## SOME OF THE NOTICEABLE EFFECTS OF AUTOCONDITIONING IN AIDING LEARNING IN EIGHTH GRADE FRENCH

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#### INTRODUCTION

In view of the giant strides in the world of science, mathematics, medicine, psychology, engineering, and politics, it seems that a lifetime is not long enough to obtain the necessary knowledge to continue to go onward for a reasonable number of years of gainful employment. This experiment was conducted in the hope of finding a way to expedite the process of learning. It was performed in the Coronado Junior High School of Kansas City, Kansas.

Before attempting this experiment, the author took two courses in hypnosis and autoconditioning. One was under Mr. Harry Arons of Irvington, New Jersey who has been active in the field of hypnosis for many years and the other was under a combined program under Mr. Arons and Dr. Hornell S. Hart of Duke University. The latter course was especially designed for the development of auto or self hypnosis. Since then, many books recommended or written by the two men have been studied. The requirements for becoming a registered clinical hypnotist have been met.

According to the Encyclopedia of Educational Research, no similar experiments have been conducted and reported.

## STATEMENT OF THE PROBLEM

Answers were sought experimentally to the following questions:

- 1. Can hypnotism shorten the time of learning in eighth grade French?
- If the time can be shortened, will the students retain the knowledge as well as those who did not learn the lessons under hypnosis?
  - 3. Will other effects occur to those hypnotized?
  - 4. How soon can the effects of hypnosis become noticeable in learning?

- 5. Can a person recall in hypnosis something he has forgotten in his conscious  $\min d 2$
- 6. On the basis of the findings what recommendations would be feasible in the educational field?

#### DEFINITION OF TERMS

Autosuggestion: A conditioning process by which one makes suggestions to the conscious mind, then hypnotises himself, then hopes the suggestion will reach the subconscious mind during the hypnotic state.

Operator: One who places himself or another in the hypnotic state. Subject: The person hypnotised.

Hypnosis: A passive state of a subject in which the subconscious mind has a high degree of suggestibility.

Prehypnotic suggestion: A suggestion that is made to the conscious mind before the subject is placed in a hypnotic transs.

Post hypnotic suggestion: A suggestion made to the subconscious mind that is to be carried out after the subject has been brought out of the trance.

Time distortion: The ability of an operator to make a subject feel that time is shorter, longer, or stops.

Catelepsy: A state of rigidity in which the body or parts of the body retains any position suggested.

Arm levitation: The rising of the arm effortlessly against gravity.

Analgesia: Loss of sense of pain.

Anesthesia: Loss of sense of touch.

Positive hallucinations: The ability to see or feel something that is not present.

Negative hallucinations: The ability to reject the presence of an object or feeling that exists.

Somnambulism: A very deep state of trance, from which the subject cannot remember what happened unless he is made to remember.

# BACKGROUND OF HYPNOTISM

Hypnotism is not a new art. Its existence has persisted in many guises since mankind settled in tribal communities. Witch doctors, medicine men, priests, religious leaders, political leaders and more recently, advertisers have used it very effectively.

The more modern history is usually said to have begun with Franz Anton Mesmer, a viennese physician of the late eighteenth and early nineteenth century. Mesmer observed the cures of the Catholic priest Father Gassner, who lived in Klosters, Switzerland. The priest was healing people. Mesmer was impressed. Realizing that some unknown force was working, he propounded a theory. He thought the body had two poles like a magnet with an invisible magnetic fluid being thrown off by the body. Disease was only an improper flow of this fluid being thrown off by the body and illness could be cured by correcting the flow.

Mesmer believed that only certain people were gifted with the power to control the fluid and those persons could cause it to flow from them into the patient. This could be done by magnetizing any object, even water, which would then impart the fluid to anyone touching it.

The spectacular appealed to Mesmer. He had a large copper tank with many pipes and iron rods sticking out of the magnetized water.

<sup>1.</sup> Leslie M. LeCron and Jean Bordeau, Hypnotism Today: p. 16-25.

The patients held these. Measur would enter in flowing robes and touch each patient with a magnetized rod. They would go in a trance, shake and tremble, then awaken oured.

The Vienness doctors liked neither his method nor his success. His fees were making him wealthy faster than his collegues so they discredited him. He moved to France where he again was very successful and again his profession caused his downfall. A commission was appointed to investigate his work. Benjamen Franklin was a member of the commission. Their report said the cures were the result of "imitation, imagination and contact."

