

Aggressive Personality and Frustration

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Abstract

The present research tested the relationship between aggressive personality and frustration tolerance on the population of a mid-western college seminary. It was hypothesized that an aggressive person would be more frustrated than a peaceful individual in a given conflict situation. This hypothesis was based on Dollard & Miller's (1941) frustration-aggression hypothesis. In the experiment a series of mazes was utilized as a task sequence to produce a conflict situation. The Perceived Stress Index (PSI) — developed by Paul D. Jacobs and David C. Munz at the University of Oklahoma — and pulse rate were utilized to measure stress level. The aggression sub-scale of the Edwards Personal Preference Schedule (EPPS) was utilized to differentiate aggressive individuals from peaceful persons. A student's t analysis revealed no significant relationship between aggressive personalities and frustration tolerance. It was concluded that other covariant personality variables might be involved, if there is a relationship between the two variables. It was suggested that the seminary population may have been a poor population for the study because of the religious value placed on peacefulness.

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AGGRESSIVE PERSONALITY AND FRUSTRATION

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Dollard & Miller's (1941) frustration-aggression hypothesis is a drive theory of behavior e.g., it explains behavior in terms of a goal-response sequence. Their hypothesis is as follows: 1) Aggression is the dominant response to frustration; 2) The occurrence of aggression always presupposes the existence of frustration. Aggression is a function of three factors: 1) the strength of instigation to the frustrated response; 2) the amount of interference with the response; 3) the number of frustrated responses. They considered frustration to be produced by conflict e.g., the interruption of a goal-response sequence. They defined frustration as a drive instigating aggression. They defined aggression as an act whose goal-response is injury to an object. Although this hypothesis is limited in its dealings with other variables, it gives a useful and tested explanation of frustration and aggression.

A corollary to this hypothesis is an aggression trait-frustration hypothesis e.g., an aggressive person should be more frustrated in a given conflict situation. This corollary rests on the second assumption of the hypothesis, name-

ly, that aggression always presupposes the existence of frustration. The goal of this research was to test this corollary.

In regards to a review of relevant literature it should be remembered that a direct review of the present hypothesis is not possible in that no previous research has been done. However, due to its close relationship with the frustration-aggression hypothesis a review of the major theories, concepts, and research in this field is in order.

Conflict

Conflict has been defined by various researchers as the simultaneously or immediately successive existence of two incompatible responses or action tendencies e.g., motives, drives, goals, and desires. Different researchers have appropriately used these terms to emphasize their approach. The theorists considered here are Luria, Lewin, and Miller.

Luria (1932) proposed an organism viewpoint of conflict involving the interaction of regulating systems. He argued that the central changes involved in conflict situations could be measured only by the assessment of behavioral change. He distinguished three major types of conflict: 1) That which arises when the excitation is prevented at the last moment from issuing into action; 2) That which arises when the subject is unprepared for reacting; 3) That which

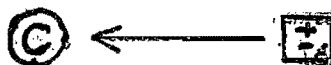
arises when the suppressed activity is diverted into central processes. In all of these types Luria considered that conflict is induced and reflected by means of motor responses, both voluntary and involuntary. Luria's major concept was the "functional carrier". This is the physiological development of patterns of cortical excitation (regulatory processes). In conflict there is a breakdown of these patterns by incompatible stimuli.

Lewin (1935) defined conflict as the opposition of simultaneously acting forces of approximately equal strength. He proposed three cases in which conflict could exist: 1) approach-approach; 2) approach-avoidance; 3) avoidance-avoidance.

In approach-approach conflict a person is confronted by two positive forces. In that either decision is rewarding, a move towards either force greatly increases the strength of that force. Consequently, it wins out with little conflict.



In approach-avoidance conflict a person is positively and negatively attracted by an object. Since either decision has some negative reinforcement, this situation produces more conflict than approach-approach.



In avoidance-avoidance conflict a person is confronted

by two negative forces and must choose one of them. In that there is primarily negative reinforcement in either decision, this produces more conflict than approach-avoidance conflict.



Lewin noted four important characteristics of these conflict situations. First, negative forces diminish more rapidly than positive forces with increasing spatial distance to the object. Second from the direction and strength of the forces present, it can be predicted that the individual will move to a particular equilibrium point. Third, this equilibrium point moves in accordance to the oscillations of these forces. Fourth, the opposition of these forces increases the tension state in the subject until the conflict is resolved.

Miller (1944) proposed a theory of conflict similar to Lewin's. However, he used terminology more consistent with behavioristic theory. He proposed gradients of approach and of avoidance as the sources of conflict. Conflict occurs when any two gradients occur simultaneously in the proper strengths. He proposed three main characteristics of these gradients: 1) The avoidance gradient is steeper than the approach gradient and accelerates as it nears the object; 2) The avoidance and approach gradients vary directly with the strength of their underlying drive; 3) When two incompatible gradients are present the stronger results. As can be seen

Miller's theory is a more comprehensive version of Lewin's theory.

Miller's gradient of approach is formed when a motivated organism is suitably reinforced for approaching a given region in space. A gradient in the strength of its excitatory tendency to approach that region is established. The strength of the tendency increases with nearness to the goal. Brown (1948a) tested this. He trained rats under hunger to approach a light to obtain food at the end of an alley. by attaching a collar and cord he was able to measure the strength of approach. He found that the approach gradient accelerated as the rat neared the goal.

Miller's gradient of avoidance is formed when an organism escapes from a noxious stimulus located at a given region in space. A gradient in the strength of its excitatory tendency to avoid that region is set up. The strength of the tendency decreases with distance from that region.

Experiments have been done to test Miller's theory. Bugelski and Miller (1938) trained rats to avoid a light at the end of a tunnel by shock. Then they were divided into three groups. Group 1 was placed at the original place of training. Group 2 was placed twelve inches away. The results were that as the rats were released nearer the light the avoidance gradient was higher. Brown (1942a) did a similar experiment and produced the same results.

Brown (1942b) tested the direct variance of approach gradients with their underlying drives. Brown found that decreasing the drive from forty-six hours to one hour decreased the pull strength. Brown (1948b) did another experiment and found that rats conditioned to strong shock pulled harder than rats conditioned to weaker shock. In comparing these experiments it was found that the avoidance gradient was steeper than the approach gradient. This supports Miller's expectation. AS

As can be seen various researchers have utilized different approaches and concepts to study conflict. However, each has retained the fundamental concept that conflict arises from simultaneous or immediately successive incompatible responses or action tendencies.

Frustration

Frustration has generally been defined as an emotional drive state produced from a conflict situation. It with other emotions (fear, anxiety, etc.,) produce aggression. It does not intrinsically involve aggression.

Many different conditions have been suggested to arouse frustration. Dollard & Miller (1941) said frustration arises when a goal-response suffers interference to its occurrence. Brown (1961) suggested three ways of causing frustration — physical barriers, removal of maintaining stimuli, and elicitation of incompatible stimuli. Symonds (1946)

lists the following as sources of frustration: restriction of infant activity, thwarting of autoerotic expression, loss of attention and care, forced independence in adolescence, adult economic hardships, and loss of loved ones. All of these contain an underlying conflict of drive situation. The consequent result is frustration.

Several individuals have termed frustration as a drive. Mowrer (1938) characterized frustration as an unpleasant emotional state. Brown and Farber (1951) explained frustration in terms of Hull's drive theory. They said frustration is energizing and directional. The energizing quality is motivational and originates in the conflict. The direction of the frustration is determined by the specific stimuli. Dollard and Miller (1939) hypothesized that frustration is a cause of aggressive behavior.

In light of these viewpoints several interpretations of the results of frustration have been given. Among these are regression, fixation, and aggression.

Regression originated as a Freudian view. Freud believed regression is the entrapment in a period of development. He said that it occurs in a person's development after he is confronted with insurmountable frustration. In consequence he regresses to an earlier successful mode of coping. Barker, Dembo, and Lewin (1941) tested this hypothesis in an experiment with thirty children. First the children were given an opportunity to play with ordinary toys. Then they

were given new highly attractive toys. After they became involved with the new toys, they were returned to the old toys. The new toys were in sight but out of their control. The children generally regressed to less constructive playing with the old toys than they had at first.

