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08 August 2019

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September, 1964

AIR FORCE OFFICE OF SCIENTIFIC RESEARCH

PSYCHOLOGICAL CORRELATES OF PLATEAU
HYPNOTIZABILITY IN A SPECIAL VOLUNTEER

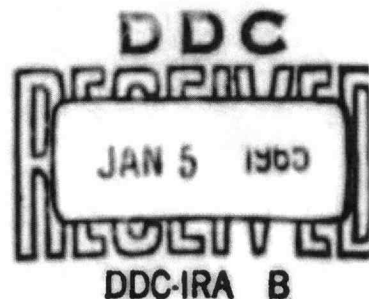
SAMPLE

Ronald E. Shor

Martin T. Orne

and

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Unit for Experimental Psychiatry
Institute of the Pennsylvania Hospital

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Over the years, in the process of training large numbers of volunteer Ss for participation in hypnosis research, the writers have gradually come to evolve a number of clinical impressions or informal hypotheses about what kinds of psychological indices predict hypnotizability and what factors seem irrelevant. The present investigation was designed to test these impressionistic hypotheses. While in intent an hypothesis-testing experiment, the study has been developed in psychometric form. This procedure was used because the hypotheses under test refer to correlates of hypnotizability and because coefficients of correlation are often descriptively useful as benchmarks in further evaluations.

In order to make the most direct and salient test of the impressionistic hypotheses it was felt essential to reproduce as faithfully as possible the specific, original conditions under which the impressions had been evolved in the first place. In methodological terms this requirement meant that two key features had to be included in the experimental design: (a) the sample drawn had to be representative of the investigators' special population of volunteer Ss, and (b) the criterion of hypnotizability used in the study had to be equivalent to what the investigators have really meant operationally by the term hypnotizability in their everyday usage.

Impressionistic Hypotheses

It has been the impression of the writers that hypnotizability is correlated with only two general types of psychological variables: (a) with attributes bearing a close family kinship to actual hypnotic performance, and (b) with attitudes which are highly specific to hypnosis and to the hypnotic situation, such as attitudes toward entering

hypnosis under the investigators' given laboratory conditions. Examples of attributes felt to be predictive are work-samples taken in the waking state of mild hypnotic effects--specifically in this regard, the heat illusion and postural sway tests. Another is the propensity for unusual subjective experiences as measured by life-history reports of naturally occurring "hypnotic-like" experiences.

Beyond these few indices it is the impression of the writers that hypnotizability does not correlate with any of the common dimensions of personality measurement such as hysteria, submissiveness, neuroticism, extroversion, social adjustment, impunitiveness, acquiescence tendency, intelligence, sex, and so forth. It is hypothesized that correlations sometimes reported between hypnotizability and these various types of measures are functionally dependant on the impurity of the criteria of hypnotizability used, the selective personal appeals of the different hypnotists, and other situation-specific factors.

For example, a professor of psychology might consistently find a positive correlation between intelligence and hypnotizability in his research samples. This consistent correlation may occur, however, only because this particular investigator's prestige and personal manner selectively appeals more to his brighter Ss and tends to evoke greater resistance and hostility in his less bright Ss.

Another investigator might discover a correlation between neuroticism and hypnotizability but only because he expected to discover this correlation. Under the generic concept of demand characteristics Orne has shown that the hypnotist's expectations and the Ss' perceptions of these expectations will subtly alter all hypnotic behavior (Orne, 1959;

Orne, 1962 a; Orne, 1962 b). It is plausible that the investigators' initial hypotheses might unwittingly set into motion interacting expectancies and other situational influences in the direction of confirming the investigators' predictions. For example, since the present investigators predict a correlation between propensity for naturally occurring "hypnotic-like" experiences and hypnotizability it is plausible that the investigators themselves may quite unintentionally initiate influences tending to confirm or at least confound the resulting correlation.

Historical Perspectives

The problem of determining correlates of hypnotizability came to the forefront of theoretical attention during the celebrated Nancy-Salpêtrière controversy of the 1860s. Charcot's neurological methodology led him mistakenly to believe that only persons constitutionally predisposed to hysteria could be hypnotized (1882). To Charcot hypnotizability was associated with a specific pathological process. A much less restrictive viewpoint was adopted by Bernheim. Marshalling the broad clinical experience of practitioners in the Nancy tradition Bernheim replied that all persons had the capacity to manifest some degree of suggestibility under appropriate circumstances (1884). To Bernheim hypnotizability was a normal and universal potentiality. Differences in responsiveness--impressionability he called it--were more due to subtle resistances and varied habit patterns toward authority than due to a lack of underlying capacity to respond. It may be noted parenthetically that the hypotheses advanced in this report are closely congruent with Bernheim's viewpoint.

In the early 1930s the question of correlates of hypnotizability became a matter for empirical study rather than polemics as academic psychologists developed standardized scales for measuring hypnotic performance. The psychological testing movement was in mature development by then and quantitative methods for expressing relationships were in general use.

Although seemingly promising at first, this line of psychometric inquiry after thirty five years and over fifty studies is primarily a history of disappointments. Published findings are generally null, unsubstantiated, and contradictory. Because the findings have been chaotic and conflicting, and because procedures of sampling and determinations of hypnotizability have been highly divergent and ambiguous there appears no satisfactory method for drawing meaningful conclusions. It was against this background of empirical confusion that the investigators turned instead to their own familiar impressions and laboratory conditions. For detailed reviews of the literature on correlates of hypnotizability see Barber (1964), Deckert and West (1963), and Weitzenhoffer (1953). The separate studies are discussed later in this report as relevant to the classification of tests used in this investigation.

Sampling Procedure

The selection procedure was designed to produce a sample representative of the investigators' special population of volunteer Se. This special population is composed mostly of college student Ss who already have had considerable exposure to hypnotic training. About half of the individuals in this population are, moreover, at the two extreme

ends of the continuum of hypnotic responsiveness--i.e., the distribution is rectangular rather than Gaussian. This abnormal distribution is produced because the majority of experiments on hypnosis in the laboratory require the use both of many highly responsive and unresponsive Ss. In other words, in the process of continually developing the volunteer Ss pool the investigators had strongly tended to expend their primary effort into locating as many individuals as possible at the two extremes of hypnotic responsiveness.

The sample was composed of 25 students from universities in the Boston area. The Ss were individuals interested in hypnotic experimentation, willing to participate in a lengthy series of psychological testing with only token monetary payment. The Ss were obtained on a random basis from the available pool. As has been noted, in the years prior to the experiment, many hundreds of Ss had passed through the laboratory with variable amounts of hypnotic training and experimental participation. Thus, some of the individuals selected for inclusion in this study were already at various advanced stages of hypnotic training prior to the experiment; others similarly had already shown themselves to be unresponsive to hypnosis in repeated hypnotic training sessions. Only 6 of the 25 Ss selected had had no prior exposure to hypnotic training. The inclusion of these few inexperienced Ss in the sample was intended to reflect the fact that at the time of the study about a fourth of the laboratory's training sessions were devoted to initial hypnotic screenings.

The Criterion of Hypnotizability

The criterion of hypnotizability used in this study was designed to be equivalent to what the investigators have really meant operationally

by the term hypnotizability in their everyday usage. In most studies hypnotizability has been defined in terms of a single score on a limited test of hypnotic performance. The assumption made is that relative ratings of Ss' performance would not alter markedly with additional hypnotic training. In the present study, however, a S's hypnotizability was defined as the maximum hypnotic depth achieved in as many intensive hypnotic training sessions as the examiner needed in order to feel confident that a stable plateau in the S's hypnotic performance had been reached. The controversy regarding "universal" hypnotizability remains unresolved; i.e., whether or not with unlimited time and ingenuity everyone eventually could be profoundly hypnotized. Nevertheless all empirical workers agree that if apparently cooperative Ss are given skillful and intensive hypnotic training, that most Ss most of the time soon reach a plateau in hypnotic performance after which no appreciable improvement occurs regardless of the hypnotist, the methods used, or the amount of further training.

Defining a S's hypnotizability as his stable plateau in hypnotic performance means that two diagnostic estimations are necessary: (a) a performance rating is needed of the actual maximum hypnotic depth which the S achieves in a given session, and (b) a prognosis judgment is needed at some point indicating the very strong unlikelihood that the S's hypnotic performance would improve with additional training.

In these hypnotic training sessions the examiner was allowed freedom to utilize any techniques which seemed appropriate and to explore clinically any issues which might then help maximize performance. All hypnotic sessions were administered by one of the investigators (MTO).

To secure estimates of inter-judge reliability another of the investigators (RES) observed all of the sessions through a one-way mirror with audio arrangements.

Both the examiner and the observer independently formed performance ratings of maximum depth achieved. These ratings were clinical diagnoses by experienced hypnotists based upon both objective hypnotic behavior and Ss' report. For each of the Ss the examiner eventually came to the judgment that further improvement in hypnotic performance was highly unlikely. Performances in these final training sessions were classified into four categories: (a) Less Than Light, (b) Light, (c) Medium, and (d) Deep. For all inferential purposes these four categories are consistent with the understandings of these terms in common usage and descriptively correspond to the major divisions of the Davis-Husband scale (Davis & Husband, 1931). The two sets of final performance ratings were almost identical ($r = .96$) with virtually no mean difference. They were averaged to form a single criterion measure of hypnotizability.

Tabulations of the Ss classified into each of the four categories of hypnotizability are presented in Table 1.

Insert Table 1 about here

An approximately equal percentage of Ss fell into each of the four categories so that the distribution is roughly rectangular. It will be recalled that a rectangular distribution was needed to reproduce the shape of the investigators' special volunteer Ss population.

Specific Predictions

The psychological tests included in the present investigation are classified below into five groups. The hypotheses under test are presented as specific predictions. The tests are described in more detail in the section on Description of Tests.

I. Proneness for Unusual Subjective "Hypnotic-like" Experiences.

This group refers to enduring abilities or propensity for the kinds of unusual subjective "hypnotic-like" experiences where external reality is not the major determinant of subjective reality. This concept was measured by a set of Personal Experiences Questionnaires. It was predicted that these tests would correlate positively with the criterion of hypnotizability.

II. Attitudes and Motivational Factors Specifically Relating to Hypnosis. This group refers to factors arising from Ss' attitudes and motives, persistent but potentially modifiable, which specifically relate to being hypnotized--i.e., conscious and nonconscious attitudes about hypnosis, preconceptions, fears, motives, situational and inter-personal considerations directly relevant to entering hypnosis under the given conditions. These concepts were measured by three tests.

1) Card 12M of the Thematic Apperception Test (Murray & associates, 1943), 2) Traits Regarding Hypnosis Inventory, and 3) Background Index on Hypnosis. It was predicted that these tests would correlate positively with the criterion of hypnotizability.

III. Personality Attributes. This group refers to common paper-and-pencil measures of stable and enduring personality attributes--e.g., measures of hysteria, submissiveness, neuroticism, extroversion, social

adjustment, impunitiveness, etc. These concepts were measured by five tests:

- 1) Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1951),
- 2) Minnesota Personality Scale (Darley & McNamara, 1941),
3. Rosenzweig Picture-Frustration Study (Rosenzweig, 1948),
- 4) Puzzles "Repression" Test (Rosenzweig & Sarason, 1942),
- and 5) Acquiescence Tendency (Couch & Keniston, 1960).

It was predicted that these tests would not appreciably correlate with the criterion of hypnotizability.

IV. Subsidiary Criteria of Hypnotic Performance. This group refers to measures of hypnotic performance other than the specific criterion of hypnotizability used in this investigation. These measures were secured by two tests.

- 1) Subjective Estimates of Percentage Depth, and 2) Stanford Hypnotic Susceptibility Scale, Forms A and B (Weitzenhoffer & Hilgard, 1959).

It was predicted that these tests would correlate positively with the criterion of hypnotizability, but they were not intended to be considered as independent predictor variables.

V. Miscellaneous. This group includes a number of tests:

- 1) Postural Sway Test (Eysenck & Furneaux, 1945),
- 2) Heat Illusion Test (Eysenck & Furneaux, 1945),
- 3) Vividness of Mental Imagery Questionnaire,
- and 4) Wechsler-Bellevue Intelligence Scale, Form II (Wechsler, 1946).

In addition, the Ss' sex also was used as a variable. It was predicted that postural sway, heat illusion, and mental imagery would correlate positively with the criterion of hypnotizability, but that intelligence

and sex would not correlate.

Order of Test Administration

Order of test administration is presented in Table 2.

Insert Table 2 about here

A few of the tests were repeated twice. Ss were run individually through the sequence of testing in three days to two months, as their schedules permitted. The average was about three weeks. The time required for Ss to complete the testing varied between 12 to 20 hours. The average was about 16 hours.

