

FACTORS IDENTIFIED BY THE MYERS-BRIGGS
PERSONALITY INVENTORY AND THEIR
RELATIONSHIP TO A LEARNED HELPLESSNESS
STYLE EVENT

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The present study was designed to assess the effectiveness of the Myers-Briggs Type Indicator in identifying personality factors that have been hypothesized to be present when persons display learned helplessness style behavior. The subjects were 48 students of Emporia State University, both upper class and freshmen.

The researcher divided the 48 subjects at random into three groups. Each subject filled out the Myers-Briggs Type Indicator and completed a learned helplessness task. The task had two sections of which the first part was a conditioning section that was to produce learned helplessness type of behavior. Each of the three groups received a different amount of helplessness style conditions. The second half of the task was identical for all subjects.

The results were obtained by comparing the scores of all subjects on the second half of the task; that is, the identical half of the task to see if there were differences among groups in scores on the test. The scores in the identical half were then correlated with the results of the Myers-Briggs Type Indicator to see if the variability of the scores was related to personality factors identified by the Myers-Briggs.

The results indicated that the learned helplessness style training did not produce statistically significant differences among groups. It was also found that the variability within the groups did not correlate

strongly with the personality factors identified by the Myers-Briggs Type Indicator.

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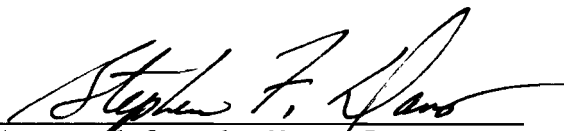
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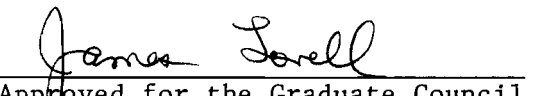
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CHAPTER 1

INTRODUCTION

Statement of the Problem

The thought that after experiencing failure persons seem to find it hard to motivate themselves to try again is hardly a new idea. Roman and Greek philosophers noticed persons who would not respond to life energetically and with hope of success after failure (Lefcourt, 1966). In more recent times, Pavlov (1927) noted that responses disintegrated when tasks became too difficult to discriminate. This disintegration of responses was noted in Richter's studies (Richter, 1957). Rats who were held in his hand so tightly that they could not escape were later put in a tank of water where no escape was possible. These rats sank within one or two hours. However, rats who were not held tightly and could escape would swim for up to 60 hours in the same tank. This kind of experimental behavior in animals led researchers at the University of Pennsylvania (Overmeir & Seligman, 1967; Seligman & Maier, 1967) to conduct experiments with mongrel dogs to try and explain why this failure to respond took place. The dogs in the experiment were subjected to inescapable shocks, then were placed in a shuttle box where, by jumping over a low barrier, they could terminate the shock. The dogs just lay on the floor and whined. Even after extensive retraining, the dogs continued to respond the same way.

Given this result, it was hypothesized that the dogs had learned to be helpless. In simple terms, what the theory proposed was that the dogs "learned" that their efforts (i.e., attempts to escape) produced

no results (i.e., stopping the shock). Therefore, when the test task was administered in which the dogs were able to escape the shock, they felt helpless and did not even try to escape.

Later, Seligman (in Friedman and Katz, 1974) stated that learned helplessness is the hypothesis that, when a subject views the probability for the reinforcement of a behavior as equal no matter what response the subject makes, then the subject will discontinue responding. This lack of response occurs even when the subject could respond in a way that would cause the reinforcement of the behavior.

To return to Seligman's experiment, if this is the case, then the dogs are hypothesized to have learned that effort does not produce results, therefore, effort is extinguished. The dogs are proposed to have learned helplessness by a cognitive defect (i.e., the misperception) that effort will not effect outcome.

Stegman and McReynold (1978) took this concept and hypothesized that helplessness is only a stage in the extinction of behavior and not a true condition in itself. However, all they showed is that given extinction training, persons did stop performing; and given reinforcement, persons do continue to perform. When reinforcement is non-contingent (i.e., effort has no effect on outcome including reinforcement) then the subject displays helplessness-like effects, thereby strengthening the hypothesis that it is not failure that produces the helplessness effect, but rather not having control over failure or success. Likewise, Maier and Seligman (1976) reported that, "In a related study we found that dogs that received inescapable shocks as puppies lost out in the competition for food (only one nose fits into a coffee cup of Alpo) with dogs that received no shock or escapable

shock," (p. 11) pointing out the effects of uncontrollability on subsequent behavior.