Han could affect man almost at will by stimulating his imagination."

This ended Mesmer's scientific career but not mesmerism. It was interesting to note that Lafayette and Binet and Simon were firm believers in Mesmerism, the term used for hypnotism at that time.

James Braid discovered that magnets were not essential. He noticed any bright object above and in front of the subject's head so as to strain the eyes worked as well. Braid also coined the word hypnotism.

The next spectacular hypnotist was James Sedaile of the East India
Company. Esdaile performed hundreds of operations including removal of
eyes and limb amputations using hypnotic anesthesia. Like Mesmer, His
methods ired his competitors. One doctor declared that the use of
anesthesia was sacriligious and that man was supposed to suffer and healed
better if he did. Braid discovered that suggestion only could induce
hypnotism. A French doctor by the name of Liebeault is semetimes erroneously
called the father of hypnotism but the credit belongs to Braid. Liebeault
practiced hypnotism and it attracted a very eminent doctor by the name of

<sup>1.</sup> George Estabrooks and Mancy S. Cross, The future of The Human Mind. p. 70.

Bernheim who was considered one of the greatest orthodox physicians of his time. After studying with Liebeault, Bernheim perfected techniques that are used to this day. This set hypnotism on a firm scientific basis and removed it from the stigma of occulties.

Dr. Bernheim established the famous Mancy school and through it and hypnotism gained many adherents. Some famous men who used it were Forel in Switzerland, Krafft Ebing and Breur in Austria, Moll, Sperling, Dessoir, Kraeplin and Shrenk - Notzing of Germany, Pavlov of Russia and Wetterstrand of Sweden. Although so well established in Europe, it did not become accepted immediately in America. The World Wars gave it an impetus when it was found valuable in treating war neuroses.

Although Psychoanalysis, which had its beginnings in the hypnotic treatment of a case of hysteria, influenced medical thinking about psychological thereapy and pschological disease, that hypnosis, which had had no medical acceptance except in this area was again pushed in obscurity. Scientific work in hypnosis continued, however and in 1958, medicine finally gave its approval to the use of hypnosis as a therapeutic tool.

What is autoconditioning and what is hypnosis? How can one tell if a person is hypnotized and how deeply he is hypnotized?

Autoconditioning is the process by which one gives himself suggestions in the conscious mind, hypnotises himself and the suggestions eventually reach his subconscious mind.<sup>2</sup> It becomes clear that hypnosis, then is a part of autoconditioning. The mind has at least two states, the conscious and the subconscious. The subconscious can be tapped in proportion to how

<sup>1.</sup>George A. Estabrooks and Nancy E. Gross, The Future of the Human Mind. P. 72.

<sup>2.</sup> Hornell Hart, Autoconditioning, The Hay To A Successful Life, p. 58-64.

well the conscious can be subdued so various methods are used in subduing the conscious. Some of the methods used to subdue the conscious are by drugs such as sodium pentathol, by physical fatigue, as in yoga, and through mental fatigue as confusion or by suggestion. The modern European and American hypnotist chiefly uses suggestion but the asiatics still use yoga as their method extensively.

Three approaches are used in the suggestive method of inducing hypnotism: the authoritarian method in which the operator commands the subject to follow his suggestions; the permissive method, in which the subject is told how he will feel and act in a soothing persuasive voice; and a combination of the authoritarian and permissive methods.

The depth of the trace is measured by the reaction of the subject to certain suggestions by the operator. If the patient cannot open his eyes when he is given the suggestion that he cannot, he is in the first stage; if he raises his are without conscious effort and can keep it up without fatiguing for a long time, he is in the second stage; if he can be made to forget such as his name or a number in a sequence he is in the third or ammesic stage; analyssia and anesthesia indicate the fourth stage of depth; positive hallucinations and negative hallucinations the fifth and sammambulism the sixth or deepest stage.

Learning takes place at any stage but hypnotists seem agreed that the third and fourth stages are most effective. The fourth stage is effective in relieving pain as in childbirth, accidents, surgery and tooth extraction. The fifth stage is useful in relieving neuroses and the sixth stage is best for major operations.

In this experiment, effort was made to have the students reach the third and fourth stages but some did not. A few reached the somnambulistic

stage. Some benefited immensely.

