No Link Between Hypnotizability and the Self-Monitoring Scale

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Socio-cognitive theorists have often claimed that hypnotizability is in part a function of social role-playing. We thus expected to find an association between a measure of hypnotizability (SHSS:C) and the Self-Monitoring Scale-Revised, a purported measure of sensitivity to social cues. The data failed to reveal any significant correlations, and therefore cannot be said to provide any support for the socio-cognitive position. Nevertheless, as hypothesized, we found that the hypnotist tended to consider subjects who were high but not low on the Other-Directedness subscale to be more deeply hypnotized than the subjects themselves felt.

Key Words: Hypnotizability, socio-cognitive, self-monitoring, other-directedness

Introduction

A prominent approach to understanding hypnotizability, espoused by theorists of the socio-cognitive school (Kirsch, 1992; Spanos, 1986; Spanos et al., 1989; Wagstaff, 1991), attributes a hypnotized subject’s responses to suggestions to the shifting situational demands that are created by the set of experimental cues. This approach, though it runs counter to the intuitions of generations of hypnotists, was deemed to be an elegant and parsimonious interpretation of clinical and experimental data, since it obviated the need to introduce the additional element of a unique hypnotic mental process or state. Special state theorists, on the other hand, posited an altered state of consciousness that the hypnotic subject experienced and which was not reducible to compliance with perceived social pressures and expectations (Fromm, 1992). Proponents of the latter approach have sought, and occasionally found, unique cognitive abilities (Lyons & Crawford, 1997), neurophysiological features (Barabasz...
et al., 1999), or genetic factors (Lichtenberg et al, 2000) that characterize highly hypnotizable subjects. The two schools need not be mutually exclusive, and plausible approaches to resolving, or at least ameliorating, the disagreements have been suggested (Gruzelier, 2000; Woody et al., 1992).

**Hypnotizability and the Social Context**

The importance of role-playing in hypnosis has been recognized from the dawn of experimental hypnosis. Janet (1919) pointed out that the hypnotic condition is molded by the particular hypnotist’s explanations of what he/she expects from his subjects, who then learn to play their role. Thus the early mesmerists shaped a specific type of hypnotic condition, and later schools shaped different patterns, depending on the particular hypnotist, the school to which he belonged, and the period in history (Janet, 1919). Freud (1891/1966) noted that all Bernheim and Liebeault’s patients in Nancy observed other patients being hypnotized before being hypnotized themselves. He considered it to be “of the greatest value for the patient who is to be hypnotized to see other people under hypnosis, to learn by imitation how she is to behave and to learn from others the nature of the sensations during the hypnotic state” (Freud, 1891/1966, pp.107-108). More recently, Stokvis (1953) compared the subjective experiences of hypnotized subjects and emphasized the element of unconscious role-playing.

Sarbin (1950) was the first to formulate a social psychological model of hypnosis, claiming that differences in hypnotizability can be explained by the variance in people’s capacity for role involvement. Spanos, Perlini, Patrick, Bell, and Gwynn (1990) found no difference between low and high hypnotizable individuals in their scores on Crowne and Marlowe’s (1960) Social Desirability Scale. Yet within the group of highly hypnotizable subjects, compliant subjects scored significantly higher than noncompliant subjects. Sarbin and Lim (1963) found a significant association between hypnotizability as measured by the Friedlander-Sarbin scale and role-taking skill as measured by the ability to improvise. Green and Lynn (1995) conclude that a socio-cognitive approach provides the most viable and parsimonious explanation for the fact that the reports of simulators were generally similar to those of highly hypnotizable subjects. Lynn, Martin, and Frauman (1996) have suggested that hypnotic sequelae, or aftereffects of hypnosis for which post-hypnotic suggestions are not offered, may be a result of general processes of social suggestibility. Socio-cognitivist theorists assert that subjects themselves are unaware of their own compliance to situational demands and in fact delude themselves into believing that their responses are involuntary (Kirsch & Lynn, 1995).