Description of Tests

The tests included in the study are described below.³

I. Propensity for Unusual Subjective "Hypnotic-like" Experiences

1) Personal Experiences Questionnaires

A relationship has been demonstrated between hypnotic performance and life-history reports on naturally occurring "hypnotic-like" experiences (Shor, 1960; Shor, Orne, & O'Connell, 1962). A number of investigators have incorporated these materials into their own prediction studies. With one exception (Barber & Calverley, in press-a) results have been favorable (Ås & Lauer, 1962; Ås, O'Hara, & Munger, 1962; London, Cooper, & Johnson, 1962; Thorn, 1960).⁴

Three varieties of Personal Experiences Questionnaires were used in the present study.

A) Personal Experiences Questionnaire--Long Form (PEQ-L). A 149-item paper-and-pencil self-report questionnaire was developed to

elicit reports on a wide variety of "hypnotic-like" experiences occurring naturally in the normal course of living, independent of the use of special techniques, such as hypnosis, sensory-deprivation, drugs, etc. Two scoring systems were used: (a) frequency--how often Ss have had the experience described, and (b) intensity--how vivid and profound was a S's single most intense experience of it. Relevant quantitative scales were provided. (Also discussed in Shor et al., 1962.)

B) Imaginary Playmates. At the end of the PEQ-L were appended a number of questions inquiring about the existence and apparent reality of imaginary playmates during childhood. These questions were scored as a separate unit.

C) Personal Experiences Questionnaire--Short Form. In a prior publication normative data were presented on 44 items selected from the PEQ-L (Shor, 1960). The scoring system was based on simple occurrence, i.e., Ss replied only on whether they had ever had the experiences described.

II. Attitudes and Motivational Factors Specifically Relating to Hypnosis.

1) Card 12M of the Thematic Apperception Test

Four cards were selected from the Thematic Apperception Test (TAT) and administered with the standard modification for written responses.

In order of administration, the four cards were: (a) boy with violin (1), (b) two men standing (7BM), (c) man and reclining figure (12M), and (d) men reclining (9BM). The third card in this set, 12M, has often been interpreted as depicting hypnosis, and it was taken as the "hypnosis" card which White (1937 a) and later Sarason and Rosenzweig

(1942) found elicited attitudes toward hypnosis which correlated with hypnotizability.⁵ A number of other investigators have also used Card 12M in their hypnosis research (Levitt, Lubin, & Brady, 1962; Levitt, Lubin, & Zuckerman, 1959; Schneck, 1951; Sector, 1961 b; Ventur, Kransdorff, & Kline, 1956).

Transcripts of the Card 12M protocols were coded and randomized. Four judges independently rated the protocols for estimates of hypnotizability, without instruction or restrictions as to the criteria of judgment to be applied.⁶

2) Traits Regarding Hypnosis Inventory

A paper-and-pencil inventory was designed to elicit attitudes toward hypnosis by means of a brief adjective check-list. The objective was to develop a device yielding information comparable in principle with White's use of the "hypnosis" TAT card. The inventory was designed to preserve some of the features of a projective device but with objective scoring. The inventory had two parts. The first inquired about traits presumed to characterize a good hypnotic S; the second inquired about traits presumed to characterize a good hypnotist. Scoring was the sum of favorable, plus not unfavorable responses.

3) Background Index on Hypnosis

A paper-and-pencil questionnaire was designed to inquire about Ss' knowledge, attitudes, and impressions about hypnosis. The questionnaire was composed of a number of separate sections.⁷

A. Impressions of Percentage Pleasantness. Ss were first required to describe their prior experiences as hypnotic Ss, their observations and reading about hypnosis, etc. They were then asked to estimate from

all of their sources of factual information what percentage of the time the typical S in hypnosis seemed to be enjoying himself and what percentage of the time hypnosis seemed unpleasant to him.

B) Circumstances of Agreeing to Participate in Hypnosis. Ss were asked to describe the circumstances under which they would volunteer to participate in hypnosis. Seven specific situations were cited covering a wide range of circumstances; e.g., medical research, a fraternity party, etc. Scoring was based on the sum of agreements to participate.

C) The Effects of Conditions on Initial Induction. A check-list was provided in which Ss were asked to classify a series of 73 items in terms of how they felt specific circumstances would effect initial hypnotic induction. Typical items were "being comfortable", "a close friend of your choice watching", "just having failed an examination", etc. A five-point scale was provided: (a) necessary to induce hypnosis, (b) favorable in inducing hypnosis, (c) neutral or uncertain, (d) unfavorable in inducing hypnosis, and (e) prevents hypnosis. Scoring was based on the number of extreme responses (summation a + e).

D) Conceptions of Hypnotic Depth. A 30-item check-list was provided for Ss to classify their impressions of the depth of hypnosis required to first produce a series of described phenomena. Typical items were: "the inability to open the eyelids when challenged to do so", "the feeling of not wanting to resist the hypnotist's suggestions", "feeling as if your body were drifting through space", and so forth. Eight of the items were grossly farfetched; e.g., "the ability to accurately predict the future by going forward in time." A five-point

scale was provided: (a) having been, (b) not having been, (c) not knowing, (d) deep hypnosis, and (e) does not happen.

A scoring stencil was designed to yield three separate scores which may be briefly characterized as follows: (a) extent of "magical" notions, (b) extent of "skepticism", and (c) extent of agreement with the opinions of recognized authorities on hypnosis.

III. Personality Attributes

1) The Minnesota Multiphasic Personality Inventory (MMPI)

and

2) The Minnesota Personality Scale (MPS)

The MMPI is a paper-and-pencil self-report personality inventory of 550 items providing measures of nine basic psychiatric scales as well as many derived scales. The MPS is a paper-and-pencil self-report personality inventory of 218 items providing five measures of individual and social adjustment. Unlike the MMPI, originally standardized to diagnose common psychiatric classifications, the MPS has been standardized to be applicable to the features of personality adjustment most relevant to the general college population.

Although not feasible to include every personality inventory related to hypnotizability by one or another investigator, it was believed that the MMPI and the MPS together would cover most of the gamut of measures available through this type of paper-and-pencil instrument.⁸

3) Rosenzweig Picture-Frustration Study,

and

4) Puzzles "Repression" Test

In 1938 Rosenzweig hypothesized that hypnotizability was positively

associated with repression as a preferred mechanism of defense and with impunitiveness as a characteristic type of immediate reaction to frustration. Evidence for this hypothesis was later reported (Rosenzweig & Sarason, 1942), in which impunitiveness was measured with the Rosenzweig Picture-Frustration Study (a paper-and-pencil inventory) and repression was measured by amount of negative Zeigarnik effect under anxiety-provoking circumstances. In the repression test a set of six to eight piece jigsaw puzzles was administered under the guise of an intelligence test in such a way that Ss could successfully complete only half of the puzzles.⁹ A greater percentage of recall of successfully completed items was taken as the index of repression. The repression study has been replicated, however, with null findings. (See Eysenck, 1947; Petrie, 1948. On impunitiveness, see Willey, 1951.)

Impunitiveness and repression scores were computed by the methods described by Rosenzweig and Sarason. Because it seemed that the computation of the impunitiveness score had a considerable non-objective component, all protocols were coded and scored blindly by three judges. Average inter-rater reliability was .78. The scores of the judges were then averaged.

5) Acquiescence Tendency

Agreeing Response Set has been defined as the general tendency to agree with psychological test items regardless of their content. A number of investigators have hypothesized that this general tendency is a manifestation of a relatively stable personality characteristic to acquiesce to authority (Couch & Keniston, 1960). Theorists often have supposed that highly hypnotizable individuals possess this attribute.

Two measures of acquiescence tendency (agreeing response set) were included in this study: (a) Over-all Agreement Scale (Couch & Keniston, 1960), and (b) the summation of responses marked true on the MMPI.

IV. Subsidiary Criteria of Hypnotic Performance

1) Subjective Estimates of Percentage Depth

During an interview conducted by one of the investigators (RES) at the end of the battery of testing, Ss were asked to estimate how deeply they had been hypnotized in the hypnotic training sessions in terms of their own, unaided understandings of the deepest hypnosis. A specific, percentage rating scale was provided, a variant of procedures used by earlier investigators who had reported on subjective estimates of depth (Barry, MacKinnon, & Murray, 1931; Hatfield, 1961; Israeli, 1953; LeCron, 1953; H.M. White, 1930).

2) Stanford Hypnotic Susceptibility Scale (SHSS)

The SHSS was administered twice to each S by one of the investigators (DNO'C). Form A of the scale was always administered first, before the hypnotic training and evaluation sessions; Form B was always administered second, after the training sessions.

V. Miscellaneous

1) Postural Sway Test

and

2) Heat Illusion Test

Eysenck (1947), Eysenck and Furneaux (1945), and Furneaux (1946; 1956), using hospital patient populations, reported multiple correlations between hypnotizability and the Postural Sway Test and the Heat Illusion

Postural Sway Test alone was reported as .73 and .64. The correlation was reported between hypnotizability and the Heat Illusion Test alone, as .51 and .59.

The Postural Sway Test, standardized by Hull (1933), measures the amount of bodily sway in response to so-called waking suggestions during a specified time period.

The Heat Illusion Test was described as early as 1893 by Scripture. The S is asked to hold an electrical resistor which is slowly heated as he turns a calibrated knob. The S is then asked to report when he first begins to feel heat. The indicator is then turned back to zero, and the procedure repeated. The second time, however, the current has been secretly turned off.

The procedures for administering and scoring these two tests as described by Eysenck were replicated closely. Eysenck's original recording of swaying suggestions was secured from Star Sound Recording Studios, Cavendish Square, London, and used throughout. Wording of other procedures was kept identical. The only known modification was that a silent time-delay hidden switch was built into the Heat Illusion apparatus rather than a manual hidden switch.

The Heat Illusion Test was concealed among a series of five other "Perceptual and Physiological Tests", which were not scored. The Postural Sway Test was administered at the end of the series.

It had been the informal experience of the investigators that the postural sway test and other similar measures discriminated moderately well between those Ss who later showed at least a few of the simplest hypnotic responses and those Ss who later showed even fewer or no

more than weak predictors, however, of ultimate hypnotic performance. Similarly, the impression was held that the Heat Illusion Test had some predictiveness of ultimate hypnotic performance, but only slight to moderate. Thus, it was predicted that the Postural Sway and Heat Illusion Tests would correlate with hypnotizability, but that the multiple prediction would not be very high.

3) Vividness of Mental Imagery Questionnaire

A paper-and-pencil questionnaire of 15 items was designed to inquire about the vividness of the mental imagery which Ss report having generally available in the usual waking state. Ss were asked to rate on a seven-point scale the clarity and vividness of their waking imagery in various sensory modalities. The questionnaire was a variation of Betts' Imagery Questionnaire (1909), which Sutcliffe (1958) had found differentiated his somnambules from non-somnambules. McBain (1954) also had found a relationship between imagery and hypnotizability. The new questionnaire was evolved to provide simpler items, more in keeping with the type of imagined experiences often required of hypnotic Ss.

It was predicted that vividness of imagery would correlate with hypnotizability, but it was felt that the correlation might be artifactual. Shor (1962) has theorized that individuals with more vivid waking imagery have an uncontrolled advantage in the performance of those hypnotic phenomena involving imagery, particularly in hallucinations. The crux of hypnotic fantasy, in Shor's theoretical view, is not the vividness of the mental imagery as such but rather how completely the Ss believe in the reality of the hypnotic fantasy at the moment of the

experience. The view is that even relatively shoddy imagery may appear phenomenally real to the S at the moment of the experience provided his usual waking standards of comparisons have sufficiently faded.

4) Wechsler-Bellevue Intelligence Scale, Form II

The Wechsler-Bellevue Intelligence Scale, Form II, was individually administered to the Ss by a trained research assistant. A number of investigators have reported positive correlations of intelligence with hypnotizability (Barry, MacKinnon, & Murray, 1931; Curtis, 1943; Davis & Husband, 1931; Friedlander & Sarbin, 1938; Hull, 1933; and M.M. White, 1930).

5) Sex

Sex differences in hypnotizability favoring females have occasionally been reported (Davis & Husband, 1931; Friedlander & Sarbin, 1938; Hilgard, Weitzenhoffer, & Gough, 1948; London, Cooper, & Johnson, 1962).

Results

Correlations are reported for each predictor variable against the criterion of hypnotizability. As pertinent, other correlations are also presented. The 5% and 1% levels of confidence are reported with single and double asterisks. Since directions of relationship often were predicted it seemed valuable also to report the 10% level; a dagger superscript (†) is used.¹⁰

I. Propensity for Unusual Subjective "Hypnotic-like" Experiences

1) Personal Experiences Questionnaires

Correlations between hypnotizability and the personal experiences measures are presented in Table 3.