#### EXPERIMENTAL PROCEDURE

Two heterogeneous groups of students were chosen to study French using autoconditioning twenty minutes on Monday, Wednesday, and Friday of each week, and another group received none but were drilled the extra 20 minutes on the same material as the experimental groups were studying. During the first twelve weeks, a pilot experiment was conducted. During the second twelve weeks, the experiment was again conducted with a different set of students. Participation was on a voluntary basia.

The experimental groups were designated as the 5th and 7th groups and the other the control group. The 6th group had 33 in it, the 7th group had 28, and the control group had 30. The three classes were very well matched in ranges of ability to learn as shown by tests given by the counselors proor to the project.

The nonparticipating students took part in the class work but refused autoconditioning.

The participating students took part in the classwork and the autoconditioning.

The nonparticipants in the D and F level chose not to join in autoconditioning but gave no reason for not doing so. They sat still and watched while the participants were being induced.

Since the class periods were only 3° minutes long, about onethird of the time each week was devoted to autoconditioning in the experimental group. The control group was getting a third more time, therefore, in extra drilling. The following procedure was used in teaching the students autosuggestion: a circle about a foot in diameter was drawn on the blackboard. The sentence, "I will concentrate more and more easily on my

French lesson," was placed on the board in such a position that a small
amount of eye strain had to be used to see the sentence. The sentence
was read out loud five times after the students had all taken a relaxed
position in their seats. The eyes then shifted to the circle at which
they stared until their eyes grew tired as indicated by their rapid blinking. Meanwhile the operator in a rather monotonous tone would tell them
how they might feel alternately with counting. When most of the eyes were
blinking, the students were told to close them, relax, and think of nothing
until they had counted slowly backward from fifty to one. They then counted
from one to five and opened their eyes.

The second week, the same procedure was followed.

The third week, instead of having the operator keep suggesting that that their eyes were getting tired, they read the sentence, moving their lips while thinking the words, gazed at the circle until their eyes were tired, then with their eyes open and still staring at the circle, they took five deep breaths slowly, relaxing with each exhalation, held the breath the fifth time until they counted backward from five to one, closed their eyes and relaxed, thinking of nothing until their eyes opened of their own accord.

The fourth week, the French lesson was taught intensively, then this suggestion was read from the board: "These words will be impressed on my mind and I will recall them whenever necessary." The five breaths, holding the last breath while counting backward from five to one, relaxation and passivity were used the rest of the nine weeks.

Six tests were given to evaluate the results; four were over the material between tests and the last two over all the material covered.

## RESULTS

Since there had been little or no conditioning when the two first tests were given, the results were very much the same. This is shown graphically in Table 1 and 2 and their distribution graphs. The tests were graded on a percentage basis.

In all cases where the groups were compared, the experimental groups showed greater retention in the final tests than the control groups. This was true when the groups were taken as a whole, whether all participated or not; whether only the participants were studied, or whether the non-participants only were considered.

Although the students of lower mental ability did better with more time to drill, in their weekly examinations, they did not retain as well for their final examinations. Table 1 and 2 show that the students in all three groups were much alike. Nithout autoconditioning, they were able to make comparable scores in each test.

Table 1. Grades for test 1 in 6th, 7th and control groups for entire classes

	control	groups for	Sucris crasses
Grades	6	7	С
93-100	24	20	19
88-92	6	4	8
20-27	0	1	1
70-79	2	2	0
Below 70	1	1	2

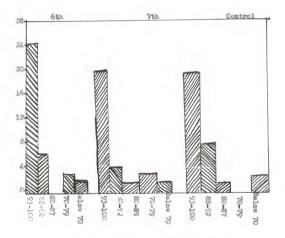


Fig. 1 Distribution Chart for Test 1

Table 2. Grades for test 2 in 6th, 7th and

	control are	mbs for aner:	A OTGODAD
Grades	6	7	C
93-100	26	25	20
88-92	2	2	5
80-87	0	0	1
70-79	0	0	2
Below 70	5	1	2

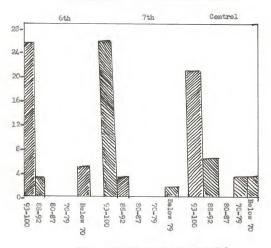


Fig. 2. Distribution graph for test 2

Table 3 and Figure 3 show the duller students making much lower scores in the experimental groups than the control group which is more of a rectangular distribution.

