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THE REINFORCING EFFECTS OF YIELDING

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TABLE OF CONTENTS

	Page
Manuscript to be submitted for publication	
INTRODUCTION.	1
METHOD.	4
RESULTS	9
DISCUSSION.	11
REFERENCES.	17
APPENDIX A. . . Prospectus.	23
APPENDIX B. . . Instructions to Subjects.	51
APPENDIX C. . . Mean Speeds for Trials of Acquisition	55
APPENDIX D. . . Mean Speeds for Trials of Extinction	57
APPENDIX E. . . Statisticsl Tests	59
APPENDIX F. . . The Questionnaire	62

The Reinforcing Effects of Yielding

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Abstract

The hypothesis that yielding (disagreement followed by agreement) is a more effective reinforcer than simple agreement was tested and supported. Yielding led to faster acquisition and higher asymptotic response speeds than simple agreement. Three groups were compared ($N=108$) in which type of agreement and item interest were manipulated. Using instrumental escape conditioning as a model and type of agreement as an analog of magnitude of reinforcement, a significant magnitude of reinforcement effect was found ($p < .005$). The results also indicated that type of agreement and item interest interacted to determine response speeds ($p < .001$). Withdrawal of agreements (extinction) led to a significant decrease in response speeds over trials ($p < .001$).

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In several experiments, attraction towards another person has been shown to be a function of a "sequence" effect in which subjects were more attracted towards agreeers after initial exposure to disagreeers (Stapert & Clore, 1969; Worchel & Shuster, 1966). A similar effect was found when the same person began disagreeing with the subject and at some point changed to agreeing with the subject (Byrne, Lamberth, Palmer & London, 1969; Gerard & Greenbaum, 1962; Sigall, 1968: see also Aronson & Linder, 1965 for similar results using personal evaluations rather than attitudinal agreement).

The theory of interpersonal attraction through attitude similarity-dissimilarity is based on the hypothesis that attitudinal statements which express views similar to or dissimilar from those of an individual constitute, respectively, reinforcing and punishing stimuli for him (Byrne, 1969). Several experiments have supported this hypothesis by showing that attitudinal statements had the same effect as other known reinforcers e.g., agreeing and disagreeing attitudinal statements were effective in altering response probabilities when presented after a specific response (Byrne, Griffitt, & Clore, 1968; Lamberth, 1970;

Lamberth & Craig, in press; Reitz, Duey & Mason, 1968).

The attraction of people to others having the same attitudes as themselves has been attributed to the effectance motive (Byrne & Clore, 1967) which is defined as a learned drive to be logical, consistent and accurate in interpreting the stimulus world. According to effectance theory disagreement produces a state of arousal or tension (Stapert & Clore, 1969) through consensual invalidation, while attitudinal agreement reduces arousal or prevents arousal through consensual validation (Byrne & Clore, 1967; Byrne, Nelson & Reeves, 1966). Support for a disagreement-arousal relationship has been reported in experiments using both the GSR (Burdick & Burnes, 1958) and self reports after exposure to disagreeing attitudes (Byrne & Clore, 1967; Stapert & Clore, 1969) and to disagreements in a line judging task (Gerard & Greenbaum, 1962).

If the results of the studies cited above are examined using learning theory as a model two conclusions are suggested: (a) if disagreement has the functional properties of drive, reduction of it through agreement following an instrumental response should serve to reinforce that response; (b) a logical extension of the sequence effect suggests that disagreement (drive arousal) followed by agreement (drive reduction) has greater reinforcement value than agreement not preceded by disagreement.

The purpose of the present experiment was to study the reinforcing effects of yielding (disagreement followed by agreement) and simple

agreement upon the strength of an instrumental response. The reinforcing effects of the conditions of the present experiment were modeled on discrete-trials instrumental escape conditioning, in which reinforcement was the termination of a noxious drive contingent upon an instrumental response.

Based on the studies cited above and their formulation within a learning theory framework, it was assumed that the three conditions in the present experiment were analogous to escape conditioning studies varying magnitude of reinforcement. For subjects in the present experiment, reinforcement was listening to another person either yield, agree or disagree and was contingent upon an instrumental response (pressing a toggle switch).

Upon the assumption that the present experiment is analogous to discrete-trials instrumental escape conditioning experiments in which magnitude of reinforcement was studied (e.g., Bower, Fowler & Trapold, 1959; McAllister & McAllister, 1967) it was hypothesized that response speed would be an increasing function of type of agreement, with type of agreement (yield vs. simple agreement and disagreement) being analogous to magnitude of reinforcement. The specific hypotheses were: (1) Subjects would acquire an instrumental response that gave them the opportunity to listen to another person either yield or agree with them. (2) Asymptotic response speeds in acquisition would have a specified rank order i.e., asymptotic speeds for the yield group would be faster than asymptotic speeds of the agree and disagree groups, with

the disagree group responding slowest. (3) Based on the results of escape conditioning studies in which magnitude of reinforcement was manipulated, a significant Magnitude of Reinforcement x Trials interaction was predicted. (4) Response speeds would decrease (extinguish) as reinforcements are discontinued.

