A STUDY OF THE EFFECTS OF PRAISE AND BLAME
ON THE MOTOR PERFORMANCE OF COLLEGE FRESHMEN

A Thesis Presented for the
Degree of Master of Arts

by

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1946

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CHAPTER I

STATEMENT OF THE PROBLEM

Praise and blame are common tools used daily by both children and adults in the attempt to influence others to exert further effort in achieving a particular goal or attitude. The use of these incentives is based on the assumption that people are affected by the opinions of others and that this has a significant effect on their behavior.

Parents and teachers have used one or the other, or both types of incentives according to their own personalities, personal theories, and sometimes on the empirical evidence as to the results achieved by these stimuli. There have been attempts made in recent years to determine experimentally the effectiveness of these incentives in the motivation of behavior. Subjects of all ages have been used in many different types of situations. Results have been conflicting and indecisive for a variety of reasons. The fact that each experiment differed from the others in some, and usually in many respects, resulted in a change in the total situation, and consequently in different results.

Each situation changes with the type of subjects used, considering age, sex, personality, intelligence and character; the situation itself, whether it be social, educational or requiring motor skill; the stimulus offered, with regard to its quality, intensity and duration; and the person or thing doing the motivating. Although these studies indicate that no general conclusions can be drawn as to the use of praise and blame, it is possible to determine their effects under more specific conditions, provided the experiments are well designed, controlled and analyzed.
Too frequently, however, these studies cannot be accepted as valid evidence. They are sometimes based on too few samples or the subjects are occasionally made without statistical substantiation or are drawn from specific situations and without sufficient evidence for broad interpretation. Some have failed in the statistical treatment of the data, and some others have not adequately defined and isolated the incentive as a single, specific variable. For example, some of these experiments were conducted in groups in which such factors as group rivalry, social recognition, avoidance of shame or inferiority in being compared with others were not taken into account. Under such conditions different incentives become interrelated and the results are the outcome of a complex situation of which the given incentive was only a part. Another variable which is difficult to control is the reaction of different subjects to the same form of praise or blame. Acceptance, critical analysis or resentment may be aroused in different subjects after having each been given the same incentive.

However, despite all these difficulties, it is necessary to pursue further study in understanding how and why persons are motivated, in order that predictions can be made, and therefore in establishing more effective training and teaching methods, as well as a partial basis upon which psychotherapy may be founded.

The present study was an attempt at observing and measuring the effects of praise and blame on the motor performance of a random sample of college freshmen, without the influence of group pressure and without the subject having knowledge of his actual performance.
CHAPTER II

REVIEW OF THE LITERATURE

Various aspects and age groups have been observed and studied in the problem of praise and blame. The experiments reviewed here are grouped according to the age group of the subject - college students, high-school students and younger children.

Gates and Rissland investigated the effect of encouragement and discouragement on the performance of seventy-four college students who were divided into three groups of praise, reproof and control, and who were given individually two trials on a test of motor coordination and a color-naming test. There was very slight difference in average improvement in the discouraged and encouraged groups on both tests, but there was greater difference in favor of encouragement or discouragement rather than no incentive at all. The effect of the incentives was not constant for the two tests -- fifty per cent improved in one test and not in the other.

In a group of college undergraduate women, Blankenship found that the effects of praise and reproof were negligible in an attempt at increasing their memory span. Wood used thirty upper-class college students who were divided into three groups -- approbated, reproved and control -- and were all given six nonsense syllables to memorize during fifteen second exposures. Each group received its respective treatment, after which they were all given another six nonsense syllables. He concluded that approbation and reproof were of practically equal value as incentives for learning among college students.
Using the Tolman Punchboard Maze and the stylus maze on fifty undergraduates, Silsick and Lapha found that the sounding of a bell accompanying right responses is a more effective condition for learning than the sounding of a bell accompanying wrong responses. Sears found that failure in contrast to success produced a progressive increment in the efficiency with which a competitive motor task was performed, and also that failure, in contrast to success, adversely affected the efficiency of a temporally contiguous task carried out under conditions providing external stimulation similar to that associated with the task at which success or failure occurred.

