THE INFLUENCE OF AN INTERPERSONAL RELATIONSHIP IN HYPNOTIC SUSCEPTIBILITY

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ABSTRACT

THE INFLUENCE OF AN INTERPERSONAL RELATIONSHIP IN HYPNOTIC SUSCEPTIBILITY

By

Josephine Pottinger

The present study was designed to investigate whether hypnotizability is actually dependent upon the presence as well as the perceived competence of E. It also examined the application of hypnosis outside of the usual laboratory conditions.

Initially 45 male college students were randomly assigned to one of three groups. Ss in Group I went through the typical hypnotic procedure while E observed. Ss in Group II sat in the laboratory alone, while E sat in an adjoining room; Ss in Group III were hypnotized in their own residence with a friend, relative or roommate acting as a substitute E. E's whereabouts was unknown. A tape recording was made of an altered version of the Stanford Hypnotic Susceptibility Scale using E's voice.

An ANOVA and Newman-Kuels Analysis showed a significant difference between Group I vs Group II, and an
even stronger significant difference between Group I vs Group III, but no significant difference between Group I and Group III.

Since the results suggested that the physical absence of an E (Group II) was a crucial variable to be looked at, it was decided to further test this conclusion by running Group II again. This time the newly obtained mean susceptibility score was comparable to the other groups. Thus the original hypothesis that the presence of E was an important factor in susceptibility, was not supported. Also the results of Group III, indicated that the perceived competence of the hypnotist is not an influencing variable.

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IN HYPNOTIC SUSCEPTIBILITY

By

Josephine Pottinger

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My Family
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>v</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>METHOD</td>
<td>9</td>
</tr>
<tr>
<td>Subjects</td>
<td>9</td>
</tr>
<tr>
<td>Materials and Experimental Situation</td>
<td>9</td>
</tr>
<tr>
<td>Procedure</td>
<td>10</td>
</tr>
<tr>
<td>RESULTS</td>
<td>12</td>
</tr>
<tr>
<td>Replication of Group II</td>
<td>13</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>14</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>17</td>
</tr>
<tr>
<td>APPENDICES</td>
<td></td>
</tr>
<tr>
<td>Appendix</td>
<td></td>
</tr>
<tr>
<td>A. Stanford Hypnotic Susceptibility Scale, Form A (Altered Version)</td>
<td>19</td>
</tr>
<tr>
<td>B. Raw Scores from the Altered Harvard Susceptibility Scale</td>
<td>33</td>
</tr>
<tr>
<td>C. Harvard Hypnotic Susceptibility Scale, Form A (Altered Version)</td>
<td>34</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Raw Scores from the Altered Harvard Susceptibility Scale</td>
</tr>
</tbody>
</table>


INTRODUCTION

One of the major issues facing hypnotic research today is that of susceptibility, with influencing variables associated with either the experimental situation, the subject, or the experimenter. Hilgard (1965) emphasizes the view that each S brings with him to the testing situation a readiness for the hypnotic experience; therefore he can be hypnotized by any responsible person. He feels that as long as the setting promotes confidence in the S, hypnosis does not depend upon the personal characteristics of the hypnotist. Although this seems to be essentially true, there is some evidence that certain personal characteristics may have a small but significant effect.

Barber and Calverley (1964) found that E's tone of voice effected the manner in which Ss responded to hypnotic suggestions. When E presented the test suggestion in a "forceful tone," the level of suggestibility of each S was relatively high, whereas when he presented the identical test suggestions to another group of Ss in a "lackadaisical tone," Ss' level of suggestibility was relatively low. As a result of this research, the authors
concluded that E's tone of voice should be considered as an independent variable or else be controlled more carefully.

Hartman (1967) found that a "friendly" or "warm" E achieved better results than the same E acting "unfriendly" or "cold." However, his results are confounded by the fact that he gave different information to the experimental groups about what they were to experience. Also, it is unclear whether the tape recording he used of a hypnotist actually was E. Nevertheless, his study raises a very important issue to be considered. If E is not the hypnotist, and all Ss are given the same information about hypnosis, will there be any great amount of difference in susceptibility that is dependent on the attitude of E?

Levitt and Overley (1965) examined the question of whether an experienced hypnotist would be more successful in inducing hypnosis than an inexperienced hypnotist. Their results showed that the experience of the hypnotist was not a factor in evoking hypnotic behavior. There was no statistically significant difference between experienced and inexperienced hypnotist.

Land and Greenberg (1971) reported that Ss run by an objectively warmer, more competent appearing E generally obtained significantly higher susceptibility scores. By structuring "warmth" and "experience" they were able to
affect Ss subjective impressions of whether they thought they had been hypnotized. They concluded that the effectiveness of hypnosis is in part determined by the prestige of the hypnotist.