Uncontrollability of the environment was further explored in a recent study by Donovan and Leavitt (1985). They investigated whether mothers who say a child is difficult to handle would relate differently if the child were seen as normal to handle. In this study, the mothers who saw the children as difficult to handle showed a much higher instance of ineffectual and helpless responses over the mothers who saw the children as normal. The issue of uncontrollability of the children's responses was focused here. The actual responses of the children were the same, but the mothers perceived the responses to be difficult, which brought about the helpless responses.

As the last study points out, learned helplessness research has broadened from animal research to human research. The first person to do significant human research was Hiroto (1974). In these experiments humans showed the same characteristics as the animals, i.e., lack of effort and the presence of passivity in the face of a task that could have been learned successfully. However, as the research was reproduced and others began to experiment, several questions began to surface. To quote Petter-son and Seligman (1984), "Sometimes laboratory helplessness is general (e.g., Hiroto & Seligman, 1975), and sometimes it is circumscribed (e.g., Cole & Coyne)" p. 348. The theory, at the time, was inadequate to explain why some subjects did or did not exhibit helpless behavior.

At this point, Abramson, Seligman and Teasdale (1978) revised the theory. In human subjects it was hypothesized that humans learned to be helpless after failure by forming a cognitive deficit, or false belief, that effort does not produce effects, and that this cognitive

deficit is attained through three personality traits. These three traits are as follows: First, the person sees failure as a result of personality factors that are an internal part of the self. The failure is not seen as an external event, but rather as a personal failure. The idea is labeled "internal" by Abramson, Seligman and Teasdale (1978). The second trait is the person sees the cause of the failure spanning across time and not an isolated event. Abramson, Seligman and Teasdale (1978) calls this idea "stable." The third trait is that failure has a variety of outcomes and is not an isolated event. This idea is called "global." So, persons with a predisposition to viewing events in certain ways, i.e., internal, stable, and global, are susceptible to learned helplessness, and those who see the world oppositely, i.e., external, unstable, and specific, are not as susceptible to learned helplessness. This reformulated theory of human learned helplessness is where much of the present study and research is being done.

Many studies have found the reformulated learned helplessness theory useful in designing and implementing research. Luchow, Carowl and Kahn's (1985) study of EH and LD/EH children, Kennelly and Mount's study (1985) of achievement in the classroom and how children feel helpless in the face of non-contingent teacher reinforcement, and Bogginano and Barrett's (1985) study of motivations (external vs. internal) and children's success in schools have demonstrated the effect. In the laboratory, studies have been done to test the helplessness effect and its validity and how stable the results can be. Trice (1984) found that, "Given several training tasks the helplessness effect of experience with unsolvable problems will be more robust. However, it is suggested that, in further research, if a generalized phenomenon is desired,

a number of different skills be tapped with helpless training procedures" (p. 94). Eckleman and Dyck (1979) reported that learned helplessness is observable and also, that it is able to be observed as extinguishable by retraining.

As the present author reviewed the human studies literature, it soon became apparent that not all studies observed the learned helplessness effect. Kennelly, Dietz and Benson (1985), Ford and Neale (1985), Stegman and McReynolds (1978) all challenged the learned helplessness effect. Also, many studies found unstable results, such as Zautra, Guenther and Chartier (1985). From the literature, the present author identified one variable that will be the basis for one of this study's hypothesis. This author found that the attributes hypothesized by Abramson, Seligman and Teasdale (1978), i.e., stability, internality, and globality, were generally measured by the Rotter Internal-External Locus of Control Test, the Attribution Style Questionnaire (ASQ), researcher-made questionnaires or measurement devices, the Eysenck Personality Inventory, or the 16 Personality Factor Questionnaire (16PF).

Reviewing these instruments as to their validity has brought these results: In the studies using researcher-made tests the present author counted only two studies that had a pilot conducted on the device listed in the study as a measure of internality-externality. Without a pilot reported to test the validity of these researcher-made instruments, this author cannot assume the instruments were valid. Likewise, these instruments themselves, as they were reported in the studies, were of the pre-experimental or post-experimental self-report design. As for the post-experimental self-report design, Nisbett and Wilson (1977) pointed out rather plainly, these retrospective self-reports are highly inaccurate.