Insert Table 3 about here

Response consistency and internal consistency reliabilities of the Personal Experiences Questionnaires have already been reported as very high (.90** to .96**, in Shor, 1960, and Shor et al., 1962).¹¹

II. Attitudes and Motivational Factors Specifically Relating to Hypnosis.

1) Card 12M of the TAT

Correlations between hypnotizability and the four judges' blind ratings were .23, .68**, .13, and .44*. The correlation with the summation ranks of the judges' ratings was .58**.

2) Traits Regarding Hypnosis Inventory

Correlations between hypnotizability and the two administrations of the Inventory and internal consistency reliabilities (split-halves, Spearman-Brown) are presented in Table 4.

Insert Table 4 about here

3) Background Index on Hypnosis

Correlations between hypnotizability and the Index are presented in Table 5.

Insert Table 5 about here

Only one of the six comparisons achieved significance.¹²

III. Personality Attributes

1) Minnesota Multiphasic Personality Inventory

Correlations with hypnotizability are presented in Table 6.

Insert Table 6 about here

Out of 27 basic and derivative scales only the correlation with the Lie scale was statistically significant. Except for Responsibility, none other had a coefficient larger than .30. By any standards of multiple probabilities findings in the table were null.¹³

2) Minnesota Personality Scale

Correlations with hypnotizability are presented in Table 7;
all were negligible.

Insert Table 7 about here

3) Rosenzweig Picture-Frustration Study

and

4) Puzzles "Repression" Test

The correlations between hypnotizability and the two triadic hypothesis variables were negligible (with impunitiveness, .27; with "repression", -.18). The correlation of the two predictors was .20.

5) Acquiescence Tendency

Correlations between hypnotizability and the two measures of acquiescence tendency (agreeing response set) were both -.27. The

the two acquiescence measures was .62**.

IV. Subsidiary Criteria of Hypnotic Performance

1) Subjective Estimates of Percentage Depth

The correlation between hypnotizability and the percentage estimates was .74**.

2) Stanford Hypnotic Susceptibility Scale (SHSS)

The correlation between hypnotizability and Form A of the SHSS was .75**; the correlation with Form B was .93**. This increase is statistically significant ($p < .005$ point). It will be recalled that Form A was administered before the hypnotic training sessions; Form B was administered after their completion. When administered under comparable conditions Forms A and B have been shown to be normative equivalents (Hilgard, Weitzenhoffer, Landes, & Moore, 1961; Weitzenhoffer & Hilgard, 1959).

V. Miscellaneous

1) Postural Sway Test

and

2) Heat Illusion Test

The correlations between hypnotizability and the two administrations of the Postural Sway Test were .32 and .37[†] respectively; were .36[†] and .02 for the Heat Illusion Test; and were .47* and .38[†] for the Multiple Predictors. Intercorrelations of the two predictors were .03 for the first administration and -.08 for the second administration. The test-retest reliability of the Postural Sway Test was .84**, of the Heat Illusion Test, .58**. ¹⁴

3) Vividness of Mental Imagery Questionnaire (VMI)

The correlation between hypnotizability and the VMI was .56**. Internal consistency reliability (odd-even, Spearman-Brown) for the VMI was .91** for the first administration and .93** for the second.

4) Wechsler-Bellevue Intelligence Scale, Form II

The correlation between hypnotizability and intelligence was -.50*.

5) Sex

The correlation (point biserial) between hypnotizability and sex was .46*, with females the more hypnotizable.

Summary of Results on Hypotheses

A general summary is given in Table 8 comparing results with the initial hypotheses under test.

Insert Table 8 about here

Tests are arranged and classified in rows. The predicted and actually observed directions of relationships are noted in the third and fourth columns of the table. Observed strengths of the relationships are described verbally in the fifth column.¹⁵ Indicated in the final column is whether the findings tend to confirm or reject the initial hypotheses.

Most of the hypotheses were supported. The Background Index was the only unsuccessful prediction of a positive relationship. Regarding predictions of negligible relationships, two unexpected significant

It should be noted that contrary to previous findings, the observed relationship between intelligence and hypnotizability was negative in direction.

Except for the Subsidiary Criteria of Hypnotic Performance (which were not distinct predictor variables) positive correlations with hypnotizability had been predicted for seven types of test. These seven were: (a) Personal Experiences Questionnaires, (b) Card 12M of the Thematic Apperception Test, (c) Traits Regarding Hypnosis Inventory, (d) Background Index on Hypnosis, (e) Postural Sway Test, (f) Heat Illusion Test, and (g) Vividness of Mental Imagery Questionnaire.

To provide a convenient summary index, a multiple correlation has been computed between hypnotizability and five of these seven. The matrix is presented in Table 9. For stable scores, composites were used, as indicated in the table. The hypnotizability criterion had already previously been computed as a composite of both examiner's and observer's final performance ratings. The multiple correlation is .77**.

Insert Table 9 about here

By transforming all composite scores into the same unitage (Anderson & Barnhart, 1959), a profile chart has been constructed to describe these relationships further. Mean composite T-scores are presented in Figure 1 for each of the four categories of hypnotizability. Averages of T-score means are also presented.

Insert Figure 1 about here

There are only a few minor inconsistencies between hypnotizability and the relative magnitudes of the T-score means. These inconsistencies are eliminated in the final averages.

Discussion

With the two notable exceptions of intelligence and sex the hypotheses under test were generally supported as evidenced by the significance levels of the separate correlations and by the summary of results. Findings confirmed that hypnotizability could be predicted from general propensity for unusual subjective "hypnotic-like" experiences, from attitudes and motivational factors specifically relating to hypnosis, and from postural sway, heat illusion, and vividness of mental imagery. In addition, the hypothesis was supported that there would be only negligible relationships between hypnotizability and measures of personality. It is therefore concluded that the investigators' impressions about correlated of hypnotizability in their special volunteer population were generally correct. Of course, the magnitudes of the reported correlations should be interpreted in the light of the special population sampled and the limited sample size. It will be interesting in later studies to see how the magnitudes compare in samples from broader populations.

The general confirmation of the investigators' predictions, is, however, only a first step into elucidating the functional dependancies underlying the observed correlations. As noted earlier, the writers were especially concerned with how demand characteristics might confound the resulting correlations with hypnotizability. In other words, the

... wondered whether their own initial hypotheses and the Ss'

perceptions of these hypotheses might not have set into motion interacting expectancies and other situational influences subtly altering the resulting pattern of correlations in the direction of confirming the initial predictions. To what extent, for example, did postural sway predict hypnotizability in this study because of an inherent, underlying, intrinsic relationship, or to what extent did postural sway predict hypnotizability because the investigators and Ss believed that it would predict?

Demand characteristics may be confounding influences, moreover, even in regard to the unsuccessful predictions. A clear illustration is found in the unexpected negative correlation between intelligence and hypnotizability. In all previous studies where intelligence was found successfully to predict hypnotizability the relationship was always positive in direction. Since the writers believed that the earlier investigators had unwittingly geared their induction strategies selectively toward their brighter Ss, the present study was initiated under the hypothesis of no intrinsic relationship. It may be conjectured that the surprising negative correlation found here was somehow caused by trying too hard to avoid contamination.

The hypothesis that demand characteristics and other situational factors confound the observation of reliable correlates of hypnotizability supplies a useful modus operandi for future empirical work, and offers a coherent speculative explanation for the conflicting results of earlier studies.

Investigators can eventually learn to identify and isolate the confounding factors by studying how correlates of hypnotizability alter on a scale invariant under different experimental conditions. In this

present experiment the investigators' impressionistic hypotheses were tested under their original conditions of development in order to specify in a coordinated fashion both the conditions and the hypotheses. With the present generally clearcut results in hand, further studies will now be devised to evaluate the impressionistic hypotheses under more general conditions and under differing sets of preformed Ss' expectations.

The wisdom of defining hypnotizability in this study as a plateau performance rather than as some briefer estimate of hypnotic performance--such as the SHSS--was affirmed. The SHSS was found to give an excellent reflection of the hypnotizability criterion after Ss had been trained to plateau hypnotic performance (.93). But the SHSS was found to give only mediocre reflection of the hypnotizability criterion when administered prior to the achievement of plateau (.75). These findings confirm the essential soundness of the SHSS, but make dubious the reliance on such brief estimates prior to judgments that plateau performance has been achieved.

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Footnotes

1. A condensation of this report was presented at the Annual Convention of the American Psychological Association, August 30, 1963, Philadelphia, Pennsylvania. The study was carried out while the writers were affiliated with Harvard Medical School, Massachusetts Mental Health Center. The work was supported in part by contract AF 49 (638)-728 and grant AF-AFOSR-88-66 from the Air Force Office of Scientific Research.

2. We wish to thank our co-workers, F. J. Evans, L. A. Gustafson, and Emily C. Orne for their helpful comments. Appreciation in this regard is also due to E. A. Cogan and U. Neisser. Statistical work was done in part at the Computation Center, Massachusetts Institute of Technology.

3. Specimen forms and scoring instructions of the new tests are in the Appendix.

4. This natural occurrence approach has parallels in earlier studies. See Barry, MacKinnon, and Murray (1931), Sutcliffe (1958), White (1937 b), and Williams (1952).

5. It was discovered too late that the original "hypnosis" card was not Card 12M. The original drawing, lost sight of during the early years of the TAT's standardization, was very similar in scenic content to the present Card 12M, but it had more hypnotic quality. A copy of the original card has since been secured from H. A. Murray.

6. Two other scoring methods had been planned: (a) the criteria which White's judges appeared to have used; and (b) Sarason and Rosenzweig's system. Both methods proved inapplicable to the present Card 12M data.

7. For related approaches on measuring attitudes see Brightbill & Zamansky (1963), London, Cooper, & Johnson (1962), Melei & Hilgard (1964), and Rosenhan & Tomkins (1964).

8. See in this regard Barber (1956); Barber & Calverley (1964); Barber & Calverley (in press -b); Barry, MacKinnon, & Murray (1931); Bentler (1963); Cooper & Dana (1964); Das (1964); Faw & Wilcox (1958); Friedlander & Sarbin (1938); Hilgard & Lauer (1962); Lang & Lazovik (1962); Levitt, Brady, & Lubin (1963); Messer, Hinckley, and Mosier (1938); Moore (1961); Sarbin (1950); Schulman & London (1963); Sector (1961 a); Thorn (1960); Weitzenhoffer & Weitzenhoffer (1958); M. M. White (1930); R. W. White (1937 b); R. W. White (1941); Wilcox & Faw (1959). A number of investigators have related Rorschach Test personality variables to hypnotizability: Bergman, Graham, & Levitt (1947); Brenman & Reichard (1943); Levine, Grassi, & Gerson (1943); Sarbin (1939); Sarbin & Madow (1942); and Schafer (1947).

9. An intensive search failed to locate Rosenzweig and Sarason's original set of puzzles. New materials were thus compiled and carefully pre-tested. Care was taken to preserve and enhance the features of the test which Rosenzweig and Sarason had considered important, such as making the test appear to be a commercially available intelligence test.

10. In a very few instances of missing data statistical significance was determined on the reduced sample size.

11. In addition, London, Cooper, and Johnson (1962) found test-retest reliability of the PEQ-Short Form over a three week interval to be .94**. As' Experiences Inventory incorporated the instructions plus

18 items from the RLQ-short form using

ly; very high stability in answer percentages across samples were demonstrated for the common items (As et al., 1962).

12. It became apparent even before the data were fully gathered that the Background Index had a serious defect in test construction. The approach used was to elicit attitudes toward hypnosis by phrasing questions in the factual format of college examinations. The Ss' replies, however, so strongly tended to reflect the enlightened skepticism of the college students' sub-culture that personal attitudes seemed neglected. See London (1961) for a similar observation.

13. Furneaux and Gibson (1961) and Das (1964) have reported negative correlations between hypnotizability and the Lie scale of the Maudsley Personality Inventory. The measurement operations of the two scales are not similar, however. For other investigations on hypnotizability with the Maudsley Personality Inventory see Cooper and Dana (1964), Evans (1963), Furneaux (1961), Hilgard and Bentler (1963), Lang and Lazovik (1962), and Thorn (1961).

14. Minor alterations in procedure may improve the Heat Illusion Test's reliability and consequently its predictive power (Furneaux, 1964).

15. These descriptions are based on the convention of general verbal nomenclature for correlations suggested by Guilford (1956; p. 145): .00-.20 slight; .20-.40 low; .40-.70 moderate; .70-.90 high; .90-1.00 very high. Insignificant correlations are considered negligible.

16. It could be argued that a third unexpected significant correlation was found for the Lie scale of the MMPI.

17. The Background Index on Hypnosis was excluded from the comparison because it was unsuccessful. The successful Vividness of Mental Imagery Questionnaire was excluded because the investigators had suspected that the relationship might be artifactual.

hypnotizability were tested. A sample of 25 Ss representative of the investigators' special volunteer population was drawn. The criterion of hypnotizability used was the maximum hypnotic depth achieved in as many intensive hypnotic training sessions as the examiner needed in order to feel confident that a stable plateau in the S's performance had been reached.

