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Conditioned Helplessness and Human Escape Behavior

Robert E. Gabbard Jr.
Central Washington University

CONDITIONED HELPLESSNESS AND HUMAN ESCAPE BEHAVIOR

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Robert E. Gabbard Jr.

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APPROVED FOR THE GRADUATE FACULTY

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Philip Tolin, COMMITTEE CHAIRMAN

_____

Larry M. Sparks

_____

Warren R. Street

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CHAPTER I

INTRODUCTION

Purpose of the Study

The present study was undertaken to determine, first, whether or not "helplessness" can be conditioned in human subjects, and, secondly, the amount of behavioral variability that can be accounted for in terms of locus of control as measured by Rotter's Internal-External control scale (I-E scale).

Helplessness

Overmier and Seligman (1967) have reported a procedure that produces a striking behavior abnormality in dogs. Harnessed dogs exposed to a series of traumatic, inescapable, electric shocks 24 hours prior to shuttlebox training reliably fail to make escape or avoidance responses. While initially, these dogs may react in the same manner as naïve dogs, they soon stop running and remain silent until shock is terminated. Even if they should happen to make an initial escape or avoidance response, they fail to maintain such behaviors as observed in normal, naïve dogs.

Several hypotheses have been generated to account for the above phenomenon. Some authors (Carlson & Black, 1961; Baron, Brookshire, & Littman, 1957) have offered a "competing-motor-response" theory, stating that, while harnessed, the dog learns motor responses associated with the termination of shock. Later, during

shuttlebox training, the dog repeats the same motor responses which, in direct contrast to jumping, cause him to stand motionless. Overmier and Seligman (1967) tested the competing-response hypothesis by presenting inescapable shock to dogs paralyzed by curare. These same dogs later failed to either escape or avoid shuttlebox shocks. Animals curarized, but not given inescapable shock escaped normally. These results were taken to contradict a competing-response explanation of the phenomenon.

MacDonald (1946) proposed an "adaptation" hypothesis to account for the interference effect. According to his theory dogs adapt to shock while exposed in the harness. Later, shock administered in the shuttlebox fails to motivate them sufficiently to escape or avoid. In a test of this hypothesis, Overmier and Seligman (1967) found that dogs failed to escape or avoid shuttlebox shocks even though the intensity was increased to near maximum (a point at which most dogs experience tetanus). This finding is inconsistant with an adaptation explanation of the effect.

Seligman and Maier (1967) tested a learned "helplessness" hypothesis. They considered that organisms are not only sensitive to contiguity and dissociation of events in learning situations, but also to the independence between events. During inescapable shock, dogs are learning that shock termination occurs independently of their responding, and consequently is beyond their control. Later, shock mediates a generalization to the shuttlebox and the probability of escape or avoidance is reduced. In support of such an hypothesis,

Seligman and Maier offered evidence that harnessed dogs trained to panel press to escape shock subsequently acquired normal escape-avoidance shuttlebox behavior. In contrast, yoked Ss receiving the same shock, but with shock termination independent of performance, displayed profound interference during shuttlebox training. These results were interpreted as supporting the learned "helplessness" hypothesis. The authors cited the following studies as lending support to their explanation of the interference phenomenon: Richter (1957) reported that rats quickly gave up swimming and drowned when placed in inescapable water tanks. Rats which were occasionally taken out of the same tanks and immediately returned continued to swim for up to 60 hrs. before drowning. He concluded that the discrepancy between efforts was due to a loss of "hope" in the inescapable situation. Liddell (1956) reported that inescapable shocks reliably produced experimental "neurosis" in lambs. Masserman (1943) found that cats allowed instrumental control over feeding suffered less frequently from experimental neurosis than cats receiving the same amount of food, but having no control over feeding schedules. Mowrer and Viek (1948) found that matched pairs of shock-controlling and shock-noncontrolling rats differed in eating inhibition after the shock periods. They concluded that an uncontrollable painful stimulus arouses an apprehension that this stimulus, if subject to control, arouses little or no apprehension. Mowrer labeled this apprehension of uncontolled pain as "fear from a sense of helplessness".