Moore (1964) reported a small (r = 0.21) yet significant correlation between hypnotizability and a test of social influencibility that was strongest for the easiest hypnotic suggestions. This finding, even if replicated, would be of dubious clinical relevance. More recently, Woody et al. (1997) found that hypnotic performance is related to some sort of social suggestibility that is not unique to hypnosis. The measure they used was the extent to which subjects reported subjective changes in experience following the consumption of a drink they (falsely) believed to contain alcohol. In another study (Kirsch et al., 1995) the responses that subjects expected to display to hypnotic suggestions were the strongest correlate of their real responses, especially for highly hypnotizable subjects and for difficult suggestions.
Self-Monitoring

According to Snyder (1995), people differ in the degree to which they monitor their self-image in social interaction. He devised a 25-item questionnaire to measure the construct he called self-monitoring, the Self-Monitoring Scale (SMS; Snyder, 1974). He described high self-monitors as having a repertoire of different selves from which to choose to suit the situation at hand. Snyder theorized that they have a talent for acting, possess good expressive skills and are particularly sensitive to interpersonal cues and the impression they make on others. This enables them to sum up situations accurately and adapt their behavior accordingly (Snyder, 1979).

Snyder (1987) described low self-monitors, on the other hand, as people who consistently behave in accordance with their personal values and beliefs, rather than with the contingencies of the situation. They were assumed to be less concerned about others' evaluations and less sensitive than high self-monitors to cues from others about the appropriateness of their behavior (Snyder, 1974). For a recent “appraisal and reappraisal” of the concept of self-monitoring, see Gangestad and Snyder (2000).

If, as suggested by Sarbin and Coe (1972), highly hypnotizable people are particularly sensitive to social cues and expectations in the context of hypnosis, and if Snyder’s SMS indeed measures sensitivity to social cues, we would expect to find a correlation between hypnotizability and self-monitoring scores. However, Kihlstrom et al. (1980) found scores on the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A; Hilgard, 1965) to be entirely independent of scores on the Self-Monitoring Scale (r = .01). This result could lead us to the conclusion that a concern for social appropriateness is not connected with the ability to be hypnotized. However, frequent criticism of the psychometric properties and the construct validity of Snyder’s SMS (Briggs & Cheek, 1988; Briggs, Cheek, & Buss, 1980; Dillard & Hunter, 1989) indicates that such a conclusion may be somewhat premature.

Snyder and Gangestad (1986) recommended the use of a revised, shortened form of the SMS that they claim to be more reliable and more factorially pure than the original scale. The original SMS contains three distinct factors: Extraversion, Acting, and Other-Directedness (Briggs, Cheek, & Buss, 1980). The Self-Monitoring Scale-Revised (SMS-R; Gangestad & Snyder, 1985) consists of 18 of the original 25 items that loaded above .15 on the first unrotated factor. The seven items deleted from the original SMS were chosen because they failed to discriminate adequately between high and low self-monitors (Gangestad & Snyder, 1985). Four of these questions, 2, 7, 15 and 19, loaded onto the Other-Directedness factor.

The SMS-R has consistently been reported to contain at least two uncorrelated factors (Briggs & Cheek, 1988; John et al., 1996), generally labeled Public Performing and Other-Directedness. Public Performing combines the smaller, intercorrelated Extraversion and Acting factors from the SMS (Briggs et al., 1980; Gangestad & Snyder, 1985b), whereas Other-Directedness remains essentially the same as in the original SMS, measuring other-directed concerns about the social appropriateness of behavior.

In the current study we administered the SMS-R in conjunction with the Stanford Hypnotic Susceptibility Scale: Form C (Weitzenhoffer & Hilgard, 1962), in order to examine whether one or both of the SMS-R subscales would correlate with a measure of hypnotic susceptibility more challenging than the HGSHS:A (Hilgard, 1965). Since hypnotic subjects are, from a social psychological viewpoint, responding in part
to the expectations of the hypnotist, we expected in particular to find that subjects scoring high on the Other-Directed subscale of the SMS-R would tend to score higher in hypnotizability than low scorers on that subscale. We also assumed that high but not low self-monitors would tend to display behavior they presume to be sought by the hypnotist, whose depth-of-trance rating for the subject would thus tend to exceed the subject’s own perceived depth of trance.

Method

Participants

One hundred and seven unpaid volunteers over the age of 17 (49 men, 58 women; mean age 33.8 years, range =18-71 years) were recruited by means of advertisements at a university campus in Jerusalem, announcements in local newspapers and by word of mouth. Subjects were evaluated with a semi-structured interview in order to establish as far as possible the absence of axis-I psychopathology as defined in the DSM-IV (American Psychiatric Association, 1994).

Instruments

1. The Self-Monitoring Scale-Revised (SMS-R; Gangestad & Snyder, 1985) is a revised scale consisting of 18 of the original 25 items of the Self-Monitoring Scale (SMS; Snyder, 1974). Questions are in true-false form and score either 0 or 1 on each question, resulting in a self-monitoring score ranging from 0 to 18. (For a thorough review of the reliability and validity of the scale, see Jackson, 1999; Gangestad and Snyder, 2000.)