Shapiro and Diamond (1972) demonstrated that increased hypnotizability was a function of interpersonal interactions. By using three experimental encounter groups and one no-treatment group, they varied the amount of interpersonal contact between group members. Three expert group leaders were chosen to produce the following types of interactions: (a) intrapersonal, (b) interpersonal, and (c) a combination of intrapersonal and interpersonal interactions. Equivalent forms of the Stanford Hypnotic Susceptibility Scale were administered before and after each group. It was found that the highest scores were obtained by Ss in the interpersonal oriented group. An explanation of these findings suggested that an interpersonal interaction increased Ss' trust of the hypnotist, thus making them more willing to engage in the kinds of behavior involved in hypnosis.

Balaschak, Blocker, Rossiter and Perrin (1972) tested two hypotheses involving "race," and "expressed experience" of the hypnotist. They used 100 white subjects, and tested the following two hypotheses: (1) Ss who believed the hypnotist to be experienced would score higher than those who perceived the hypnotist to be
inexperienced. (2) Ss hypnotized by a white hypnotist would score higher than Ss hypnotized by a black hypnotist. Their results supported the first hypothesis only for the white hypnotist groups. The second hypothesis was not supported.

Ruch and Morgan (1971) hypothesized that Ss tested in postures other than sitting, would show differences in measured hypnotic susceptibility. By testing three groups of subjects using three different postures (sitting, standing and lying down), they reported that posture does not affect susceptibility. All three groups performed equally well in all tasks on the Stanford Hypnotic Susceptibility Scale, Form C.

The question of whether recorded suggestions or spoken suggestions are effective, were examined by Hoskovec, Svorad, and Lanc (1963). By using body sway as a measurable hypnotic suggestion, they found that the initial suggestions for their recorded group were just as effective as the initial suggestions for their spoken group. The advantage of a recorded induction is the standardization of procedures.

Influencing variables other than the personal characteristics of the hypnotist have been reported. Wiseman and Reyher (1962) devised a technique which utilized dreams to deepen the hypnotic trance. They used amnesia as the criterion of depth. It was found that
a significant number of Ss experienced complete amnesia for the hypnotic sessions than when other methods were used as the deepening technique.

It recently has been noted that there is a relationship between the induction of hypnosis and the production of sensory deprivation. Sanders and Reyher (1969) used Ss who were originally resistant to hypnosis and exposed them to sensory deprivation until they began to manifest symptoms. When this occurred an induction procedure was given over earphones. The Ss' increase in susceptibility was substantial and they were able to retain this increase when retested at a later time.

Reyher (1963) developed a theory to explain the psychodynamic and interpersonal processes involved in induction to produce an altered state of awareness. A simplified version is as follows:

When an individual submits to a hypnotic induction procedure he assumes a passive-dependent relationship with the hypnotist. If this is not anxiety-producing for S, then he will transfer his executive ego functions to E which includes the role of analyzing and integrating sensory input, thereby ceasing to respond adaptively. The hypnotist literally becomes his eyes and ears, and his suggestions act in the same way as spontaneous impulses in S. By adopting this passive-dependent attitude, the highest level of brain functioning
which supports adaptive functioning cannot be maintained, therefore more primitive levels of brain functioning become dominant and organize the overall functioning of the brain. Sleep occurs in this fashion, as does highway hypnosis and sensory deprivation phenomena. If the adoption of a passive-dependent attitude by S is anxiety-producing, defenses—which are adaptive in nature—maintain the highest levels of integration of brain functions. This is the same mechanism which keeps a person sleepless; anxiety and worry over personal affairs is adaptive in intent, and thereby prevents the reorganization of brain mechanisms characteristic of sleep.

When the induction procedure succeeds, the highest level of neuronal integration in the CNS which supports adaptive behavior can no longer remain dominant in the entire organization of brain functions, thus it gives way to an organization of brain functions in which a phylogenetically older structure becomes regnant. Since phylogenetically older structures have diffuse connections with cortical and subcortical areas, regulatory psychophysiological mechanisms are more easily influenced. These older structures are also instrumental in producing psychopathology because anxiety is assumed to be generated at this level of brain functioning, producing patterns of excitation and inhibition which produce repression, psychosomatic symptoms, and other forms of psychopathology.
Since phylogenetically older structures have diffuse connections with cortical and subcortical areas, regulatory psychophysiological mechanisms are more easily influenced. This then is considered to be an altered organization of brain mechanisms. In this altered state, the voice of the hypnotist becomes a substitute for that of S, and at the same time, provides his contact with reality. The complete absence of overt behavior by S reflects the incorporation of the hypnotist.