Table 3. Test 3 by grades for 6th, 7th, and control groups for entire classes

doumer	Stodia vot.	Attenta Grassas
6	7	C
19	5	6
3	1	7
1	6	8
5	3	4
5	13	5
	6 19 3 1	3 1 1 6 5 3

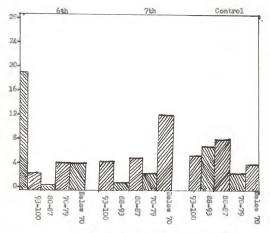


Fig. 3. Distribution graph for test 3.

Table 4 and figure 4 continue to follow the pattern set in the previous test except that the control group was superior to the experimental groups in grades all the way.

The test was over articles of clothing for boys and girls and the effect of longer drilling periods is evident in the control group. The duller students are feeling the lack of sufficient drill in the experimental groups as shown by the increasing number getting grades below 70.

Table 4. Test 4 by grades for 6th, 7th and

-	central tro	and for entity	3 CIREERS
Grades	6th	7th	C
93-100	12	13	19
88-92	3	2	3
80-87	3	5	2
70-79	5	1	3
Below 79	10	7	4

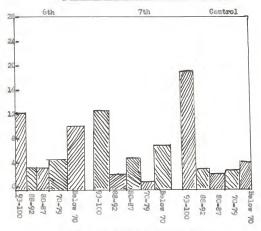


Fig. 4. Distribution graph of test 4.

Tests five and six covered all the French studied during the twelve weeks. These tests showed that the participants remembered the material wery well even though they had been drilled considerably less than the control group. They also revealed that the poorer students in the control group had done better on the tests given at intervals during the course. They did no better than the poorer students in the experimental groups even though less time was spent on the poorer students of the experimental groups. This seems to indicate that intensive drill does not help the poorer students to remember beyond a certain capacity. The table of means of the poorer nonparticipating group and the poorer students of the control group seems to indicate the same trend. However, more experiments lasting over a longer period of time should be performed before any sweeping generalisations are made in this area. Autoconditioning takes time because it is a conditioning process. In the final tests, it was the experimental groups who did better because they were becoming sufficiently conditioned to feel the effects of the conditioning.

Table 5 and figure 5 show a complete reversal of the pattern in table 4 and figure 4 and (comparative trends).

Table 5. Test 5 by grades for 6th, 7th and control group for all the classes.

Grades	6th	7th	C
93-100	13	16	7
88-92	2	3	2
80-87	5	2	2
70-79	3	0	3
Below 70	1.0	7	16

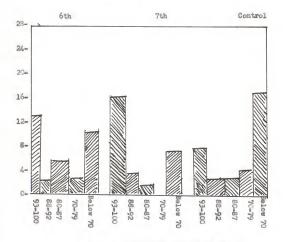


Fig. 5. Distribution graph for test 5.

Test six was the hardest test and involved various persons in verbs and sentence structure yet the experimental groups with much less drill did as well as the control group.

Table 6. Test 6 by grades for 6th, 7th and control group for entire

	lances.	0,	
Grades	6th	7th	C
93-100	4	4	1
88-92	2	0	3
80-87	2	5	7
70-79	9	6	6
Below 70	16	14	14

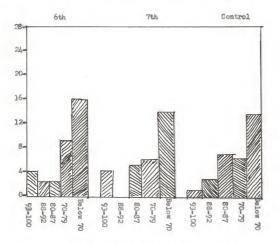


Fig. 6. Distribution graph of 6th, 7th and control groups for test 6.

Table 7 shows the means for the entire classes. The results are not quite as easy to ollow as when the participants only are considered, yet the final tests show higher scores for the experimental groups than the control group.

Table 7 . Table of means for the entire classes

Tests	1	2	3	14	5	6
6th 7th	89.7 39	80 83.7	83.3 65.4	75 78.4-	78.2 78.8	59.7 63.9
Control	89.1	39.5	80.7	90.1	64.4	62.8

To estimate the significance of differences between the means, the t-ratio was concerned, using the formula:

The table of significance of differences indicated that the differences between the means were not significant at the 5 % level of confidence. (See table 8.) For the sample size used, a t-ratio of 2.00 would be required to be significant.

Table 8. Significance of differences for the entire classes.

Tests	1	5	3	4	5	6
6th and conti	rol +.12	±.07	±.19	+.1.43	+1.07	±.24

The scores for 7th and control were so similar to those of 6th and control that it was unnecessary to compute them.