From the review of the Eysenck Personality Inventory printed in Buros (1978):

It seems fair to say that, on the level of self-report, the support for, in some sense, a unitary sociability impulsiveness dimension is not especially strong; and more positive evidence is needed from other data sources before Eysenck's particular extroversion concept can be considered established. (p. 803)

From Bloxom's (1978) review of the 16PF in the Mental Measurements Yearbook, "There is good reason to question the adequacy with which most scales of the five 16PF forms sample the content domains pertinent to the constructs they are designed to measure" (p. 1078). Also, states Buros (1978), "The 16PF should not be used for research or applied work unless precautions are taken....scales B, M, and Q2 should not be used" (p. 1078).

Concerning the ASQ, Zautra, Guenther and Chartier (1985) conducted a study to validate the ASQ against other established criterion and found, "On the basis of these findings it is doubtful the ASQ is measuring what it purports to measure" (p. 537). The Mental Measurements Yearbook did not contain a review of the ASQ.

In Lefcourt's (1966) review of locus of control, Rotter's concepts were carefully examined and reviewed. The review pointed out that Rotter defined internal and external locus of control the following ways: Internal locus of control was defined as the view that an individual can control his or her environment; external locus of control is defined as others or the environment controlling the individual. The individual with an external orientation believed it must conform to others' ideas about it, whereas internally oriented individuals

seek internal validation for actions. The Rotter Internal-External Locus of Control Test is designed to measure these concepts. Several difficulties have shown up in this instrument. First, the test must deal with the problem that, internality as defined by Rotter, is culturally a trait viewed positively, i.e., "I am in control. I am self-motivated and self-accepting," and that externality, as defined by Rotter, is negatively reinforced (i.e., "I am controlled by others. I must conform to you or you will not like me"). Given Campbell and Stanley's (1963) concept of positive self-presentation, the test's format lends itself to subject dishonesty. In this vein, Joe (1971) found:

To be a valid instrument, the I-E scales (internal-external) must be modified to distinguish those aspects of a person's world view which indicate a personality trait and those which reflect societal norms. Until this can be done, serious problems are apparently posed for investigators using the I-E scales. (p. 62)

Given this understanding, the research by Weiner and Kukla (1970), finding that achievement and motivation are highly correlated, shows good use of the Rotter. Kukla (1972) found that high-achieving students scored high in internality and low achievers are not correlated with I-E scales. Battle and Rotter (1963) found that lower class blacks were significantly more external than middle class blacks; these can all be seen as using the Rotter's test in a useful and productive way; that is, measuring social norms.

In the reformulated learned helplessness theory, however, Abramson (1978) stated that persons are susceptible to learned helplessness because of a personality trait where they see events as stable, internal and global. Given this, the Rotter's test shows poor construct validity to test the hypothesis.

Abramson (1978) and Hiroto (1974) have set the procedures for testing the learned helplessness hypothesis on human subjects. In the review of the literature, this author found the methodology for testing learned helplessness very consistent. The experimenter will take a sample and put that group of subjects through a failure experience where effort does not produce results. Then, the experimenter will put the group in a situation where success is possible by effort. The subjects are, then, measured by some device.

This author followed the procedures used in the previous studies, however, the author used a different device to measure the subjects. Given the report on validity that has been reported in this paper, this author saw reason to try a different instrument to measure the traits hypothesized by Abramson. The author used the Myers-Briggs Type Indicator (MBTI). The review of the MBTI in Buros is favorable, and the manual reports acceptable validity and reliability information. Given these data, I propose the following hypothesis: That there will be differences in the number right on a test given and that those differences will be between groups who experience different amounts of non-contingent failure stimuli; non-contingent referring to situations where the subject's efforts will not produce the effects on the task assigned.

The second hypothesis I will test is: There will be a correlation between the number right on a test given after a learned helplessness style event and the traits found on the MBTI scales measuring Extroversion and Introversion and the scales measuring Judgmental and Perceiving.

For this paper, extroversion is defined as the overall personality trait identified in the MBTI of a person's tendency to see himself or

herself, and assessing reality in terms of criteria that are personally contained. Judgmental is defined as a person seeing within himself or herself the need to structure reality into patterns, and being able to see concrete units for decisions setting limits to reality. Perceiving is defined as a person seeing himself or herself as needing to structure reality loosely, with their perception of reality being in a process of change.