2. The Stanford Hypnotic Susceptibility Scale: Form C (SHSS:C; Weitzenhoffer & Hilgard, 1962) was administered to each subject individually. One point was awarded for each of 12 suggestions responded to, resulting in a hypnotizability score ranging from 0 to 12. The Kuder-Richardson total scale reliability index is 0.85 (Perry et al., 1992). During SHSS:C administration, before the twelfth item (which takes the subject out of the hypnosis), the hypnotist estimated the depth of each subject’s hypnotic state on an eleven-point scale (0-10). The subject was then asked, while hypnotized, to name a number between 0 and 10 that best corresponded to his or her subjective depth of trance. The difference between these two ratings was calculated for each subject.

Procedure

As part of a wider study on the genetics of hypnotizability (Lichtenberg et al., 2000), subjects were requested to complete a number of questionnaires, including the SMS-R. Since the SMS-R was not administered to the first 14 respondents, a total of 93 participants completed this scale. After completing the questionnaires, participants underwent hypnotic induction, and were administered the SHSS:C. An assessment of perceived depth of trance was given by both hypnotist and subject, as described above.

Pearson correlation coefficients were computed:

1. Between SHSS:C scores and
a.) total SMS-R scores,
b.) scores on the SMS-R Public Performing subscale, and
c.) scores on the SMS-R Other-Directedness subscale.

2. Between the Other-Directed subscale of the SMS-R and the difference between the hypnotist’s and the subjects’ depth-of-trance ratings.

**Results**

SHSS:C scores ranged from 0 to 11, with a mean of 5.77 (SD=2.8). The SMS-R scores ranged from 1 to 17 with a mean of 8.52 (SD=3.66). As expected from previous research (Hilgard, 1965; Lyons & Crawford, 1997), no difference was observed between men and women in hypnotic susceptibility. Despite previous studies in which men were found to score higher than women on the SMS-R (John et al., 1996; Stewart & Carley, 1984), we found no significant gender difference both for the total SMS-R score and for the subscales. Descriptive statistics for the two administrations are presented in Table 1 and a correlation matrix between the scales and subscales is presented in Table 2. Note that we found the two SMS-R subscales to correlate significantly with one another (r = .24, p < 0.05).

Contrary to our hypothesis, no association was found between hypnotic susceptibility and total self-monitoring scores (r = 0.02). Furthermore, neither of the correlations between hypnotic susceptibility and the SMS-R subscales was significant.

As expected, a positive association was found between scores on the Other-Directed subscale of the SMS-R and the difference between the hypnotist’s and the subjects’ depth-of-trance ratings (r = .28, p < 0.05). In other words, the higher subjects scored on the SMS-R Other-Directedness subscale, the more the hypnotist tended to overrate the subject’s depth of trance in relation to the subject’s subjective rating. This effect was even larger when the data was limited to subjects scoring above 6 in the SSHS:C (r = .34, p < 0.05); it was not significant (r = .21, p = 0.15) for the less hypnotizable subjects (those scoring up to 6 on the SSHS:C). The difference in ratings was not significantly associated with total SMS-R scores.

**Discussion**

In the present study, we did not find any correlation between Snyder’s SMS and hypnotizability. Social-cognitive theory has stressed the contribution of responses to perceived expectations through entering social roles as a factor in hypnotizability.

| Table 1: Descriptive statistics for SHSS:C, SMS-R and SMS-R subscales |
|-----------------|-----|-----|-----|-----|
|                 | N   | Mean| SD  | Range|
| SHSS:C          | 107 | 5.77| 2.80| 0-11 |
| SMS-R           | 93  | 8.52| 3.66| 1-17 |
| Public Performance | 93  | 5.37| 2.90| 0-12 |
| Other-Directedness | 93  | 3.15| 1.64| 0-6  |
Self-monitoring, or at least its Other-Directedness component, would have been expected to measure this responsiveness to expectations. Hence, these findings do not provide support for a basic tenet of the social-cognitive approach.

Some researchers have questioned the validity of self-monitoring as a psychological construct, since a single, general factor seems to be lacking. Some studies even show that total self-monitoring scores bear no relation to sensitivity to situational cues for appropriate behavior (Dabbs, Evans, Hopper, & Purvis, 1980; Schlenker, Miller, & Leary, 1983). John et al. (1996) found little evidence for the discriminant validity of the SMS-R against the Social Potency scale (Tellegen, 1982). Briggs and Cheek (1988) also found it hard to distinguish from measures of extraversion, but this appears to be largely because the Public Performance subscale overlaps to a high degree with extraversion (as well as social potency and self-confidence).

