

HYPNOTHERAPY IN THE TREATMENT OF CHRONIC HEADACHES

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Can Ericksonian hypnotherapy be effectively used in the treatment of chronic headaches? Using a within-subjects design, thirty-five patients were assessed on different measures of the DV: frequency, duration, intensity, amount of medication and number of associated difficulties. Twenty-five of the patients were randomly assigned to two psychotherapists who administered Ericksonian hypnotherapy while the remaining ten patients became part of the comparison group. Prior to treatment, all 25 subjects were nonsignificantly different on their baseline measures. Immediate post-treatment measures showed all patients with complete relief from their headaches. Two months after, 20 out of 25 patients experienced complete recovery while 5 had a single attack of headache each. All observed changes within the subjects were significantly different from their pre-treatment rates at p less than .001.

For the two experimental groups, there were no significant differences found between their symptomatic manifestations both before and after treatment. For the multiple independent groups, the two experimental groups and the comparison group showed nonsignificant baseline rates on all DV measures. However, significant F -values were found for all indicators of the DV at the delayed post-treatment period. Post hoc test analysis evidenced a shared pattern of significant differences between each of the two treatment groups and the comparison group.

Can a psychological approach facilitate relief from physiological agony? Can an individual's mental and behavioral capacities be utilized to effect lasting release from unnecessary bodily pains with its accompanying emotional distress? More specifically, can a chronic headache be alleviated by psychotherapeutic means? And finally, focusing on the problem addressed by this experiment: can Ericksonian hypnotherapy be effectively used to treat chronic headaches?

Ericksonian hypnotherapy was developed by Milton H. Erickson, an American psychiatrist with an M.A. in psychology, who was generally reputed to be the world's leading hypnotherapist until his death in 1980. His life history is as creative and growth-inspiring as the clinical method he pioneered. Dr. Erickson's hypnotherapy is also known as the utilization approach since all of the patient's overt and covert behaviors are incorporated into a uniquely designed therapy for each individual. The distinguishing features of his method are:

- (1) the indirect method of trance induction;
- (2) primary reliance on unconscious learning which need not made conscious, i.e., insight is

not necessary for recovery;

(3) it is an "interactional therapy" or a social change therapy. Symptomatic behavior is not a mere report about a patient's inner state; it is also the way the person deals with other people including himself;

(4) healing does not come from direct suggestion but through dissociation which facilitates the all important shift in a person's paradigms for experiencing realities.

Chronic headaches refer to either of two types of psychosomatic headaches as classified in DSM III: migraine or vascular headaches; and muscle contraction or tension headaches.

What do past studies and clinical experiences indicate about the efficacy of the utilization approach to facilitate relief from chronic headaches? Dr. Erickson and two of his associates have published five anecdotal studies of clinically successful remediation of chronic headaches (Erickson 1941, 1943, 1953; Barber 1982; Lankton & Lankton 1983). Other psychotherapeutic means which have been tried and tested with psychosomatic headaches are:

- (1) traditional hypnoanalysis and behavior

conditioning (Asher 1956; Harding 1967; Anderson, Basker & Dalton 1975);

(2) biofeedback, including the electromyogram (EMG), electroencephalogram (EEG), and temperature types (Budzynski et al. 1970, 1973; Sargent, Green & Walters 1973; Mckensie et al. 1974; Philip 1977; Brown 1977; Cohen, McArthur & Rickles 1980);

(3) verbal relaxation (Lutker 1971; Benson 1974; Otis & Turner 1975).

The different studies using the above techniques reported improvements which ranged from 53 to 82 % and complete remission varying from 38 to 43 %.

In the Philippines, faith healers use methods that have striking similarities to Ericksonian hypnotherapy. A study of fifteen Filipino faith healers (seven females and eight males) utilizing naturalistic observation, participant observation and depth interviews showed a method of healing which consisted of trance induction and trance formations. Unlike Erickson's approach, however, the primary mode of communication is non-verbal. Both direct and indirect forms of suggestions are used.

Psychic healing as practised in the Philippines also relies heavily on the principle of dissociation, in which, a body part or an individual function is depersonalized and assumes autonomous behavioral manifestations, usually attributed to a spirit guide or a religious figure (Bulatao 1982, 1985).