Maier (1949) proposed a theory of developmental fixation. He said that frustration instigated behavior is not motivational, not goal directed, and not adaptive. Instead it is fixated or stereotyped. Consequently, aggression may result from frustration, but it is nondifferentiated and nondiscriminating. Thus it is difficult to alter through the manipulation of contingencies. Experimentation of Maier's theory has been limited to a few rat experiments. Needless to say, Maier's theory has been challenged by a large number of motivational and learning theorists.

Finally, Dollard et. al. (1939) proposed their frustration-aggression hypothesis as already discussed above. They held that anticipated punishment inversely effects overt aggression. Behavior should change from physical to verbal, immediate to delayed, and direct to displaced. This offers a partial explanation of regressive behavior.

Aggression

Dollard et. al. (1939) defined aggression as an act whose goal-response is injury to an organism (or organism surrogate). Miller always associated aggression with frus-

tration. He defined a dependent definition of aggression which follows frustration. He also termed aggression a learnable drive. An example is habitual arguing and fighting. He further said that it can be classically conditioned to neutral cues.

Various research supports Miller's view of aggression. For example, an early experiment by Sears, Hovland, and Miller (1940) indicated an obvious relationship between aggression and frustration. Subjects were hired under the guise of an experiment in fatigue. They were kept awake all night. Smoking was prohibited even though they were habitual smokers. Restraints on activity were applied. Finally, an expected meal was denied them. The results were a high level of aggression manifested towards the experimenters. Drawings by the subjects showed violent and hostile themes.

Barker, Dembo, and Lewin (1941) did an experiment on immediate versus delayed reinforcement of an elicited drive. They had two groups of children. Each group was shown attractive toys to elicit a play drive. One group was allowed immediate access to the toys. The second group was denied access for a period of time. This produced a conflict situation. When they were given access they were more destructive in their play. The first group was more quiet and constructive. This indicated that delay of reinforcement of a drive produced aggression. Whereas immediate gratification produced no apparent frustration or aggression.

Another factor, normally considered of importance in determining frustration and its theoretical consequence of aggression, is the strength of the drive or instigation to respond. The interruption of a stronger drive state should produce more frustration and aggression. Sears (1940) interrupted babies at different times during bottle feeding. The earlier interruption was followed by more crying. In this instance hunger was the drive. The drive strength decreased as the hunger was satisfied. Therefore the babies were more frustrated when the hunger drive was strongest. They manifested more aggression.

Haner and Brown (1944) did an experiment to test the degree of frustration aroused as a barrier applied at different degrees of closeness to a goal. He promised children a prize (goal) for pushing marbles through holes within a time period (barrier). If they failed they were to push a plunger (aggression measure) in order to start over. This plunger was designed to measure the strength of their push. The results were that the closer the children were to finishing the task there was more plunger strength (aggression). This indicated that there was a greater degree of frustration when a goal was blocked nearer to its completion. Perhaps this occurred because there was a greater state of arousal when the goal was in sight.

Olds (1953) in a similar experiment tested whether the strength of a barrier increased the amount of frustration.

He had children crank a machine (barrier) to get poker chips to exchange for toys (goal). As he increased the number of turns required to earn a chip the force (frustration) on the crank increased. This demonstrated that increased barrier to a goal eventuated in greater frustration.

Many other manipulation experiments including the Office of Strategic Service (1948), and McClelland and Apicella (1945) have revealed the relationship between frustration and aggression. In addition, correlational studies including Palmer (1960), and Doob and Sears (1939) have revealed the apparent relationship between frustration and aggression.

Other explanations of aggression exist besides the frustration-aggression hypothesis. Johnson (1972) talks in terms of models. He said that parents, peers, and society provide models of aggression which children copy. Many studies have supported this view. Hoffman (1960) rated mothers according to severity of discipline and their assertion of unqualified power. He found that the use of unqualified power correlated highly with the child's hostility towards other children and his resistance to social change. Bandura and Walters (1963) studied punitive and non-punitive fathers and found that the sons of the punitive fathers revealed more antisocial values when they made up stories. Sears, Macoby, and Levin (1957) interviewed 379 middle class mothers. They found several factors to be highly correlated with aggressiveness in the expression of aggression, frequent disagreement among parents,

general dissatisfaction of the mother with her role, and low esteem of the father by the mother. These studies deal with the situations where aggressive models were present from which the child could learn aggressive behavior. However, it can easily be seen that a frustrating situation also existed and could be a partial explanation of the aggression.

It has been suggested that aggression can be elicited by environmental cues. Berkowitz and LePage (1967) taught subjects to play the role of an experimenter who punished stooges with electrical shock when they made mistakes. He had two groups, a control group and an experimental group. The experimental group had a gun placed in the room. This group punished the subjects more severely.

Another explanation of aggression is the biological basis e.g., it has been suggested that physiological factors play a substantial role in determining aggression. Many studies have related the two. Epinephrine has been found to create the physical arousal which accompanies aggression. But the direction in which this arousal was directed was determined by the environment (Schachter and Singer, 1962). Sex hormones in humans have been found to affect aggression. The male hormone testosterone appears to be effective in eliciting aggression. Allee, Collias, and Lutherman (1939) found that injecting chickens with testosterone raised their position in the pecking order. LeMaire (1956) in a study of castration practices in India's prisons, found that the con-

tinuation of the policy was based on its success in reducing criminality. Other studies have duplicated this finding. Physiological abnormalities seem to play a role in aggression. The most dramatic example is the mass murders committed by Charles Whitman at the University of Texas in 1966. An autopsy revealed that he had a large tumor in the brain. When the growth of the tumor was compared to his recent medical history, the tumor was discovered to be the instigator of his aggressive behavior. In similar cases of brain damage stereotaxic surgery has relieved aggressive behavior (Narabayaski, 1963).

It can be seen that conflict, frustration, and aggression is a complicated area of psychology. Many researchers have diverging theories on the subject. No one theory can adequately explain the entire area. However, individual theories can offer useful explanations of a specific area. Dollard and Miller's frustration-aggression hypothesis does this. It is on this basis that the corollary hypothesis of this paper was deduced.

Hypothesis

The frustration-aggression hypothesis is that aggression is the dominant response to frustration. The occurrence of aggression always presupposes the existence of frustration. The frustration-aggression relationship may throw light on the dynamics involved in a person who habitually behaves ag-

gressively, who has been termed an aggressive personality. Possibly he has been in more frustration-producing situations or, as this paper would infer, possibly he is more reactive to frustration-producing situation. The hypothesis of this paper is that an aggressive person should be more frustrated in a given conflict situation.

METHOD

Subjects

The subjects of this experiment were 40 male students of a mid-western college seminary. Ages varied between 18 and 23 years with a median of 20 years. The subjects were randomly chosen from the total school population and asked to participate in a psychological study outside of class time. Only two subjects refused.

Apparatus

The apparatus utilized in this experiment were pulse rate (PR), the Perceived Stress Index (PSI), the aggression items of the Edwards Personal Preference Schedule (EPPS), a mirror screening device, and a series of mazes. The PR and the PSI were the measurements of frustration. The PSI is an instrument developed by Paul D. Jacobs and David C. Munz (1968). A copy is contained in Appendix I. The PSI Consists of a fifteen item checklist comprised of words and phrases with empirically assigned values. Directions can be varied

to obtain stress level "at this moment" or as one would "normally feel." It was developed and standardized on a college population. In the present study the "at this moment" form was used. The aggression items of the EPPS were intermixed with consistency items to prevent easy detection of the aggression variable. See Appendix II. The series of mazes in Appendix III were utilized to create a conflict situation. The mirror screening device allowed only indirect sight of the tasks, thus making the tasks more frustrating.