CHAPTER 2

METHOD

Sample

A sample was taken from Emporia State University by asking for volunteers. The 48 volunteers consisted of 35 women and 13 men. The students were all in classes in the Division of Psychology and Special Education of Emporia State University. The sample consisted of 20 upper division students, 27 freshmen, and one person who did not indicate classification. The age range was from 18 years to 45 years. Mean age was not determined.

Instruments

All volunteers were first given a Myers-Briggs Type Indicator Test, the test was group administered and took about 30 minutes to administer. Each test was given a number randomly assigned from a joint pool of three sets of numbers ranging from A1 to A16, B1 to B16, and C1 to C16. After all the MBTI's were administered, the subjects went on to the six-task test. The subjects were given a test booklet with the same number as that on the MBTI. The subjects were allowed to sit anywhere in the room and told to make themselves comfortable. The tests given to the subjects were a series of six (6) tasks in booklet form. The tasks are to (1) draw a person and a house from a set of designs, (2) to count and sum a series of dominos, (3) unscramble words, (4) complete a progression of designs, (5) add and sum numbers, and finally, (6) to unscramble a set of words. Each task was separated by colored paper. On the colored sheets of paper and the cover sheet was printed in large 2" letters,

"Do not open or turn this page until instructed to. Thank you." Each colored sheet separated one of the six (6) tasks on the test. These tasks consisted of items specifically drawn from sources Browner, Healy, Lowe, and Shomberg (1928); Bandreth (1984); Auquarde (1984), and Oetting and Thornton (1968) as tasks that can be solved by persons of average and above intelligence. This author piloted the tasks on persons from the same population as the experimental subjects and found the tasks to be solvable.

Procedure

Each subject in the experiment was given a test booklet at the door and was asked not to open the booklet. After the subjects were seated and comfortable, the tester said, "You have been given a test booklet that has several tasks. The tasks are not a test of I.Q. or ability, they only measure the actual task itself. You will be given five minutes to complete each task, do not turn the colored sheets until you are told to. I will give you instructions on how to do the first task and then I will punch the time clock. You will do the tasks between the cover sheet and the first colored sheet, then stop. You will be given the full five minutes and no more; you are not allowed to be given any assistance in solving the problems. You are asked to give each task your fullest effort. Are there any questions?"

The tester answered any questions. The tester then said, "On the first task you are given sets of shapes and figures. On each page is one set of these figures and shapes. From the material on the page and using no other figures or shapes than those found on the page, please construct a house and a person. You may use each figure once and once only; you are asked to use all figures and shapes. The figures and shapes are

numbered so you may tell when you have used them; however, you need not number the figures or shapes in your completed drawings of the house and person. There are six sheets in the task, please try to do all six drawings, then stop. Do not turn the colored sheet. You have five minutes to do all six sheets. If you complete them before the time limit, please wait quietly for the time to expire. You may begin."

After the five minutes are up, the tester said, "Stop." Then the tester said, "On the next task you will find on each sheet a square. Each square will consist of drawings representing dominos. You are asked to count all of the dots on the dominos vertically and horizontally for each row in the sides of the squares, so that each line at the side of each row around the square has the correct sum of the dots for that row written in. There are six sheets with one square on each sheet, please do all six sheets and then stop, do not turn the colored sheet. You will have five minutes to do all six sheets. If you finish before the time limit please wait quietly. You may begin."

At the end of five minutes the tester said, "Stop." The tester then said, "On the next test you will find a list of letters on each sheet. These letters are scrambled words. Each word has five letters, you are asked to go down each list and unscramble the words. There are six pages on this task, please do all six pages and then stop. Do not turn the colored sheet. You will be given five minutes to do all six sheets. If you complete before the time limit, please sit quietly. You may begin."

At the end of five minutes the tester said, "Stop." The tester then said, "On the next task you will find on each sheet a box containing figures. The figures represent a progression. You are asked to decide

what figure will complete the progression from the figures given you at the bottom of the page. You may circle your answer. There are six pages on this task, please do all six pages and then stop. Do not turn the colored sheet. You will be given five minutes to do all six sheets. If you complete before the time limit, please sit quietly. You may begin."