Findings confirmed the hypotheses that hypnotizability could be predicted from general propensity for unusual subjective "hypnotic-like" experiences, from attitudes and motivational factors specifically relating to hypnosis, and from postural sway, heat illusion, and vividness of mental imagery. In addition, with few exceptions the hypothesis was supported that there would be only negligible relationships between hypnotizability and measures of personality. Defining hypnotizability as a plateau performance rather than as some briefer estimate was shown to be wise. Results were placed into the perspective of the further lines of research needed.

Hypnotizability Ratings					
	Less Than Light	Light	Medium	Deep	Total
Percentage	28	24	16	32	100
Frequency	7	6	4	8	25
Had Prior Evaluations	6	4	1	8	19
New <u>Ss</u>	1	2	3	0	6

Table 1. Tabulations of the Ss classified into each of the four categories of hypnotizability.

1) Vividness of Mental Imagery Questionnaire
2) Personal Experiences Questionnaire - Long Form
3) Card 12M of the Thematic Apperception Test
4) Personal Experiences Questionnaire - Short Form
5) Postural Sway Test (I)
6) Heat Illusion Test (I)
7) Traits Regarding Hypnosis Inventory (I)
8) Rosenzweig Picture-Frustration Study
9) Background Index on Hypnosis
10) Stanford Hypnotic Susceptibility Scale, Form A
11) Hypnotic Training and Evaluation Sessions
12) Minnesota Personality Scale
13) Minnesota Multiphasic Personality Inventory
14) Puzzles "Repression" Test
15) Postural Sway Test (II)
16) Heat Illusion Test (II)
17) Wechsler-Bellevue Intelligence Scale, Form II
18) Traits Regarding Hypnosis Inventory (II)
19) Stanford Hypnotic Susceptibility Scale, Form B
20) Over-all Agreement Scale
21) Subjective Estimates of Percentage Depth

Table 2. Order of test administration

	Hypnotizability
PEQ-Long Form: Frequency	.48*
PEQ-Long Form: Intensity	.36†
Imaginary Playmates: Coded Rating on Their Apparent Reality	.43*
PEQ-Short Form: Simple Occurrence	.46*

Table 3. Personal Experiences Questionnaires (PEQ)

Illustration		Hypnotizability	Internal Consistency
Illustration	Good Hypnotic Subject	.51*	.82**
	Good Hypnotist	.00	.68**
	Combined Score	.37†	.84**
Illustration	Good Hypnotic Subject	.68**	.71**
	Good Hypnotist	.57**	.61**
	Combined Score	.69**	.79**

	Hypnotizability
Impressions of Per Cent Pleasantness	.15
Sum of Agreements to Participate	.24
Conditions of Initial Induction: Sum of Extreme Responses	.17
Extent of "Magical" Notions	.23
Extent of "Skepticism"	-.36 [†]
Extent of Agreement with the Opinions of Recognized Authorities on Hypnosis	.25

Table 5. Background Index on Hypnosis

	Hypnotizability
diastasis	.08
on	.04
on Hysteria	.16
thic Deviate	.18
in	.20
ility-Femininity	-.27
	.22
henia	-.20
renda	-.08
ia	-.17
itroversion	-.24
ay Score	-.14
	.48*
	.04

	Hypnotizability
Sum Basic Clin. Scales	-.09
Welsh's First Factor	-.10
Welsh's Second Factor	.15
Ego Strength	-.02
Dependency	-.15
Dominance	.29
Responsibility	.32
Prejudice	-.10
Social Status	-.17
Role Playing	.08
Control	-.23
Summation True	-.29
Taylor's Manifest Anxiety	-.05

	Hypnotizability
I. Morale	-.09
II. Social Adjustment	.17
III. Family Relations	.08
IV. Emotionality	-.08
V. Economic Conservatism	-.11
Total Scores (I-V)	.04

Table 7. Minnesota Personality Scale

Issues	Tests	Directions of Relationships		Observed Strength of Relationships	Tendency to Hypotheses
		Pred.	Obs.		
Issues for Unusual Hypnotic-Like "Hypnotic-Like" Responses	1) Personal Experiences Questionnaires	+	+	Low to moderate	Confirm
	1) Card 12M of the TAT	+	+	Negligible to moderate	Confirm
	2) Traits Regarding Hypnosis Inventory	+	+	Low to moderate	Confirm
Issues and Motivations Specifically Hypnosis	3) Background Index on Hypnosis	+	0	Generally negligible	Reject
	1) Minnesota Multiphasic Personality Inventory	0	0	Generally negligible	Confirm
	2) Minnesota Personality Scale	0	0	Negligible	Confirm
	3) Rosenzweig Picture-Frustration Study	0	0	Negligible	Confirm
	4) Puzzles "Repression" Test	0	0	Negligible	Confirm
Primary Criteria of Performance	5) Acquiescence Tendency	0	0	Negligible	Confirm
	1) Subjective Estimates of Percentage Depth	+	+	High	Not apply
	2) Stanford Hypnotic Susceptibility Scale, Forms A and B	+	+	High to very high	Not apply
	1) Postural Sway Test	+	+	Low	Confirm
	2) Heat Illusion Test	+	+	Negligible to low	Confirm
Simultaneous	3) Vividness of Mental Imagery Questionnaire	+	+	Moderate	Confirm
	4) Wechsler-Bellevue Intelligence Scale, Form II	0	-	Moderate	Reject
	5) Sex (females as higher)	0	+	Moderate	Reject

*Directions: + = positive; - = negative; 0 = negligible

	V Heat	IV Sway	III Traits	II Card 12M	I P.E.Q.
Hypnotizability	.25	.42*	.58**	.58**	.48*
Personal Experiences Questionnaires-- Form (Sum of ranks of both scores)	-.12	.38†	.33	.17	
Card 12M of the TAT (Sum of ranks of judges' ratings)	.25	.27	.18		
Traits Regarding Hypnosis Inventory (Sum of totals)	.42*	.06			
Natural Sway Test (Sum of totals)	-.26				
Heat Illusion Test (Sum of totals)					

9. Intercorrelations of hypnotizability and the five composite factor variables.

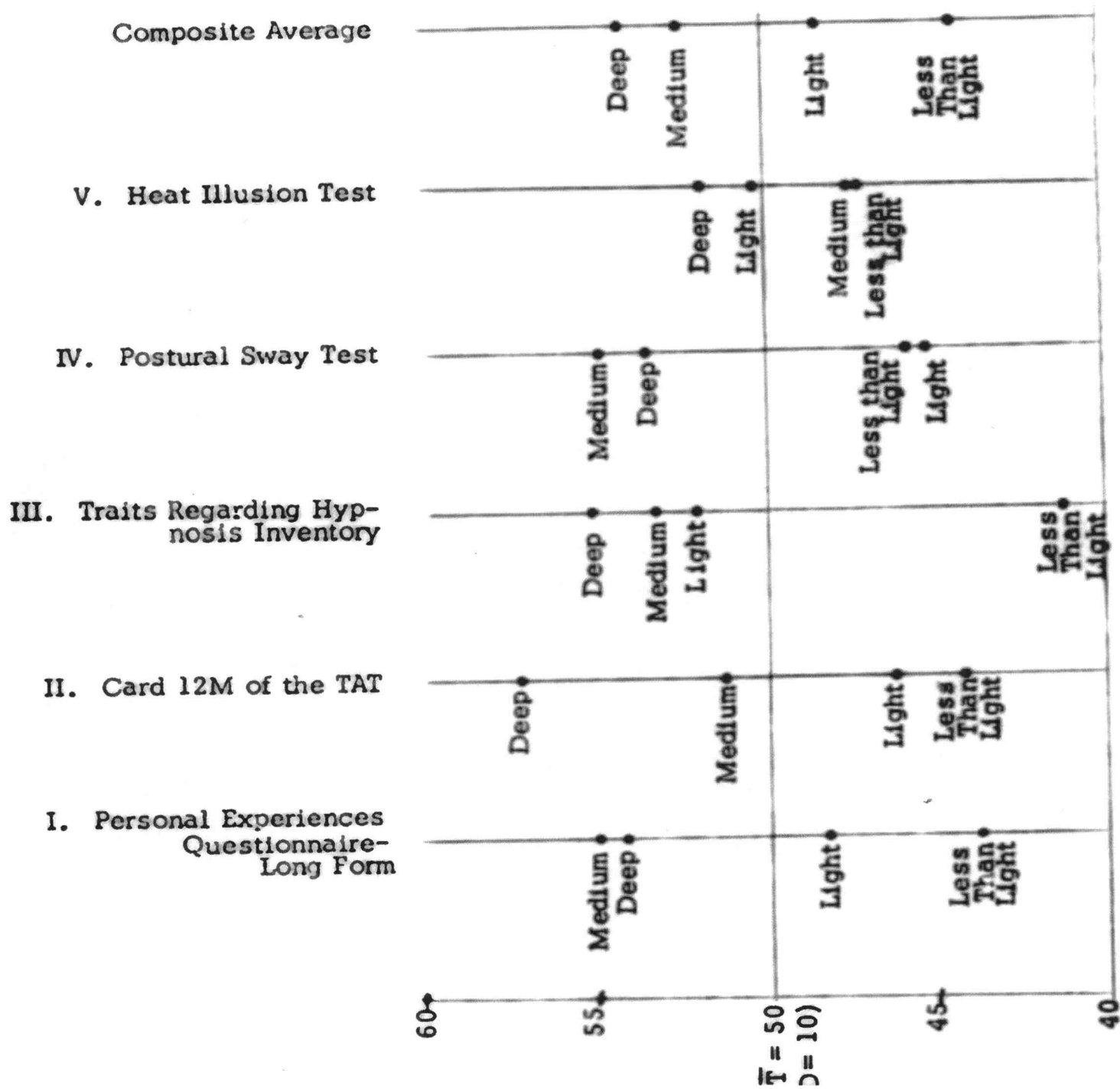


Fig. 1. Profile of mean composite T-scores

Appendix: Specimen Forms and Scoring

Instructions of the New Tests

Personal Experiences Questionnaire
Form L: College Students

Ronald E. Shor, Ph. D.
Harvard University

Name: _____ Age: _____ Sex: _____ Date: _____

Occupation: _____ (if student, name institution)

Local Address: _____ Tel: _____

Description and Instructions

A great many phenomena are considered common and everyday in one culture and bizarre or even pathological in another. Hallucinations, for example, are eventually experienced by every male Crow Indian during his maturation process -- he must see his Guardian Spirit in order to become a man. In our society, however, when an individual has such an experience, he rarely reports it since he feels it is at best peculiar. Yet the Yogi or Zen Buddhist deliberately seeks mystical or transcendental experiences which are considered in their culture among the highest expressions of the human intellect.

As in the case of sexual behavior, it is hard to get honest reports on things which are sometimes intensely personal. The present questionnaire is based on extensive interview data with normal subjects where it became obvious that such experiences are very common even though rarely spoken of. Please take this questionnaire seriously as we are concerned with getting a true approximation of the incidence of some of these experiences in a normal college population.

We are interested in experiences which have happened spontaneously in the natural course of living and not as a result of special techniques such as hypnosis, the experimental sensory-deprivation situation, or by means of drugs that cause hallucinations (such as lysergic acid, marijuana, or mescaline). Experiences which occurred only in dreams or as the result of special techniques should be labeled as such.

You are to describe your experiences in two different ways. First in terms of frequency -- that is, how often have you had the experience described. Secondly in terms of intensity -- that is, how vivid and profound the single most intense experience was. Intensity is distinct from frequency. It is possible, for example, to have had a certain experience very frequently, but never to have had it particularly vividly or intensely. It is also possible to have had a certain experience rarely, perhaps even only once in a lifetime, and yet with extraordinary vividness and intensity.

You are to give the two kinds of answers in the following way:

1) Frequency: Under each question there is a scale with seven subdivisions: never, very rarely, rarely, occasionally, often, very often, and always. You are to read through each question and then rate yourself on this seven-point scale by placing a circle around the most appropriate answer.

2) Intensity: When referring to intensity forget about how frequently you have had the experience. Select only the most intense experience you have had. Then do one of three things:

- a) if the single most intense of these experiences was not profound or vivid, put no check marks beside the question
- b) if the single most intense of these experiences was quite vivid or profound, place a single check mark beside the question (✓)
- c) if the single most intense of these experiences was extremely profound, intense, or vivid, place two check marks beside the question (✓✓)

Check or double check for intensity as many or as few of the questions as you wish. However, answer all questions as to frequency. If in doubt, make your best guess.