The facility for the experiment was a college class room. The S was seated across a table from the experimenter.

Procedure

Each subject entered the class room one at a time with the experimenter. He was questioned concerning his age and hand usage for writing. Then he was given the "at this moment" scale of the PSI. Next he was asked to complete the aggression sub-scale of the EPPS. He was then asked to take his PR for a one minute period. Next the subject was given the conflict producing task sequence. Directions for this are in Appendix III. He was told that he was taking a test of "Perceptual and Motor coordination Relative to Speed". The goal of the task sequence was to thwart the subject's attempts to accomplish the "normally expected" score. Upon completion the subject completed another "at this moment" scale of the PSI and again took his PR. The subject was

asked if he had any questions concerning the experiment and was escorted from the room. Total interview time was approximately thirty minutes.

RESULTS

The raw data are summarized in Appendix IV. The data was divided into two groups according to degree of Ss' aggressiveness (Group 1, less aggressive ; Group 2, more aggressive). The student's t statistic was utilized to test whether significant differences existed between the pretest frustration scores of the high and low aggressive groups. Tests on both the PR data and the PSI data indicated no significant differences between groups prior to the conflict situation.

The student's t statistic was also utilized to test the hypothesis whether a significant difference existed between high aggressive personality and low aggressive personality on their frustration tolerance. A measurement of frustration tolerance was acquired by subtracting the pretest from the post-test as illustrated in Appendix IV. All these scores were transformed by using the greatest negative score as the zero point e.g., the absolute value of the greatest negative number was added to each number. The difference between groups of the change in PR (ΔPR) was insignificant at the .05 alpha level ($t=.336$). The test of change PSI (ΔPSI) was insignificant at the .05 alpha level ($t=.1029$). Thus neither measurement support the hypothesis.

DISCUSSION

An examination of the results revealed insignificant differences of frustration change between more and less aggressive Ss. Both the PR measurement and the PSI measurement were extremely insignificant. The particular population used may have created some problems. It should be noted that the mean aggression scores of both the less aggressive group and the greater aggressive group were in the normal range of the EPPS sub-scale (7.45 and 14.55). Consequently, the population did not adequately represent the full spread of the variable. It might also be noted that the seminary population could be a poor sample; the religious teachings of the institution place a high value on peacefulness as opposed to aggressive characteristics.

Two other feasible hypotheses were proposed to explain the insignificant results. One was that aggressive people might learn to deal with frustrating situations. They might release their frustration through aggressive behavior. In doing this they might correct the conflict situation. Consequently, they may lower the amount of frustration which they experience e.g., they might lower their anticipated sensitivity — as anticipated by the hypothesis of this paper — to frustration and raise their expected frustration tolerance — as expected by the hypothesis of this paper. Also, the aggressive person might know that he will properly deal with a conflict situation and does not become frustrated.

Another explanation might be that aggressive behavior is rewarding (Johnson, 1972). An aggressive person might enjoy conflict situations because they provide him with an opportunity to be aggressive. Therefore he might not be so frustrated.

In conclusion it appears that more aggressive people are not necessarily more frustrated in a conflict situation. Perhaps only large differences in aggressive personalities have differences in frustration level. It is also probable that other personality variables, normally correlated with aggression, play a significant role in frustration tolerance. Further study should encompass a greater range of aggressive personalities and should consider other aggressive correlated personality traits for the establishment of a covariant with frustration.

REFERENCES

- Allee, W.C., Collias, N., and Lutherman, C.Z. Modification of the social order among flocks of hens by injection of testosterone propionate. Physiology of Zoology 1939, 412-420. Quoted from Johnson, R. N., Aggression in Man and Animals, 229
- Bandura, A., and Walters, R. H. Child Psychology. National Society for the Study of Education, 1963, 364-407
- Barker, R. G., Dembo, T., and Lewin, K. Frustration and regression: an experiment with young children. University of Iowa Study in Child Welfare, 1941. Quoted from Johnson, R. N., Aggression in Man and Animals, 134
- Berkowitz, L., and LePage, A. Weapons as aggression-eliciting stimuli. Journal of Personality and Social Psychology, 1967, Vol. 7, 202-207
- Brown, J. S. Factors determining conflict reactions in difficult discriminations. Journal of Experimental Psychology, 1942a, Vol. 31, 272-292
- Brown, J. S. The generalization of approach responses as a function of stimulus intensity and strength of motivation. Journal of Comparative and Physiological Psychology, 1942b, Vol. 33, 209-226
- Brown, J. S. Gradients of approach and avoidance responses and their relation to level of motivation. Journal of Comparative and Physiological Psychology, 1948a, Vol. 41, 450-465. Quoted from Cofer, C. N., and Appley, M. H. Motivation: Theory and Research. 436
- Brown, J. S. Gradients of approach and avoidance responses and their relation to motivation. Journal of Comparative and Physiological Psychology. 1948b, Vol. 41, 450-465.
- Brown, J. S. and Farber, I. E. Emotions conceptualized as intervening variables — with suggestions toward a theory of frustration. Psychological Bulletin, 1951, Vol. 48, 465-495. Quoted from Cofer and Appley. Motivation: Theory and Research. 419
- Bugelski, B. R., and Miller, N. E. A spatial gradient in the strength of avoidance responses. Journal of Experimental Psychology. 1938, Vol. 23, 494-505. Quoted from Yates, Aubrey Y., Frustration and Conflict. 150

- Cofer, C. N. and Appley, M. H. Motivation: Theory and Research. New York: John Wiley & Sons, 1964. 413, 423
- Dollard, J. et. al. Frustration and Aggression. New Haven: Yale University Press, 1939.
- Dollard, J. and Miller, N. E. The frustration-aggression hypothesis. Psychological Review. 1941, Vol. 48, 337-342
- Dollard, J. and Miller, N. E. Personality and Psychotherapy: An Analysis in Terms of Learning, Thinking, and Culture. New York: McGraw-Hill, 1950, 84, 355-363
- Doob, L. W., and Sears, R. R. Factors determining substitute behavior and the overt expression of aggression. Journal of Abnormal and Social Psychology. 1939, Vol. 34, 293-313.
- Freud, Sigmund The Complete Psychological Works of Sigmund Freud. London: Hogarth Press, 1966.
- Haner, C.F., and Brown, P.A. Clarification of the instigation to action concept in the frustration-aggression hypothesis. Journal of Abnormal and Social Psychology. 1955, Vol. 51, 205-206. Quoted from Johnson, R. N. Aggression in Man and Animals. 134
- Hoffman, M. Power assertion by the parent and its impact on the child. Child Development. 1960, Vol. 31, 129-143. Quoted from Johnson, R. N. Aggression in Man and Animals. 1124
- Johnson, Roger N. Aggression in Man and Animals. Philadelphia: W. B. Saunders Company, 1972. 67, 99, 124-131, 141-145
- Le Maire, L. Danish experiences regarding the castration of sexual offenders. Journal of Criminal Law and Criminology. 1956, Vol. 47, 294-310. Quoted from Johnson, R. N. Aggression in Man and Animals. 99
- Lewin, K. A Dynamic Theory of Personality. New York: McGraw-Hill, 1935. Quoted from Yates, Aubrey Y. Frustration and Conflict. 139-142
- McClelland, D. C. and Apicella, F. S. A functional classification of verbal reactions to experimentally induced failure. Journal of Abnormal and Social Psychology. 1945, Vol. 40, 376-390

Maier, N. R. F. Frustration: The Study of Behavior Without a Goal. New York: McGraw-Hill, 1949. Quoted from Cofer & Appley Motivation: Theory and Research. 425

Miller, N. E. Experimental studies of conflict. Personality and the Behaviour Disorders. Hunt, J. McV. (Ed.) New York: Ronald Press, 1944, 431-465

Mowrer, Oh H. Some research implications of the frustration concepts as related to social and educational problems. Character and Personality. 1938, Vol. 7, 129-135. Quoted from Cofer & Appley Motivation: Theory and Research. 419