At the end of five minutes the tester said, "Stop." The tester then said, "On the next task you will find on each sheet a square consisting of numbers. You are asked to add each line of the square vertically and horizontally for each line in the square. You will write your sums on the lines provided at the sides of the squares, so that each line at the side of each row around the square has the correct sum of the numbers written in. There are six sheets with one square on each sheet, please do all six sheets and then stop, do not turn the colored sheet. You will have five minutes to do all six sheets. If you finish before the time limit, please wait quietly. You may begin."

At the end of five minutes the tester said, "Stop." The tester then said, "On the next task you will find on each sheet a list of letters. These letters are scrambled words. Each word has five letters, and you are asked to go down each list and unscramble the words. There are six pages on this task, please do all six sheets. If you complete the task before the time limit, please wait quietly. You may begin."

After all these tasks were completed, the volunteers were thanked by the tester and excused from the room. This concluded the testing phase of the experiment.

The tests are grouped into three sections. The A1 to A16 tests were designed so that these instructions given by the tester will not enable the subjects to complete the tasks successfully on the first three

of the six tasks. This is accomplished by the tasks on the sheets being structured so that the subject, following the instructions, will not find a correct solution. The instructions, therefore, are non-contingent (i.e., effort will not effect results) in these first three tasks. On the first task, the figures given will not be appropriate to form a house and a person. On the second task, the dominos are structured so that when one counts the row, all the rows add up to a different sum (i.e., this cannot be accomplished in the allowed time limit). On the word scramble task, the words are scrambled at random (i.e., there is no consistent pattern in the words). The second three tasks are contingent (i.e., effort will produce results). The progressions have a correct answer to complete them. The number squares, when added, will all equal the same sum, so when the subject adds one row of the squares and the subject adds the other rows, they are all the same result. Therefore, for all the squares, one row added will give you answers for that square. Each square on each sheet is different from each other in sum, but the same in construction. In the scrambled word task, all words are scrambled in the same mathematical progression (34125).

In the tests marked B1 to B16, the first two tasks are non-contingent (i.e., same as A1 to A16) and the next four are contingent. So the only change is task three, the word scramble. All the words are now in mathematical progression (53412).

On the tasks marked C1 to C16, the first task is non-contingent (i.e., the same as B1 to B16) and the next five are contingent. So the change here is that task two, the dominos, will all equal the same amount on each line of each square, so that when one counts each line they will all equal the same amount around the square. Each square is different

in sum, but the same in construction. This method is used to produce the differing degrees of failure.

In review of the procedure section, threats to validity shall be addressed. The independent variables are Introversion and Extroversion; Judgmental and Perceiving; and levels of helplessness training induced. The questions that have surfaced in researching this experiment are, first, are there subject variations? By random selection with the sample of groups it is hypothesized that there will be control for subject variations. The next question has been: Are the levels of helplessness training in the task assigned sufficient to produce helplessness? And, if so, why not more or less stimulus? To answer these questions, this author, in reviewing the literature found many different amounts of helplessness training. However, one point is clear, Seligman (1974) pointed out, "One of the properties of Learned Helplessness is that it exists in time and can be acquired and lost. It also seems to be preventable by intensive retraining, but it has a high retention and it is difficult to retrain dogs" (p. 105). This author does not wish to produce too robust a helpless effect for ethical reasons. Likewise, to give the experiment the best possible chance for a valid measure it was designed based on the best clinical judgment and literature reviewed, and it is hypothesized that, by balancing the helpless effect (i.e., three tasks) with the non-helpless tasks (i.e., three tasks) that the most helpless group would be given a mathematical probability exactly equal in being helpless or non-helpless. By limiting the helpless effect, this study does run the risk of finding the null, but ethical and practical considerations of time and expense to necessitate this design. History is controlled by randomization within the sample. There is a possibility of differing efforts being made by the subjects on the six-task test.

However, positive self-presentation of the subject wanting to do good on a "cognitive" test as well as the nature of what is being measured (i.e., lack of effort being caused by helplessness) should only heighten the experiment as opposed to nulling the effect.

CHAPTER 3

RESULTS

To test the first hypothesis that there will be a difference among groups that represent levels of helplessness, A being more helpless, B being the next, and C being the least helpless, a one-way ANOVA was run on the test scores. The results were as follows:

TABLE 1

ANOVA COMPARING THE MEAN SCORES ON THE SIX-TASK TEST
SECOND OR IDENTICAL SECTION.