In actuality, hypnosis is induced whenever S accepts a passive-dependent-regressive relationship with the hypnotist and allows him to direct his attention and behavior. The depth of hypnosis is related to the degree to which S enters into such a relationship. There are many individuals in our culture who would see such situations as anxiety-provoking; in this case, hypnosis cannot occur. However, in most cases, S enters into a passive-dependent-regressive relationship with E much like that of a physician-patient, faith healer-suppliant and guru-student (Reyher, 1963, 1968, 1970).

The present investigation represented an attempt to demonstrate that the induction of hypnosis is dependent upon an interpersonal relationship with the hypnotist as this is specified by the foregoing theory. However, defining the presence and absence of an interpersonal relationship is a difficult task, particularly in reference to the induction of hypnosis. Therefore, we hoped
to circumvent this problem by devising a set of conditions wherein the opportunity for the subject to enter into an interpersonal relationship with the hypnotist is diminished. The tactic we adopted to accomplish this was the use of a tape recorded induction with and without the physical presence of the hypnotist.

The following hypotheses were tested:

**Hypothesis 1:** Hypnotizability is dependent on the physical presence of the hypnotist.

**Hypothesis 2:** Hypnotizability is dependent upon the subject perceiving the hypnotist as a person knowledgeable and competent in hypnosis.
METHOD

Subjects

Forty male college students from a general psychology course volunteered to participate in "an experiment in hypnosis."

Materials and Experimental Situation

A tape was made of E's voice using the Stanford Hypnotic Susceptibility Scale, Form A (Weitzen and Hilgard, 1962). The induction was in accordance with the published instructions, but was slightly altered to fit the conditions of this particular experiment. Item 1 "postural sway," was eliminated since E was required to aid S in falling backwards. This would have been possible only for Groups I and III but not for Group II, since E was not present. With no E present this task would have been impossible for S to perform alone.

S was seated in an upright upholstered chair in a sound-proof room. The Harvard Group Scale of Hypnotic Susceptibility, Form A (Shor and Orne, 1962) was used for Ss to score themselves. This was altered to conform to
the items in the Stanford Hypnotic Susceptibility Scale, thus making it a 10-item questionnaire.

Procedure

Ss were randomly assigned to one of three groups, so that there were 15 Ss in each group. All Ss were run individually. The following is a description of the experimental procedure utilized for each group:

**Group I.** S was comfortably seated in a chair, after which he was told by E* that the tape recorder would provide him with all instructions. At this point the tape recorder was turned on, and E sat quietly in a corner to observe S. Immediately following the induction, S was given the Harvard Scale for self scoring.

**Group II.** The experimental conditions were identical to those of Group I, with the exception of E being present outside of the laboratory. S was told that E would be sitting quietly in an adjoining room outside of the laboratory. E then re-entered at the exact time the tape was completed. At this point, S was given the Harvard Scale to be self-scored.

**Group III.** E and S went to S's home for the purpose of replicating as closely as possible the conditions of the laboratory. A roommate, wife or friend was asked to act as a substitute E, and was told to sit

*Experimenter and Hypnotist are the same person.
quietly in a corner and observe. At this point, E left without saying when she would return, however she allotted time for S to complete the Harvard Scale and to pick up the tape recorder.
RESULTS

Hypothesis 1 was tested by performing an Anova on the mean scores of the three groups ($\bar{X}_1=5.87$, $\sigma=1.73$; $\bar{X}_2=4.07$, $\sigma=2.40$; $\bar{X}_3=7.07$, $\sigma=2.09$). It was found that there was a significant difference between all groups ($F=7.76$, df 2 and 42, $p<.01$).

Application of a Newman-Keuls test indicated that:
(a) Group I vs Group II was significant at .05 level;
(b) Group II vs Group III was significant at .01 level;
and (c) Group I vs Group III was not significant.

The results of Hypothesis 1 suggest that hypnotizability is dependent upon the presence of $E$. There was a significant difference between $E$ being present during the hypnotic procedure (Group I) opposed to $E$ being outside of the hypnotic situation (Group II), or a substitute $E$ being present (Group III).

Hypothesis 2 was tested by comparing the means of the three groups. Since the mean of Group III was higher than the other two groups, this hypothesis was rejected. The surrogate $E$s in Group III were inexperienced in
hypnosis and were not seen as knowledgeable and competent as specified in Hypothesis 2.

**Replication of Group II**

To determine if it was by chance that Group II had the lowest mean, a fourth group was tested. If \( S \) became anxious when \( E \) was just outside of the laboratory, what then would happen if \( E \) made the situation even more anxiety-provoking and left entirely. In order to enhance the effects; it was made clear that \( E \) would not be around. This was done to emphasize the physical absence of \( E \). \( S \) was told by \( E \) that she was not returning.

Fifteen \( S \)s were tested in Group IV during the same semester the other groups were tested, and under the exact conditions as in Group II with the only difference being that \( E \) did not return at the end of the experiment.