It should be noted that the phenomenon observed by Seligman et al. is quite specific to the methodology employed in its investigation. Using slightly different methods, other authors have found facilitory effects, rather than interference following exposure to inescapable preshock. If an approach-avoidance conflict situation is created by substituting shock for food in a straight alley maze, Ss who have received prior inescapable preshock learn the avoidance more rapidly than nonshocked controls (Kurtz and Walters, 1962; Anderson, Cole, & McVaugh, 1968). This facilitation effect seems to be highly dependent upon the nature of the preshocks. If the preshocks are sufficiently staggered over time rather than massed, Ss respond normally in the conflict situation (Anderson et al., 1968).

Internal Versus External Control

A construct quite similar to "helplessness" but one which has been exclusively applied to human behavior is that of "internal" versus "external" control of reinforcement as derived from Rotter's (1954) social learning theory. This construct deals with generalized expectancies which operate across a large number of situations, and are assumed to reflect the relative strengths of two components: (a) previous experience in similar situations; and (b) generalizations from past reinforcements in other situations. "Internal" control refers to the perception of events as being a consequence of one's own behavior and thereby under personal control; "external" control

refers to the perception of events as being unrelated to one's own behavior, and therefore beyond personal control. Rotter (1966) has constructed a 29-item, forced-choice test (I-E scale) to measure individual perceptions of control (See Appendix C), and has summarized reliability, validity, as well as all available research data concerning the use of the scale. Locus of control has been found to be predictive of many learning performances, social behaviors, and certain achievement-related activities. Rotter has concluded that "internal" scoring Ss tend to be more alert to, and more active in, improving their environmental conditions than "external" scorers.

Statement of the Problem

Seligman (1969) has discussed the importance of instrumental control over aversive events in the cause, prevention, and treatment of maladaptive, "helpless" behaviors in humans. It should be noted that in scientific terms the distance between human pathology and "helpless" dogs is, indeed, great. Whether or not Seligman's techniques will apply to human behavior remains an empirical question. The present study was designed to determine first, whether or not "helplessness" can be conditioned in human subjects via Seligman's techniques, and, secondly, the amount of behavioral variability that can be accounted for in terms of locus of control on Rotter's I-E scale.

Design of the Study

Certain procedural deviations were required for working with

human subjects. Obviously, traumatic shock could not be employed. Instead, a loud tone, rated as annoying by subjects tested during a pilot study, was substituted for shock. Every attempt was made to minimize deviations from Seligman's basic procedures.

Training was accomplished by giving one group of subjects ("Hope" group) control over the offset of annoying tones, and another group ("Helpless" group) no control over the same tones. A third group ("Control" group) received no pre-training. Subjects of the Helpless group were, then, similar to Seligman's dogs in that they were repeatedly presented with an annoying stimulus over which they had no control. Thus, these subjects were expected to learn that there was no relationship between their behavior and the onset and offset of the tone, i.e., that they were "helpless". It was expected that subjects of the Hope group, having control over the tones, would not learn such a relationship. The Control group was employed to control for possible habituation effects caused by exposure to the tones.

Following "helplessness" training, subjects were given an insoluble problem in which they were told that finding a certain combination of button presses could enable them to terminate a continuous loud tone. It was reasoned that if "helplessness" can be conditioned in human subjects, then, those subjects receiving "helplessness" training should make fewer button presses to escape the tone than would subjects not receiving such training. Further,

if I-E scores reflect the degree of generalized "helplessness", then the performance of subjects ranked as "internal" should be less affected by "helplessness" training than those ranked as "external".

CHAPTER II

METHOD

Subjects

The Ss were 23 male and 31 female graduate and undergraduate volunteers taken from 6 undergraduate psychology classes conducted during the summer of 1969. The Ss' ages ranged from 19 to 56 yrs. (mdn. age = 24 yrs.). All Ss were naïve with respect to the purpose of the investigation.

Apparatus and Procedure

Each of the 54 Ss was randomly assigned to one of 3 independent groups for testing--"Helpless", "Hope", or, "Control"--and was tested individually. Upon arrival, the Ss were escorted into a sound deadening chamber (Industrial Acoustics Co., model 403p) located adjacent to the apparatus room. A one-way window between the rooms enabled the E to observe the Ss throughout testing. The Ss were seated at a small table in front of a standard telegraph key. The experiment was carried out in 2 phases (Phase I = training, and Phase II = testing) with the appropriate instructions preceding each phase (see Appendix B for instructions).