Group A	Group B	Group C	<u>aMS</u>	<u>ERROR MS</u>	<u>F</u>	<u>p</u>
Mean score 40.44	Mean score 56.38	Mean score 51.38	1075.64	622.59	1.728	.187

The ANOVA came out as statistically nonsignificant. However, this author noted the large MS ERROR on the analysis and the results of the ANOVA. A check of the range of scores obtained on the tasks being scored (i.e., second or equivalent half of the six-task test), the range was as follows: From group A the range was 10 - 96; on group B the range was 3 - 108; and group C had a range of 13 to 120. A possibility of deviant response sets was entertained. The hypothesis was that if the highest and lowest scores were dropped from each group then the wide variance of scores would be reduced, reducing the MS ERROR on the ANOVA without changing the means of the group significantly. Then, when the one-way ANOVA was re-run, the variability of the remaining scores could be checked for statistical significance. This was done to see if the possibility of deviant response sets could have made the range of scores

so great as to make the statistical device used, the one-way ANOVA less effective in picking up the differences in the mean scores.

The results of this test were as follows: The means of the scores on the second half or identical half of the six-task test did remain very much the same. The mean of group A changes by 1.8; in group B the change was .12; and in group C the change was 2.11. The range of the groups were changed from group A being 10 - 96, now it was 16 - 73. Group B changed from 3 - 108 to 27 - 86, and group C changed from 13 - 120 to 26 - 100. The ANOVA was re-run and the results are in Table 2:

TABLE 2

ANOVA COMPARING THE MEAN SCORES ON THE SIX-TASK TEST
SECOND OR IDENTICAL SECTION AFTER MANIPULATION OF DATA.

Group A	Group B	Group C	<u>aMS</u>	<u>ERROR MS</u>	<u>F</u>	<u>p</u>
Mean score 38.64	Mean score 56.50	Mean score 49.64	1136.09	313.38	3.625	.035

The test was statistically significant at the .035 level. The MS ERROR was changed from 622.59 to 313.38, a change of 309.21 as a result of dropping the scores that might have been deviant response sets.

To further explore the results of the experiment, a correlation coefficient was run on the scores on the second half of the six-task test and the factors identified by the Myers-Briggs Type Indicator. For the factor identified on the Myers-Briggs Type Indicator as thinking vs. feeling types of persons the results were: Group A, $\underline{r} = .49$; group B, $\underline{r} = -.63$; and group C, $\underline{r} = .04$. These scores indicate the factor identified on the MBTI as discriminating persons between those that primarily use their feelings to interpret reality and those that use their

thinking processes to interpret reality does not correlate consistently with the scores they earned on the second half of the six-task test.

For the factor identified on the Myers-Briggs Type Indicator as Sensing vs. Intuitive the results were: Group A, $\underline{r} = .20$; group B, $\underline{r} = .04$; and group C $\underline{r} = .09$. These correlations are not statistically significant, however, these correlations are all in the same direction, that is, they all are correlations to the sensing type of persons.

For the factors identified on the Myers-Briggs as extroversion vs. introversion which was one of the factors identified by the second hypothesis of this paper: That there would be a relationship between scores on a learned helplessness task and the factors identified on the Myers-Briggs Type Indicator as Introversion - Extroversion and Perceiving - Judging, and results of that interaction are as follows: Group A, $\underline{r} = .19$; group B, $\underline{r} = .37$; and group C, $\underline{r} = .25$ for the correlation between scores on the second half of the six-task test and the factors of extroversion and introversion. The correlations were not statistically significant, although they were in the direction hypothesized, that is introverted persons scored lower on the tasks than did extroverts but not significantly.

For the perceiving vs. judging scale the correlations were: Group A, $\underline{r} = -.14$; group B, $\underline{r} = -.17$ and group C, $\underline{r} = -.21$. The correlations were not statistically significant, although they were in the hypothesized direction of perceiving scoring better than judging.