Narabayaski, H. et. al. Stereotaxic amygdalotomy for behavior disorders. Archives of Neurology. 1963, Vol. 9, 1-26. Quoted from Johnson, R. N. Aggression in Man and Animals. 81

OSS Assessment Staff Assessment of Men. New York: Rinehart, 1948. Quoted from Cofer & Appley Motivation: Theory and Research. 749

Olds, J. The influence of practice on the strength of approach drives. Journal of Experimental Psychology. 1953, Vol 46, 232-236

Palmer, S. Frustration, aggression, and murder. Journal of Abnormal and Social Psychology. 1960, Vol. 60, 430-432. Quoted from Yates, Aubrey Y. Frustration and Conflict. 71

Schachter, S. and Singer, J. E. Cognitive, social and physiological determinants of emotional state. Psychological Review. 1962, Vol. 69, 379-399

Sears, Pauline S. Levels of aspiration in academically successful and unsuccessful children. Journal of Abnormal Social Psychology. 1940, Vol 35, 498-536. Quoted from Cofer & Appley Motivation: Theory and Research. 750

Sears, R. R., Hovland, C. L., and Miller, N. E. Minor studies of aggression: I. Measurement of aggressive behavior. Journal of Psychology. 1940, Vol. 9, 275-295

Sears, R. R., Maccoby, E., and Levin, H. Patterns of Child Rearing. Evanston, Illinois: Row, Peterson, 1957.

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Symonds, P. M. The Dynamics of Human Adjustment. New York:
Appleton-Century, 1946, 64-69

Yates, Aubrey J. Frustration and Conflict. New York: John
Wiley & Sons, 1962.

APPENDIX I

THE PERCEIVED STRESS INDEX

THE PERCEIVED STRESS INDEX

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Following are the instructions, checklist, and scale values to be used with the PSI. Presentation differences have not been found between the "normally feel" and the "at this moment" scales. The authors suggest the order of presentation as it appears in this booklet.

The scale values appearing on the checklist are those assigned to the words or phrases by our college sample. The following is the recommended scoring procedure:

$$\text{PSI} = (\text{"normal" scale value minus "this moment" scale value}) + 10$$

The constant, 10, eliminates scoring problems dealing with sign, and scores may be interpreted in the following manner:

PSI above 10 indicates scores moving toward pleasant end of scale.

PSI below 10 indicates scores moving toward unpleasant end of scale.

PSI of 10 indicates no change.

Thus, a PSI of 1.25 indicates movement from extremely pleasant to extremely unpleasant; while a score of 18.75 movement from extremely unpleasant to extremely pleasant.

The authors would appreciate reports of data gathered using this checklist.

¹The authors wish to express their appreciation to Mrs. Frances Everett and Miss Rita Hall for their assistance in developing this scale.

PSI SCORING KEY

<u>8.24</u>	DISTRESSED
<u>5.68</u>	UNRUFFLED
<u>8.74</u>	THREATENED
<u>4.47</u>	AT EASE
<u>7.21</u>	TIMID
<u>10.72</u>	EXTREMELY TERRIFIED
<u>9.38</u>	FEARFUL
<u>7.60</u>	UNEASY
<u>2.30</u>	MARVELOUS
<u>5.12</u>	ALRIGHT
<u>5.98</u>	NOT MATTERING
<u>1.97</u>	THRILLED
<u>2.99</u>	FEELING GOOD
<u>10.04</u>	SCARED STIFF
<u>3.77</u>	KEEN

INSTRUCTIONS

On the following page is a list of words and phrases which can be used to describe your feelings. Please check the word or phrase which best describes the way you feel AT THIS MOMENT. So that you will become familiar with the general range of feeling that they cover or represent, read the entire list before making your selection. Check only one word or phrase.

_____ DISTRESSED
_____ UNRUFFLED
_____ THREATENED
_____ AT EASE
_____ TIMID
_____ EXTREMELY TERRIFIED
_____ FEARFUL
_____ UNEASY
_____ MARVELOUS
_____ ALRIGHT
_____ NOT MATTERING
_____ THRILLED
_____ FEELING GOOD
_____ SCARED STIFF
_____ KEEN

INSTRUCTIONS

On the following page is a list of words and phrases which can be used to describe your feelings. Please check the word or phrase which best describes the way you NORMALLY FEEL. So that you will become familiar with the general range of feeling that they cover or represent, read the entire list before making your selection. Check only one word or phrase.

_____ DISTRESSED
_____ UNRUFFLED
_____ THREATENED
_____ AT EASE
_____ TIMID
_____ EXTREMELY TERRIFIED
_____ FEARFUL
_____ UNEASY
_____ MARVELOUS
_____ ALRIGHT
_____ NOT MATTERING
_____ THRILLED
_____ FEELING GOOD
_____ SCARED STIFF
_____ KEEN

APPENDIX II

THE EDWARDS PERSONAL PREFERENCE SCHEDULE
(Aggression Subscale)

Directions

Below you will find a number of pairs of statements about things you may or may not like; about ways in which you may or may not feel. With each pair circle the letter of the statement which is more characteristic of what you like. If both statements describe how you feel, then you should choose the one which you think is more characteristic. If neither statement accurately describes how you feel, then you should choose the one which you consider to be less inaccurate. Your choice, in each instance, should be in terms of what you like and how you feel at the present time, and not in terms of what you think you should like or how you think you should feel.

- - - - -

- 1 A I like to read newspaper accounts of murders and other forms of violence.
 B I would like to write a great novel or play.
- 2 A I like to help my friends when they are in trouble.
 B I like to do my very best in whatever I undertake.
- 3 A I would like to write a great novel or play.
 B I like to attack points of view that are contrary to mine.
- 4 A I feel like getting revenge when someone has insulted me.
 B When I am in a group, I like to accept the leadership of someone else in deciding what the group is going to do.
- 5 A When I am in a group, I like to accept the leadership of someone else in deciding what the group is going to do.
 B I feel like criticizing someone publicly if he deserves it.
- 6 A I like to experience novelty and change in my daily routine.
 B I like to tell my superiors that they have done a good job on something, when I think they have.
- 7 A I like to tell other people what I think of them.
 B I like to have my meals organized and a definite time set aside for eating.
- 8 A I feel like blaming others when things go wrong for me.
 B I like to ask questions which I know no one will be able to answer.

- 9 A I like to have my life so arranged that it runs smoothly and without much change in my plans.
B I get so angry that I feel like throwing and breaking things.
- 10 A I like to finish any job or task that I begin.
B I like to keep my things neat and orderly on my desk or workspace.
- 11 A I like to ask questions which I know no one will be able to answer.
B I like to tell other people what I think of them.
- 12 A I get so angry that I feel like throwing and breaking things.
B I like to avoid responsibilities and obligations.
- 13 A I like to attack points of view that are contrary to mine.
B I like to write letters to my friends.
- 14 A I like to help my friends when they are in trouble.
B I like to do my very best in whatever I undertake.
- 15 A I feel like making fun of people who do things that I regard as stupid.
B I like to predict how my friends will act in various situations.
- 16 A I like to avoid responsibilities and obligations.
B I feel like making fun of people who do things that I regard as stupid.
- 17 A I feel like criticizing someone publicly if he deserves it.
B I like my friends to make a fuss over me when I am hurt or sick.
- 18 A I get so angry that I feel like throwing and breaking things.
B I like to tell other people how to do their jobs.
- 19 A I like to write letters to my friends.
B I like to read newspaper accounts of murders and other forms of violence.
- 20 A I like to read books and plays in which sex plays a major part.
B I like to be the center of attention in a group.
- 21 A I like to predict how my friends will act in various situations.
B I like to attack points of view that are contrary to mine.