Phase I for the Ss of the "Helpless" group consisted of 20 presentations of an inescapable and unavoidable 1500-Hz pure tone generated by a Beltone model 15C audiometer and delivered through a pair of matched earphones (Telephonics model TDH-39

with MX-41/AR cushions). The tone was delivered at a constant intensity which was judged annoying by a group of pilot Ss. A LeHigh Valley relay control panel was used in conjunction with a Grason-Stradler interval programmer and program tape to present the stimuli automatically. Tone durations were presented randomly, with a mean length of 12.9 sec., and a range of 8 to 21 sec. The inter-stimulus interval was a constant 13 sec. All Ss were exposed to a minimum of 240 sec. of tone. Key presses were recorded for every trial. Upon completion of the twentieth tone presentation, the apparatus was switched off, terminating Phase I.

Phase I for the Ss of the Hope group was like that of the Helpless group, with the difference that tone termination was not automatically controlled, but was made contingent upon key-pressing. A holding circuit was employed to hold the tone on during the 13-sec. periods in which the Helpless group received no tone. A 12v dc white light in circuit with the programmer served to signal the beginning of these 13 sec. periods. By pressing the telegraph key any time during these periods, Ss could break the circuit and terminate the tone. If the S failed to respond during a 13 sec. period a new trial began automatically, and the tone could not be terminated by the S until after the next light flash. If the S had never depressed the response key during any of the 13 sec. periods, he would have been exposed to a continuous tone throughout the duration of testing. A Lafayette electric stop clock was used to record reaction times. The clock was started simultaneously with the onset of the

cue light, and stopped when the S depressed the response key. Counters were employed to record both the number of trials and total key presses.

Phase II was identical for all Ss and was the only phase experienced by the Ss of the Control group. A 4 X 7 in. control panel containing 6 spring-loaded toggle switches was positioned in front of the Ss. A taped, 2-min. continuous tone (1500 Hz) of the same intensity as used in Phase I was presented through the headphones. The Ss were told that the tone could only be terminated by pressing the right combination of 4 buttons, one at a time, and in the correct order. Total button presses in each of 4 consecutive 30-sec. intervals were recorded for each S.

Subjects were given the I-E scale either before or after exposure to testing, the time being left to the convenience of the instructors involved. All tests were administered during regular class periods by the instructors teaching the courses from which the Ss had been drawn. The instructors were directed not to reveal the true nature of the scale, nor to connect it with the present study in any way.

CHAPTER III

RESULTS

The following performance measures were analyzed to test for the effects of the experimental treatments and their relationship with I-E test scores: (a) the number of button presses made by all Ss during each of the 4 consecutive 30-sec. intervals of Phase II; (b) the relationship between I-E test scores and the total number of button presses in Phase II, as well as the number of presses in the first 30 sec. of Phase II; (c) the number of key presses made by the Ss of the Helpless group during Phase I; and, (d) the reaction times of the Ss of the Hope group during Phase I. See Appendix A for the original data of all Ss.

Button Presses on Phase II

Figure 1 illustrates the mean number of button presses for all groups during the 30-sec. intervals of Phase II. The results of an analysis of variance performed on the data are summarized in Table 1. As can be seen, treatment effects, and the interaction of treatments with time were not significant ($p > .05$). There was, however, a significant time effect ($p < .05$) reflecting decreases with time of the mean number of button presses for all groups. Further analysis revealed the power of the test of treatment effects to be .20, reflecting the large amount of variability within the data.