The mean of Group II \((X=4.07)\) was then compared to the mean of Group IV \((X=6.13)\), the difference was significant, \( t(28)=-2.46 \ p<.05 \). Since the mean of Group IV is between the means of groups I and III, the original finding of the presence of \( E \) being an important factor in susceptibility was rejected. This new finding suggests that when a person places himself in a receptive position such as in hypnosis, he allows his behavior to be directed. Therefore hypnosis can occur just as readily by a voice whether or not it is accompanied by the physical presence of \( E \).
DISCUSSION

The results of the present study are quite relevant to the current issue of hypnotizability. Since the findings suggest that hypnotizability does not depend upon the interpersonal relationship between the hypnotist and subject, then the usual laboratory procedure of hypnosis (using a tape recorded voice of the hypnotist) does not require the experimenter to be knowledgeable, competent or experienced. It was hypothesized that hypnotizability would be dependent upon the physical presence of the experimenter-hypnotist; this group (Group I) scored second highest of the three groups.

Contrary to what was predicted, the group with the surrogate hypnotist had the highest mean (Group III). There were two Ss who scored a perfect 10. One possible reason for this group having the highest mean is that when university research experiments are used as a matrix for hypnosis, S becomes intrinsically reassured that his welfare is protected and that no harm will come to him. Consequently, he is able to accept a passive-receptive attitude to the voice on the tape recorder.
It was assumed that the conditions in one's own home would create anxiety within S, since the surrogate E was inexperienced. Also because the surrogate E was related in some capacity to S, it seemed likely that S would worry about his performance in front of his wife, girlfriend, roommate, or relative. However in Group III, when the question of how each S felt by having had a surrogate E perform the role of a hypnotist, 14 Ss responded that it did not matter to them. Only one S felt uncomfortable because his mother was the substitute E. He previously chose his sister to act as E, but she declined at the last minute and his mother consented. It can be assumed that an interpersonal relationship between the mother and S took place during the hypnotic procedure, which was the cause of his discomfort. However, the other 14 Ss who gave a positive response about their feelings towards a surrogate E more than likely did so because they chose that particular person.

When replicating this experiment, caution is advised in giving instructions to the surrogate E in Group III. In 6 out of 15 cases, the surrogate E reported "feelings of going under along with S." Accordingly it is advisable to inform all surrogate Es in future research that there is a possibility that they also will feel drowsy, but by focusing their attention on something
else such as a problem or occurrence during the day, it can be avoided.

Also, in Group III, even though you want to give the subject the impression that you will not return, it is important that you remain nearby and return within 5 or 10 minutes after the completion of the entire procedure. In one case, a subject was unable to come out of the hypnotic trance, this greatly upset the surrogate E as well as the entire household. If actual E were not within minutes away from S's home, serious consequences might have resulted.

The practical implication of the results of this experiment shows that the physical presence of an experienced E is not important for hypnotizability in the context of university research.
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REFERENCES


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APPENDIX A

STANFORD HYPNOTIC SUSCEPTIBILITY SCALE
FORM A (ALTERED VERSION)
People coming for the first time are sometimes a little uneasy because they do not know what the experience will be like, or because they may have a distorted notion of what it is like. It is very natural to be curious about a new experience. Your curiosity will be satisfied before we are through, but you can best get the answers you want by just letting yourself be a part of what goes on, and by not trying to watch the process in detail.

Let me reassure you on a few points. First of all, the experience, while a little unusual, may not seem as far removed from ordinary experiences as you have been led to expect. Hypnosis is largely a question of your willingness to be receptive and responsive to ideas, and to allow these ideas to act upon you without interference. These ideas we call suggestions.

Second, you will not be asked to do anything that will make you look silly or stupid, or that will prove embarrassing to you. We are here for serious scientific purposes.
Third and finally, I shall not probe into your personal affairs, so that there will be nothing personal about what you are to do or say during the hypnotic state.

You may wonder why we are doing these experiments. Hypnotism is being used more and more by physicians for example, by dentists to relieve pain, by obstetricians to make childbirth easier, by psychiatrists to reduce anxiety. If we can understand the processes involved, we will know more about the relationship between ideas and actions, or about the way in which personality operates. So in participating here you are contributing to scientific knowledge of a kind that can be used to help other human beings. We are trying here merely to understand hypnotism. Probably all people can be hypnotized, but some are much more readily hypnotized than others, even when each of them cooperates. We are studying some of these differences among people.