It is interesting to note that while it is the patient who appears to go into trance in the utilization approach; in Philippine faith healing, it is the faith healer who manifests trance-like behaviors. Actually, whether they are aware of it or not, both the healer and the patient enter into an altered state of consciousness.

According to the faith healers, their rate of success in healing varies from 65 to 90 % for general types of illness such as high blood pressure, arthritis, asthma, ulcers, sprains, "kulam" (possession), and headaches. However, these estimations are only based on those who come

back or write the faith healer about their improved condition.

This study was designed to determine the degree of success of Ericksonian hypnotherapeutic methods in the treatment of chronic headaches. The following hypotheses were tested in the study:

(1) Subjects with chronic headaches who undergo Ericksonian hypnotherapy will exhibit reduced frequency, duration, intensity, medication requirements, and other associated difficulties experienced along with the headaches at the end of the hypnotherapy.

(2) These changes have a long term effect.

(3) Subjects handled by different hypnotherapists will nevertheless show similar improvement.

METHOD

A. Subjects. The subjects for this experiment were patients who were recruited through public service announcements and posters in randomly selected hospitals, churches, schools, and business offices in the Metro Manila area. A local daily and two weekly papers helped in offering the free psychological service to the public. Applicants were screened according to three sets of qualifications required of each patient. These were:

(1) voluntary seeking of therapy

(2) had undergone a medical check-up in which the doctor has ruled out tumors and infectious illness; and

(3) was willing to abide by all conditions of the hypnotherapy.

A total of 35 subjects were accepted as patients. Among the 35, 25 were randomly distributed to either of 2 treatment groups, each handled by a female psychotherapist who studied in the same university, and were trained in Ericksonian hypnotherapy by the same professor in clinical psychology. The remaining ten patients became part of the comparison group.

B. Design. The study utilized a small-N design, a type of 'within subjects' experiment that is suitable for investigating clinical problems for which large numbers of subjects are not available. It was B.F. Skinner who laid down the foundation for this experimental approach which may use even just one or two subjects. It is also referred to as the ABA design (See Figure 1).

C. Operational Definitions of the Experimental Variables

(1) *The Independent Variable.* Patients who met the stipulated requirements were asked to

PRETREATMENT	TREATMENT	IMMED. POST-TRT	DELAYED POST
preliminary measures 0-1	X ₁ - T-2 no-treatment	post-treatment measures 0-2	long-term measures 0-3

Figure 1. Experimental Design of the Research

relate their experience of headaches for the past two months. They were instructed to monitor their headaches. The general treatment procedure is summarized in Table 1.

(2) *The Dependent Variable.* This variable was primarily measured through the mean occurrence or frequency of the headache. Secondary measures included: (a) mean duration in hours; (b) mean pain intensity on a scale from one (lowest) to ten (highest); (c) mean number

Table 1. General Treatment Procedure

I. Pre-treatment	8 weeks
II. Treatment	8 weeks
A. Trance Training (4 weeks)	
: 2(45 min - 1 hour) sessions weekly for 2 weeks	
: 1(45 min - 1 hour) session weekly for 2 weeks	
B. Trance Utilization (4 weeks)	
: 1(45 min - 1 hour) session weekly for 2-4 weeks	
III. Post-Treatment	8 weeks
A. Immediate Post-treatment (2 weeks after trt)	
B. Delayed Post-treatment (8 weeks after trt)	

of medication taken for the headache; and (d) mean number of associated difficulties experienced along with the headache such as nausea, vomiting, blurring of vision, anxiety, heightened irritability, loss of appetite, depres-

sion and others.

D. Methods of Analysis. Descriptive statistics were used to quantitatively characterize the sample in terms of the various measures of the dependent variable as well as the subjects' demographic traits. A percentage of improvement for each individual was computed using the formula:

$$\% \text{ improved} = \frac{\text{pretreatment measure} - \text{delayed posttreatment meas.}}{\text{pretreatment measure}}$$

The inferential statistical tests used to establish significant differences among group means were the Student's t-test for correlated samples for the 'within subjects' comparisons, the Duncan's range test, and the anova for the multiple independent group comparisons. To test for experimenter effects, t-tests for two independent samples were run on the two treatment groups. Lastly, to understand the process of Ericksonian hypnotherapy, case studies were presented and qualitatively interpreted.