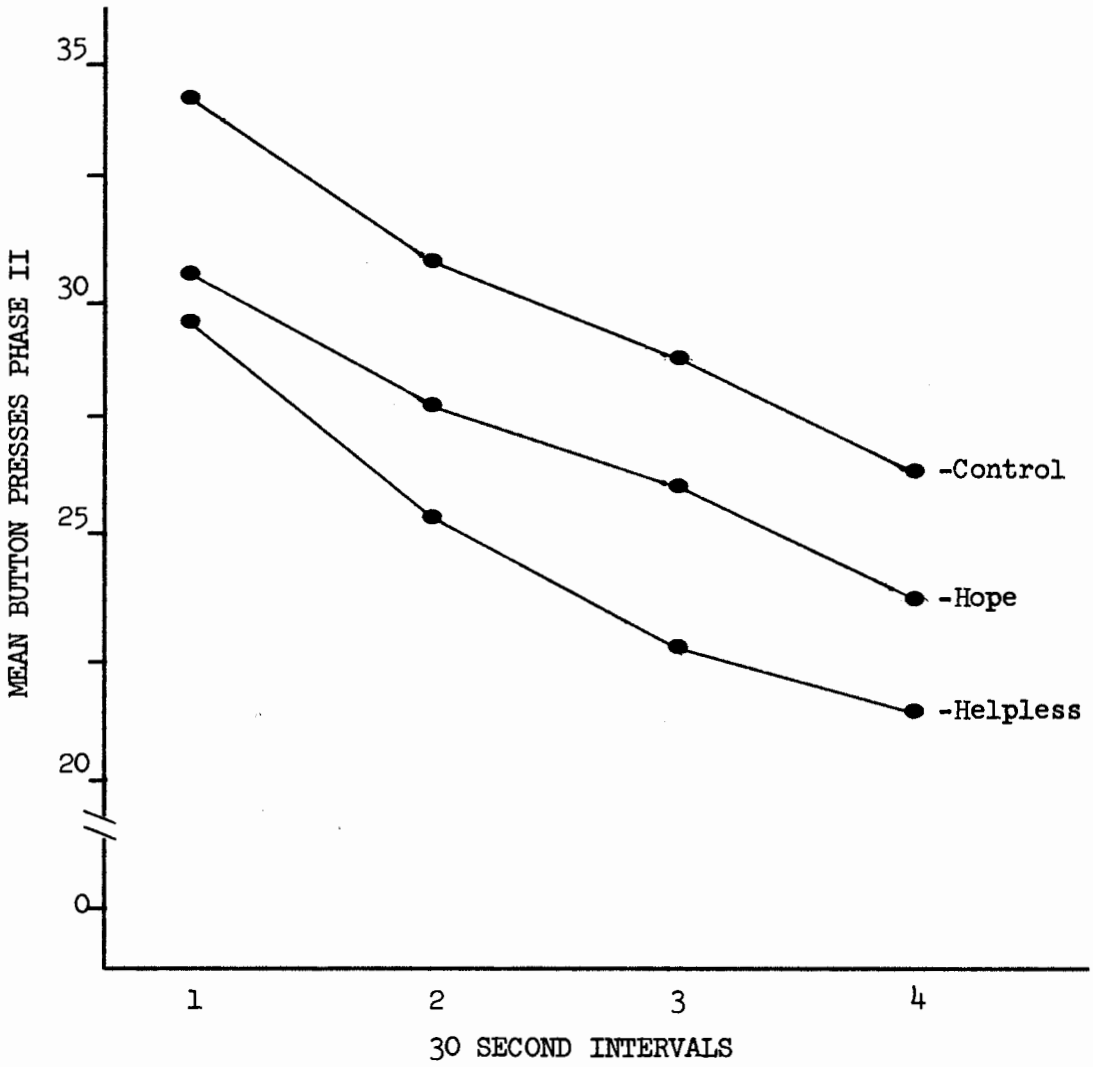

Fig. 1. Mean number of button presses for all groups during the time intervals of Phase II.

TABLE 1

ANALYSIS OF VARIANCE OF BUTTON PRESSES OVER PERIODS OF TIME AND TREATMENT

Source	df	MS	F
Treatments (A)	2	482.26	1.55
Ss within groups	51	310.72	
Time periods (B)	3	480.59	15.32*
AB	6	6.58	.21
B X Ss within groups	153	31.38	

*$p < .05$

I-E Test Scores

Correlations were computed between I-E scores and: (a) the total number of button presses during Phase II; and, (b) button presses made during the first 30 sec. of Phase II (see Table 2). None of these correlations reached significance at the $\alpha = .05$ level. Further analysis involved ranking the I-E scores of each treatment group, and then comparing total button presses of the 5 top scorers in each group with the bottom 5 scorers. The results of an analysis of variance performed on these data are summarized in Table 3. As can be seen, none of the F values reached significance at the $\alpha = .05$ level.

Five Ss (2 in the Helpless group, 2 in the Hope group, and 1 in the Control group) were not present on the day of testing. I-E scores were thus not obtained for these Ss, and their scores were excluded from the above analyses.

Key Presses on Phase I

Examination of the mean number of key presses for all Ss of the Helpless group during Phase I revealed that 10 of the Ss averaged less than 1 button press over the last 5 tone presentations, while the remainder of the Ss continued to respond. Analysis revealed no significant difference between the total number of button presses on Phase II made by those Ss who extinguished (i.e. averaged less than one press during the last 5 trials), and those who did not.