Method

Subjects and Design

One hundred and eight subjects were randomly assigned to the Yield, Agree, and Disagree groups. Each group had 24 males and 12 females. For all groups each trial was started by a confederate (always the same sex as the subject) reading a topic. In the yield condition the confederate commented on the topic after he read it. In the agree and disagree conditions the confederate never commented on the topic. After the subject made the instrumental response and gave his opinion on the topic, the confederate either yielded, agreed or disagreed depending upon the condition the subject was in.

In all groups, reinforcements were given on only 50 per cent of the twelve acquisition trials. Pilot research indicated that it was not feasible to have the confederate yield on every trial because subjects became suspicious when both 100 per cent and 75 per cent of the trials were reinforced. As a consequence a 50 per cent partial reinforcement schedule was employed in which the confederate yielded to the subject on only one-half of the trials. In order to maximize learning the confederate yielded to the subject on items of high interest

and maintained the original disagree position on low interest items. This particular reinforcement procedure, which was necessary to have an effective experimental induction, required congruent procedures in the other two groups. Thus, subjects in the agree group also received the same 50 per cent partial-reinforcement schedule and were agreed with on high interest items. The disagree group followed an identical schedule, with their disagreements limited to high interest items.

Apparatus

The subject's room and the experimenter's control room shared a common wall. The subject was seated at a table facing this wall, which included four windows of transparent mirror glass. The windows were opaque except when illuminated from behind, and instructional signals appeared in each window upon illumination. The signals were the large printed words (1) "listen", (2) "throw switch if you wish to comment", (3) "talk", (4) "move dial to final opinion". A panel mounted on the table top contained the subjects "comment" switch (a telephone toggle switch with a spring return), a microphone, and a speaker, as well as an opinion change indicator used in the masking task. Also mounted in the wall were two Standard Electric timers, by means of which the subject could monitor the length of time he and the "other subject", respectively, had spoken.

On the experimenter's side of the wall were the controls for turning on the various signals, a loudspeaker for monitoring the subject's comments, a microphone and a control timer. A digital stop clock

(Lafayette 5720, 1/100 digital readout stop clock) automatically measured the subject's response latency to .01 sec. (the time between the signal "throw switch if you wish to comment" and the time the circuit was broken by the switch being thrown). The subject's masking-task opinion change dial was attached to a synchronous motor which drove a matching dial in the control room, enabling the experimenter to determine when the subject was finished with the intertrial masking-task and therefore ready for a new trial.

Deception and Masking Task

The experiment was presented to the subjects as a study of opinion change. The subjects were told: "We are interested in how your opinions may be affected by what someone else says; how your opinions may be affected by what you yourself say; and how what you say may affect the opinions of someone else." After each statement by the subject and reply by the confederate the subject indicated whether he changed his opinion by moving the opinion change dial.

Procedure

Attitude Testing. In order to select opinions with which each subject agreed or disagreed with before the experiment proper, all students enrolled in the introductory psychology courses were given a 50-item questionnaire several days prior to the beginning of the experiment. The questionnaire dealt with current controversial issues such as, family size regulation by the government, forced integration, the war in Vietnam, socialized medicine, etc. Students were asked to respond

to each item on a seven point scale, ranging from "strongly agree" to "strongly disagree". After completing the 50-item questionnaire all students were given a second sheet with the instructions to rank order the 15 items they were most interested in and the 10 items they were least interested in. Because of the reinterpretation of attraction data for the present experiment item interest was an important part of pretesting. For the purposes of the present experiment it was assumed that interest in an item determined its drive arousing properties if disagreed with.

Acquisition. As each subject arrived for the experiment, the experimenter explained that the other "subject" (the confederate, referred to as subject A) had not yet arrived. After a short time both subjects received the deceptive rationale and the operating instructions over the intercom (the confederate was in the control room with the experimenter throughout the course of the experiment). It was explained that subject A (the confederate) was in another room and had been provided with a list of topics they were to discuss. The subject was told that having the two subjects in separate rooms would ensure confidentiality of his/her candid opinions on controversial issues. Both subjects were asked to keep their statements to about 20 seconds if they could, but they were never interrupted if they spoke more than 20 seconds, since interruption would have been punishing (Mandler & Watson, 1966). During acquisition all subjects were given six reinforced and six nonreinforced trials in four prearranged random orders (with the exception that the first and eleventh trial of every subject be reinforced).