RESULTS

1. The experimental subjects possessed the following basic demographic profile (See Table 2).

2. The major analytical framework of the study was the 'within subjects' design. At the start of treatment, the 25 subjects had the following symptomatic profile (See Table 3).

At the immediate post treatment (O-2) which was taken two weeks after therapy, all 25 patients enjoyed a complete headache free condition.

To assess the stability of the treatment effects, the patients were followed up after a period of 2 months which is the same length of time used in the baseline condition. The results of (O-3) is shown in Table 4. On the major measure of the DV, the frequency of headache occurrence, follow-up measures indicated a complete freedom from any headpain for 20 patients and varying percentages of improvement for 5 patients.

Table 2. Basic Demographic Characteristics of the Participants

		Group I	Group II	Group III	Overall
1. Age:	Mean	31.33	30.40	28.10	30.14
	Std. Dev.	2.48	10.38	9.71	10.93
2. Sex:	Male	4	2	--	6
	Female	11	8	10	29
	Total	15	10	10	35
3. Civil Status:	Single	8	7	7	22
	Married	4	3	3	10
	Separated	3	--	--	3
	Total	15	10	10	35
4. Highest Educational Attainment:	Post Col.	3	1	1	5
	Col. Grad.	7	5	3	15
	Sen. Col.	2	2	4	8
	Sop. Col.	3	1	2	6
	H.S. Grad.	--	1	--	1
	Total	15	10	10	35

Table 3. Pretreatment Means and Standard Deviations of the Different Dependent Variable Measures on a Weekly Basis for the Treatment Participants

	Mean Frequency	Mean Duration	Mean Intensity	Mean Medication	Mean Assoc. Diff.
Mean	3.20	4.44	6.16	4.00	5.48
Std. Dev.	0.63	1.50	1.38	1.33	1.17

patients.

How significant were these observed changes within the subjects? Table 5 shows the results of the t-tests for correlated samples for each of the 5 measures of the DV. It can be gleaned from the table that all operational indicators of the DV showed a significant difference from their baseline rate at $p < .001$. The major measure manifested the highest obtained t-value.

3. For the two independent groups, there was

Table 4. Mean Percentage Improvement of the Participants on the Different Measures of the Dependent Variable

	Mean Frequency	Mean Duration	Mean Intensity	Mean Medication	Mean Assoc. Diff.
Mean	93.67	93.20	92.12	96.27	94.67
Std. Dev.	13.39	14.19	16.02	10.51	12.65

no significant differences found between their symptomatic manifestations both before and after therapy (See Tables 6 & 7). Both groups

Table 5. Testing for the Significance of Differences Between Pretreatment and Delayed Posttreatment Measures for Within Subjects

Dependent Variable Measure	Pretreatment	Delayed Posttreatment	Obtained t-values
Mean			
Frequency	3.20	0.20	21.90*
Mean Duration	4.44	0.32	12.96*
Mean Intensity	6.16	0.52	17.58*
Mean No. of Medication	4.00	0.16	13.97*
Mean No. of Asso. Diff.	5.48	0.28	18.38*

*Significant at the 0.001 level where critical t-values: $t(24) = 3.745, p < 0.001$

had completely headache-free patients at immediate posttreatment. How rooted and firm was this achieved relief?

Two months after therapy, 12 out of 15 patients in Group I noted the continuing absence of their headaches. For Group II, 8 out of 10 had complete symptom remission. The rest—3 patients in Group I and II had a single attack of headache each. Thus, it can be seen that both groups achieved parallel results (See Table 8).

In terms of the number of therapeutic sessions conducted, Group I had a mean of 2.60 sessions while Group II used a mean of 2.80 sessions with

Table 6. Baseline Measures for Groups I and II

Dependent Variable Measure	Group I	Group II	Obtained t-values
Mean			
Frequency	3.27	3.10	0.63
Mean Duration	4.47	4.40	0.74
Mean Intensity	6.13	6.20	0.12
Mean Medication	4.07	3.90	0.30
Mean Asso. Diff.	5.47	5.50	0.60

Obtained t-values $t(23) = 2.069, p < 0.05$

$s = .99$ and 1.75 for Groups I and II. The therapy sessions ranged from 1 to 7 with an overall mean of 2.60 and a standard deviation of 1.31.