Johanson observed the change in reaction time of three subjects over a period of time under three kinds of condition. The first was without any incentive, the second with the knowledge of the speed of the subject's previous response and the third was with punishment in the form of an electric shock. His results showed that the factors of positive and negative incentive caused the state of keener attention to be maintained, the actual saving, though temporary, by knowledge of results being six per cent and by punishment fifteen per cent of the normal time.

Judd found that the lack of motivation in withholding knowledge of results from subjects resulted in absence of improvement on subsequent performance. Rexroad performed an experiment using eighty college students who were divided into two groups. One group learned a maze by simple trial and error without punishment while the other group was punished by electric shock for errors made in the maze. As a result of the electric shock, there was a fifty per cent decrease in time, a thirty-four per cent increase in time per trial and a thirty per cent decrease in the number of errors.
Eaton studied the effect of various stimuli on the emotional status of the individual as expressed through changes in steadiness. Forty-five subjects -- twenty-three college men in freshman basketball and twenty-two college women in swimming -- were given steadiness tests on a plate and stylus tester, during which various degrees of physical exercise stimuli, praise stimuli and reproof stimuli were presented. He found that praise acted on the emotional status of women to increase their steadiness, while for men it decreased their steadiness. Reproof increased the steadiness of men but decreased the steadiness of women. These findings are in accord with observations made in athletics by Griffith, who has stated that he considers praise to be the more "dangerous" because of its greater emotional stimulation, which is detrimental to the performance of the athlete, although Hurlock writes that Scott reported an experiment of a college coach who found that encouragement caused athletes to increase their exertion up to fifty per cent.

Eaton also quotes the investigation done by Kitson of the work performed by forty journeymen printers who were given a bonus for work completed in excess of the average amount turned out daily. It was found that their average daily output for the group was improved seventy-eight per cent.

Laird showed the changes in motor control of eight fraternity pledges who were given a series of motor tests under both normal conditions and with "razzing" by the active members. Steadiness was diminished, coordination was decreased and rate of fatigue was increased under razzing in all the subjects. In another study done by Laird with college students, he concluded from students' introspective reports that commendation stimulated students to harder work than reprimand.
Folano and Axelrod recognized the importance of the personality in their attempt to show the effect of praise and blame on the performance of introverts and extroverts. They point out that one cannot assume that all individuals of the same age and intelligence respond alike to the "same" incentive. Blame proved to be a more effective motivator than praise or indifference for both groups, but the introverts who were blamed made a significant increase over the performance of the control group after both the first and second applications of blame, whereas extroverts had to be blamed twice before their increase over the performance of the control group was significant.

Briggs gives the result of sarcasm on 152 high school seniors. Sixty-four per cent did worse work when sarcasm was used in the presence of other people, 40.7 per cent when it was used in private, 17.9 per cent when it was directed toward other students. In another of his experiments in a junior-high school, reprimand and commendation followed tests given, and eighty-seven per cent of the pupils made better scores after commendation and encouragement. In a study similar to the one he did with college students, Laird tried to determine how the high-school student responds to different incentives to work. His findings indicated that reprimands, ridicule, sarcasm, low grades and additional assignments reduce the seriousness of the students' work rather than increasing it. All the positive incentives resulted in more serious work.

Many experiments have been performed with school children as subjects. Gilchrist used two school classes, praising one and reproving the other. The praised group improved by seventy-nine per cent while the latter made a lower score than on the original test. Chapman and
Feder wished to show the effect of external incentives on the improvement of forty-eight boys and girls in the 5A to whom he gave three tests over a period of ten days. Half were given no incentive besides the number of errors made on the previous day while graphic presentation and stars were given to those who scored in the upper fifty per cent of the class on the performance of the previous day and to those generally in the upper fifty per cent of the class. Although the groups were not equated, there was a trend showing greater improvement in children's school work with external incentives.

