), which measures absorption in everyday hypnotic-like experiences, the Betts Vividness of Mental Imagery Scale (QMI; Sheehan, 1967), and the Creative Imagination Scale (CIS). Subjects were carefully instructed in completing the forms and had an opportunity to ask questions. Subjects returned the completed materials to assigned faculty offices.

We compared these subjects with a sample of 55 Malaysian volunteer college students who were enrolled in classes at Ohio University and who were tested at Ohio University. The average length of enrolment was 2.5 years. All subjects were considered fluent in English, having received a passing score (80 or better) on a nationally standardized test of English language proficiency. The sample of subjects was

recruited from a sample of 150 Malaysian students located through a Malaysian student directory. To facilitate comparison across samples, subjects received the same measures of hypnotizability, absorption, and imagination, with the procedures paralleling those of the Malaysian sample tested in Malaysia. Subjects were tested by four different graduate student hypnotists.

Table l. Means and standard deviations of dependent measures for multi-cultural sample

	Malay (N = 133) Mean (SD)	M-A (N = 55) Mean (SD)	Aust (N = 1944) Mean (SD)	US (N = 132) Mean (SD)	US (N = 59) Mean (SD)	German (N = 374) Mean (SD)	Canadian (N = 535) Mean (SD)
HGSHS:A	6.23	6.15	4.11	6.12	7.31	6.50	5.38
	(2.75)	(2.70)	(2.40)	(2.47)	(2.80)	(2.43)	(3.33)
CIS	14.93	12.18	20.33	25.29	18.62	–	
	(7.50)	(7.92)	(7.07)	(6.95)	(8.22)	–	
TAS	21.20	20.96	21.72	21.16	21.17	–	
	(7.35)	(8.09)	(6.95)	(5.48)	(7.92)	–	
Betts QMI	90.15	98.30	94.82	98.37	79.70	–	

M-A, Malaysian-American

As can be seen in Table 1, the Harvard mean and standard deviation of the Malaysian samples are well within the range of the means and standard deviations of the German, United States, Australian, and Canadian samples. Mean differences are, in part, attributable to different scoring of the amnesia item across samples.

Table 2. Reliability data for HGSHS:A

	M-A	Malay	German	US	Australian	Canadian
Total Score Kuder-Richardson	0.68	0.68	0.62	0.80	0.76	0.84
Standard Error of Measurement	1.52	1.51	1.50	1.36	1.45	1.31–1.36

In Table 2, it is evident that Kuder-Richardson reliability coefficients of the Malaysian samples also fall within the range of other cultures sampled. These findings suggest that the Harvard scale has comparable psychometric properties, even when used in highly diverse cultural contexts.

When we examine the item pass percents across the Malaysian, German, American, Australian, and Canadian samples, presented in Table 3, we can see that there is a high degree of cross-cultural correspondence on the hallucination, inhibition, hands moving, and amnesia items, when differences in scoring of the last item are taken into account. The Malaysian sample tends to diverge somewhat from the others on the motoric suggestions, in that subjects respond less completely, whereas in response to challenge suggestions, Malaysian subjects respond more completely.

The reason for these discrepancies is not perfectly clear. However, response to motoric suggestions may be dampened because they are the initial suggestions. That is, Malaysian subjects lack prior exposure to hypnosis and responding to hypnotic suggestions; hence, they may require relatively more time to orient and involve themselves with respect to the novel situation. In general, however, the psychometric properties of the Harvard Scale, show a high degree of cross-cultural consistency, even when a decidedly non Western sample is used as a reference group.

Table 3. Item pass percents

HGSHS:A	M-A (N = 55)	Malaysian (N = 133)	German (N = 374)	US (N = 132)	Australian (N = 1944)	Canadian (N = 535)
Items						
1. Postural Alteration	55	56	73	86	61	65
2. Eye Closure	53	53	73	74	57	63
3. Hand Lowering	58	48	83	89	71	66
4. Arm Immobilization	55	62	52	48	36	47
5. Finger Lock	73	75	57	67	53	50
6. Arm Rigidity	67	72	52	57	41	47
7. Hands Moving	64	68	74	86	71	64
8. Inhibition	49	50	49	50	42	43
9. Hallucination	29	35	47	56	38	36
10. Eye Catalepsy	60	38	31	46	17	15
11. Post-Hypnotic Suggestion	26	38	31	36	17	15
12. Amnesia	31	19	36	48	33	19

Returning to Table 1, we can see that when Malaysian subjects are compared with Australian and American subjects, they respond comparably not only on the Harvard Scale, but also on measures of imagery vividness and absorption. Malaysian subjects tend to diverge from the comparison samples only on the Creative Imagination Scale. The Creative Imagination Scale does not require that subjects actually respond to suggestions, only that they imagine the described actions or experience, and rate the correspondence between the imagined event and an actual occurrence of the event or experience described. Cross-cultural differences may reflect the use of a more stringent criterion, on the part of Malaysian subjects, for reporting an identity between actual and imagined experiences.