1. Do you ever get unusually sleepy when reading?
never very rarely occa- often very always
 rarely sionally often

2. Have you ever had the experience of walking in your sleep?
never very rarely occa- often very always
 rarely sionally often

3. Can you fall asleep in noisy surroundings?
never very rarely occa- often very always
 rarely sionally often

4. Can you fall asleep easily?
never very rarely occa- often very always
 rarely sionally often

5. Can you put yourself to sleep?
never very rarely occa- often very always
 rarely sionally often

6. Can you easily fall asleep in strange surroundings (e.g., in a strange bed)?
never very rarely occa- often very always
 rarely sionally often

7. Have you ever carried on an actual conversation with another person while you were asleep (for example, with someone who walked into your room at night)?
never very rarely occa- often very always
 rarely sionally often

8. Have you ever cried, laughed, or talked in your sleep?
never very rarely occa- often very always
 rarely sionally often

9. Have you ever used a special way of concentrating to put yourself to sleep (for example, counting sheep, staring at a real or imaginary object, imagining a quiet scene, systematically relaxing all of your muscles, etc.)?
never very rarely occa- often very always
 rarely sionally often

10. Have you ever awakened in the middle of the night with what seemed such a great idea that you wrote it down, and then found the next morning that you could not understand what you had written?

never	very rarely	rarely	occa- sionally	often	very often	always
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12. Have you ever dreamed in three-dimensions?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

13. Have you ever been able to decide beforehand what you would dream about?

never	very rarely	rarely	occa- sionally	often	very often	always
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14. Have you ever been able deliberately to change things in the middle of a dream?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

15. Do you dream frequently?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

16. Can you remember your dreams easily?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

17. Do your dreams involve people?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

18. When you are dreaming do you ever feel that it is real?

never	very rarely	rarely	occa- sionally	often	very often	always
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19. Can you daydream?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

20. Can you throw yourself into a job if you like it?

never	very rarely	rarely	occa- sionally	often	very often	always
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21. Do you find it easy to settle down to work?

never	very	rarely	occa- sionally	often	very often	always
-------	------	--------	-------------------	-------	---------------	--------

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

23. Do you enjoy losing yourself in thought?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

24. Is it easy for you to become drowsy?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

25. Is it easy for you to relax?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

26. Have you ever sat staring off into space, actually thinking of nothing and hardly being aware of the passage of time?

never	very rarely	rarely	occasionally	often	very often	always
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27. Have you ever had the experience of being unable to focus your eyes?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

28. Have you ever been lulled into a groggy state or put to sleep by a lecture or concert even though you were not otherwise fatigued or tired?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

29. Have you ever been so weary that it was very hard for you to move or think?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

30. Do you enjoy a good argument?

never	very rarely	rarely	occasionally	often	very often	always
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31. Do you lose your temper or fly into a rage?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

12. Have you ever dreamed in three-dimensions?

never	very rarely	rarely	occa- sionally	often	very often	always
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13. Have you ever been able to decide beforehand what you would dream about?

never	very rarely	rarely	occa- sionally	often	very often	always
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14. Have you ever been able deliberately to change things in the middle of a dream?

never	very rarely	rarely	occa- sionally	often	very often	always
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15. Do you dream frequently?

never	very rarely	rarely	occa- sionally	often	very often	always
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16. Can you remember your dreams easily?

never	very rarely	rarely	occa- sionally	often	very often	always
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17. Do your dreams involve people?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

18. When you are dreaming do you ever feel that it is real?

never	very rarely	rarely	occa- sionally	often	very often	always
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19. Can you daydream?

never	very rarely	rarely	occa- sionally	often	very often	always
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20. Can you throw yourself into a job if you like it?

never	very rarely	rarely	occa- sionally	often	very often	always
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21. Do you find it easy to settle down to work?

never	very	rarely	occa-	often	very	always
-------	------	--------	-------	-------	------	--------

never	very rarely	rarely	occa- sionally	often	very often	always
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23. Do you enjoy losing yourself in thought?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

24. Is it easy for you to become drowsy?

never	very rarely	rarely	occa- sionally	often	very often	always
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25. Is it easy for you to relax?

never	very rarely	rarely	occa- sionally	often	very often	always
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26. Have you ever sat staring off into space, actually thinking of nothing and hardly being aware of the passage of time?

never	very rarely	rarely	occa- sionally	often	very often	always
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27. Have you ever had the experience of being unable to focus your eyes?

never	very rarely	rarely	occa- sionally	often	very often	always
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28. Have you ever been lulled into a groggy state or put to sleep by a lecture or concert even though you were not otherwise fatigued or tired?

never	very rarely	rarely	occa- sionally	often	very often	always
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29. Have you ever been so weary that it was very hard for you to move or think?

never	very rarely	rarely	occa- sionally	often	very often	always
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30. Do you enjoy a good argument?

never	very rarely	rarely	occa- sionally	often	very often	always
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31. Do you lose your temper or fly into a rage?

never	very rarely	rarely	occa- sionally	often	very often	always
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never	very rarely	rarely	occasionally	often	very often	always
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33. Do you enjoy a movie that makes you cry?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

34. Do you like the smell of perfumes?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

35. Do you like bright colors?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

36. Do you stand up and cheer at sports events (for example, football games)?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

37. Have you almost fallen asleep while you were driving on a quiet, level stretch of road?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

38. Have you ever found yourself suddenly very calm, peaceful and relaxed?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

39. Have you ever found yourself staring at something and for the moment forgotten where you were?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

40. Has everything in your line of vision become blurry or strange, as if you were dreaming?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

41. Do you find yourself unwittingly adopting the mannerisms of other people?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

42. Do you find it hard to resist a good salesman?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

43. In a group, crowd, or audience, have you found yourself going along with the group even though it was against some of your convictions?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

44. Have you ever been swayed in your opinions in such a situation?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

45. Have you ever gotten excited because a group got excited?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

46. Do you find you laugh when a group laughs?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

47. Have you been made to yawn because others yawned?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

48. When you see someone with a heavy cold, do your eyes sometimes get watery?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

49. Do you ever get seasick at ocean movies?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

50. Do you feel uneasy when you do not go along with what a salesman tells you?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

51. When watching a fight or an emotional scene in the movies, have you ever found your body tensing up and going through the motions too?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

52. Do you get more excited by music when in a group than when listening alone?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

53. Is your mood affected by the weather?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

54. Do you get sea, car or air sick?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

55. Have you ever caught yourself at least half believing in a superstition?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

56. If someone is in pain, do you find yourself suffering along with him?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

57. Do you feel sick at the sight of blood?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

58. When someone says that you do not look well do you begin to feel ill?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

59. If you are with friends and the gang wants to go somewhere while you would rather stay, do you go along?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

60. When you are sick and your doctor prescribes medication, do you follow his instructions to the letter?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

61. If you have a toothache and go to the dentist do you find it disappears in the dentist's waiting room?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

63. Have you ever been so lost in thought that you did not understand what people said to you even when you nodded token agreement?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

64. Have you ever wandered off into your own thoughts while doing a job so that you actually forgot you were doing it, and then found a few minutes later, that you had finished the job without even being aware of it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

65. Have you ever become so absorbed in listening to music that you almost forgot where you were?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

66. Have you ever become so absorbed in listening to music that you became lost in imagination?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

67. Have you ever drifted off into your own thoughts while someone was talking directly to you?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

68. Have you ever stared at a performer, lecturer, or television screen and had everything around it seem to be blacked out for you?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

69. Do you ever worry so hard that you forget what is going on around you?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

70. Can you block out advertising commercials?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

71. Is it easy for you to read or study in a noisy room?

72. Have you ever been able to ignore pain?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

73. Have you ever had the experience of rearranging your mind so that when you looked at something you saw it in a different way?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

74. Have you ever been awakened from a dream and been able to force yourself back into it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

75. If something unpleasant happens can you make yourself forget it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

76. If something is distracting you, can you make yourself ignore it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

77. Have you ever been able to make a daydream seem real?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

78. When there are sounds that you do not want to listen to, can you block them from your mind so that they are no longer important to you?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

79. Can you make these sounds seem far away?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

80. Can you make these sounds seem like meaningless noise?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

81. Can you make these sounds so unimportant that you actually do not hear them?

never	very	rarely	occa-	often	very	always
-------	------	--------	-------	-------	------	--------

82. Have you ever been able to think yourself into a state of calmness, peacefulness, or relaxation by deciding to do so?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

83. Do you ever enjoy being entirely alone with nothing to do but explore your own thoughts?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

84. Have you ever had the experience of things looking weird and different?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

85. Have you ever had the experience of colors (or sounds) seeming unusually intense?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

86. Have you ever had the experience of seeming to feel your body move without any actual movement?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

87. Have you ever felt time passing unnaturally slowly? or quickly?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

88. Have you ever experienced everything becoming blurry and strange as if in a dream?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

89. Have you ever experienced your body or external objects seem to change in size and shape?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

90. Have you ever actively stared at something and had it slowly (or suddenly) become very strange before your eyes?

never	very rarely	rarely	occasionally	often	very often	always
-------	-------------	--------	--------------	-------	------------	--------

92. Have you ever felt as if parts of your body were swollen, bloated, coated, or detached from you?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

93. Have you ever felt as if your body were abnormally heavy?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

94. Have you ever noticed a clock tick louder and then seem to become softer as you shift your attention first to it and then away from it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

95. Have you ever had the feeling of lightness or weightlessness?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

96. Have you ever felt your whole body or a part of your body numb or tingling without an obvious reason?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

97. When a part of your body is in severe pain (such as a bad tooth ache), have you ever felt that it was the only thing that mattered and that it seemed to swell in size while the rest of your body shrank?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

98. Have you ever been oversensitive to pain?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

99. Have you ever felt while driving as if the car was a part of your body?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

100. When you are feeling especially happy, have you ever had everything around you look actually brighter as if in technicolor?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

102. Have you ever had the experience of doing something in the middle of the night (for example, jotting down a note, answering a phone call) without remembering it the next morning?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

103. Have you ever "lost" a period of time where you cannot remember what you did?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

104. Have you ever forgotten whether you have eaten lunch?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

105. Have you ever forgotten where you parked your car?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

106. Have you ever "lost" a day (e.g., thinking on a Wednesday that it must be Tuesday, even though on Tuesday you knew it was Tuesday)?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

107. Have you ever caught yourself having driven a car for a length of time without having been aware of it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

108. Have you ever caught yourself driving to the wrong place (even though you knew the proper way perfectly)?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

109. Have you ever forgotten you told something to someone and then insisted to him that you did not say it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

110. Are you absent-minded?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

112. Have you ever remembered events in your past life so vividly that it felt like living it again?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

113. Have you ever recalled snatches of events without being sure whether they really happened or you dreamt it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

114. Have you ever been unsure whether you did something or just thought about having to do it (for example, not knowing whether you either mailed a certain letter or just thought about mailing it)?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

115. Have you ever walked up the aisle after a particularly absorbing movie and felt still so much in the movie that your walking up the aisle was unreal or like a dream?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

116. Have you ever told a story one way one time and then told it another way another time and finally become confused as to what really happened?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

117. Have you ever read a book and been able to picture the events so that for the time it appeared almost real to you, as if you were living it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

118. Have you ever had strange images -- vivid and real as life -- flow into your mind, seemingly out of nowhere?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

119. Have you ever thought that you had said something when actually you had only thought about saying it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

121. Have you ever experienced something while you thought you were awake only to discover that it must have been a dream?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

122. Have you ever not known whether someone said something or you just imagined that he said it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

123. Have you ever thought you heard something, like someone calling your name or the telephone ringing, and then on checking found that it was just your imagination?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

124. Have you ever been completely immersed in nature or in art (for example, in the mountains, at the ocean, viewing sculpture, etc.) and had a feeling of awe, inspiration, and grandeur sweep over you?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

125. Are you strongly affected by art (painting, music, dance)?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

126. Have you ever had the experience of being caught up by music or dancing so that you became enraptured by it and had it live and express itself through you so that you as yourself seemed to cease to be during it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

127. Have you ever been overwhelmed by a feeling of peace, harmony, and contentment?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

128. Have you ever felt a oneness with the universe, a melting into the universe, or a sinking into eternity?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

129. Have you ever directly experienced a "higher power"?

130. Have you ever been able to do with amazing ease things that would usually be very hard for you (in sports, work, social situations, etc.), almost as if inspired?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

131. Have you ever felt a sense of inner authority and illumination -- full of revelations and significance?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

132. Have you ever felt you own "will" in abeyance, perhaps grasped and held by a "superior power"?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

133. Have you ever felt a mystical higher control, a "presence", or surrender of self?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

134. Have you ever had the experience of seeming to watch yourself from a distance as if in a dream?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

135. Have you ever felt your "mind" or "consciousness" flowing into different parts of your body?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

136. Have you ever felt a second self floating above your body and looking down on the other as an empty shell?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

137. Have you ever had the feeling that a part of your body was not really a part of you?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

138. When in a social situation where you do not feel at ease, does a part

139. Have things ever seemed unreal?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

140. Have you ever had the feeling that a part of your body was moving without your doing it?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

141. Have you ever had the eerie feeling that you had done this before or been there before?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

142. Have you ever felt drunk while sober?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

143. Have you ever lost consciousness of your body and been aware of only your thoughts?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

144. Have you ever felt that things happening outside of yourself were really happening to you (e.g., hear noises in the next room and feel as if you are making them)?

never	very rarely	rarely	occ- sionally	often	very often	always
-------	----------------	--------	------------------	-------	---------------	--------

145. Have you ever had part of your body look strange and not part of your body at all?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

146. Have you ever gone through your daily activities feeling as though somehow it was not you yourself doing them though you knew full well it was?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

147. Do you feel as if you are an entirely different person on some occasions than on others?

148. Are there episodes which have happened in your life that when you now think back on them seem very unreal, as if they had happened to another person?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

149. Do you ever notice yourself in a roomful of people, physically present yet mentally miles away?

never	very rarely	rarely	occa- sionally	often	very often	always
-------	----------------	--------	-------------------	-------	---------------	--------

The following questions require worded answers:

150. Did you have an imaginary playmate as a child?

151. If so, how real was he to you? (E. g., did you see him clearly and did he talk to you?)

152. At what age did he disappear?

153. What made him disappear?

HAVE YOU CHECKED THE QUESTIONS FOR INTENSITY AND
VIVIDNESS ?