All patients were also observed to suffer from

Table 7. A Comparison of the Delayed Posttreatment Measures for Groups I and II

Dependent Variable Measure	Group I	Group II	Obtained t-values
Mean Frequency	0.20	0.20	0.00
Mean Duration	0.27	0.40	0.45
Mean Intensity	0.53	0.50	0.80
Mean Medication	0.20	0.10	0.51
Mean Asso. Diff.	0.20	0.40	0.71

obtained t-values < t (23) = 2.069 p < 0.05

complete relief, 14 explained their cure in psychological and transpersonal terms like "becoming more confident, finding peace of mind, experiencing self-acceptance, better self-awareness, more effective coping, and stronger faith in God." Three pointed at more social

Table 8. Headache Symptomatology Before and After Therapy: Within Subjects Comparison for Groups I and II

Symptom	Pretreatment	Delayed Post-treatment	Obtained t-values
Mean Frequency			
Group I	3.30	0.20	21.74*
Group II	3.10	0.20	10.74*
Mean Duration			
Group I	4.50	0.27	10.38*
Group II	4.40	0.40	7.44*
Mean Intensity			
Group I	6.13	0.53	14.00*
Group II	6.20	0.50	10.20*
Mean Medication			
Group I	4.07	0.20	11.50*
Group II	5.50	0.40	9.33*

*significant at the .001 level where the critical t-values: Group I - t (14) = 4.140 p < 0.001
Group II - t (9) = 4.781 p < 0.001

psychological explanations such as engaging in dating and just having a good time with friends. Another three claimed that "becoming more relaxed" was responsible for their relief.

4. The three randomized group design was not originally intended. The 10 patients who comprised the control group were those who went through the same intake process as the two treatment groups but for reasons reportedly beyond their control were unable to come for therapy. While they could not yet come, they

were advised to continue monitoring their symptomatic condition. Data reported after two weeks and eight weeks after the standard treatment period were used for immediate and delayed post treatment measures. Table 9 shows the pretreatment measures of the 3 groups.

Two months after the end of therapy, the same DV measures for the 3 groups were assessed. The results showed significant F values (See Table 10). What specific sample groups were significantly different? Post-hoc test analysis evidenced a shared pattern of significant differences between each of the 2 treatment groups and the comparison group (See Table 11).

A more concrete illustration of the effect of the IV on the DV as measured by the weekly average frequency of headaches is given in Figure 2.

DISCUSSION

A. Validity of Treatment Effects. Were the treatment effects valid? First, the alternative explanation of experimenter effect was ruled out by the outcome of the two independent groups experiment in which 25 patients were randomly

Table 9. A Comparison of the Pretreatment Measures for the Three Randomized Groups

Dependent Variable Measure	Group I	Group II	Group III	Obtained F-value*
Mean Frequency	3.27	3.10	3.00	0.52
Mean Duration	4.47	4.40	3.50	1.48
Mean Intensity	6.13	6.20	6.30	0.04
Mean Medication	4.07	3.90	3.50	0.65
Mean Asso. Diff.	5.47	5.50	5.00	0.66

*critical F-value :F(2, 32) = 3.30 p < 0.05

Table 10. A Comparison of the Posttreatment Measures for the Three Randomized Groups

Dependent Variable Measure	Group I	Group II	Group III	Obtained F-value*
Mean Frequency	0.20	0.20	2.70	35.54*
Mean Duration	0.27	0.40	3.40	24.83*
Mean Intensity	0.53	0.50	5.70	33.95*
Mean Medication	0.20	0.10	3.20	32.13*
Mean Asso. Diff.	0.20	0.40	4.50	45.01*

*significant at the .01 level where the critical F-value: F (2, 32) = 5.34 p < 0.01

by the outcome of the two independent groups experiment in which 25 patients were randomly assigned to either of two therapists who administered Ericksonian hypnotherapy. The two randomized groups showed no significant differences on all five measures of the dependent variable. Consequently, the observed effectiveness of the treatment cannot be attributed to unique personality characteristics of the experimenter.