- 22 A I like my friends to make a fuss over me when I am hurt or sick.
B I feel like blaming others when things go wrong for me.
- 23 A I like to experience novelty and change in my daily routine.
B I like to tell my superiors that they have done a good job on something, when I think they have.
- 24 A I like to tell other people how to do their jobs.
B I feel like getting revenge when someone has insulted me.
- 25 A I feel like blaming others when things go wrong for me.
B I feel that I am inferior to others in most respects.
- 26 A I like to attack points of view that are contrary to mine.
B I like my friends to confide in me and to tell me their troubles.
- 27 A I like to finish any job or task that I begin.
B I like to keep my things neat and orderly on my desk or workspace.
- 28 A I feel like telling other people off when I disagree with them.
B I like to participate in new fads and fashions.
- 29 A I like to tell other people what I think of them.
B I like to avoid being interrupted while at my work.
- 30 A I feel that I am inferior to others in most respects.
B I feel like telling other people off when I disagree with them.
- 31 A I get so angry that I feel like throwing and breaking things.
B I like to avoid responsibilities and obligations.
- 32 A I like my friends to confide in me and to tell me their troubles.
B I like to read newspaper accounts of murders and other forms of violence.
- 33 A I feel like making fun of people who do things that I regard as stupid.
B I like to listen to or to tell jokes in which sexplays a major part.
- 34 A I like to participate in new fads and fashions
B I feel like criticizing someone publicly if he deserves it.

- 35 A I like to avoid being interrupted while at my work.
B I feel like telling other people off when I disagree with them.
- 36 A I like to read books and plays in which sex plays a major part.
B I like to be the center of attention in a group.
- 37 A I like to listen to or to tell jokes in which sex plays a major part.
B I feel like getting revenge when someone has insulted me.

APPENDIX III

Task Sequence-Script and Mazes

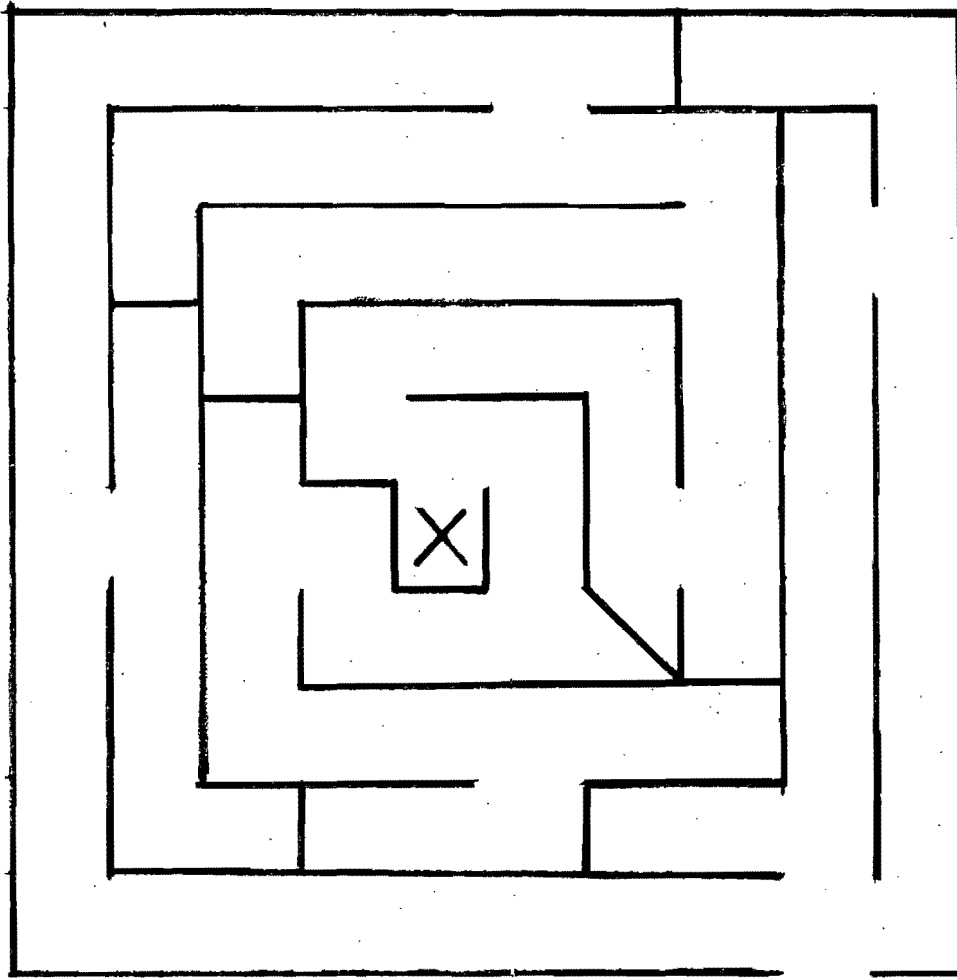
E - "This is a test of perceptual and motor coordination relative to speed. It consists of a series of mazes." (Display maze #1) "With each maze you are to start at the arrow and search for the correct path to the goal X. To do this you will be using a mirror screening device." (Introduce the mirror screening device.) "This device provides only indirect sight of the mazes by means of the mirror." (Have the S focus the mirror and screen so that he can only see the work area through the mirror and can comfortably reach the area with his hands.) "To do this series of tasks you are to use the hand opposite your normal writing hand. For each maze you successfully complete you will be awarded an appropriate number of points. The total number of points will indicate your perceptual and motor coordination. There are several rules. When searching for the correct path you must keep the pencil in contact with the paper and moving at all times. Also, you must not cross the walls of the mazes. Any violation of these rules is termed a 'violation'. I will keep track of any violations which may occur. The total number of violations which may occur will be computed through a formula and subtracted from the total points awarded. There is an anonymous time limit for completion of the series. However, I will notify you if you are keeping with the normally expected time schedule. If you should become bogged down on a particular maze you may indicate that you wish to go on to the next one. However, you may not return to the skipped maze until the entire series has been completed. In that speed and time are variables which affect your performance, a more accurate measurement of your perceptual and motor ability is possible if you do not waste time on mazes you are unlikely to complete. Do you have any questions?" (Answer only questions concerning procedure.) "You may begin when I say begin." (Look at watch and say begin at arbitrary time.)

There is no time limit for the completion of the series of mazes, although the Ss were told that there was. Instead there was a standardized schedule by which the Ss were told they were getting behind schedule and were committing violations.