1. EYE CLOSURE

Now I want you to seat yourself comfortably: a hand on each arm of the chair and look straight ahead. I am about to give you some instructions that will help you to relax and gradually to enter a state of hypnotism. Just relax and make yourself comfortable. Now look at a spot on your hand, any spot. I want you to look steadily at the target, and while keeping your eyes upon it to listen
to what I say. Your ability to be hypnotized depends partly on your willingness to cooperate and partly on your ability to concentrate upon the target and upon my words. You have already shown yourself to be cooperative by doing this experiment, and with your further cooperation, I can help you to become hypnotized. You can be hypnotized only if you are willing. I assume that you are willing and that you are doing your best to cooperate by concentrating on the target and listening to my words, letting happen whatever you feel is going to take place. Just let it happen. If you pay close attention to what I tell you, and think of the things I tell you to think about, you can easily experience what it is like to be hypnotized. There is nothing fearful or mysterious about hypnosis. It is a perfectly normal consequence of certain psychological principles. It is merely a state of strong interest in some particular thing. In a sense you are hypnotized whenever you see a good show and forget you are part of the audience, but instead feel you are part of the story. Many people report that becoming hypnotized feels at first like falling asleep, but with the difference that somehow or other they keep hearing my voice as a sort of background to whatever other experience they may have. In some ways hypnosis is like sleepwalking; however, hypnosis is also an individual experience and is not just alike for everyone. In a sense the hypnotized
person is like a sleepwalker, for he can carry out various and complex activities while remaining hypnotized. All I ask of you is that you keep up your attention and interest and continue to cooperate as you have been cooperating. Nothing will be done that will cause you any embarrassment. Most people find this a very interesting experience.

Just relax. Don't be tense. Keep your eyes on the target. Look at it as steadily as you can. Should your eyes wander away from it, that will be all right...just bring your eyes back to it. After a while you may find that the target gets blurry, or perhaps moves about, or again changes color. That is all right. Should you get sleepy, that will be fine too. Whatever happens, let it happen and keep staring at the target for a while. There will come a time, however, when your eyes will be so tired, will feel so heavy, that you will be unable to keep them open any longer and they will close, perhaps quite involuntarily. When this happens, just let it take place.

Relax completely. Relax every muscle of your body. Relax the muscles of your legs...Relax the muscles of your feet...Relax the muscles of your arms...Relax the muscles of your hands...of your fingers...Relax the muscles of your neck, of your chest...Relax all the muscles of your body...Let yourself be limp, limp, limp.
Relax more and more, more and more. Relax completely. Relax completely. Relax completely.

As you relax more and more, a feeling of heaviness perhaps comes over your body. A feeling of heaviness is coming into your legs and your arms...into your feet and your hands...into your whole body. Your legs feel heavy and limp, heavy and limp...Your arms are heavy, heavy...Your whole body feels heavy, heavier and heavier. Like lead. Your eyelids feel especially heavy. Heavy and tired. You are beginning to feel drowsy, drowsy and sleepy. Your breathing is becoming slow and regular, slow and regular. You are getting drowsy and sleepy, more and more drowsy and sleepy while your eyelids become heavier and heavier, more and more tired and heavy.

Your eyes are tired from staring. The heaviness in your eyelids is increasing. Soon you will not be able to keep your eyes open. Soon your eyes will close of themselves. Your eyelids will be too heavy to keep open. Your eyes are tired from staring. Your eyes are becoming wet from staring. You are becoming increasingly drowsy and sleepy. The strain in your eyes is getting greater and greater, greater and greater. It would be so nice to close your eyes, to relax completely, and just listen sleepily to my voice talking to you. You would like to close your eyes and relax completely, relax completely. You will soon reach your limit. The strain will be so
great, your eyes will be so tired, your lids will become so heavy, your eyes will close of themselves, close of themselves.

Your eyelids are getting heavy, very heavy. You are relaxed, very relaxed. There is a pleasant feeling of warmth and heaviness all through your body. You are tired and drowsy. Tired and sleepy. Sleepy. Sleepy. Sleepy. Listen only to my voice. Pay attention to nothing else but my voice. Your eyes are getting blurred. You are having difficulty seeing. Your eyes are strained. The strain is getting greater and greater, greater and greater. Your lids are heavy. Heavy as lead. Getting heavier and heavier, and heavier. They are pushing down, down, down. Your eyelids seem weighted, weighted with lead, heavy as lead...Your eyes are blinking, blinking, blinking...closing...closing...

You are now comfortably relaxed, but you are going to relax even more, much more. Your eyes are now closed. You will keep your eyes closed until I tell you otherwise, as I tell you to awaken...You feel drowsy and sleepy. Just keep listening to my voice. Pay close attention to it. Keep your thoughts on what I am saying - just listen. You are going to get much more drowsy and sleepy. Soon you will be deep asleep but you will continue to hear me. You will not awaken until I tell you to do so. I shall now begin to count. At each count you
will feel yourself going down, down, into a deep, comfortable, a deep restful sleep. A sleep in which you will be able to do all sorts of things I ask you to do. One - you are going to go deeply asleep....Two - down, down into a deep, sound sleep....Three - four - more and more, more and more asleep....Five - six - seven - you are sinking, sinking into a deep, deep sleep. Nothing will disturb you. Pay attention only to my voice and only to such things as I may call to your attention. I would like you to keep on paying attention to my voice and the things I tell you... Eight - nine - ten - eleven - twelve - deeper and deeper always deeper asleep - thirteen - fourteen - fifteen - although deep asleep you can clearly hear me. You will always hear me no matter how deeply asleep you may feel yourself to be....Sixteen - seventeen - eighteen - deep asleep, fast asleep. Nothing will disturb you. You are going to experience many things that I will tell you to experience....Nineteen, twenty. Deep asleep! You will not awaken until I tell you to do so. You will wish to sleep and will have the experiences I shall presently describe.