However, when only the participants were considered, more significance of differences were apparent as shown by tables 9 and 10.

The low scores in the control group were excluded to equalize the comparisons because with the exception of one student, all who participated in the experimental groups were the better students.

Table 9. Means for the participants and better students of the control group.

Tests	1	2	3	4	5	6
6th	94	95	94	86	92	73
7th	94	88	74	88	91	76
Control	94	94	86	98	75	76

Table 9 showed the control group better in the interval tests and the experimental groups better in retention.

Table 10 showed the differences that were significant for the participants in the experimental groups and the better students of the control group.

Table 10. Significance of differences for the participants and the better students of the control group.

Tes	ts			1	2	3	la.	5	6
6th	and	control	t=	0	2.5	2.9	3.5	3.3	.6
7th	and	control	ter	0	2.4	1.8	1.9	1.8	0

The degree of freedom for 6th and control was 25 + 21 - 2 = 42. At the 5% level of confidence "t" would be 2.02 so any "t" over 2.02 showed a significant difference.

For the 7th and control, the degree of freedom 16 + 21 - 2 = 35. At the 5 level of confidence, the "t" would be 2.03. So anything above 2.03 showed a signific at difference.

The writer could site only that there was a difference of 10 minutes in favor of the 6th hour class. Whether that made a significant difference would have to be tested again. However, it is evident that the 6th hour class showed more significant difference than the 7th hour group.

Knowing the principles of waking hypnosis, it seemed worthwhile to compare the nonparticipating students of the experimental groups with the comparable students of the control group. Table 11 showed the means of these groups.

Table 11. Means of the nonparticipants of the experimental groups and comparable students of the control group.

Tests	1	2	3	4	5	6
6th	79.6	56	59	43	61.5	41.3
7th	78.5	53	43	57.3	55.5	43.7
Control	79	80.5	68	76	34	35

Since these scores follow the same trends as those of the participating groups, it seemed possible that the nonparticipants of the experimental groups could have been conditioned through waking hypnosis. However, more experiments would have to be done before final conclusions could be reached.

Figure 7 shows the means of all the three classes including the nonparticipants.

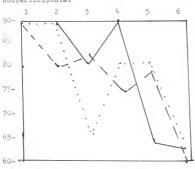


Fig. 7 Graph of means for all three classes including non par ticipants.

Legend for graph: 6th, --- --- ,7th, ...... Control, solid line.

Figure 8 slowed the graph of the means for the participants compared with the better students of the control group.

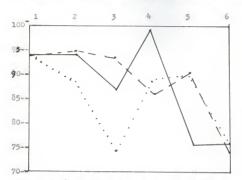


Fig. 8. Broken line graph of the means of the participants and the better students of the control group.

#### HISTORIES OF SPECIAL CASES

A few special cases proved interesting and seemed worthy of being mentioned because they represented problems of the classroom.

# Case History No. 1

Ralph, a fifteen year old boy who could not read was tutored by the experimenter and was hypnotized with the consent of his parents. It took six months to condition him to the somnambule stage and three months to condition him to the third stage. When he began with the tutoring, he could learn , using one hour a day, to spell

<sup>1</sup> Legend --- 6th group; ... 7th group; solid line control group.

and recognize about five words per week, working an hour a day on spelling. At the end of eight months, he could learn from ten to twelve in 30 minutes. One night, he learned thirty bones of the bobody and how to spell them in three hours. He was told he would study study 50 minutes so the three hours seemed to him like 30 minutes. He showed no signs of fatigue when the trance was removed and he still knew the names and their spelling a week later.

## Case History II

Gaylyn, a bright student even in the conscious state, had finished taking the final test. She had been autoconditioned with other members of the class for nine weeks. A finger was placed on her head and she was instructed to close her eyes and to turn her eyes inward and upward and to concentrate on the finger. In about thirty seconds, she was in hypnosis. Upon being told to find her mistakes and to correct them while remaining in hypnosis, she turned to each mistake immediately and corrected it.

When asked if she knew the answeres, she said she had not until she was told to remember, then the answer came to her immediately.

# Case History III

Jim's nails were bitten down into the flesh. He wanted to stop but would bite unconsciously, so it seemed impossible. He was given the suggestion that each time he would like to bite his nails, he would look at his hands and remember how much nicer his hands would look and how much more useful they would be with nails. The suggestion was repeated five times in the same trance. Five weeks later, his nails had to be trimmed.