IF NOT, GO BACK OVER THE QUESTIONS AND DO SO RAPIDLY.

IF YOU HAVE DONE SO THE QUESTIONNAIRE IS NOW COMPLETED.

Form C is a revision of the Short Form included in the experiment. The Short Form was identical with Form C except that there was no provision for Intensity responses.

Personal Experiences Questionnaire
Form C: College Students

Description and Instructions

A great many phenomena are considered common and everyday in one culture and bizarre or even pathological in another. Hallucinations, for example, are eventually experienced by every male Crow Indian during his maturation process--he must see his Guardian Spirit in order to become a man. In our society, however, when an individual has such an experience, he rarely reports it since he feels it is at best peculiar. Yet the Yogi or Zen Buddhist deliberately seeks mystical or transcendental experiences which are considered in their culture among the highest expressions of the human intellect.

As in the case of sexual behavior, it is hard to get honest reports on things which are sometimes intensely personal. The present questionnaire of 44 items is based on extensive interview data with normal subjects where it became obvious that such experiences are very common even though rarely spoken of. Please take this questionnaire seriously as we are concerned with getting a true approximation of the incidence of some of these experiences in a normal college population.

We are interested in experiences which have happened spontaneously in the natural course of living and not as a result of special techniques such as hypnosis, the experimental sensory-deprivation situation, or by means of drugs that cause hallucinations (such as lysergic acid, marijuana, or mescaline). Experiences which occurred only in dreams or as the result of special techniques should be labeled as such.

Please describe your experiences in the following two different ways. First, in terms of simple occurrence--that is, whether or not you have ever had the experience described. Secondly, in terms of intensity--that is, how vivid and profound was any given experience the single most intense time you experienced it. The intensity of the experience may be different from its frequency.

It is possible, for example, to have had a certain experience very frequently, but never to have had it particularly vividly or intensely. It

A special answer sheet is supplied with each booklet. Please write only on this special answer sheet. Please do not write in this booklet. You are to give the two kinds of answers -- simple occurrence and intensity -- in the following way:

1. Simple occurrence: Read through each question and then rate yourself as to whether or not you have ever had the experience described by placing a circle around the appropriate yes or no on the answer sheet. Give additional information only if a simple yes or no cannot be given. Please answer every question.

2. Intensity: When referring to intensity forget about how frequently you have had the experience. Select only the single most intense occurrence of the experience in your lifetime, then do one of three things:

- a) if the single most intense of these experiences was not profound or vivid, put no check marks beside the question.
- b) if the single most intense of these experiences was quite vivid or profound place a single check mark beside the question. (✓)
- c) if the single most intense of these experiences was extremely profound, intense, or vivid place two check marks beside the question. (✓✓)

Check or double check for intensity as many or as few of the questions as you wish. However, answer all questions as to simple occurrence. If in doubt make your best guess.

The questionnaire has been designed to require about fifteen minutes on the average to complete it.

1. Have you ever been lulled into a groggy state or put to sleep by a lecture or concert even though you were not otherwise fatigued or tired?
2. Have you ever carried on real conversations with another person while you were asleep? (e.g., with someone who walked into your room).
3. Have you ever had the experience of doing some task in the middle of the night (e.g., jotting down a note, answering a phone call) with no memory the next morning of having done so?
4. Have you ever tended to be lulled to sleep while you were driving your car on a quiet, level stretch of road?
5. Have you ever sat staring off into space, actually thinking of nothing and hardly being aware of the passage of time?
6. Have you ever been completely immersed in nature or in art (e.g., in the mountains, at the ocean, viewing sculpture, etc.) and had a feeling of awe, inspiration, and grandeur sweep over you so that you felt as if your whole state of consciousness was somehow temporarily altered?
7. Do you know of ever having had the experience of sleepwalking?
8. Have you ever been so lost in thought that you did not understand what people said to you even when they were talking directly to you and even when you nodded token agreement?
9. Have you ever become so absorbed in listening to music that you were hardly aware of your surroundings? Or completely lost in imaginary surroundings?
10. Have you ever been able to shut out your surroundings from your mind by concentrating very hard on something else?
11. Have you ever wandered off into your own thoughts while doing a routine task so that you actually forgot you were doing the task, and then found, a few minutes later, that you had completed it without even being aware that you were doing it?
12. Have you ever been able to block out sounds from your mind so that they were no longer important to you? Or so that they seemed very far away? Or so that you no longer understood them? Or so that you did not hear them at all?
13. Have you ever focused on something so hard that you went into a kind of benumbed state of consciousness? Or a state of extraordinary calm and serenity?
14. Have you ever caught yourself having forgotten where and who you were, and, as soon as you became aware of it, thereby immediately remembered everything?

16. Have you ever been able to quiet down your mind, construct a new, imaginary world, and feel for the time that it was real?
17. Have you ever actively stared at something and had it slowly (or suddenly) become very strange before your eyes?
18. Have you ever experienced everything becoming blurry or strange as if in a dream?
19. Do you know of ever having had an imaginary playmate as a child?
20. When a part of your body has been in severe pain (such as a bad toothache) have you ever felt that it was the only important reality, that the part seemed to swell in size while the rest of your body shrank?
21. Have you ever had the experience of imagining something so very hard that it became almost real for you? Or actually seemed to become real for you?
22. Have you every had the experience of reading a novel (or watching a play), and while doing so actually forget yourself, your surroundings, and even the fact that you are reading (or watching) and begin to actually live the story with such great reality and vividness that it becomes temporarily almost reality for you? Or actually seemed to become reality for you?
23. Have you ever had the experience of being caught up by music or dancing so that you became enraptured by it and had it live and express itself through you so that you as yourself seemed to cease to be during it?
24. Have you ever stared at a performer, lecturer, or television screen and had everything around it seem to be blacked out for you?
25. Have you had the mystical experience of feeling a oneness with the Universe, a melting into the Universe, or a sinking into Eternity?
26. Have you ever been so overwhelmed by a feeling of peace, harmony, and contentment that you felt as if your whole being was somehow temporarily transformed?
27. Have you ever had all your powers come together and focus and be able to do with amazing ease and spontaneity things that would usually be very difficult tasks for you? (e.g., in sports, work, social situations, etc.)
28. Have you ever felt an enormous sense of inner authority and illumination--full of revelations and significance? With your own will in abeyance, perhaps grasped and held by a superior power? With a higher control, a Presence, or a surrender of self?
29. Have you ever lost consciousness of your body and been aware only of your

31. Have you ever had the experience of seeming to watch yourself from a distance as if in a dream?

32. Have you ever felt your "mind" or "consciousness" going apart from your body? Or flowing out of your body? Or flowing into different parts of your body?

33. Have you ever felt a second self floating above your body and looking down on the other as an empty shell?

34. Have you ever had the feeling that a part of your body was not really a part of you?

35. Have you ever experienced a part of your body move and have the feeling that it was moving without your volition?

36. Have you ever had the experience of seeming to feel your body move when there was actually no movement?

37. Have you ever had the experience of your body or external objects seeming to change in size and shape?

38. Have you ever felt as if you were swinging, floating, falling, or drifting?

39. Have you ever felt as if parts of your body were swollen, bloated, coated, or detached from you?

40. Have you ever been unsure whether you did something or just thought about having to do it? (e.g., not knowing whether you either mailed a certain letter or just thought about mailing it)

41. Have you ever had the experience of telling a story with elaboration to make it sound better and then having the elaborations seem as real to you as the actual incidents?

42. Have you ever had the experience of recollecting a past experience in your life with such clarity and vitality that it was almost like living it again? Or so that it actually seemed identical with living it again?

43. Have you ever thought you heard something (e.g., the telephone ring, someone speak to you) and then found out it was just your imagination? (This does not refer to cases of simple mistaken identity.)

44. Did you ever find while you were acting in a play that you really felt the emotions of the character you were portraying, and "became" him for the time being, forgetting both yourself and audience?

HAVE YOU CHECKED THE QUESTIONS FOR INTENSITY AND VIVIDNESS?
IF NOT, GO BACK OVER THE QUESTIONS AND DO SO RAPIDLY. IF YOU
HAVE DONE SO, THE QUESTIONNAIRE IS NOW COMPLETED.

Personal Experiences Questionnaires: Scoring Instructions

Computational procedures of scoring the Long Form were as follows. The Frequency measure was the summation of ratings with None = 0, Very Rarely = 1, Rarely = 2, and so forth. The Intensity measure was the summation of check marks. One check mark was counted as one, a double check mark as two. In the Short form the Simple Occurrence measure was the summation of Yes responses.

Scoring of ambiguous responses was guided by three simple rules. The primary rule was to follow conscientiously the wording of the item and the definition of noteworthy experiences as presented in the cover page instructions. Prior to recording the quantitative scores the rater read Ss' appended comments to clarify scoring. If, for example, an experience occurred only in dreams, under the influence of alcohol, or by direct physiological causation, etc., the experience did not properly fit under the definition of a positive response, and the rater thus had to alter the Ss' misconceived replies accordingly. Similarly, the rater made sure that two intensity checks were maximum for any single item, and that intensity checks were given only for experiences which occurred at least once.

The secondary rule, of subordinate status to the first, was that bias was given to the S's own definition of his experience, of whether he most likely felt his experiences came under, or were excluded from the given definitions of noteworthy experiences.

The tertiary rule, of subordinate status to the other two, was to give bias to negative responses. Thus, responses of "don't know", "don't understand", "not sure", and so forth were scored as negative replies. However, replies such as "occasionally", "sometimes", "not very often" would fit the definition of an experience which happened at least once, and, thus, were scored positively. The tertiary rule was invoked also for items left blank.

TRAITS REGARDING HYPNOSIS INVENTORY

Name: _____ Age: _____ Sex: _____ Date: _____

Occupation: _____ (if student, name institution)

Local Address: _____ Tel.: _____

PLACE A CHECK IN EITHER THE "YES" COLUMN OR IN THE "NO" COLUMN.
PLEASE ANSWER EVERY ITEM. GUESS IF NECESSARY.
QUESTIONS REFER TO PEOPLE IN GENERAL, AND NOT TO YOU AS AN INDIVIDUAL.

The following personality characteristics are more likely than not to make anyone a good hypnotic subject:

	Yes (more likely)	No (less likely)
athletic		
naïve		
self-sufficient		
weak-minded		
immature		
self-confident		
intelligent		
easy-going		
egotistical		
neurotic		
scatterbrained		
submissive		
creative		
insecure		
apprehensive		
good-looking		
dependent		
well-adjusted		
logical		
imaginative		
stable		
inhibited		
likeable		
gullible		

The following personality characteristics are more likely than not to make anyone a good hypnotist:

	Yes (more likely)	No (less likely)
gentle		
overpowering		
egotistical		
honest		
Inconsiderate		
pompous		
careful		
stable		
vain		
conniving		
likeable		
arrogant		
deceitful		
fatherly		
overbearing		
polite		
conscientious		
dedicated		
stubborn		
understanding		
scholarly		
Irresponsible		
reckless		
sincere		
considerate		
exhibitionistic		

Traits Regarding Hypnosis Inventory

Scoring information:

The following is a list of the responses considered favorable (+)
and not favorable (-).