2. HAND LOWERING

Now that you are very relaxed and sleepy, listening without effort to my voice, I am going to help you to learn more about how your thoughts affect your actions in
this state, not all people experience just the same things in this state and perhaps you will not have all the experiences I will describe to you. That will be all right. But you will have at least some of the experiences and you will find these interesting. You just experience whatever you can. Pay close attention to what I tell you and watch what happens. Just let happen whatever you find is happening, even if it is not what you expect.

Please extend your left arm straight out, with the palm of your hand down. That's it. I want you now to pay close attention to this hand, the feelings in it, and what is happening to it. As you pay attention to it you are more aware of it than you have been - you notice whether it is warm or cool, whether there is a little tingling in it, whether there is a tendency for the fingers to twitch ever so slightly....That's right, I want you to pay close attention to this hand because something very interesting is about to happen to it. It is beginning to get heavy...heavier and heavier...as though a weight were pulling the hand and the arm down...you can picture a weight pulling on it...and as it feels heavier and heavier it begins to move...as if something were forcing it down...a little bit down...more and more down...down...and as I count it gets heavier and heavier and goes down more and more...one, down...two, down...three, down, four down, more and more down...five, down...six, down...seven...
eight...heavier and heavier, down and more and more...
nine...down...ten...heavier and heavier...down more and more.

That's fine...just let your hand now go the rest of the way down to its original position on the arm of the chair, and relax. You must have noticed how heavy and tired the arm and hand felt: much more so than it ordinarily would if you were to hold it out that way for a little while; you probably noticed how something seemed to be pulling it down. Now just relax...your hand and arm are now quite comfortable again. There...just relax.

3. ARM IMMOBILIZATION (RIGHT ARM)

You are very relaxed. The general heaviness you have felt from time to time you now feel all over your body. Now I want you to pay close attention to your right arm and hand....Your right arm and hand share in the feeling of heaviness...how heavy your right hand feels...and note how as you think about this heaviness in your hand and arm the heaviness seems to grow even more....Now your arm is getting heavy...very heavy. Now your hand is getting heavy...so heavy...like lead...perhaps a little later you would like to see how heavy your hand is...it seems much too heavy to lift...but perhaps in spite of being so heavy you could lift it a little, although it may now be too heavy even for that....Why don't you see how heavy it is....Just try to lift your
hand up, just try. Just try to lift your hand up, just try.

That's fine...stop trying...just relax. Your hand and arm now feel normal again. They are no longer heavy. You could lift them if you wanted to, but don't try now. Just relax...relax completely.

4. FINGER LOCK

Now let us try something else. Put your fingers together. Interlock your fingers. That's it. Press your hands tightly together. Notice how your fingers are becoming tightly interlocked together, more and more tightly interlocked together...so tightly interlocked together that you wonder very much if you could take your fingers and hands apart....Your fingers are interlocked, tightly interlocked...and I want you to try to take your hands apart...just try....Stop trying and relax....Your hands are no longer tightly clasped together....You can take them apart....Take them apart, return them to the arms of the chair and relax...just relax.

5. ARM RIGIDITY (LEFT)

Please extend your left arm straight out, and make a fist...arm straight out, a tight fist. I want you to pay attention to this arm and imagine that it is
becoming stiff...stiffer and stiffer...very stiff...and now you notice that something is happening to your arm....you notice a feeling of stiffness coming into it....It is becoming stiff...more and more stiff...rigid...like a bar of iron...and you know how difficult...how impossible it is to bend a bar of iron like your arm....See how much your arm is like a bar of iron...test how stiff and rigid it is...try to bend it...try.

Now relax...stop trying to bend your arm....It is not stiff any longer....Let it relax back to the arm of the chair....Just relax.

6. MOVING HANDS (TOGETHER)

Please hold both hands out in front of you, palms facing inward, hands about a foot apart. Now I want you to imagine a force attracting your hands towards each other, pulling them together. As you think of this force pulling your hands together, they move together slowly at first, but they will move closer together, closer and closer together as though a force were acting on them...moving...moving...closer, closer....

That's fine. Now place your hands back on the arms of the chair and relax.