#### CONCLUSTONS

The time for learning can be reduced for more mentally alert students by using autoconditioning. Extra drilling did not help the less mentally alert students except momentarily. More alert students are willing to try new techniques but the less mentally alert do not seem to have the desire to improve their ability to learn.

The experiment indicated that the experimental groups retained the French better than the control group.

Some students could correct their mistakes in hypnosis who could not do so in the conscious mind.

It takes two to three souths to condition a group so that they all respond to autoconditioning in learning. The good sublects, however respond sooner.

Concentration and attitudes can be improved.

The subconscious mind can be used to facilitate learning.

#### SUGGESTIONS FOR APPLICABILITY

Autosuggestion or hypnotism or both could be used to increase concentration and memory, to dispel boredom, to create enthusiasm, and to change attitudes toward atudy for the better.

Some people can use their subconscious minds to step up or slow down the time used for an action or learning process. This has been of great service in emergencies.

The student in the Senior Teas of high school or college students should be hypnotized in preference to younger students because they sometimes try to hypnotize others and the younger students might not use discretion as to whom they hypnotize and what suggestions they make. Hypnotism in the hands of the ignorant or unscrupulous can be dangerous.

More experiments in the field of education will have to be made before many of the benefits of autoconditioning and hypnotism can be erjoyed and utilized more fully.

Waking hypnosis could be used on the skeptics to advantage.

# ACKNOWLEDGMEN IS

The writer is deeply grateful to Dr. Russel G. Drumright for his time and constructive suggestions in her behalf. She is also indebted to Mr. Harry Arons for giving her a list of worthwhile books on hypnotism to read.

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APPENDIX

Table 12. Raw Test Scores for 6th group.

Tests	1	2	3	4	5	6	
Arlene	95	95	96	70	80	60	
Steve*	90	0	78	32	40	45	
Sylvia	90	95	98	76	75	72	
Linda	95	95	100	86	100	77	
Betty	90	95	100	100	100	89	
Mollye	95	95	100	100	65	87	
Darrell"	70	0	0	0	45	16	
Cheri	95	95	72	46	100	43	
Margaret	95	95	100	100	95	87	
Eilene	95	95	100	92	90	74	
James*	70	0	92	70	30	35	
Janet	90	95	72	72	80	44	
David	95	95	84	76	50	70	
Vicki	95	95	100	80	100	88	
Claudia	95	95	100	100	100	94	
Pat	95	95	100	92	100	94	
Donald*	95	95	0	36	65	76	
Donald	95	95	98	96	85	77	
Ton ja	95	95	100	96	100	73	
Nancy	95	95	100	92	100	67	
Mike*	90	95	96	96	65	10	
Georgia	95	95	100	100	100	78	
Charles*	95	90	68	32	80	48	
Jerry	95	95	100	96	95	93	
Jean	95	95	96	966	90	46	
David*	95	90	92	64	65	48	
Donald*	95	95	88	488	75	67	
Susan	95	95	100	100	100	95	
Nancy	95	95	76	100	80	77	
David*	0	0	16	100	0	60	
/icki	95	0	72	0		44	
Jean	90	95	96	80	95 65		
David*	95	95	60	52	70	43	
deans	89.7	80	83.3	75	78.2	59.7	

Nonparticipants

Table 13. Raw Test Scores for 7th Group

Tests	1	2	3	4	5	6
Raymond	90	0	0	0	65	35
Kenneth*	0	0	20	64	20	8
George	95	95	52	84	0	37
Linda	90	95	56	80	100	60
Ronnie"	95	95	32	90	100	48
Linda	95	95	94	100	100	78
Kathy*	95	95	68	65	90	76
Linda	95	95	92	100	100	80
Gaylyn	95	95	84	100	100	98
Carl	75	0	60	48	10	49
John	95	90	76	100	100	70
Kathleen	95	95	72	80	100	80
Gary	95	95	84	100	95	95
Jerry	95	95	100	100	100	96
Leo*	75	0	84	88	85	70
Marvin	90	95	86	100	85	70
Robert"	95	95	68	65	90	55
Freddie	95	95	100	100	100	76
Sarah*	95	95	96	96	100	84
Regina	95	90	52	100	95	75
lee*	92	0	0	0	50	28
Carolyn	95	95	80	100	95	82
Karen*	95	95	40	48	35	46
Linda	95	95	75	75	100	87
Edward*	95	95	16	48	0	13
Alice	90	95	64	84	100	63
Dennis"	95	95	80	80	92	35
Carol	95	95	100	100	100	98
Means	89	88.7	65.4	78.4	78.8	63.9

<sup>\*</sup> Nonparticipants

Table 14 . Raw Test Scores for Control Group.