The original 25-item SMS includes 10 Other-Directedness items that form a reliable subscale unrelated to measures of extraversion (Briggs et al., 1980). In several cases, the full 10-item Other-Directedness subscale (but not the full SMS) has been shown to correlate with other variables, for example inconsistency between behavior and attitudes (Baize & Tetlock, 1985) and the inclination to use cues from other people as a guide for how to behave socially (Nowack, 1994; Schwalbe, 1991). The finding that high self-monitors prefer image-orientated advertisements to quality-orientated advertisements (Snyder & DeBono, 1985) held only for the 25-item version of the SMS. The effect was not significant for the 18-item SMS-R because the Other-Directedness items were the best predictors of advertising preferences. Oliver, Cheek and Klohnen (1996) suggest that the Other-Directed items remaining on the SMS-R do not provide a sufficiently reliable and valid measure of the tendency to adapt one’s behavior to different situations on the basis of social cues. Nevertheless, the Other-Directedness subscale of the SMS-R appears to have reasonable discriminant validity.

Table 2: Correlation matrix for SHSS:C, SMS-R and SMS-R subscale scores

<table>
<thead>
<tr>
<th></th>
<th>SHSS:C</th>
<th>SMS-R</th>
<th>Public Performance</th>
<th>Other Directedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHSS:C</td>
<td>1.00</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>SMS-R</td>
<td>.02 (p = .83)</td>
<td>1.00 (p = .00)</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Public Performance</td>
<td>-0.06 (p = .57)</td>
<td>0.90** (p = .00)</td>
<td>1.00 (p = .00)</td>
<td>---</td>
</tr>
<tr>
<td>Other-Directedness</td>
<td>0.15 (p = .14)</td>
<td>0.64** (p = .00)</td>
<td>0.24* (p = .42)</td>
<td>1.00 (p = .00)</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)
*Correlation is significant at the 0.05 level (2-tailed)
and could be expected to represent a valid construct of relevance to hypnotic susceptibility. In this study, the correlation between the Other-Directedness subscale and hypnotic susceptibility scores was not significant.

Hypnotic response could not reasonably be expected to be completely indifferent to either neuropsychological processes or to social influences, and theorists have attempted to reconcile the two approaches (Woody, Bowers, & Oakman, 1992; Gruzelier, 2000). However, special process theory, which places less emphasis on the social factors of hypnotizability, is more consistent with the findings presented here.

We did find a hint of responsiveness to social influence affecting at least the way we assess hypnotizability—not enough to lend support to the social-cognitivist position, but interesting nevertheless. The Other-Directedness subscale, though not the total SMS-R scores or the Public Performance subscale, predicted greater differences between the hypnotist’s ratings of subjects’ depth of hypnotic trance and the subjects’ own ratings, especially for the less hypnotizable subjects. This makes good intuitive sense, since we would expect those who tend to behave in accordance with other people’s expectations to display “successful” behavior in the hypnotic situation, even if they are not actually experiencing a greatly altered state of consciousness. Those high in Other-Directedness, therefore, tended to give the impression of being more deeply hypnotized than they felt. As noted, this effect did not attain significance when calculations were restricted to the group of less hypnotizable subjects, while the correlation was particularly robust amongst the high hypnotizables. This finding might provide some support for an influence of the social context upon perceived hypnotizability, in line, for example, with Epstein and Rock’s (1960) conclusion that the perceived desires of the hypnotist override other factors in determining the response to suggestions for highly hypnotizable subjects only.

As noted, the 18-item SMS-R places much less emphasis on other-directed concerns about social appropriateness than the original 25-item SMS. We therefore recommend administering the 25-item SMS in future hypnosis research, to examine whether or not hypnotic susceptibility is significantly correlated with its Other-Directedness subscale. A more challenging test of hypnotizability would possibly uncover correlations not discerned by the HGSHS:A. Future research could also examine the possibility of a link between hypnotic susceptibility and alternative measures of “social chameleonism”, such as the Concern for Appropriateness Scale (Lennox & Wolfe, 1984) or the Functional Flexibility Scale (Paulhus & Martin, 1986).

Whereas we detected an inclination on the part of the hypnotist to overestimate the depth of hypnotizability among subjects scoring high on the Other-Directedness subscale, we were unable to find a correlation between the SMS-R and hypnotizability. The findings of this study cannot be said to provide support for the socio-cognitive interpretation of hypnotizability.

References


New York: Guilford Press.


Hypnotizability and Self-Monitoring