7. VERBAL INHIBITION (NAME)

You are very relaxed now...deeply relaxed...think how hard it might be to talk while deeply relaxed...
perhaps as hard to talk as when asleep....I wonder if you could say your name. I really don't think you could.... You might try a little later when I tell you to...but I think you will find it quite difficult....Why don't you try to say your name now...just try to say it.

That's all right...stop trying and relax....You can say your name easily now....Go ahead and say it.... That's right. Now relax.

8. HALLUCINATION (FLY)

I am sure that you have paid so close attention to what we have been doing that you have not noticed the fly which has been buzzing about you....But now that I call your attention to it you become increasingly aware of this fly which is going around and around about your head...nearer and nearer to you...buzzing annoyingly... hear the buzzing getting louder as it keeps darting at you....You don't care much for this fly....You would like to shoo it away...get rid of it....It annoys you. Go ahead and get rid of it if you want to....

There, it's going away...it's gone...and you are no longer annoyed...no more fly. Just relax, relax completely.

9. EYE CATALEPSY

You have had your eyes closed for a long time while you have remained relaxed. They are by now tightly
closed, tightly shut....If you tried to open them now, they most likely will not as if your eyes were glued togethertightly glued shut....Perhaps you would soon like to try to open your eyes in spite of their feeling so heavy and so completely...so tightly closed. Just try...try to open your eyes.

Now relax...stop trying. Your eyes are normal again, but just keep them closed and relax.

10. POST-HYPNOTIC SUGGESTION
(TOUCHING ANKLE): AMNESIA

Remain deeply relaxed and pay close attention to what I am going to tell you next. In a moment I shall begin counting backwards from twenty to one. You will gradually wake up, but for most of the count you will still remain in the state you are now in. By the time I reach "five" you will open your eyes, but you will not be fully aroused. When I get to "one" you will be fully alert, in your normal state of wakefulness. You probably will have the impression that you have slept because you will have difficulty in remembering all the things I have told you and all the things that you did or felt. In fact, you will find it so much of an effort to recall any of these things, that you will have no wish to do so. It will be much easier simply to forget everything until I tell you that you can remember. You will remember nothing
of what has happened until I say to you: "Now you can remember everything!" You will not remember anything until then. After you open your eyes, you will feel fine. You will have no headache or other after effects. I shall now count backwards from twenty and at "five," not sooner, you will open your eyes but not be fully aroused until I say "one." At "one" you will be awake....A little later I shall tap my pencil on the table. When I do, you will reach down and touch your left ankle. You will do this, but forget that I told you to do so, just as you will forget the other things, until I tell you "Now you can remember everything." Ready, now: 20 - 19 - 18 - 17 - 16 - 15 - 14 - 13 - 12 - 11 - 10 - 9 - 8 - 7 - 6 - 5 - 4 - 3 - 2 - 1. Wake up! Wide awake! The feeling will go away soon. You feel wide awake. Any feelings of drowsiness will soon go away.

(TAP PENCIL)
APPENDIX B

RAW SCORES FROM THE ALTERED HARVARD SUSCEPTIBILITY SCALE
APPENDIX B

TABLE 1
Raw Scores from the Altered Harvard Susceptibility Scale

<table>
<thead>
<tr>
<th>Subject</th>
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<th>Group II</th>
<th>Group III</th>
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APPENDIX C

HARVARD HYPNOTIC SUSCEPTIBILITY SCALE

FORM A (ALTERED VERSION)
APPENDIX C

HARVARD HYPNOTIC SUSCEPTIBILITY SCALE

FORM A (ALTERED VERSION)

Name: __________________________________________ Date: __________
Age: __________ Sex: __________ Class: ______________
Occupation: ________________________________________
Present Address: ____________________________________
__________________________ Phone: ________________
Permanent Address: _________________________________
__________________________ Phone: ________________

Have you ever been hypnotized? Circle: Yes No
If so, please cite the circumstances and describe your experiences. Please be brief:
Please write down now briefly in your own words a list of the things that happened since you began looking at the target. Do not go into detail. Spend three minutes, no longer, in writing your reply.

On this page write down a list of anything else that you now remember that you did not remember previously. Please do not go into detail. Spend two minutes, no longer, in writing out your reply.
Section on Objective, Outward Responses

Listed below in chronological order are the ten specific happenings which were suggested to you during the standard hypnotic procedure. We wish you to estimate whether or not you objectively responded to these ten suggestions, that is, whether or not an onlooker would have observed that you did or did not make certain definite responses by certain specific, predefined criteria. In this section we are thus interested in your estimates of your outward behavior and not in what your inner, subjective experience of it was like. Later on you will be given an opportunity to describe your inner, subjective experience, but in this section refer only to the outward behavioral responses irrespective of what the experience may have been like subjectively.