An experimental trial began with the "listen" signal. In the yield condition the confederate read the opinion statement and commented on it. In the agree and disagree conditions the confederate just read the topic. When the confederate either finished commenting on the topic or reading it, the experimenter operated the control switch which both (a) presented the CS, the signal "throw switch if you wish to comment," and (b) started the latency timer. When the subject threw the comment switch the latency timer stopped. Latency was recorded and converted to speed. If the trial was reinforced the confederate agreed with the subject. If the subject did not throw the comment lever within 20 seconds, latency was considered to be infinite and speed counted as zero. In this case an unscored makeup-trial was given to equalize the number of reinforcements.

Extinction. All subjects were given six extinction trials in which three high interest and three low interest items were used. In the yield condition, the confederate maintained his/her initial disagreeing position after the subject made the instrumental response and gave his/her opinion. In the agree and disagree conditions the confederate simply disagreed with the subject after the subject made the response and gave his/her opinion.

Drive Manipulations

All groups received the first part of the drive manipulation as part of the instructions. Each subject was told that the confederate had a list of attitudinal statements that they would be discussing. In an

attempt to insure some initial effectance arousal the following sentence was included in the instructions: "Due to the nature of the opinions that will be expressed during the course of your conversation, it is possible that there will be some initial disagreement between the two of you." For the agree and disagree conditions it was assumed that this statement plus the fact that the confederate disagreed with the subject on trial two would assure some arousal from trial three on through acquisition as soon as the opinion statement was read. The assumption of arousal from trial three on was based on the hypothesis that agreement and disagreement on trials one and two respectively, would create a certain amount of uncertainty in the subject, i.e., the subject would be expressing his opinion but had no indication of how the confederate felt about the issue since he was agreed with and then disagreed with. For the yield group it was assumed that the instructions plus the added initial disagreement by the confederate before the subject commented would lead to a higher state of arousal than in the agree and disagree conditions.

Results

Figure 1 shows the mean response speeds (100/latency) for acquisition and extinction in blocks of two trials. Although response speeds for the three groups on the first trial block are approximately equal, the improved speed over trials indicates that the subjects learned the instrumental response. However, the diverging curves indicate that

response speeds and therefore learning increased differentially during the course of acquisition. Figure 1 also shows decreasing response speeds in all groups throughout extinction.

Acquisition. It is apparent from the curves presented in Figure 1 that response speeds in the yield condition (large magnitude of reinforcement) begin to diverge from those of the agree and disagree conditions.

Insert Figure 1 about here

The prediction that asymptotic response speeds would have the specified rank order: Yield, Agree, Disagree, was tested by a Jonckheere test (Jonckheere, 1954; Kirk, 1968; Siegel, 1956). The Jonckheere is an elegant and ideally suited test for examining both the rank orderings of groups and the differences between them in a single operation. Results of a Jonckheere test performed on the grand means of the last four trials of acquisition indicated that group response speeds were in the hypothesized rank order and that speeds over the last four trials of acquisition for the three groups were significantly different from each other ($z=4.11$, $p < .003$).

In order to test for sex differences a preliminary analysis of variance was performed. The analysis indicated that there were no significant main effects or interactions attributable to sex.

A two-way repeated measures analysis of variance (Magnitude of Reinforcement x first and last acquisition trial blocks) indicated a significant increase in response speeds over trials ($F = 42.69$, $df = 1/105$, $p < .001$), and that the diverging curves presented in Figure 1

represented the hypothesized significant Trials x Magnitude of Reinforcement interaction ($F = 6.21$, $df = 2/105$, $p < .005$). Further support for the effects of magnitude of reinforcement on response speeds was denoted by a significant Magnitude of Reinforcement main effect ($F = 7.11$, $df = 2/104$, $p < .005$). Results of a trend analysis performed on the acquisition data of the disagree condition indicated the presence of both a significant linear component ($F = 5.05$, $df = 1/70$, $p < .05$) and a significant quadratic component ($F = 10.58$, $df = 1/70$, $p < .005$).

Extinction. Response speed was a decreasing function of the number of extinction trials as presented in Figure 1. Results of a 3 x 2 repeated measures analysis of variance (Magnitude of Reinforcement x first and last extinction trial blocks) indicated a highly significant Magnitude of Reinforcement effect ($F = 15.40$, $df = 2/105$, $p < .001$) and a highly significant trials effect ($F = 16.04$, $df = 1/105$, $p < .005$). However a nonsignificant Magnitude of Reinforcement x Trials interaction was found ($F < 1$), indicating that extinction for the three conditions occurred at approximately the same rate.

Discussion

In general the shape of the curves presented in Figure 1 and the significant Magnitude of Reinforcement x Trials interaction appeared to support the assumption that the present paradigm was analogous to the instrumental escape conditioning paradigms of Bower, Fowler and Tapold (1959) and McAllister and McAllister (1967). The results also indicate that the present experiment is analogous to those familiar

experiments (e.g., Franchina, 1969; Trapold & Fowler, 1960) in which magnitude of reinforcement is varied simultaneously with the intensity of drive, so that subjects who have the termination of a high drive as reinforcement receive a larger magnitude of reinforcement than those who receive the termination of a low drive as their reinforcement.