GOOD HYPNOTIC SUBJECT

athletic	+
naïve	-
self-sufficient	+
weak-minded	-
immature	-
self-confident	+
intelligent	+
easy-going	+
egotistical	-
neurotic	-
scatterbrained	-
submissive	-
creative	+
insecure	-
apprehensive	-
good-looking	+
dependent	-
well-adjusted	+
logical	+
imaginative	+
stable	+
inhibited	-
likeable	+
gullible	-
passive	-
happy	+
uncritical	-
good-natured	+

GOOD HYPNOTIST

gentle	+
overpowering	-
egotistical	-
honest	+
inconsiderate	-
pompous	-
careful	+
stable	+
vain	-
conniving	-
likeable	+
arrogant	-
deceitful	-
fatherly	+
overbearing	-
polite	+
conscientious	+
dedicated	+
stubborn	-
understanding	+
scholarly	+
irresponsible	-
reckless	-
sincere	+
considerate	+
exhibitionistic	-
ruthless	-
trustworthy	+

BACKGROUND INDEX ON HYPNOSIS

I. General Information.

Name: _____ Age: _____ Sex: _____ Date: _____

Local or Business Address: _____ Tel: _____

Home Address (if different): _____ Tel: _____

Occupation (If student, name institution & class): _____

Field of concentration (if any): _____

II. Family Relationships.

How many brothers or sisters do you have?

Indicate their first names, sex, and age:

III. Courses in Psychology.

Please list all of the courses you have taken or are now taking in the area of psychology. Give approximate dates and whether or not they were full or half-year courses:

IV. Previous Participation in Psychological Experiments.

Please list all experiences you have had as a subject in psychological experiments. Describe each briefly:

V. Experiences as a Hypnotist.

Have you ever tried to hypnotize anyone?

If yes, please estimate how often:

Describe, as best you can recall, the circumstances of each incident:

Has a subject ever chosen to enter hypnosis while you were attempting to hypnotize him?

If yes, please estimate how often:

Describe, as best you can recall, the circumstances of each incident:

VI. Experiences as a Hypnotic Subject.

Have you ever tried, even casually, to enter hypnosis?

If yes, please estimate how often using the following table:

	casually	seriously
with a friend		
by yourself		
with a stage hypnotist		
with a dentist		
with a physician		
with a psychologist or psychiatrist		
other:		

Have you ever succeeded in entering hypnosis?

If yes, please estimate how often you have entered light, medium, and deep hypnosis. Answer in terms of how you yourself conceive these distinctions. (In a later section you will be given the opportunity of describing what you mean by light, medium, and deep hypnosis.) Answer using the following table:

	light	medium	deep
with a friend			
by yourself			
with a stage hypnotist			
with a dentist			
with a physician			
with a psychologist or psychiatrist			

Describe, as best you can recall, the circumstances of each time you were hypnotized:

ere beforehand:

II. Observations of Hypnosis.

Have you ever observed hypnosis in a movie?

If yes, please estimate how many different films you have seen which have included hypnosis. (It is not necessary that this really be hypnosis, merely that it was called hypnosis in the film.)

Give as many titles (or approximate titles) as you can recall and the kinds of things the subjects did:

Have you ever observed hypnosis on television?

If yes, please estimate how many different programs you have seen which have included hypnosis. (It is not necessary that this really be hypnosis, merely that it was called hypnosis on the program.)

Name as many programs by name (or approximate name) as you can recall and the kinds of things which the subjects did.

Have you ever seen a so-called "professional" hypnotist demonstrate hypnosis as a stage-show?

If yes, please estimate how often.

Briefly describe each occasion and the kinds of things the subjects did.

Have you ever observed hypnosis demonstrated by an amateur, perhaps at a party?

If yes, please estimate how often:

Please describe briefly each occasion and the kinds of things the subjects did:

Have you ever witnessed anyone being hypnotized in ways not covered in previous questions?

If so, by whom and under what circumstances? Please describe briefly each observation and the kind of things the subjects did:

VIII. Discussions and Readings on Hypnosis.

Has hypnosis ever been discussed in any of your courses or have you ever read technical scientific books or articles on hypnosis?

If yes, please describe briefly the circumstances and the kinds of information covered. Name titles (or approximate titles) of the books or articles as you can recall them.

Have you read any books about hypnosis for nonmedical readers, for example, popular books of instruction on hypnosis?

If yes, please estimate how many.

Name the titles (or approximate titles) of those you remember, the kind of thing the subjects did, and the information covered.

Have you ever read a popular description of hypnosis either in a novel, slick magazine, pulp magazine, or Sunday supplement?

If yes, please estimate how often.

things the subjects did, and the information covered.

Have you ever discussed hypnosis informally or in a bull session with your friends?

If yes, please estimate how often:

Please describe briefly the kinds of things talked about:

IX. General Impressions from Observations and Readings.

Taking all of your observations and readings together has the hypnotist (real or fictional) ever done anything which caused the subjects to become upset or embarrassed?

If yes, please estimate how often:

Please describe briefly each occasion and the kinds of things that happened.

Counting all of the times together of observing and reading about hypnosis, what percent of the time would you estimate that the subject in hypnosis seemed to be enjoying himself and what percent of the time did it seem unpleasant to him.

Estimated % of time pleasant:

Estimated % of time unpleasant:

X. Circumstances of Agreeing to Participate in Hypnosis.

Would you volunteer to participate as a hypnotic subject in a scientific study of hypnosis done under the auspices of a recognized medical or educational institution?

Would you agree to enter hypnosis at the request of your physician for the treatment of a painful or very bothersome condition?

Would you agree to enter hypnosis at the request of your dentist to avoid the discomfort of dental work?

Would you volunteer to participate in a demonstration of hypnosis to a group of physicians?

Would you volunteer to participate in a demonstration of hypnosis before a class in Introductory Psychology?

Would you volunteer to participate in a demonstration of hypnosis at an adult education lecture conducted by a physician, psychologist, or psychiatrist of recognized standing?

Would you volunteer to participate in a demonstration of hypnosis for entertainment purposes conducted by a stage-hypnotist?

Would you participate in experiments in hypnosis in your fraternity or among friends as a lark?

XI. Expectations Toward Entering Hypnosis.

How long do you estimate it would take you to enter hypnosis (with a competent hypnotist whom you trust, for valid scientific or therapeutic reasons)?

- a) less than 1 minute
- b) 1 to 5 minutes
- c) 5 to 10 minutes
- d) 10 to 30 minutes
- e) 30 to 60 minutes
- f) 1 to 3 hours
- g) more than 3 hours

Can you think of any circumstances which might prevent you from entering hypnosis, provided you wished to do so and are working with a competent person whom you trust? Please comment on each circumstance briefly.

XII. Conceptions of Hypnotic Depth.

In a previous question we asked you to rate your own experiences in hypnosis as being light, medium, or deep. Depth is most easily defined in terms of the kinds of phenomena readily produced, more difficult phenomena generally requiring deeper hypnosis. Different authorities, however, have classified various hypnotic phenomena somewhat differently. Whether or not you have experienced hypnosis, we are interested in learning how you would classify hypnotic phenomena as to required depth. You may feel that you do not have enough information to classify them, but we would like you to guess even if you are not at all sure of an item.

Underneath each item is a rating scale with five subdivisions: waking state, light hypnosis, medium hypnosis, deep hypnosis, and does not happen. If you believe, for example, that a certain phenomenon can happen generally only in medium and deep hypnosis, but not in light hypnosis nor in the waking state, put a circle around the medium hypnosis category. (It is unnecessary to put a second circle around the deep hypnosis category since what can occur in medium hypnosis generally can also occur in deeper hypnosis.) Some items included may occur in hypnosis, but may occur equally well in the waking state. These items are to be classified as WAKING STATE. Another group of items included here refer to phenomena which are highly controversial, and, according to most authorities, are simply not true of either hypnosis or the waking state. If you feel an item would not occur at all you are to mark it DOES NOT HAPPEN.

Please answer all items. Work rapidly, and where in doubt, stick to your first impression.

1. The inability to open the eye-lids when challenged to do so.

waking state , light hypnosis , medium hypnosis , deep hypnosis , does not happen

2. The ability to forget everything that happened during the hypnotic session upon awakening.

waking state , light hypnosis , medium hypnosis , deep hypnosis , does not happen

3. The ability to diminish discomfort in the dental chair.

waking state , light hypnosis , medium hypnosis , deep hypnosis , does not happen

4. The ability to do an almost unlimited amount of work without fatigue.

waking state , light hypnosis , medium hypnosis , deep hypnosis , does not happen

5. Complete submission to the will of the hypnotist, even in matters of conscience or morals.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

6. A desire not to resist any suggestions except those contrary to the conscience and morals of the subject, and except talking about personal issues the subject is strongly disinclined to discuss.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

7. Drowsiness.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

8. The ability to see someone who really is not there.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

9. The ability to accurately predict the future by going forward in time.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

10. The ability to eat a lemon and think it is a peach.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

11. The ability to read through a single page of fairly complex printed material once at a normal reading speed and subsequently be able to reproduce it verbatim by the process of hypnotic visualization.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

12. A marked increase in the ability to understand one's own unconscious processes, such as interpreting dreams correctly.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

13. The ability to experience a suggested emotion so that the body physically reacts by changes in sweating, heart rate, respiration, muscle tension, and blood pressure.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

14. An increase in the ability to see clearly so that vision is approximately twice that of a normal individual, especially in relation to vision in the dark.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

15. The ability to enter a state of suspended animation. (Slowing of pulse rate far below what is normally possible and general slowing down of all bodily functions, permitting the individual to remain without food or drink for periods up to eight days.

waking state, light hypnosis, medium hypnosis, deep hypnosis, does not happen

16. Extensive physical relaxation.

waking state, light hypnosis, medium hypnosis, deep hypnosis, does not happen

17. The ability to be suspended rigidly between two chairs while an adult sits on your abdomen.

waking state, light hypnosis, medium hypnosis, deep hypnosis, does not happen

18. The ability to loose all feeling in a portion of the body so that complicated surgical operations could be performed without feeling pain.

waking state, light hypnosis, medium hypnosis, deep hypnosis, does not happen

19. The ability to cause blisters to appear by suggestion.

waking state, light hypnosis, medium hypnosis, deep hypnosis, does not happen

20. Feeling as if your body were drifting through space.

waking state, light hypnosis, medium hypnosis, deep hypnosis, does not happen

21. The ability to suppress habits such as nail-biting.

waking state, light hypnosis, medium hypnosis, deep hypnosis, does not happen

22. The ability to return to a previous reincarnation such as demonstrated by Bridey Murphy.

waking state, light hypnosis, medium hypnosis, deep hypnosis, does not happen

23. The ability to have a small weight dangling on a string from your fingertips like a pendulum and without deliberately making it move have it swing from side to side as you concentrate on it happening.

waking state, light hypnosis, medium hypnosis, deep hypnosis, does not happen

24. The ability to recall accurately any previous experience in the subject's lifetime no matter how obscure and apparently forgotten.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

25. The ability to remove warts by suggestion.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

26. The feeling of not wanting to resist the hypnotist's suggestions.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

27. The compulsion to carry out a complex action after being awakened from hypnosis without knowing why.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

28. The ability to have a hand rise up from your lap seemingly entirely by itself.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

29. The ability to open eyes, talk, walk about, and answer complicated questions while still hypnotized.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

30. The ability to relive vividly a childhood experience so that it seems identical with living it again.

waking state | light hypnosis | medium hypnosis | deep hypnosis | does not happen

XIII. The Effect of Conditions on Initial Induction.

The following list of items relate to conditions that have been thought to be favorable or necessary for the initial induction of hypnosis or thought to be unfavorable or prevent hypnosis. Considerable disagreement exists among authorities on these matters. Beside each item is a scale with five subdivisions:

a) necessary to induce hypnosis (necess.); b) favorable in inducing hypnosis (fav.); c) neutral or uncertain (n. or u.); d) unfavorable in inducing hypnosis (unfav.); and e) prevents hypnosis (prev.). Classify every item. You may feel that you do not have enough information to classify them, but we should like you to guess even if you are not at all sure of an item. Place an "X" in the column you feel appropriate. Please mark one box for each question.