Table 4. Correlations of HGSHS:A with dependent measures

	Malay (N = 130)	Malaysian-American (N = 55)	US (N = 132)	US (N = 459)	Australian (N = l944)	Polish (N = 240)
CIS	0.11	0.61***	0.55***	0.52***	0.28***	–
TAS	0.11	0.33*	0.33***	0.26***	0.13**	0.26***
Betts QMI	0.01	0.14	0.26***	0.12**	0.15**	–

* $P < 0.05$ ** $P < 0.01$ *** $P < 0.001$

Our most interesting finding was the failure to secure significant correlations in the Malaysian sample between hypnotizability and absorption and waking suggestion, dependent measures presumed to be related to susceptibility. Table 4 shows that this pattern differs from the typically significant correlations obtained in the Australian, American, and Polish reference samples. In contrast, when Malaysian students, who have resided in the United States for an average of 2.5 years are tested, the correlations between hypnotizability and absorption and waking suggestion are all significant.

We interpret our results as suggesting that culture-based expectancies play a role in mediating the relationship between hypnotizability and measures frequently associated with hypnotic responsiveness in Western cultures. In the Malaysian sample tested in Malaysia, even though the Creative Imagination Scale and the Harvard Scale were administered in the same testing context, a significant correlation between the measures was not secured. This finding stands in sharp contrast to other research that has documented correlations in the range of 0.35–0.60. It is possible that subjects' performance on the CIS did not establish expectancies associated with hypnotic responding because Malaysian students failed to associate imagining in response to waking suggestions with the overt responding required in the hypnotic context. Our data also suggest that no inherent relationship between hypnotizability and the measures presumed to be associated with it may exist, independent of expectancies that shape interpretations of behaviour and experience.

Our findings are congruent with recent research from a number of laboratories suggesting that correlations between susceptibility and absorption vary as a function of the testing context and situational expectancies (see Kirsch & Council, 1993). This research and our cross cultural findings challenge the notion that there is an inherent connection between imaginative ability and hypnosis. It appears that, at least under some conditions, absorption, imagination, and response to suggestion may be independent.

Our data challenge the assumption that hypnotic responding is invariably associated with vivid imagery, imaginative involvement, and absorption in hypnotic-like experience. Responding to hypnotic suggestions is determined by a number of factors. These factors include not only involvement in suggestion-related imaginings, but also subjects' attitudes, beliefs, and expectations concerning hypnosis; their rapport with the hypnotist and performance standards and criteria for responding; and each subject's ability to accurately interpret how to respond to suggestions. The relative salience and potency of these multiple determinants of hypnotic responding may well vary across cultures. In closing, our research suggests that while subjects' responsivity to hypnosis may be comparable across disparate cultures, the cultural context appears to play a role in shaping their experience of hypnosis.

REFERENCES

Bongartz, W. (1985). German norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis* **33**, 131–139.

Kirsch, I. & Council, J.R. (1993). Situational and personality correlates of hypnotic responsiveness. In E. Fromm & M.R. Nash (Eds), *Contemporary Hypnosis Research*. New York: Guilford.

Lamas, J.R., del Valle-Inclan, F. & Blanco, M.J. (1989). Spanish norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis* **37**, 264–273.

Sheehan, P.W. (1987). A shortened form of Betts's questionnaire upon mental imagery. *Journal of Clinical Psychology* **23**, 386–389.

Shor, R.E. & Orne, E.C. (1962). *Harvard Group Scale of Hypnotic Susceptibility, Form A*. Palo Alto, CA: Consulting Psychologists Press.

Tellegen, A. (1980). The Differential Personality Questionnaire. Unpublished test materials, University of Minnesota.

Wilson, S.C. & Barber, T.X. (1978). The Creative Imagination Scale as a measure of hypnotic responsiveness: Applications to experimental and clinical hypnosis. *American Journal of Clinical Hypnosis* **20**, 235–249.

Address for correspondence:

Dr Judith W. Rhue,
Department of Family Medicine,
Ohio University College of Osteopathic Medicine,
Athens,
OH 45701,
USA.