Second, in therapy-outcome studies, the rival explanation of non-specific factors or placebo is often raised. For this experiment, however, not only were the subjects completely matched (since each patient served as his own control),

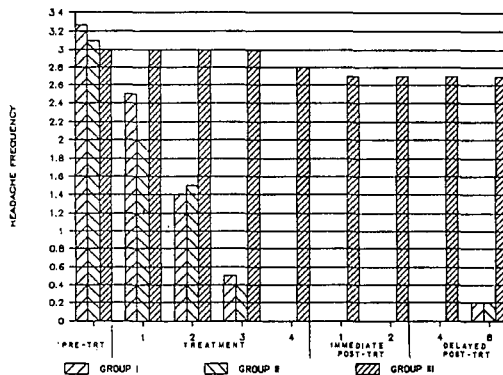


Figure 2. Average Weekly Frequency of Headaches by Group

Table 11. Post Hoc Analysis of Obtained F-Values for Each Dependent Variable Measure Among the Three Randomized Groups

Dependent Variable Measure	Mean 1	Mean 2	Obtained t-values	df
Mean Frequency				
Groups I & II	0.20	0.20	0.00	23
Groups II & III	0.20	2.70	5.64*	18
Groups I & III	0.20	2.70	6.83*	23
Mean Duration				
Groups I & II	0.27	0.40	0.47	23
Groups II & III	0.40	3.40	4.57*	18
Groups I & III	0.27	3.40	6.02*	23
Mean Intensity				
Groups I & II	0.53	0.50	0.07	23
Groups II & III	0.50	5.70	5.79*	18
Groups I & III	0.53	5.70	6.79*	23
Mean Medication				
Groups I & II	0.20	0.10	0.51	23
Groups II & III	0.10	3.20	5.51*	18
Groups I & III	0.20	3.20	6.23*	23
Mean Asso. Diff.				
Groups I & II	0.20	0.40	0.72	23
Groups II & III	0.40	4.50	6.08*	18
Groups I & III	0.20	4.50	8.10*	23

*significant at the .001 level where the critical t-values:
 $t(23) = 3.767 p < 0.001$
 $t(18) = 3.922 p < 0.001$

but were also compared with an untreated group in a multiple independent groups design. The comparison groups and the two independent groups initially shared a similar degree of symptom difficulties. After therapy, both immediately after the end of treatment and during follow-up phase, significant differences ($p < .001$) were consistently obtained between each treatment group and the comparison group

on all five measures of the headache symptomatology. Thus, a placebo-based effect to account for the changes observed in the DV can be ruled out.

A third possible extraneous variable which may be cited is relaxation. Were the achieved improvements and cures just a function of lower levels of autonomic arousal? Recall of the explanations offered by the patients who experienced complete symptom remission do not support such a view. These subjective reports, though admittedly constrained by the individual's own observations and level of comprehension, throw some light about the role of relaxation in the utilization approach. While it is clearly an aspect of the Ericksonian model of hypnosis, there is clearly more to the therapy than simple relaxation.

B: External Validity of Observed Effects. Can these findings be generalized to the wider population? Within the limits imposed by the type of sampling procedure used, the answer is in the affirmative. Random representativeness was achieved through the recruitment process for age, sex, civil status, socio-economic status and level of education. However, strictly speaking, there was no random selection in terms of geography since the public service an-

nouncements were done in Metro Manila.

C. Comparisons with Previous Studies. The experimental results statistically confirm the previous anecdotal reports of success of Ericksonian hypnotherapists with chronic headaches.

How do the findings compare with the results of other modes of therapy used in previous studies? It is significant to note that all 25 patients were improved (100%) in the experiment, with 20 out of 25 (or 80%) completely relieved of their chronic headaches even after two months. On the other hand, the reported improvements of the studies in the review of literature ranged from 53 to 82%, with complete remission varying from 38 to 43%.

Aside from performance effectiveness, Ericksonian hypnotherapy as conducted in the experiment can be noted for its relatively brief length of treatment. The number of therapeutic sessions held ranged from one to seven with an average of 2.68 sessions. In comparison, Budzynski et al. (1973) gave 32 biofeedback training sessions held twice daily over a 16 week period. Other investigators who used biofeedback reported the following number of training sessions: 9 for Friar and Beatty (1976); 8 for Cox et al. (1975); and 4 for Zamani (1975). Meanwhile, Harding (1967) conducted 4 to 7 sessions using other types of hypnotherapy.