In an investigation of the effect of different combinations of incentives on the motor performance of 213 children from two to four years of age, Chase found that some motivation, either positive or negative, was better than no motivation for the performance of a task. In a group of 408 grade-school pupils who were divided into equivalent groups of praise, blame and control on the basis of I.Q., chronological age and the number of white and Negro children, Hurlock administered a second test one week after the first test and incentives had been given. She found that praise and reproof were of equal value in motivating school work and that although older children responded more to either incentive, praise was slightly more effective for older children and reproof for younger ones. Boys did better following both praise and reproof, but praise was found to bring about better work in girls and reproof in boys. Her results showed that some incentive was more essential for superior than for inferior children if their work was to be kept up to the maximum of their ability. Superior children were greatly influenced by both incentives and the inferior children much less so. Praise was better for children of
inferior intelligence and reproof for children of superior intelligence. Although there were only slight differences, Negro children reacted more favorably to praise and white children to reproof. Following this study, Hurlock attempted to evaluate the incentives used in school work. Using 106 children from the fourth and sixth grades, she wanted to find whether children who constantly received praise for their work showed more improvement from day to day than those who were reproved, ignored but in the same room or used as a control and in a different room. The children were tested over a period of five days, each group receiving consistent treatment. The greatest amount of improvement at the end of the test series was found in the group which had been encouraged and urged to do better. Decidedly less improvement was found in the reproved group, still less in the ignored and none at all in the control. Praise proved to be more effective regardless of age, sex, initial ability or accuracy than reproof or ignoring. Reproof, when first used, seemed to be about equal in value to praise, but with continued use its effectiveness sharply declined. Ignoring some children while others in the group received incentives, had a detrimental effect upon their work, for the longer they were ignored, the less improvement did they show, even in spite of the opportunity to improve from practice.

This same author demonstrated the effects of incentives upon the constancy of the I.Q. by giving alternate forms of a group intelligence test to 273 children from the fifth and eighth grades before and after the conditions of praise, reproof or control. She found that praise and reproof raised the average I.Q. seven points, while the control group raised its I.Q. less than one point, a gain which was attributed to
practice. In another article by Hurlock, she describes a study done by Kirby in which he encouraged school children to improve their scores and surpass previous records, as displayed on individual charts. He recorded median gains of forty-eight per cent in addition problems and seventy-nine per cent in division. Hurlock also states that Binet and Vasehie found that appealing to children to break their records always resulted in improvement.

In the effort to study the development of the stimulating power of incentive situations, Leuba attempted a technique which is similar to the psychophysical technique used in measuring sensory thresholds. The requirements for achieving a goal-object -- a bar of chocolate -- in a group of thirty-five school children were increased step by step from a minimum at which everyone received the chocolate to a maximum requiring an effort beyond that which anyone was willing, or perhaps able, to make in order to obtain the chocolate; then the requirements were gradually decreased from the maximum at which no one obtained the goal-object to the minimum at which everyone received it. The average of the maximum performance of the individual during the increasing and decreasing of the requirements was considered a measure of the extent to which he would exert himself rather than do without the chocolate. The task consisted of two-place multiplication problems of uniform difficulty which were given three times a week during ten-minute periods. A given number of problems had to be completed in the stated time, the number differing with the individual, depending upon his ability as indicated by his past performance. "The average chocolate performance index for the lowest quartile showed a gain of ninety-two per cent over their level
of work when incentives were absent; for the highest quartile the gain was thirty-two per cent; the average gain for the group as a whole was fifty-two per cent."

In a group of thirty-eight children in the fourth grade whose ages ranged from nine to thirteen, Warden and Cohen had their teacher administer tests in the classroom situation. The incentives for increasing speed and accuracy in adding columns of numbers were the promise of telling a story, playing games, having an Easter party, an hour of outside play, reproof and praise. Games were the best incentive for speed and accuracy and stories the least effective, the others having about equal effectiveness. For accuracy scores alone, praise and reproof were the best incentives.