TABLE 2

CORRELATIONS BETWEEN I-E SCORES AND NUMBER OF PRESSES IN PHASE II

Group	Total Presses	Presses 1st 30 sec.
Helpless	.48	.17
Hope	.29	.19
Control	.15	.05

TABLE 3

ANALYSIS OF VARIANCE OF TOTAL BUTTON PRESSES DUE TO HIGH VERSUS LOW I-E SCORES

Source	df	MS	F
Treatments (A)	2	117.43	1.06
I-E scores (B)	1	61.13	.15
AB	2	75.43	.69
Within cell	24	109.86	

Reaction Times

Median reaction times based on blocks of five trials were computed for the Ss of the Hope group during Phase I (see Table 4). They revealed that learning to associate the cue light with key-pressing took place sometime during the first block of trials as evidenced by median reaction times of less than 1 sec. All Ss (with one exception) who failed to make the association during the first block of trials (median reaction time > 1. sec.) revealed that they had learned the association by the end of training (median reaction time < 1. sec. on the last block of trials). It is apparent, therefore, that the Ss in the Hope group did learn that tone offset was contingent upon their behavior.

TABLE 4

MEDIAN PHASE I REACTION TIMES IN EACH BLOCK OF FIVE TRIALS FOR SUBJECTS IN THE HOPE GROUP

Subjects	Median Reaction Times in Seconds			
	1	2	3	4
1	1.60	.60	2.45	.65
2	1.20	.80	.75	.90
3	.40	1.10	.40	.40
4	.30	.30	.30	.40
5	1.20	.70	3.30	15.20
6	.30	.40	.30	.30
7	.40	.50	.40	.40
8	.30	.50	.50	.50
9	.30	.70	.70	.70
10	.30	.30	.30	.30
11	.05	.40	.50	.40
12	1.30	.70	.80	.80
13	.40	.40	.40	.50
14	.40	.40	.40	.50
15	.80	1.10	1.00	1.10
16	1.20	.05	.20	.60
17	.40	.60	.50	.60
18	.70	.60	.50	.50
$\bar{X}$	.61	.56	.76	1.37
SD	.44	.26	.78	3.33

CHAPTER IV

DISCUSSION

Performance on an instrumental escape (problem solving task) was not differentially affected by prior training in which Ss were given varying degrees of control over the termination of an annoying tone. These results did not confirm the prediction that Ss given no control over the offset of tones would make fewer button presses in Phase II of the experiment. The study, therefore, provided no evidence that human Ss are susceptible to "helplessness" conditioning as defined by Seligman and his associates. In addition, performance in Phase II was not related to the Ss' perceptions of their degree of control over external events, as measured by Rotter's (1966) I-E control scale. This finding was supported both by correlational data, and an analysis of variance. Schwarz (1969) has indicated that generalized expectancies may only operate during the initial trials of skill-orientated tasks. Accordingly, one might expect to find I-E scores most predictive of performance during the initial stages of practice during Phase II. However, correlations between I-E scores and the number of button presses made during the first 30 sec. of Phase II were small and not significant.

It should be noted that the power of the analysis of treatment effects was .20, revealing the high probability of Type II error. The large amount of uncontolled variability within the

data may have been due, in part, to individual differences in problem-solving strategies and/or differential perceptions of the nature of the task. These conclusions are partially supported by the remarks of several Ss at the end of the experimental session. For example, some Ss reported having tested as many different combinations of buttons as possible, while others reported having suspected from the start that the task was insoluble. These differences in perception were not, however, related to I-E test scores. The brevity of the instructions used for Phase II may have contributed, in part, to these differential perceptions of the nature of the task. Future research involving instructions providing highly structured and unstructured task sets may prove useful.

Another possible cause of the large amount of variability might be related to the intensity of the tone employed. Possibly, the tone that was used was not sufficiently aversive to produce the expected results. In fact, the phenomenon of "helplessness" has only been observed when the stimulus employed has been traumatic in nature. Seligman and Maier (1967), however, defined "helplessness" as "a learned independence between events". Clearly, this definition does not preclude the use of less intense stimuli. The present research indicates that conditioning of "helplessness" may, in fact, be limited to only situations in which intense stimulation is employed. Parametric research involving systematic manipulation

of the quantitative and qualitative aspects of various stimuli is clearly called for.