Like some of the researches on biofeedback which included measures of treatment stability such as Haynes et al. (1975) and Cox et al. (1975), the effect of the utilization approach showed durability of the elicited changes. Erickson's hypnotherapy likewise offers other important advantages as a treatment of choice: One is its innocuous treatment characteristic. The individual need not be pricked by a needle, suffer the discomforts of alien instruments intruding into his body, or be subjected to harsh remembrances. Two, it offers freedom from chemical side effects that toxify the bodily systems; and, last, but most important, is the hope hypnotherapy offers people in helping themselves.

D. Significance of the Study. To the knowledge of this writer, the study is the first quantitative and experimental validation of the utilization approach for psychosomatic headaches. The experiment showed that Erickson's approach can bring about significant clinical improvements or even complete symptom remission for chronic headaches. The results obtained are suggestive of a similar potential efficacy for other psychosomatic complaints. It further evidences the pivotal role that an individual plays in losing and regaining his health.

E. Limitations of the Study. As conducted, the experiment does not provide evidence regarding the effectiveness of Ericksonian hypnotherapy compared with other psychotherapeutic approaches such as the psychoanalytic, Rogerian or traditional hypnotherapeutic techniques. The utilization approach was intended to be a complementing tool which can be used within any of the established psychotherapeutic schools, rather than to be a substitute for any of these schools.

Another limitation of this experiment is the nature of the comparison group whose symptomatic condition was contrasted with the two experimentally treated groups in the three randomized groups design. Strictly speaking, it cannot stand for a control group. It received no alternative treatment.

F. Conclusions and Recommendations. Based on the results of the study, the following conclusions are made:

1. For the sample in the study, there are strong evidences to support the view that Ericksonian hypnotherapy can be effectively used in the treatment of psychosomatic headaches.
2. The research findings evidenced a statistically significant impact of the treatment condition on each measure of the DV at a $p > .001$.
3. The delayed posttreatment measures significantly suggest that the remedy and or complete alleviation of the chronic headaches were

significantly vary between the two experimental groups before and after the treatment. Hence, the treatment effects may safely be assumed to be beyond the extraneous variable effects of experimenter bias.

5. For psychosomatic ailments in general, there seems to be a great probability that an individual's mental and behavioral mechanisms can be used to effect durable release from unnecessary bodily pains with its associated emotional distress.

In order to further understand the impact of the IV on psychosomatic headaches, these recommendations are offered:

1. The applicability of the utilization approach is well investigating.

2. Subject variables such as age, level of depression and secondary gains need to be examined as intervening variables which may weaken the impact of treatment.

3. It would be interesting to study the possibility of further shortening the duration of treatment through the use of a small group approach in the initial stage of trance training.

4. Differential treatment effects may be analyzed from a comparison of an intensive, continuous "marathon-like" therapy of a few days and the more spaced or distributed approach.

5. It would be interesting to compare the

effectiveness of a purely Filipino verbal approach and the English-based method of hypnotherapy for different geographic and ethnic samples in the Philippines. Similarly, the use of non-verbal hypnotherapeutic tools such as those used by local faith healers can be experimentally tested to enhance clinical skills.

6. There is a need to propagate scientifically backed clinical information on the role each man plays in determining his state of health, and on the more natural alternative remedies for facilitating relief from pain. Thus, if people have learned to achieve certain goals, they can learn other effective and appropriate behavior instead of having headaches.

7. To deal with a headache, deal with the whole person. Lastly, this investigator proposes the establishment of an interdisciplinary pain management center in which continuing studies on the therapy of chronic pain can be pursued and an outreach program for prevention and relief of pain can be offered to the public at minimum costs. The interdisciplinary context as envisioned is one that goes beyond the traditional association of professional specialists or formally accredited technical experts. Instead, it is hoped that other therapeutic agents such as the local indigenous healers and especially the pain owner himself will assume a unique, active and complimentary roles in seeking for a cure.

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