Tests	1	2	3	4	5	6
Robert	82	75	50	76	20	39
Peter	21	75	75	96	84	55
William	90	65	60	84	68	48
Martha	95	95	80	100	88	66
George	80	80	80	48	6	19
Carol	95	95	90	100	96	70
Zebedee	60	60	60	884	8	23
Janet	95	95	95	100	100	88
Janice	95	95	90	100	96	86
Dennis	95	90	80	76	40	54
Melva	95	95	80	100	76	79
Barbara	95	95	80	100	60	72
Dale	95	95	90	100	76	94
Phyllis	95	95	95	92	56	80
Janice	90	95	60	100	68	80
Walter	95	95	95	98	86	83
Jim	95	75	75	52	20	13
Mark	95	90	50	64	36	49
Marjean	95	95	90	100	100	87
Kris	95	95	90	96	48	35
Robert	90	95	95	88	68	74
Rudia	95	95	75	100	96	76
Steve	90	95	80	100	72	75
Patsy	99	90	75	94	92	18
Linda	95	95	90	100	96	89
Steven	95	95	95	96	24	86
Marilyn	90	90	80	100	64	60
Billy	90	95	80	60	24	11
Barbara	90	90	90	100	64	81
Muriel	95	95	95	100	100	92
Means	89.1	89.5	80.7	90.1	64.4	62.

Table 15. Raw test score nonparticipants 6th group.

Tests	1	2	3	4	5	6
Steve	90	0	78	32	40	45
Darrell	70	0	0	0	65	16
James	70	0	92	70	90	35
Donald	95	95	0	36	65	76
Mike	90	95	96	96	65	10
Charles	95	90	68	32	80	48
David	95	90	92	64	65	48
Donald	95	95	88	48	75	67
David	0	0	16	0	0	61
David	95	95	60	52	70	7
Means	79.5	56	59	43	61.5	41.

Table 16. Haw test scores for 7th group nonparticipants.

Tests	1	2	3	4	5	6
Kenneth	0	0	20	64	20	8
Ronnie	95	95	32	90	100	48
Kathy	95	95	68	65	90	76
Carl	75	0	60	48	10	49
Leo	<b>7</b> 5	0	84	88	85	70
Marvin*	90	95	86	100	85	65
Robert	95	95	68	65	90	55
Sarah*	95	95	96	96	100	84
Dee	82	0	0	0	50	28
Karen	95	95	40	48	35	46
Edward	95	95	16	48	0	13
Dennis	95	95	80	80	92	35
eans	82.3	63.3	50	62	63	48

<sup>&</sup>quot;Parents would not allow them to participate.

Table 17. Raw test scores D and F students nonparticipants.

1	2	3	4	5	6
05	Q	20	64	20	48 76
	95	68	65		76
	Ó	60		10	49
75	0	84	88	85	70
95	95	68	65	90	55
82	0	0	0	50	28 46
95	95	40	48	35	46
95	95	16	48	0	13
78.5	53	43	57.3	55.5	43.
	95 82 95 95	95 95 75 0 75 0 95 95 82 0 95 95 95 95	95 95 68 75 0 60 75 0 84 95 95 68 82 0 0 0 95 95 40 95 95 16	95 95 68 65 75 0 60 48 95 95 68 65 82 0 0 0 95 95 40 48 95 95 16 48	95 95 68 65 90 75 0 60 48 10 75 0 84 88 85 95 95 68 65 90 82 0 0 0 50 95 95 40 48 35 95 95 16 48 0

Table 18. Raw test score5 6th group participants

Tests	1	2	3	4	5	6
Arlene	95	95	96	70	80	60
Sylvia	90	95	98	76	75	72
Linda	95	95	100	86	100	77
Betty	90	95	100	100	100	89
Mollye	95	95	100	100	65	87
Cheri	95	95	72	46	100	43
Margaret	95	95	100	100	95	87
Eilene	95	95	100	92	90	74
Janet	90	95	72	72	80	44
David	95	95	84	76	50	70
Vicki	95	95	100	80	100	88
Claudia	95	95	100	100	100	94
Pat	95	95	100	92	100	94
Donald	95	95	98	96	100	77
Tonja	95	95	100	96	100	73
Nancy	95	95	100	92	100	67
Georgia	95	95	100	100	95	78
Jerry	95	95	100	96	80	93
Jean	95	95	96	96	80	46
Susan	95	95	100	100	65	95
Nancy	95	95	76	100	80	79
Vicki	95	95	72	80	95	43
Jean	90	95	96	52	65	42
Means	94	95	94	86	92	73

Table 19. Raw test scores 7th group participants.