	necess.	fav.	n. or u.	unfav.	prev.
1. being willing to enter hypnosis					
2. standing up					
3. a quiet room					
4. being a student of the hypnotist					
5. being under the influence of alcohol					
6. knowing that the hypnotist is an amateur					
7. being tired and ready to go to sleep					
8. an audience watching					
9. the subject skeptical of whether he can enter hypnosis					
10. the hypnotist being in a hurry					
11. fixing the gaze on a bright object					
12. knowing that everyone can enter hypnosis if willing					
13. disliking the hypnotist as a person					
14. critically evaluating what the hypnotist is saying					
15. the hypnotist speaking in a dull					

	necess.	fav.	n. or u.	unfav.	prev.
17. tape recording everything said					
18. seeing hypnosis as a struggle between the hypnotist and the subject					
19. being comfortable					
20. a noisy room					
21. hypnotist much older than subject					
22. male subject with female hypnotist					
23. female subject with male hypnotist					
24. male subject with male hypnotist					
25. female subject with female hypnotist					
26. passively letting things happen					
27. not fully trusting the hypnotist					
28. a darkened room					
29. taking part in an important scientific study					
30. the subject being paid					
31. being in a room full of people					
32. knowing that the privacy of your inner life will be respected					
33. being alert and in full control of your senses					
34. the hypnotist saying interesting things with considerable vocal inflection					
35. reclining					
36. being under the influence of hypnotic drugs					

	necess.	fav.	n. or u.	unfav.	prev.
37. being a relative of the hypnotist					
38. looking forward to entering hypnosis as a pleasant experience					
39. being approached while asleep					
40. just having failed an examination					
41. being very upset					
42. feeling sorry for the hypnotist					
43. the hypnotist being a person who commands authority					
44. being a personal friend of the hypnotist					
45. sitting down					
46. the hypnotist having a soothing voice					
47. being relaxed					
48. bright sunlight					
49. trusting the hypnotist					
50. just awakening from sleep in the morning					
51. the hypnotist being quietly persuasive					
52. watching someone else enjoying being in hypnosis first					
53. knowing the hypnotist is a physician, dentist, psychologist, or psychiatrist					
54. being afraid of entering hypnosis					

	necess.	fav.	n. or u.	unfav.	prev.
56. liking the hypnotist as a person					
57. being tense					
58. the hypnotist having a high-pitched voice					
59. distrusting the hypnotist					
60. hoping that hypnosis will help treat a medical problem					
61. wondering about what is going to happen					
62. actively concentrating on the hypnotist's words					
63. being uncomfortable					
64. hoping that hypnosis will relieve the discomfort in dentistry					
65. being unwilling to enter hypnosis					
66. hypnotist being younger than subject					
67. believing that the hypnosis has a valid scientific or therapeutic purpose					
68. being alone with the hypnotist					
69. having just read the novel, <u>Trilby</u> , where the hypnotist uses the powerless subject for his own advantage. The reader knows this to be untrue, a pure fantasy					
70. being with friends all seriously trying together					
71. knowing some secret information which must be kept confidential					

	necess.	fav.	n. or u.	unfav.	pre
72. the opportunity of talking with the hypnotist about the procedures in some detail beforehand					
73. a close friend of your choice watching					

XIV. Impressions on Family in Regard to Hypnosis.

Whom in your immediate family would you think would make the best hypnotist given the technical knowledge? (You may name more than one.)

Briefly comment on your reasons for thinking so:

Whom in your immediate family would you think would never make a good hypnotist no matter how much technical training he (or she) acquired? (You may name more than one.)

Briefly comment on your reasons for thinking so:

List all of the members of your immediate family by name, classifying them as to whether or not you think they would be good or bad hypnotic subjects. Please classify your parents and all of your brothers and sisters:

	WS	LH	MH	DH	DNH	Highest possible
1.	1	0	1	2	~	2
2.	~	2	1	0	~	2
3.	~	0	1	2	~	2
4.	~	~	~	~	~	0
5.	~	~	~	~	~	0
6.	1	0	1	2	~	2
7.	0	0	1	2	~	2
8.	~	2	1	0	~	2
9.	~	~	~	~	~	0
10.	3	2	1	0	~	3
11.	~	~	~	~	~	0
12.	1	0	0	0	~	1
13.	0	0	1	2	~	2
14.	~	~	~	~	~	0
15.	~	~	~	~	~	0
16.	0	0	1	2	~	2
17.	0	1	2	3	~	3
18.	3	2	1	0	~	3
19.	0	0	0	0	~	0
20.	0	0	1	1	~	1
21.	0	0	0	0	~	0
22.	~	~	~	~	~	0
23.	0	1	2	3	~	3
24.	~	~	~	~	~	0
25.	0	0	0	0	~	0
26.	0	0	1	2	~	2
27.	~	1	0	0	~	1
28.	1	0	1	2	~	2
29.	~	2	1	0	~	2
30.	3	2	1	0	~	3

Total = 40

Scoring information for Background Index on Hypnosis, Section XII, Conceptions of Hypnotic Depth. Scoring gives per cent sum of absolute distance in categories between Ss' ratings and consensus of opinions of authorities on hypnosis. "Magic" items (#4, 5, 9, 11, 14, 15, 22, and 24) are not considered. Items marked in dashed spaces or left blank are to be omitted for that S and his total score prorated from the highest possible score of 40 to the resulting highest

Puzzles "Repression" Test

Two identical sets of pictures were selected from pairs of magazines and mounted on 3 1/4" x 4 1/4" cards. One set of cards was inserted into a small photographic album with transparent plastic leaves. The other set was covered with "Contact", a transparent adhesive plastic sheeting, and then cut at random angles into 6 to 8 piece puzzles. Each puzzle was placed in a 4" x 6 3/8" manilla envelope (Wachusett Clasp #15) with the top cut to 5 3/4" and one side of the opening rounded inwardly to facilitate access to contents. At the top of the envelope a brief descriptive name was given to the puzzles; e.g., Deer and Waterhole, File Case, Diagonal Lines, etc. These envelopes were arranged in a wooden file box. Glued inserts in the file box provided space for the photo album and Manual of Instructions. Printed Scoring Sheets also were provided (see below). The materials were given the appearance of a commercially distributed test and were identified as the "Peabody-Anderson Effective Intelligence Test: Non-Verbal, College Level" as distributed by the "Psychological Materials Corporation".

Instructions. Place the box of test materials on the table so that S can easily read the label. Fill out the top portion of the Scoring Sheet. After giving the opening instructions (see below) open the box and remove the picture book. Place the picture book in front of S, opened to the title page, so that S can read that it is a test of intelligence.

The following instructions are then to be given. "Have you ever done jigsaw puzzles?" Obtain answer. "You know that when you do jigsaw puzzles you are given a reproduction of the completed puzzle along with the parts of the puzzle randomly arranged. In a moment I shall place the pieces of a puzzle before you and show you a reproduction of what the puzzle should look like when it is put together. When assembled, each puzzle will be a rectangle the same size and shape as the page in this book, with the same picture printed on it. Your task is to assemble all the pieces to make a rectangle just like the page in this book. Is that clear?" Ascertain comprehension. Clarify if necessary.

"Now as to the scoring of the test: Each puzzle has a certain amount of time allotted for its solution. The amount of time allotted for each puzzle varies with the difficulty of the puzzle. In order to do well you must work as rapidly as you can. I shall start timing each puzzle when I tell you to begin. If you run overtime I will tell you to stop. Is that clear? Are there any

"When I say the word 'stop', immediately cease working on the puzzle. Under no circumstances do any further work on the puzzle after I say 'stop'." Turn to the first picture. "The first puzzle is the picture of a file box." In rapid order, put down the pieces of the first puzzle, one at a time, right side up. Then say, "Begin."

The same verbal format is used to introduce all of the remaining puzzles, which are to be given in proper order. After putting away the pieces of the preceding puzzle, state, "The next puzzle is a picture of _____. " Turn to the appropriate picture, and so forth.

If S completes the puzzle "in the time limit", smile, nod, or give some other minor complement. If S does not complete the puzzle "in the time limit", say "Stop" and insist that he do no further work on the puzzle. Throughout, E is to arouse tension; e.g., by looking alternately at his stopwatch and at S now and again, by frowning disappointedly when a task has to be interrupted before completion, and in general by maintaining a distant attitude. Questions are to be answered in monosyllables and the impression given that talking is not permitted.

Scoring criteria. "A" indicates that the puzzle is to be stopped when S thinks he has three more pieces to place. "B" indicates that the puzzle is to be stopped when S thinks he has two more to complete. "C" indicates that S is to be stopped just before he puts down the final piece.

"D", "E", and "F" indicate that S should be allowed to finish the test no matter how much time he takes.

PEABODY-ANDERSON EFFECTIVE INTELLIGENCE TEST

SCORING SHEET

No.	Picture	Time	Scoring Code	Total	Remarks
1.	File Case		40E		
2.	Deer and Waterhole		42A		
3.	Pajamas		38D		
4.	Telephone		47B		
5.	Fish		49A		
6.	Toaster		39C		
7.	Evening Scene		26F		
8.	Camera		34D		
9.	Scatter Rug		69A		
10.	Television Set		39E		
11.	Fruit		50C		
12.	Diagonal Lines		67B		
13.	Teddie Bear		31F		
14.	Violin		50B		
15.	Tree		31D		
16.	Iron		29E		
17.	Set of Encyclopedia		35C		
18.	Baseball Scene		20F		

INTELLIGENCE QUOTIENT:

Subjective Estimate of Percentage Depth

Subject: _____ Examiner: _____ Date: _____

Remarks: _____

Instructions: All of the following information should be conveyed by the examiner. Wording may be varied slightly to avoid sounding stilted. Instructions may be repeated and stressed as necessary. Care should be taken, however, to avoid leading the subject.

"We would like to get your own subjective estimate of how deeply you were hypnotized. We want you to use your own standards, your own impressions. Let's say that zero per cent is the usual waking state and one hundred per cent is the deepest a person could be hypnotized. Not just you, but people in general. How deeply, by these standards, would you estimate that you yourself were hypnotized?" The examiner should discuss the meaning of these instructions with the subject until it is clear that they are fully understood.

The examiner is then to secure percentage estimates of a.) the deepest hypnosis achieved throughout all sessions, b.) the hypnotic depth generally achieved, and c.) any other estimates of depth during specific sessions or during salient aspects within sessions as suit the examiner's objectives. The examiner should always try to secure single percentage figures. If the subject insists on a range estimate, require him to break it down into situations where the upper and lower estimates seemed to occur.

Estimations are appropriate only if amnesia is lifted for the respective hypnotic sessions and only if it is reasonable to infer that no special experimental procedures had been instituted which would be likely to distort markedly the subject's subjective report.

Examiner's Record:

Vividness of Mental Imagery Questionnaire

Name: _____ Age: _____ Sex: _____

Occupation (if student, name institution): _____

Local address: _____ Tel: _____

Date: _____

Description & Instructions

As you may know, people differ widely in their ability to imagine sensory experiences. In vision, for example, most people can imagine things well enough to get some kind of image of them in their minds. Some people, however, can imagine things as vividly as the actual object. This is called eidetic imagery. Some other people report that they have no visual imagery whatsoever.

The present questionnaire asks about your imagery in the various sense modalities: vision, audition, touch, taste, kinesthesia, etc.

All questions refer only to the imagery which you have available here and now. Spend ten to fifteen seconds (no more) trying to imagine as vividly as you can the things called for in each question, and then rate yourself.

Please answer the questions by checking the most appropriate response on a seven-point scale. Although you may be somewhat unclear on how to answer some of the questions, please try to answer every question as best you can.

1) When you close your eyes and try to imagine a specific automobile which you have seen many times, how vividly can you imagine it?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

2) When you keep your eyes open and try to imagine the automobile, how vividly can you imagine it?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

3) When you close your eyes and try to imagine a color, such as bright blue, how vividly can you imagine it?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

4) When you keep your eyes open and try to imagine a patch of the wall becoming a different color, how vividly can you imagine the changed color?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

6) When you try to imagine hearing a tune, how vividly can you imagine it?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

7) When you try to imagine yourself running, how vividly can you imagine yourself actually moving? (This refers to the feeling of your muscles in motion, not to visually seeing yourself running.)

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

8) When you try to imagine your arms as being especially heavy, how vividly can you imagine it?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

10) When you try to imagine a common taste, such as the sweetness of sugar, how vividly can you imagine it?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

11) When you try to imagine the room as becoming especially warm, how vividly can you imagine it?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

12) When you try to imagine the room as becoming especially cold, how vividly can you imagine it?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

visually trying to see it.

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

14) When you try to imagine how it feels when you have a stomach ache, how vividly can you imagine it?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

15) When you try to imagine the room spinning, how vividly can you imagine it?

- a) Perfectly clear, and as vivid as the actual experience.
- b) Very clear, and comparable in vividness to the actual experience.
- c) Moderately clear and vivid.
- d) Not clear or vivid, but recognizable.
- e) Vague and dim.
- f) So vague and dim as to be hardly discernible.
- g) No image present at all, you only knowing that you are thinking of it.

Philadelphia, Pennsylvania

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13. ABSTRACT

A number of specific hypotheses about correlates of hypnotizability were tested. A sample of 25 Ss representative of the investigators' special volunteer population was drawn. The criterion of hypnotizability used was the maximum hypnotic depth achieved in as many intensive hypnotic training sessions as the examiner needed in order to feel confident that a stable plateau in the S's performance had been reached.

Findings confirmed the hypotheses that hypnotizability could be predicted from general propensity for unusual subjective "hypnotic-like" experiences, from attitudes and motivational factors specifically relating to hypnosis, and from postural sway, heat illusion, and vividness of mental imagery. In addition, with few exceptions the hypothesis was supported that there would be only negligible relationships between hypnotizability and measures of personality. Defining hypnotizability as a plateau performance rather than as some briefer estimate was shown to be wise. Results were placed into the perspective of the further lines of research needed.

hypnotizability

hypnosis

suggestibility

suggestion

trance

INSTRUCTIONS

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