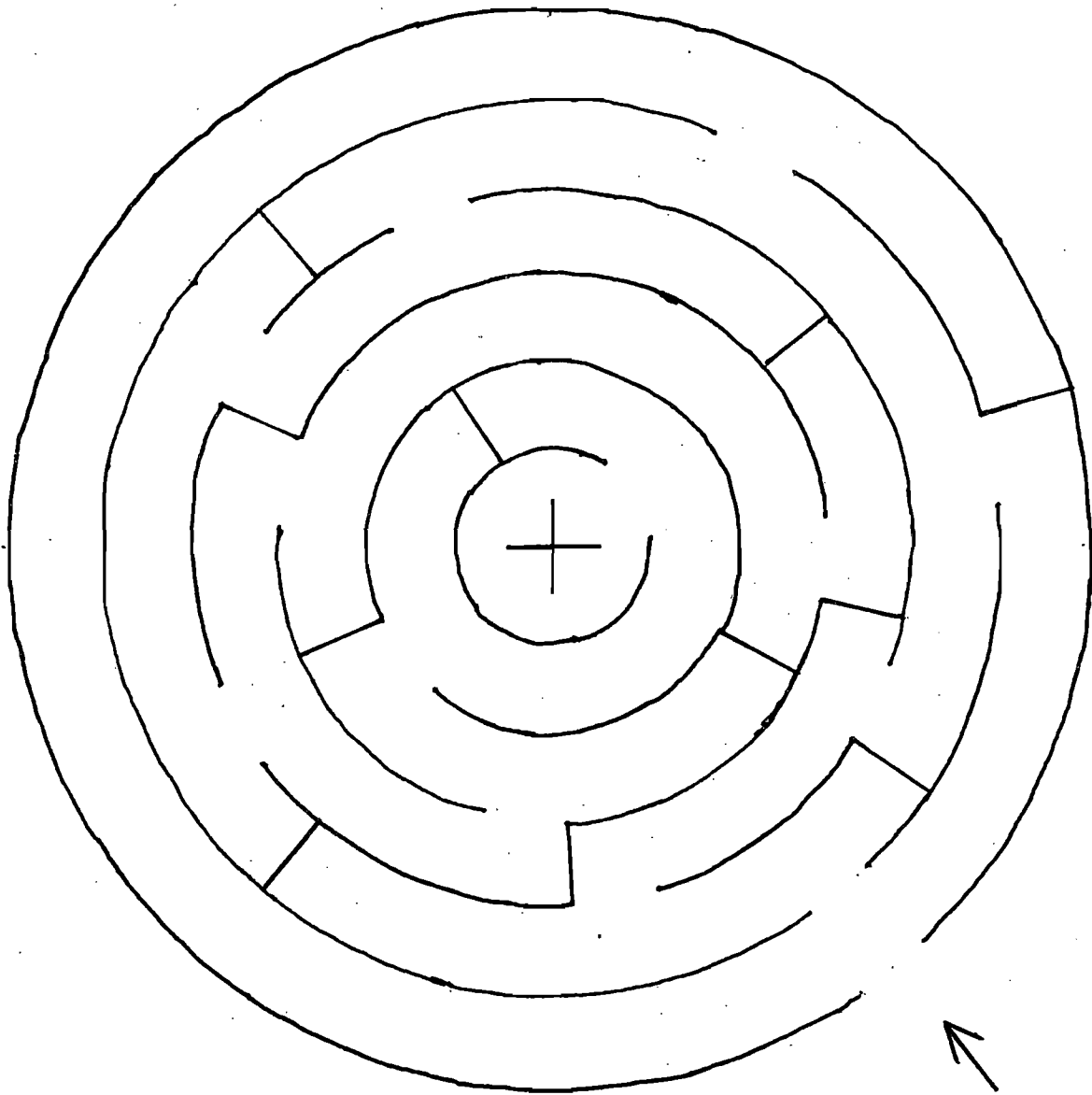
EE - At completion of Maze 1 - "You took the normal amount of time."
" " " " 2 - "You are a little behind."

At completion of Maze 3 - "You are a little more behind."
" " " " 4 - "You are quite a bit behind."
" " " " 5 - "You are in bad shape, you will
have to hurry to complete the
series."
" " " " 6 - "Your time is up." (As S nears
the X₂)

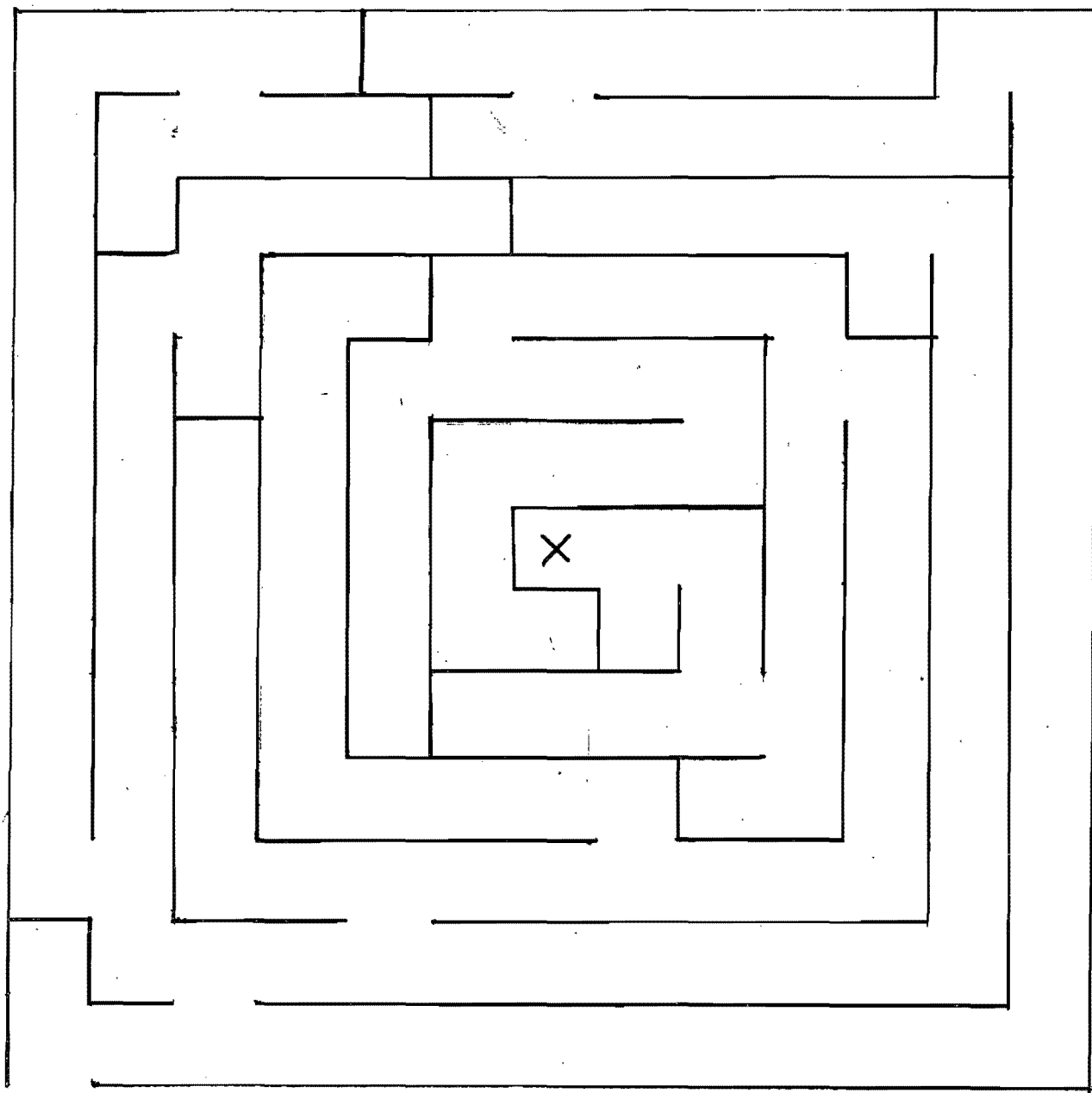
Maze 7 was not used, although it was present for the S
to see. Indicate that the S has committed a violation twice
during each maze. On the fifth maze indicate that his num-
ber of violations are becoming excessive. During the sixth
maze indicate that his number of violation are excessive.