Another hypothesis explored was that intellectual factors could be at work causing the variability in scores. Since no valid I.Q. was obtained on the subject, the experimenter broke down class standing (i.e., freshman, sophomore, junior, senior, or graduate student) to see

if there were differences between scores on the six-task and how far a person has advanced in their college career. The results are as follows. For upper division students in group A, $\underline{n} = 8$ with a mean of 37.31, standard deviation of 17.16. For freshmen in group A, $\underline{n} = 6$ with a mean of 50.83, standard deviation of 22.22. For group B upper division students $\underline{n} = 6$ with a mean of 62.76, and a standard deviation of 31.39; for freshmen of group B the $\underline{n} = 9$, a mean of 54, and standard deviation of 18.87. For group C, the upper division persons scored on the six-task test with a $\underline{n} = 5$, mean of 76, and a standard deviation of 29.37; and freshmen of group C were $\underline{n} = 11$, mean of 40.17, and a standard deviation of 15.66. From these data, an intellectual function or class standing function cannot be ruled out as nonsignificant, nor can it be proven as significant.

CHAPTER 4

CONCLUSIONS

This author finds that there is little support in this study for Abramson's theory of learned helplessness. The correlation coefficients show a tendency to run consistently in the direction hypothesized by Abramson; however, these were very weak. The learned helplessness task did not cause variations between groups. It is recommended for future research that a possibility of gaining a clearer picture of the differences that were found on the learned helplessness style event that the B series of tests be dropped. The B series of tests were those for which the first two tasks were non-contingent, (i.e., effort does not produce results), and the third of the training tasks was contingent, (i.e., effort does produce results). This series obtained scores very similar to those found on the C series of tests. This means the tests were likewise very similar. Given this result, to clearly discriminate between the most helpless and least helpless groups and so as not to run a greater number of subjects in a lesser helpless type task than you run in a most helpless type of condition, it is recommended for future research using this instrument, the B series of tests be eliminated. Overall, the Myers-Briggs Type Indicator did not correlate with the learned helplessness task. The factors involved that causes the variations in the groups could not be identified by the Myers-Briggs, nor could they be explained by the class standing. As a result, this study concludes that further studies should be done to try to identify why persons do not complete a task that is able to be completed after they are subjected to tasks

that are not completable. The experimenter observed while grading the helpless training task that many of the lower scores were made because of responses that were deviant to the instructions given. It is not known why the persons' responses were deviant, however, a strong hypothesis is that the person did not intend to or chose not to follow instructions given. If this were the case, that there was an unwillingness to hear, or to understand, or to follow the instructions, then much of the variation in scores could be accounted for and a fruitful line of inquiry could be made to explore why the person did not follow the instructions. This is only a hypothesis that this author would suggest to future experimenters who wish to pursue the reason for the variations that were found in this experiment.

Overall, this experiment did not support the second hypothesis that there was a relationship between the factors on the Myers-Briggs Type Indicator and the scores on a learned helplessness type style event. This study, likewise, does not support the hypothesis that there are differences between groups after a learned helplessness style event. This study cannot say what caused the differences that were existent and would encourage further research in this area.

REFERENCES

- Abramson, L., Seligman, P., & Teasdale, J. (1978). Learned helplessness in humans: Critique and reformation. Journal of Abnormal Psychology, 87, 49-74.
- Auquarde, J. (1984). The Oxford guide to word games. New York: Oxford University Press.
- Battle, E., & Rotter, J. (1963). Childrens feelings of personal control as related to social class and ethnic group. Journal of Personality, 31, 482-490.
- Bandreth, G. (1984). Number play. New York: Rawson Associates.
- Brewin, C. (1985). Depression and casual attributions: What are their relations? Psychological Bulletin, 98, 297-309.
- Bronner, A., Healy, W., Lowe, G., & Shomberg, M. (1928). A manual of individual mental tests and testing. Boston: Little and Brown Co.
- Bogginano, A., & Barrett, M. (1985). Performance and motivational deficits of helplessness: The role of motivational orientations. Journal of Personality and Social Psychology, 49, 1953-1963.
- Buros, O. (1978). The eighth mental measurements yearbook. Lincoln, NB: University of Nebraska Press.
- Buros, O., Mitchell, M. (Ed.). (1985). The ninth mental measurements yearbook. Lincoln, NB: University of Nebraska Press.
- Campbell, D., & Stanley, J. (1963). Experimental and quasi-experimental designs for research. Chicago, IL: Rand McNally.
- Cohen, R., & Tennen, H. (1985). Self-punishment in learned helplessness and depression. Journal of Social and Clinical Psychology, 3, 82-96.