Rosensweig was interested in discovering whether preferences in the repetition of successful and unsuccessful activities were a function of age and personality. A group of thirty-seven children, ranging in age from five to fourteen were given two jig-saw puzzles to complete, being allowed to be successful on one while failure was induced in the other. Of the thirty-seven, twenty preferred to repeat the successful, seventeen the unsuccessful puzzle. Those of the former group tended to be younger in C.A. and M.A. and had been assigned lower ratings for the trait of pride by their teachers.

Goodenough had 20 four and a half year old children trained for fifty days in throwing rings over a post set at a distance of four feet, ten inches. Her conclusion that emotional factors influenced success was drawn from the decidedly greater tendency for the children to throw beyond the mark in the case of those errors immediately following success,
which was attributed to the effect of the pleasurable emotion aroused by
success.

The effects of success and failure on 212 nine-year-old boys were
studied by Lantz, who found that the experience of success or failure
had an influence on the mental activity immediately following such an
experience. A successful experience raised the average scores on a
mental test and tended to increase average ratings on those traits and
attitudes that favor better personality adjustment. The experience of
failure, however, served as a depressant, significantly inhibiting the
expected test-retest increases in average score as well as tending to
decrease the average ratings on socially important traits.
CHAPTER III

SUBJECTS, APPARATUS AND PROCEDURE

In this experiment, the task was that of sighting a "gun" on a target. However, steadiness in holding the gun was eliminated as a factor as was the element of time. Steadiness of the head and eye-hand coordination seemed to be the factors determining success. The purpose of the experiment was to discover whether the external incentives of praise or blame would significantly modify this performance.

Subjects

The 160 subjects used for the experiment were college freshmen, taken from classes in elementary psychology. Entire classes were used, one student being tested at a time and each taking approximately fifteen minutes. Subjects were alternately given the incentives of praise or blame until there were fifty in each group, after which a control group of fifty was taken. Praised subjects constituted Group I, blamed subjects Group II, and control subjects Group III.

The subjects were all interested in taking part after their instructors had informed them that it was an opportunity for them to see a real psychological experiment in operation. They were not given any further information about the test, besides the fact that they would be told at the end of the quarter the purpose and results of the experiment.

Apparatus

An aiming apparatus was constructed and set up in a room in which the lighting could be controlled (See Figure I). A card (a) measuring
four by six inches had painted on it five black circles (each circle will hereafter be referred to as a target) each an inch and one-eighth in diameter and organized with four of them forming a rectangle with the fifth in the center. The card was mounted on side A of a steel plate (b) which could be manipulated by the subject to move up and down and back and forth by means of a system of springs and levers (c) above and handles (d) at its lower end.

The subject was seated on a stool (e) just behind and below the metal plate, so that, by sighting along a wooden barrel (or "gun") (f) which had both a rear sight (g) and a front sight (h), the reflection of the targets could be seen in a mirror ten and a half feet away. On the opposite side (side B) of the steel plate (see Figure II) was a three-sided metal frame (i) which duplicated in size and position the target card on the other side. Into this frame could be slipped mimeographed copies of similar target cards, except that these targets, instead of being solid black, had bull's eyes drawn within them (j). On the right handle was a key, or pushbutton (k), which, when pressed, completed an electrical circuit by a current being passed through a transformer (l) and to a solenoid coil plunger (m) with a sharp metal point which was held in a stationary position just behind the target cards.

When the subject moved the handles of the steel plate until he was satisfied with the position of the target, he pressed the key and the plunger struck the target card making a small hole in the paper. There were six rings on each target, graded in value from a score worth six for the center to one for the outer ring. Each person thus had a score on each target and the sum of these scores was his total score.
The gun was immovable, and when the steel plate was moved into the position in which the plunger was directly over the center of the middle target, the gun was aimed directly at the reflection of the middle target on side A of the steel plate.