CHAPTER V

SUMMARY

The present investigation was concerned with determining, first, whether or not "helplessness" could be conditioned in human subjects using techniques similar to those employed in animal studies, and, secondly, the amount of behavioral variability that could be accounted for in terms of locus of control on Rotter's I-E control scale.

Each of 54 Ss was randomly assigned to one of 3 independent groups for testing, and was tested individually. The experiment consisted of 2 phases. In Phase I, one group of Ss (Hope group) was given control over the offset of annoying tones. Another group was given no control (Helpless group) over the same tones. A third group (Control group) did not participate in Phase I. Following Phase I, all Ss were given an insoluble problem in which they were told that finding a certain combination of button presses would enable them to terminate a continuous loud tone. It was reasoned that if "helplessness" can be conditioned in human Ss, then those Ss not given control over the offset of the Phase I tones would make fewer button presses to escape the test tone than the other groups. Further, if I-E scores reflect the degree of generalized "helplessness", then the performance on the problem solving task of Ss ranked as "internal" would be less affected by "helplessness" training than that of those ranked as "external".

The results of the present study provided no evidence that human Ss are susceptible to "helplessness" conditioning, nor did they lend any support to the predictive validity of the I-E control scale.

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APPENDIX A

APPENDIX A

I-E SCORES AND NUMBER OF PRESSES IN PHASE I & II FOR EACH SUBJECT IN THE HELPLESS GROUP

Subject	I-E[a]	Presses Phase I	Presses Phase II[b]				
			1	2	3	4	Total
1	14	128	36	17	16	14	83
2	12	34	29	27	27	30	113
3	9	14	30	30	37	18	115
4		31	18	23	18	16	75
5	13	163	15	5	24	19	63
6	12	627	34	28	13	18	93
7	15	6	20	16	8	10	54
8	4	6	20	33	37	31	121
9	8	50	36	28	35	30	129
10	0	477	40	33	28	29	130
11	9	69	28	25	22	15	90
12	16	135	40	33	24	31	128
13		24	24	24	10	18	76
14	9	104	44	37	35	28	144
15	16	468	35	33	31	36	135
16	16	7	21	19	14	10	64
17	16	13	21	29	12	20	82
18	6	101	22	20	18	19	79

[a] High scores indicate external control; low scores indicate internal control.

[b] Phase II is divided into 4 30-sec. intervals

APPENDIX A

I-E SCORES AND NUMBER OF PRESSES IN PHASE I & II FOR EACH SUBJECT IN THE HOPE GROUP

Subject	I-E[a]	Presses Phase I	Presses Phase II[b]				
			1	2	3	4	Total
1	13	72	26	22	20	17	85
2	11	27	19	27	29	29	104
3	12	44	26	25	25	30	106
4	7	30	44	40	29	36	149
5		98	19	24	25	12	80
6	13	132	62	44	36	50	192
7	3	27	25	25	17	25	92
8	5	22	14	19	28	13	74
9	10	62	28	25	28	29	110
10		30	24	31	37	27	119
11	4	43	31	32	25	29	117
12	12	26	28	17	15	18	78
13	14	29	30	23	23	5	81
14	9	34	40	40	33	33	146
15	4	27	14	18	15	16	63
16	7	114	42	31	25	25	123
17	6	25	37	31	26	31	125
18	11	21	25	18	13	12	68

[a]High scores indicate external control; low scores indicate internal control.

[b]Phase II is divided into 4 30-sec. intervals

APPENDIX A

I-E SCORES AND NUMBER OF PRESSES IN PHASE II FOR EACH SUBJECT IN THE CONTROL GROUP

Subject	I-E[a]	Presses Phase I	Presses Phase II[b]				
			1	2	3	4	Total
1	16	-	43	44	38	39	164
2		-	32	33	30	21	116
3	10	-	37	30	17	16	100
4	7	-	28	20	15	12	75
5	6	-	24	19	18	18	79
6	8	-	40	35	23	21	119
7	11	-	20	18	13	18	69
8	17	-	48	46	32	41	167
9	7	-	21	21	31	33	106
10	13	-	34	24	12	16	86
11	10	-	43	47	68	48	206
12	6	-	47	39	40	35	161
13	5	-	39	38	32	28	137
14	22	-	28	20	17	16	81
15	13	-	37	40	28	34	139
16	9	-	31	33	24	26	114
17	13	-	15	11	15	10	51
18	2	-	43	47	43	38	171

[a]High scores indicate external control; low scores indicate internal control.