It is understood that your estimates may in some cases not be as accurate as you might wish them to be and that you might even have to guess. But we want you to make whatever you feel to be your best estimates regardless.

Beneath a description of each of the ten suggestions are sets of two responses, labeled A and B. Please circle either A or B for each question, whichever you judge to be the more accurate. Please answer every question. Failure to give a definite answer to every question may lead to disqualification of your record.

I. Eye Closure

You were first told to rest your hands on the arm of the chair and pick out a spot on either hand as a target and concentrate on it. You were then told that your eyelids were becoming tired and heavy. Would you estimate that an onlooker would have observed that your eyelids had closed (before the time you were told to close them deliberately)?

Circle one:  
A. My eyelids had closed by then.  
B. My eyelids had not closed by then.
II. HAND LOWERING (LEFT HAND)

You were next told to extend your left arm straight out and feel it becoming heavy as though a weight were pulling the hand and arm down. Would you estimate that an onlooker would have observed that your hand lowered at least six inches (before the time you were told to let your hand down deliberately)?

Circle one:  
A. My hand had lowered at least six inches by then.  
B. My hand had lowered less than six inches by then.

III. ARM IMMOBILIZATION (RIGHT ARM)

You were next told how heavy your right hand and arm felt and then told to try to lift your hand up. Would you estimate that an onlooker would have observed that you did not lift your hand and arm up at least one inch (before you were told to stop trying)?

Circle one:  
A. I did not lift my hand and arm at least one inch by then.  
B. I did lift my hand and arm an inch or more by then.

IV. FINGER LOCK

You were next told to interlock your fingers, told how your fingers would become tightly interlocked, and then told to try to take your hands apart. Would you estimate that an onlooker would have observed that your fingers were incompletely separated (before you were told to stop trying to take them apart)?

Circle one:  
A. My fingers were still incompletely separated by then.  
B. My fingers had completely separated by then.

V. ARM RIGIDITY (LEFT)

You were told to extend your left arm straight out and make a fist, told to notice it becoming stiff, and then told to try to bend it. Would you estimate that an onlooker would have observed that there was less than two inches of arm bending (before you were told to stop trying)?
Circle one:  A. My arm was bent less than two inches by then.
B. My arm was bent two or more inches by then.

VI. MOVING HANDS TOGETHER

You were next told to hold your hands out in front of you about a foot apart and then told to imagine a force pulling your hands together. Would you estimate that an onlooker would have observed that your hands were not over six inches apart (before you were told to return your hands to their resting position)?

Circle one:  A. My hands were not more than six inches apart by then.
B. My hands were still more than six inches apart by then.

VII. COMMUNICATION INHIBITION

You were told to think how hard it might be to say your name, and then told to try. Would you estimate that an onlooker would have been able to understand you say your name? (That is, before you were told to stop trying.)

Circle one:  A. I did not recognizably say my name.
B. I did recognizably say my name.

VIII. EXPERIENCING OF FLY

You were next told to become aware of the buzzin of a fly which was said to become annoying, and then you were told to shoo it away. Would you estimate than an onlooker would have observed you make any movmeent, any grimacing, any outward acknowledgement of an effect (regardless of what it was like subjectively)?

Circle one:  A. I did make some outward acknowledgement.
B. I did not make any outward acknowledgement.
IX. EYE CATALEPSY

You were next told that your eyelids were so tightly closed that you could not open them, and then you were told to try to do so. Would you estimate that an onlooker would have observed that your eyes remained closed (before you were told to stop trying)?

Circle one:  
A. My eyes remained closed.  
B. My eyes had opened.

X. POST-HYPNOTIC SUGGESTION (TOUCHING LEFT ANKLE)

You were next told that after you were awakened you would hear a tapping noise at which time you would reach down and touch your left ankle. You were further informed that you would do this but forget being told to do so. Would you estimate that an onlooker would have observed either that you reached down and touched your left ankle, or that you made any partial movement to do so?

Circle one:  
A. I made at least an observable partial movement to touch my left ankle.  
B. I did not make even a partial movement to touch my left ankle, which would have been observable.
YOU MAY NOW REFER TO EARLIER PAGES--
BUT PLEASE DO NOT WRITE ANYTHING FURTHER ON THEM

SECTION ON INNER, SUBJECTIVE EXPERIENCES

(1) Regarding the suggestion of EXPERIENCING A FLY--how real was it to you? How vividly did you hear and feel it? Did you really believe at the time that it was there? Was there any doubt about its reality?

(2) Regarding the two suggestions of HAND LOWERING (LEFT) and HANDS MOVING TOGETHER--was it subjectively convincing each time the effect was happening entirely by itself? Was there any feeling either time you were helping it along?

(3) On the remainder of this page please describe any other of your inner, subjective experiences during the procedure which you feel to be of interest.

THANK YOU FOR YOUR COOPERATION