A beaverboard shield (j) was set up in back of and over the head of the subject in order to set a limit for the distance of the subject's head from the gun and to prevent the subject from seeing his record as indicated by the plunger on the target card.

The room was entirely darkened except for a lamp which was suspended so that the light was shining directly on the targets on side A.

Procedure

The subjects were brought into the testing room one at a time and requested to sit on the stool, facing toward the mirror. The name and sex of each subject was noted by the experimenter, as well as the information as to whether the subject had had any previous experience in either shooting or aiming at a target. If the answer was in the affirmative, it was determined whether it had been a great deal of experience or just a moderate amount (there were returned veterans among the subjects and many of them had had much experience in military service).

E told S to look in the mirror and observe the five targets and then gave the following instructions:

"Here (pointing) is our gun. This is the rear sight and this is the front sight. In order to shoot a bull's eye, you have to line up your sights in this manner. On paper it would look like this when correctly sighted." (See Figure III) The diagram was shown to S and E continued, comparing the diagram with the gun sights and targets until it was clear
that S understood the correct way in which to sight. E then said, "The sights are lined up now so that they are correctly sighted for a bull's eye for the middle target. Will you look and see if you can see it just that way?" (E waits until S is able to do this.) "Now I would like you to sight the other four targets, one at a time, in the very same way.

But in order to do that, you will have to move the position of the targets. You can move their position by moving these handles either up or down or back and forth. (E demonstrates its movability.) Each time you have sighted a target so that you feel it will strike a bull's eye, you will press this key with your thumb, and that automatically makes a record of how you have done. I would like you to aim for them in this order: upper left, lower left, upper right, lower right. I will start you at the middle target and you aim for the other four in that order."

Three mimeographed target cards were used for each subject and were designated (a), (b) and (c). E slid (a) into the frame, and after setting the steel plate so that the gun was sighted for the middle target (this could be done by E's moving the steel plate so that the center of the middle target was directly in line with the plunger) S was allowed to sight and press the key for each of the four targets without any further comment from E.

After this had been done, E took out (a), slid (b) into the frame and said, "I would like you to do the same thing again," and to Groups I and II added, "And this time, after each shot I will tell you how you did." After each shot made by the subjects in Group I, E made the following remarks, the number of the remark corresponding to the number of the shot:
1. "That was very good -- keep it up."
2. "That shows good aiming."
3. "Excellent shooting."
4. "You're doing better than most people."

And to Group II were addressed these remarks:
1. "That wasn't very good."
2. "That was a rather poor shot."
3. "Not very good aiming."
4. "You didn't do so well."

E then substituted card (c) for (b) and said to all subjects, "Now I would like you to do the same thing once more, adding, for Groups I and II, "and this time I won't interrupt you at all."

After S had aimed and shot at these four targets, E told him that he was finished and thanked him for participating in the experiment.

The pre-test, which was the same for all subjects, will be referred to as Test I and the second part, which differed for the three groups, will be referred to as Test II. Since there were five targets on Test I and seven on Test II, scores on the two tests were equated by using average scores.
CHAPTER IV

EXPERIMENTAL RESULTS

Although the possible range of average scores was 0 to 6, the actual range obtained by the subjects on Test I was 0 to 5 and on Test II 0 to 5.14. The mean score on Test I was 1.63 and on Test II 1.22.

Before the effect of the incentives on the performance of subjects on Test II could be found, it was first necessary to determine whether the subjects could all be considered part of the same population or whether they would have to be treated separately, according to sex or the amount of their previous experience with aiming. The analysis of variance was used within Test I for this purpose. The null hypotheses was first established for sex, that the difference between the scores of males and females was due to chance. Extracting the error due to experience, the F ratio for sex was found to equal 5.66, which did not meet the standard of 6.61 set for the one per cent level of significance (see Table I). The null hypothesis, therefore could not be rejected, and for the purpose of this experiment it would be possible to consider both males and females as part of the same population. Since the F ratio was significant at the five per cent level, however, sex differences were not wholly a result of chance, but undoubtedly exercised some influence, although the amount is indeterminable. For this reason a male-female breakdown was made in Table II to investigate possible differences. Further experimentation, with a larger sample than was used here, would possibly give a more definite indication of the importance of sex in such an experiment.
The null hypothesis that the difference in scores for subjects with varying amounts of experience was due to chance was necessarily rejected, because, with the error for sex extracted, the F ratio for experience was 9.37, while the value at the one per cent level was 4.75, making the difference significant and showing that there are factors in experience which cannot be accounted for by chance.