[b]Phase II is divided into 4 30-sec. intervals.

APPENDIX B

APPENDIX B

PHASE I INSTRUCTIONS

Your instructions are as follows: Upon the completion of these instructions position the headset so that it comfortably covers both ears.

You will shortly be exposed to a series of loud tones which may, or which may not be controlled by pressing the telegraph key.

Do not touch or readjust the headphones, nor leave your seat until instructed to do so. If you have any questions I will answer them now.

APPENDIX B

PHASE II INSTRUCTIONS

Your instructions are as follows: Adjust the red switch panel for ease of operation. You will shortly be exposed to a continuous loud tone that can only be terminated by pressing the right combination of buttons. The right combination consists of 4 buttons pressed one at a time, and, in the right order. Remember, your task is to find the 4 buttons that when pressed in the correct order will turn off the tone.

Do not begin pressing until you hear the tone. If you have any questions I will answer them now.

APPENDIX C

APPENDIX C

INTERNAL - EXTERNAL CONTROL SCALE

INSTRUCTIONS

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered a or b. Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose, or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers.

Your answers to the items on this inventory are to be recorded on a separate answer sheet. Print your name, age, sex, and any other information requested by the examiner on the answer sheet, then finish reading these directions.

Please answer these items carefully but do not spend too much time on any one item. Be sure to find an answer for every choice. Find the number of the item on the answer sheet and black-in the space under the letter corresponding to your choice.

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you're concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.

1) a. Children get into trouble because their parents punish them too much.

   b. The trouble with most children nowadays is that their parents are too easy with them.

2) a. Many of the unhappy things in people's lives are partly due to bad luck.

   b. People's misfortunes result from the mistakes that they make.

3) a. One of the major reasons why we have wars is because people don't take enough interest in politics.

   b. There will always be wars, no matter how hard people try to prevent them.

4) a. In the long run people get the respect they deserve in this world.

   b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5) a. The idea that teachers are unfair to students is nonsense.

   b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6) a. Without the right breaks one cannot be an effective leader.

   b. Capable people who fail to become leaders have not taken advantage of their opportunities.

7) a. No matter how hard you try some people just don't like you.

   b. People who can't get others to like them don't understand how to get along with others.

8) a. Heredity plays the major role in determining one's personality.

b. It is one's experiences in life which determine what they're like.

9) a. I have often found that what is going to happen will happen.

b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10) a. In the case of the well-prepared student there is rarely if ever such a thing as an unfair test.

b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11) a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.

b. Getting a good job depends mainly on being in the right place at the right time.

12) a. The average citizen can have an influence in government decisions.

b. This world is run by the few people in power, and there is not much the little guy can do about it.

13) A. When I make plans, I am almost certain that I can make them work.

b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14) a. There are certain people who are just no good.

b. There is some good in everybody.

15) a. In my case getting what I want has little or nothing to do with luck.

b. Many times we might just as well decide what to do by flipping a coin.

16) a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.

b. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.

17) a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.

b. By taking an active part in political and social affairs the people can control world events.

18) a. Most people don't realize the extent to which their lives are controlled by accidental happenings.

b. There really is no such thing as luck.

19) a. One should always be willing to admit mistakes.

b. It is usually best to cover up one's mistakes.

20) a. It is hard to know whether or not a person really likes you.

b. How many friends you have depends upon how nice a person you are.

21) a. In the long run, the bad things that happen to us are balanced by the good ones.

b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22) a. With enough effort we can wipe out political corruption.

b. It is difficult for people to have much control over the things politicians do in office.

23) a. Sometimes I can't understand how teachers arrive at the grades they give.

b. There is a direct connection between how hard I study and the grades I get.

24) a. A good leader expects people to decide for themselves what they should do.

b. A good leader makes it clear to everybody what their jobs are.

25) a. Many times I feel that I have little influence over the things that happen to me.

b. It is impossible for me to believe that chance or luck plays an important role in my life.

26) a. People are lonely because they don't try to be friendly.

b. There's not much use in trying too hard to please people, if they like you, they like you.

27) a. There is too much emphasis on athletics in high school.

b. Team sports are an excellent way to build character.

28) a. What happens to me is my own doing.

b. Sometimes I feel; that I don't have enough control over the direction my life is taking.

29) a. Most of the time I can't understand why politicians behave the way they do.

b. In the long run the people are responsible for bad government on a national as well as on a local level.