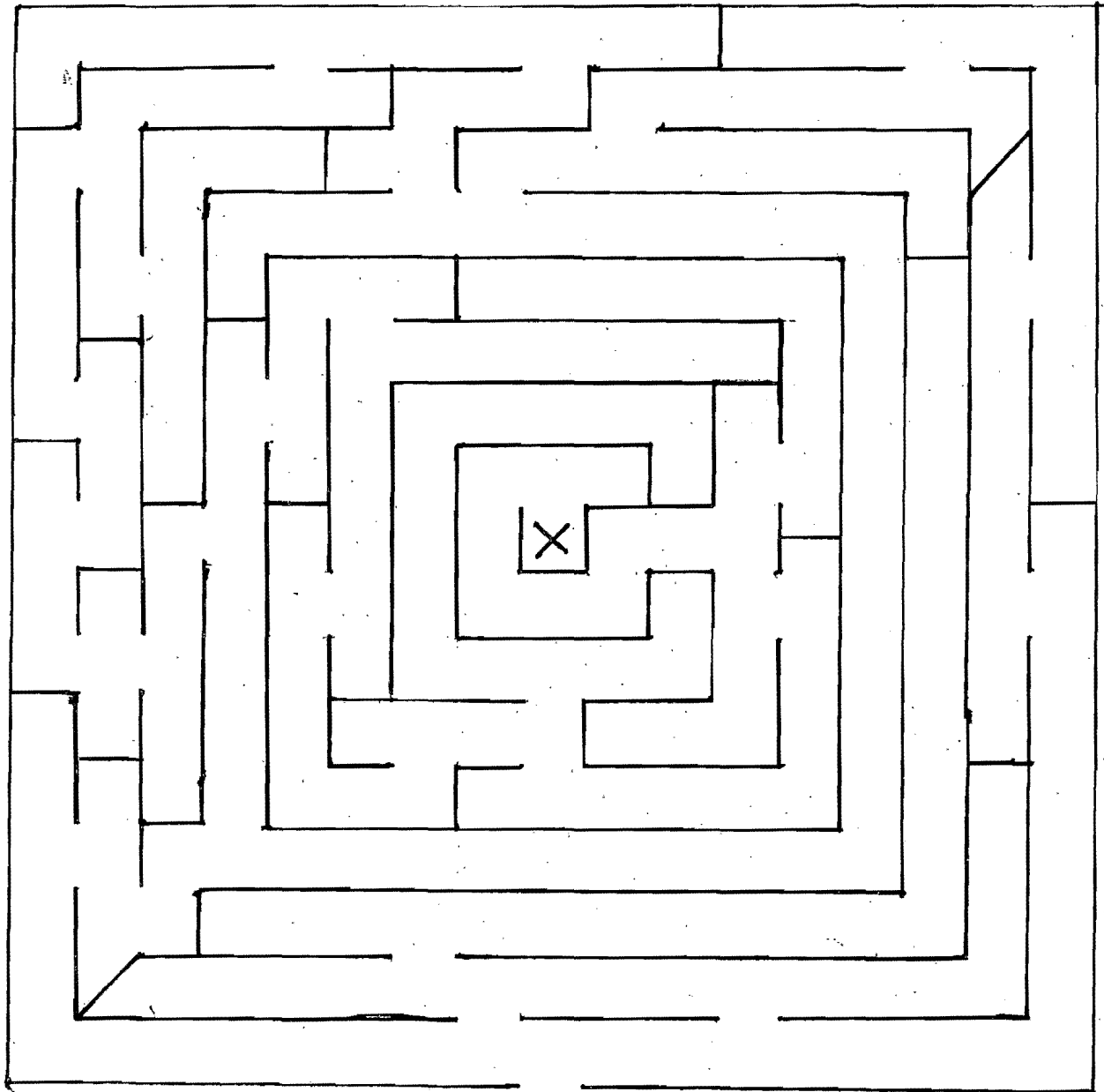
MAZE I



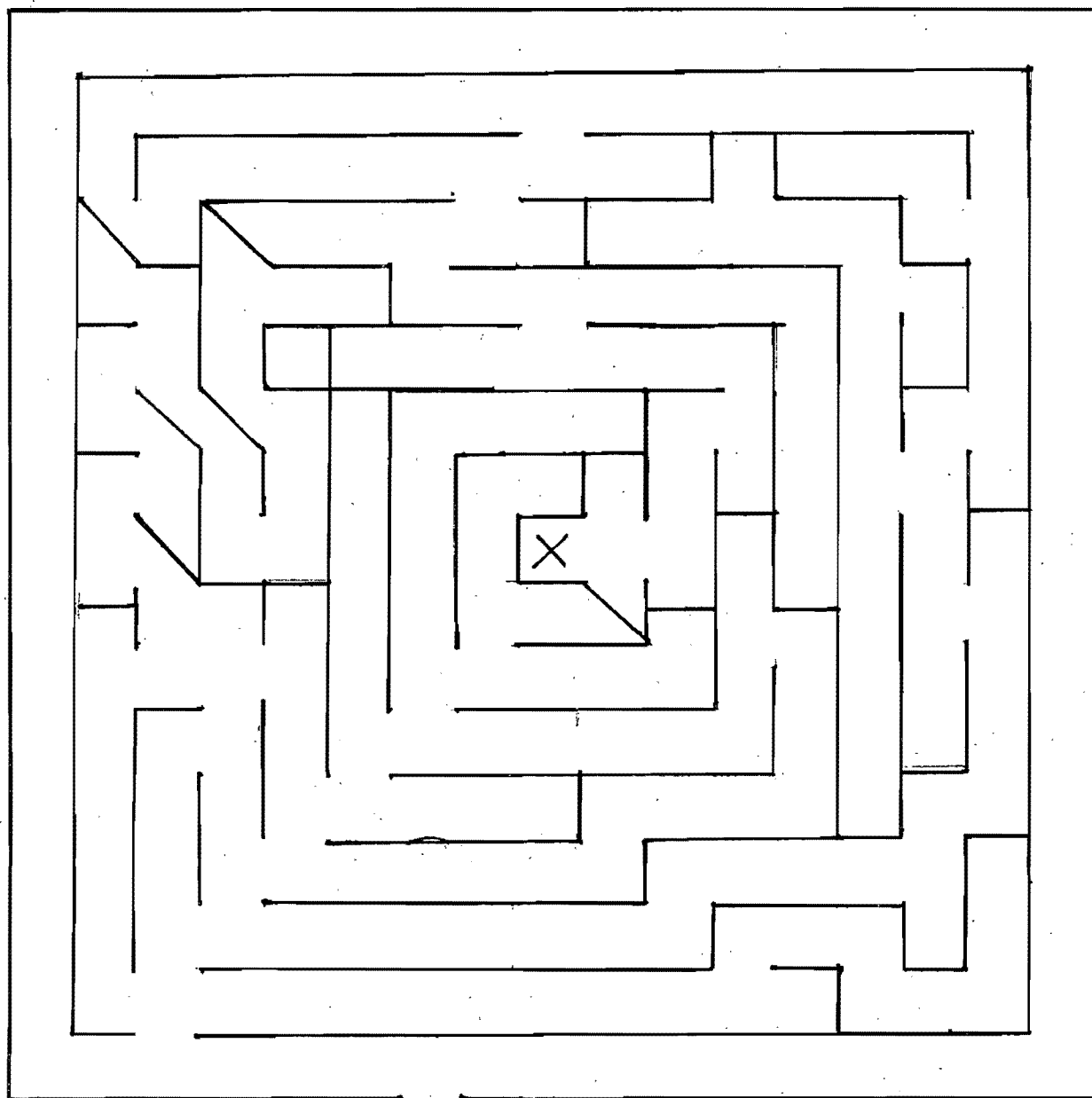
MAZE II



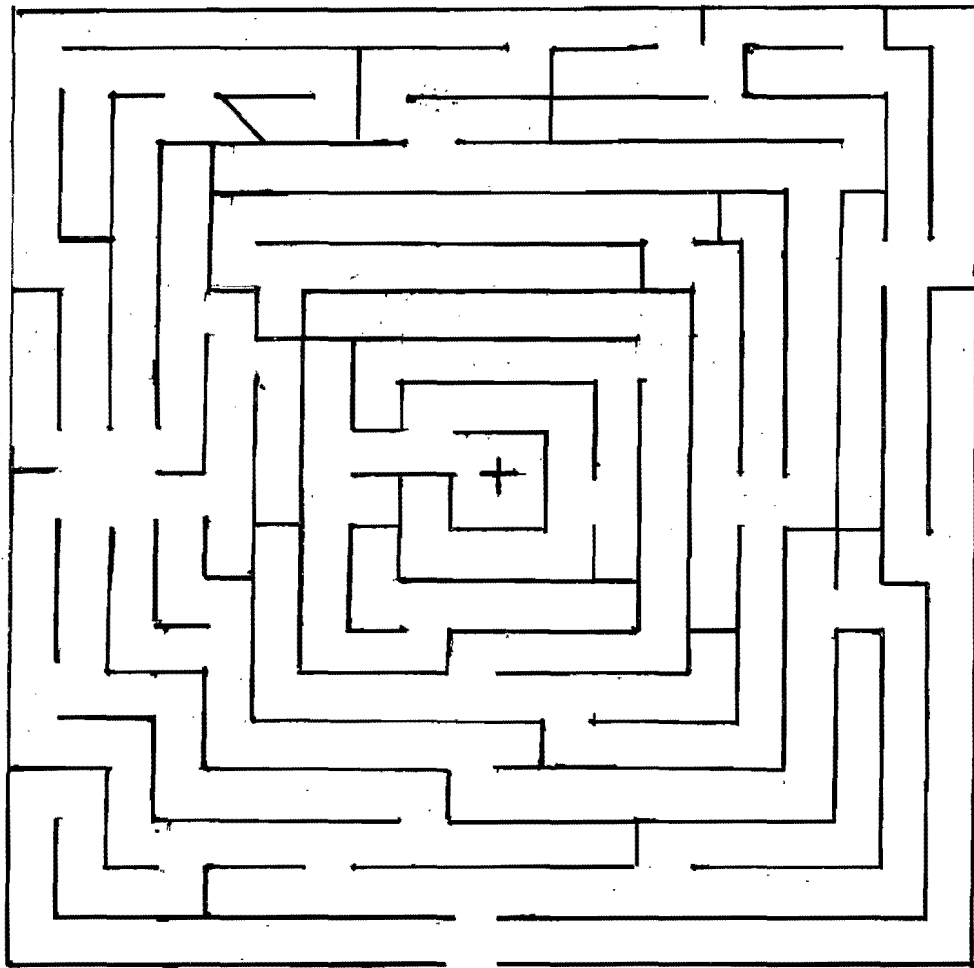
MAZE III



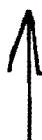
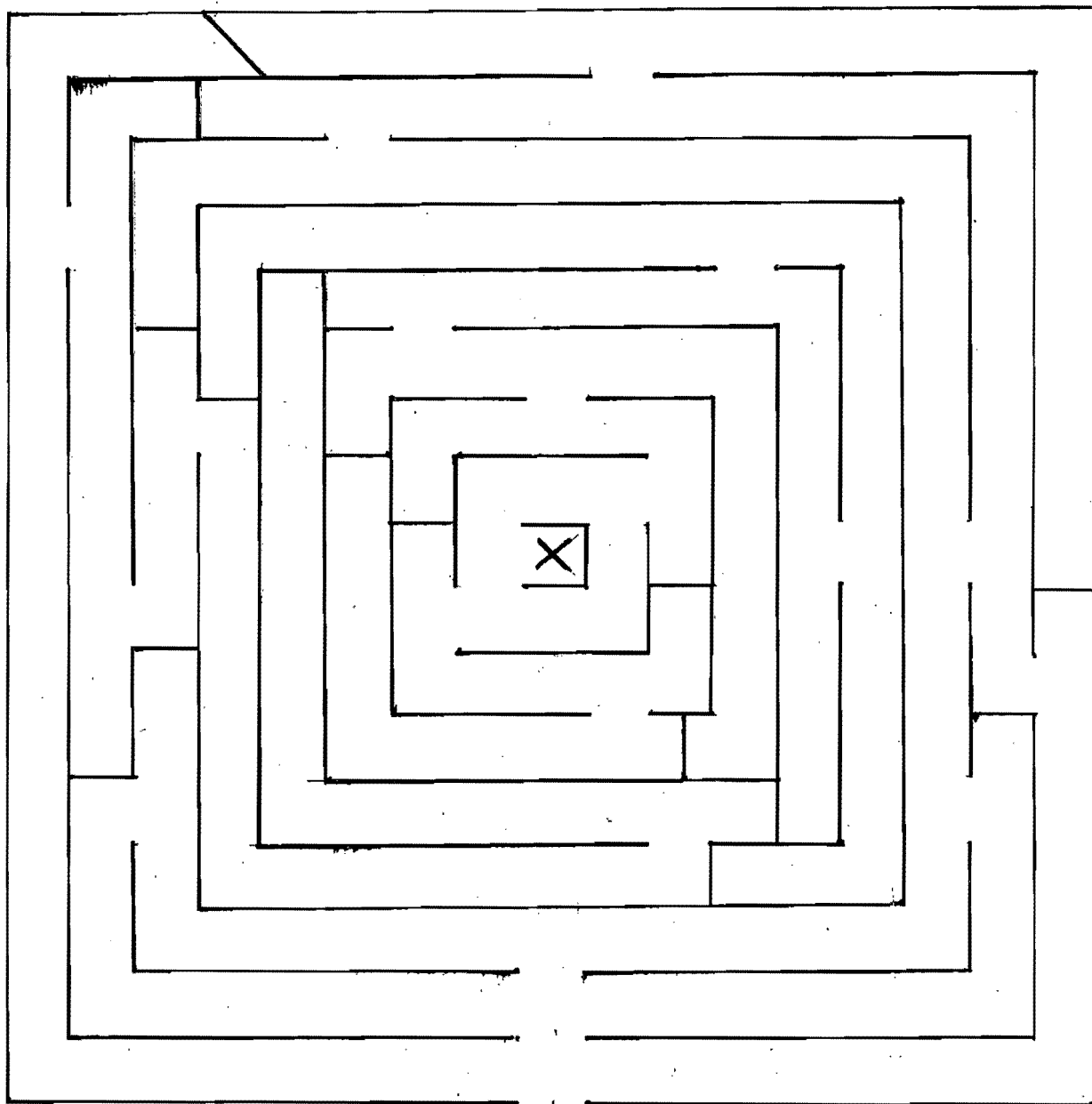
MAZE IV



MAZE V



MAZE VI



MAZE VII

APPENDIX IV

Group 1									Group 2								
S#	Agg.	PR	PR	*	PR	PSI	PSI	* PSI	S#	Agg.	PR	PR	*	PR	PSI	PSI	* PSI
2	10	38	-2		12	4.47	0	5.00	1	15	44	4		18	5.12	0	5.00
4	6	31	-2		12	4.47	3.77	7.40	3	11	39	-1		13	5.12	2.40	7.40
5	8	34	2		16	5.12	2.40	5.70	7	11	32	0		14	4.47	3.13	8.13
6	5	38	2		14	3.77	.70	1.38	11	13	42	2		16	8.24	0	5.00
8	11	42	0		12	8.74	-3.62	5.00	14	13	37	-2		12	2.99	3.77	8.77
9	4	37	-2		33	4.47	0	8.77	16	13	37	0		14	4.47	3.77	8.77
10	8	26	19		14	5.12	2.48	7.48	17	14	26	-8		6	7.60	1.92	6.92
12	7	32	0		16	4.47	.65	5.65	20	15	24	9		25	5.12	2.48	7.48