The next step was to compare the differences in scores for the variables from Test I to Test II by means of the analysis of variance, in order to see any possible differences in effect which the incentives had on performance. Using this procedure, possible differences were investigated and examined in the following systematic breakdowns of the data: (1) males and females; (2) no experience, some experience, much experience; (3) praise, blame, control; (4) females-praise, females-blame, females-control, males-praise, males-blame, males-control; (5) females-no experience, females-some experience, males-no experience, males-some experience, males-much experience; (6) praise-no experience, praise-some experience, praise-much experience, blame-no experience, blame-some experience, blame-much experience, control-no experience, control-some experience, control-much experience; (7) no experience-females-praise, no experience Females-blame, no experience-females-control, some experience-females-praise, some experience-females-blame, some experience-females-control, no experience-males-praise, no experience-males-blame, no experience-males-control, some experience-males-praise, some experience-males-blame, some experience-males-control, much experience-males-praise, much experience-males-blame, much experience-males-control.

In none of these seven breakdowns were there found any reliably significant differences. As can be seen from Table II, for all the
categories except sex-treatment, sex-experience and experience-sex-treatment, the mean of the squares was smaller than the mean of the squares for error, and the F ratio was therefore not calculated for them. The remaining three categories, however, were not significant at the one per cent level and consequently their differences were not considered to be significant.

An attempt was made to determine whether the absence of any significant difference was a result of a possible instability or unreliability of the measuring instrument. A correlation was therefore found between the cumulative scores for various shots within Test I. The correlation for shots two and four, which were the two lower targets, was \( r_{24} = .52 \) and for two and five, an upper and a lower target, was \( r_{25} = .20 \). These were sufficiently high correlations to be able to say that the instrument was fairly stable.

In order to see whether there was any learning on Test I from shot two to shot five, the analysis of variance was used for shots two, three, four, and five. Since the corrected total sum of the squares was a minus value, there could be no significant difference between the various trials, and thus, no learning can be said to have been exhibited.
### TABLE I

**ANALYSIS OF VARIANCE FOR HOMOGENEITY WITHIN TEST I**

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<th>Sum of Squares</th>
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<th>1% Level</th>
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<tr>
<td>Sex</td>
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<td>146</td>
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### TABLE II

**ANALYSIS OF VARIANCE OF THE DIFFERENCES BETWEEN TEST I AND TEST II**

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<td>Treatment-experience</td>
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CHAPTER V

DISCUSSION OF RESULTS

The fact that the use of praise, blame and control were not significantly different in this experiment does not necessitate the conclusion that external incentives do not differ in their effects upon behavior. Possible reasons for the results will be discussed, but it may be pointed out that the experiment has fulfilled most of the requirements set up in the criticism of previous, similar experiments. An adequate number of subjects was used, the subjects constituted a random sample of the freshman class, comparability of the subjects was established, individual testing eliminated group pressure and social rivalry, the data underwent a strict and thorough statistical analysis and unwarranted generalizations were avoided.

Although the results obtained here might set up some question in regard to the validity of some previous experiments from which generalizations have been drawn on the basis of "trends," these results may also be seen to indicate the direction for further research.

The problem of the degree of intensity required to make the incentive effective demands investigation. Intensity may vary from a facial expression to an intensely emotional verbal comment or actual physical treatment. In the present experiment it is possible that the incentives were not strong enough, long enough in duration or repeated frequently enough over an interval of time to yield a motivation sufficient to cause a significant change. Leuba has tried using a psychophysical technique to determine the relative amounts of effort which children would expend to achieve a
coveted goal-object, but there is a great deal more work which needs to be done in this direction.