- Crandall, V., & Kathovsky, W. (1962). Motivational and ability determinants of young childrens intellectual achievement behavior. Child Development, 33, 643-661.
- Crandall, U., & Kathovsky, W. (1965). Childrens beliefs in their own control of reinforcement in intellectual-achievement situations. Child Development, 36, 91-109.
- Donovan, W., & Leavitt, L. (1985). Simulating conditions of learned helplessness: The effects of interventions and attributions. Child Development, 56, 594-603.
- Eckleman, J., & Dyck, D. (1979). Task and setting related cues in immunization against learned helplessness. American Journal of Psychology, 92, 653-667.
- Ford, D., & Neale, R. (1985). Learned helplessness and judgments of control. Journal of Personality and Social Psychology, 49, 358-371.
- Friedman, R., & Katz, M. (1974). The Psychology of depression contemporary theory and research. Washington, DC: U. H. Winston and Sons.
- Hiroto, D. (1974). Locus of control and helplessness. Journal of Experimental Psychology, 102, 187-193.
- Joe, V. (1971). Review of the internal-external control construct as a personality variable. Psychological Reports, 28, 619-640.
- Kennelly, K., Dietz, D., & Benson, P. (1985). Reinforcement schedules, effort vs. ability attributions and persistence. Psychology in the Schools, 22, 459-464.
- Kennelly, K., & Mount, S. (1985). Perceived contingency of reinforcements, helplessness, locus of control and academic performance. Psychology in the Schools, 22, 465-469.

- Kula, A. (1972). Attributional determinants of achievement and related behavior. Journal of Personality and Social Psychology, 21, 166-174.
- Lefcourt, H. (1966). Internal vs. external control of reinforcement: A review. Psychological Bulletin, 4, 206-220.
- * Luchow, H., Crowl, T., & Kahn, J. (1985). Learned helplessness: Perceived effects of ability and effort on academic performance among EH and LD/EH children. Journal of Learning Disabilities, 18, 470-474.
- * Maier, S., & Seligman, M. (1976). Learned helplessness: Theory and evidence. Journal of Experimental Psychology: General, 105, 3-46.
- Nisbett, R., & Wilson, T. (1977). Telling more than we can know: Verbal reports on mental processes. Psychological Review, 84, 231-259.
- Nisbett, R., & Wilson, T. (1977). The halo effect: Evidence for unconscious alteration of judgments. Journal of Personality and Social Psychology, 35, 250-256.
- Oetting, E., & Thorton, G. (1968). Exercise in psychological testing. New York: Harper & Row.
- Overmier, B., & Seligman, M. (1967). Effects of inescapable shock upon subsequent escape and avoidance responding. Journal of Comparative & Physiological Psychology, 63, 28-33.
- Pavlov, I. (1927). Conditional reflexes: An investigation of the physiological activity of the cerebral cortex. Oxford: Oxford Press.
- Petterson, C., & Seligman, M. (1984). Casual explanations as a risk factor for depression: Theory and evidence. Psychological Review, 91, 347-374.

- Richter, C. (1956). On the phenomenon of sudden death in animals and man. Psychosomatic Medicine, 19, 191-198.
- Seligman, M., & Maier, S. (1967). Failure to escape traumatic shock. Journal of Experimental Psychology, 74, 1-9.
- Stegman, R., & McReynolds, W. (1978). Learned helplessness, learned hopefulness, and learned obsessiveness: Effects of varying contingencies of escape responding. Psychological Reports, 43, 795-801.
- Trice, A. (1984). Number of types of training tasks and the generality of the learned helplessness effect. Journal of General Psychology, 110, 283-284.
- Trice, A., & Wood-Shuman, S. (1983). Locus of control and performance on a perceptual task under maximal or normative instructions. Perception and Motor Skills, 56, 830-835.
- Weiner, B., & Kukla, A. (1970). An attributional analysis of achievement motivation. Journal of Personality and Social Psychology, 15, 1-20.
- Winefield, A., Barnett, A., & Tiggeman, M. (1985). Learned helplessness deficits: Uncontrollable outcomes or perceived failure? Motivation and Emotion, 9, 185-195.
- Zautra, A., Guenther, R., & Chartier, G. (1985). Attributions for real and hypothetical events: Their relation to self-esteem and depression. Journal of Abnormal Psychology 94, 530-540.