13	4	46	2		16	7.60	-2.48	2.52	22	11	38	1		15	7.60	-2.48	2.52
15	6	31	-1		13	4.47	3.77	4.30	24	13	32	3		17	4.47	1.41	6.51
18	11	37	-2		12	5.12	-.70	5.00	28	16	35	1		15	5.12	0	5.00
19	9	28	-12		2	2.99	0	7.13	29	13	38	3		17	5.98	1.62	6.62
21	9	28	2		16	2.99	2.13	7.13	33	20	40	-1		13	5.12	2.48	7.48
23	8	35	2		16	2.99	4.61	9.61	34	11	39	3		17	2.30	2.17	7.17
25	5	42	-1		13	5.98	-4.01	.99	35	16	43	-2		12	4.47	0	5.00
26	8	32	3		17	4.47	.65	5.65	36	14	38	-6		8	5.12	.86	5.86
27	7	27	3		17	5.98	0	5.00	37	12	38	-1		13	4.47	.65	5.65
30	9	35	1		15	4.47	-1.48	3.52	38	22	40	-14		0	7.60	.39	.39
31	10	40	-5		9	2.30	.69	5.69	39	20	35	-8		6	2.99	2.69	7.69
32	7	42	-6		8	2.99	5.25	10.25	40	17	39	2		16	5.12	0	5.00

* These scores are transformed to eliminate negatives.

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