It is also possible, in light of the fact that there was no practice effect indicated on the first five shots, that the subjects were performing near the maximum of their performance, and that improvement would have been beyond the limits of their ability.

Aside from the conditions of motivation experiments and the kinds and intensities of the incentives, the personality, temperament, habits and attitudes of the subjects should be considered as factors in the ambiguity of the results, for an incentive is not only the objective, external situation which is meant to stimulate the individual to further exertion, but also the attitude or behavior pattern aroused by these situations. The mental set with which a person approaches a task is an important factor in his performance. Chase mentions a study in problem solving in young children by Alpert in which she found that self-consciousness, lack of confidence, lack of interest and discouragement were factors in preventing the arousal of insight. Over-confidence, suspicion of the situation and level of aspiration may also be operating factors.

The qualitative effects which the different incentives have on the subjects' attitudes is also of interest. Although no systematic record of the quality of the subjects' responses was made in this study, observations made by the experimenter seem to warrant consideration. Blame had a quicker, more visible and more consistent effect on morale in eliciting a defensive-aggressive, excuse-making reaction. Those students receiving reproof described the experience as distasteful and "nerve-wracking," while those who had been praised described it as fun and
offered to assist in any further experiments. Reproved subjects
frequently became upset and seemed to suffer a loss of self-confidence
because they had judged their shots to be accurate, and reproval without
being told in which direction they were off could not help them to know
how to "improve" their shots. However, there were differences depending
upon the amount of experience the subjects had had with shooting as well
as upon different personalities. Those with much experience seemed to
suffer the greatest loss of self-esteem when reproved. But the forms
of reaction differed, some becoming aggressive and moving the apparatus
roughly, others trying to exercise more care. Excuse-making, however,
was almost universal for reproved subjects. The response of praised
people differed, too, some of them becoming over-confident and careless,
others apparently becoming more determined to outdo themselves. Control
subjects aimed much more quickly and with much less care than subjects
given incentives. The emotional responses to praise and blame exhibited
in this experiment show considerable similarity to those observed by
Lantz in situations of success and failure. She reports that the experi-
ence of success significantly increased the average ratings given the
subjects on willingness, self-confidence, social confidence, cooperation,
alertness, friendliness, boldness, talkativeness, cheerfulness, quietness,
persistence, confidence and effort, and that the experience of failure
served as a depressant, inhibiting the expected average re-test increase
in responses significantly and decreasing the average ratings given
subjects on willingness, self-confidence and attention. After failure,
her subjects became, on the average, significantly more uncooperative,
dull, antagonistic, reticent, somber, in need of urging, restless, easily
discouraged, anxious and impulsive. In Rosenzweig's study in which each child succeeded and failed at a puzzle and was later asked which puzzle he liked better, results showed that success was highly preferred to failure as an experience. The children in Hurlock's experiment also reported that they enjoyed taking the test more after being praised than reproved. Gilchrist states that, in his reproved group, those who had done well on the initial test did worse after criticism and those who had not done so well did better, concluding that the good students, who were probably unaccustomed to adverse criticism, were more influenced by the comment than the poor students who were probably used to it. Rexroad, who administered electric shock as punishment for inaccuracy, reports that punishment may act as an incentive, have an instructive effect or act as a disruptive and distractive influence.
CHAPTER VI

CONCLUSIONS

The following conclusions were reached in regard to this experiment:

1. There were no significant differences in performance in the three groups which had each been given the treatment of praise, blame or control.

2. There were no significant differences in performance between the sexes within Test I or from Test I to Test II.

3. Although there was a significant difference in performance for subjects with various amounts of experience within Test I, there was no difference from Test I to Test II.


5. The results suggest direction for further research in the study of praise and blame.
BIBLIOGRAPHY


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BIBLIOGRAPHY (cont.)