Tests	1	2	3	4	5	6
Raymond	90	0	0	0	65	35
George	95	95	52	84	0	37
Linda	90	95	56	80	100	60
Linda	95	95	94	100	100	78
Linda	95	95	92	100	100	80
Gaylyn	95	95	84	100	100	98
John	95	90	76	100	100	70
Kathleen	95	95	72	80	100	80
Gary	95	95	84	100	95	
Jerry	95	95	100	100	100	95 96 76
Freddie	95	95	100	100	100	76
Regina	95	90	52	100	95	75
Carolyn	95	95	80	100	95	82
Linda	95	95	75	75	100	87
Alice	90	95	64	84	100	63
Carol	95	95	100	100	100	98
Means	94	88	74	88	91	76

Table 20 . Raw test scores. Control group participanti's comparables.

Tests	1	2	3	4	5	6
Martha	95	95	80	100	88	66
Carol	95	95	90	100	96	70
Janet	95	95	95	100	100	88
Janice	95	95	90	100	96	86
Melva	95	95	80	100	76	79
Barbara	95	95	80	100	60	72
Dale	95	95	90	100	76	94
Phyllis	95	95	95	92	56	80
Janice	90	95	60	100	68	80
Walter	95	95	95	98	86	83
Marjean	95	95	90	100	100	87
Kris	95	95	90	96	48	55
Robert	90	95	95	88	68	74
Rudia	95	95	75	100	96	76
Steve	90	95	80	100	72	75
Patsy	90	90	75	94	92	18
Linda	95	95	90	100	96	89
Stephen	95	95	95	96	24	86
Marilyn	90	90	80	100	64	60
Barbara	90	90	90	100	64	81
Muriel	95	95	95	100	100	92
Means	94	94	86	98	98	76

Table 21. Raw test scores for control group. D and F students.

Tests	1	2	3	4	5	6
Robert Peter William George Zebedee Dennis Jim Mark Billy	82 21 90 80 60 95 95 95	75 75 65 80 60 90 95 90	50 75 60 80 60 80 75 50	76 96 84 48 84 76 52 64	20 84 68 6 8 40 20 36 24	39 55 48 19 23 54 13 49
Means	<b>7</b> 9	80.5	68	76	34	35

# SOME OF THE NOTICEABLE EFFECTS OF AUTOCONDITIONING IN AIDING LEARNING IN EIGHTH GRADE FRENCH

by

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AN ABSTRACT OF A MASTER'S REFORT

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MASTER OF SCIENCE
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KANSAS STATE UNIVERSITY
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The experiment was conducted to find out whether autoconditioning could facilitate learning in eighth grade French.

answers were sought experimentally to the following questions:

- 1. Can autoconditioning shorten the time of learning in eighth grade French?
- 2. If the time is shortened, will the students retain the knowledge as well as those who did not learn the lessons under autoconditioning?
  - 3. Will other effects occur to those hypnotized?
- 4. How soon can the effects of autoconditioning become noticeable in learning?

In order to conduct the experiment, two experimental groups and one control group were selected. They were heterogeneous groups which were comparable as shown by tests given by the counsulor at the beginning of school. The experimental groups were autoconditioned 20 minutes on Mondays, Wednesdays, andFridays, but the control group had this extra time for study or drill.

The conclusions reached were:

- 1. Fime can be saved in learning through autoconditioning.
- 2. Extra drilling did not help the less mentally alert students except momentarily.
- Mentally alert students were more willing to participate than the slower students.
  - 4. The subconscious mind can be used for learning.
- 5. Tests could be corrected under autoconditioning that could not be corrected in the conscious state.
- 6. It takes two to three months of autoconditioning before the effects are quite noticeable for a whole group.
  - 7. Waking hypnosis could be used by instructors in teaching.