The results of the present experiment indicated that subjects would acquire an instrumental response that gave them the opportunity to listen to someone either yield or agree with them and further shows that subjects in the yield condition exhibited faster response speeds than subjects in the agree and disagree condition throughout acquisition. Differential response speeds in the present experiment could only be attributed to: (1) type of agreement (yield vs. agree) or (2) the subjects interest in the items presented to them in the different conditions. Any differences between groups must be due to one of these variables since the number of reinforcements were equated for all groups.

Since both item interest and number of reinforcements were equated in the yield and agree groups the observed differences in response speeds could only be attributed to the differences in the magnitude of the drive aroused and consequently reduced by the confederate's agreement with the subject in the yield group. Therefore, it appears that reading an attitudinal statement and presenting an opinion contrary to the subject's was successful in inducing a higher state of arousal than simply reading the opinion statement and not commenting on it. The present experiment also provided support for the disagreement-arousal and arousal reduction hypothesis of Stapert and Clore (1969). However,

the results of the present experiment appeared to extend the arousal hypothesis beyond that of arousal produced only through disagreement. Evidence for extension of the arousal hypothesis comes from the increasing response speeds across trials of the agree condition. Acquisition and maintenance of the instrumental response appears to support the assumption that the instructions were effective in arousing drive, and that agreement by the confederate reduced a heightened state of arousal in the subject created by not knowing whether or not the confederate would agree or disagree with him.

Further support for the assumption that disagreement produced a state analogous to that produced by the presentation of an aversive stimulus, and that agreement reduced the noxious state came from the acquisition data of the disagree group, i.e., initial increase in response speeds followed by a decrease in speeds during acquisition. This result supported the assumption that the mechanism for acquisition of the instrumental response was the termination or offset of an aversive stimulus. Response suppression in the disagree group could only have been caused by the aversive nature of disagreement on topics of high interest to the subject, because the number of reinforcements in the agree and disagree conditions were equated. Support for this conclusion comes from several experiments by Byrne and his associates (e.g., Byrne, Griffitt & Clore, 1968; Byrne, Young & Griffitt, 1966). Both of these studies showed the aversive nature of disagreeing opinion statements by showing that disagreeing opinion statements presented after a response led to suppression of that response.

The observed differences between the agree and disagree conditions can further be explained by a slight reinterpretation of experiments dealing with item interest and attraction. Several experiments (Byrne, London & Griffitt, 1968; Byrne & Nelson, 1965; and Clore and Bladridge, 1968) have shown that subjects were more attracted to others who agreed with them on high interest items and less attracted to others who agreed with them on low interest items. In the context of the present experiment and its results, this suggests that the interest a subject has in a particular opinion statement determines both its effectiveness as a reinforcer if agreed with and its drive arousing properties if disagreed with. Therefore, one would expect subjects receiving reinforcements (agreements) on high interest items to respond faster than subjects receiving the same number of agreements but on items of low interest to the subject. Based on this assumption and the results of the experiments of Byrne, Griffitt and Clore (1968) and Byrne, Young and Griffitt (1966) the initial increase in response speeds of the subjects in the disagree condition followed by a decrease in response speeds would be expected as the negative effects of disagreement on high interest items negated any reinforcing effects of agreement on items of low interest.

To fully demonstrate the reinforcing properties of a stimulus it is also necessary to show that withdrawal of that stimulus or nonpresentation of it after the response leads to a reduction in the strength of that response. In the present experiment it was necessary to show that withdrawal of agreement would lead to decreasing response speeds. Examination of the extinction data presented in Figure 1 and the significant Trials effect in the analysis of the extinction data does

in fact show that withdrawal of agreement led to response decrement and further supported the hypothesis that agreement was reinforcing.

Although the present experiment was based on the disagreement-arousal hypothesis resulting from frustration of the effectance motive, it is possible to interpret portions of the present experiment (specifically the yield condition) in dissonance theory terms: "The existence of disagreement among members of a group on some issue or opinion, if perceived by the members certainly produces cognitive dissonance," and one "way of reducing the dissonance would be to influence those persons who disagree to change their opinions so that it more closely corresponds to one's own (Festinger, 1957, p. 178, 182)". Furthermore, several experiments have supported the assertion that dissonance has the functional properties of drive. Therefore, if disagreement produces dissonance, and it has the functional properties of drive, reduction of it through agreement should reinforce the instrumental response that immediately preceded reduction of the dissonance. The yield condition of the present experiment by having the confederate initially disagree with the subject could have led to dissonance arousal in the subject. If this is so then the subject's reply could be interpreted as behavior that is "...directed to returning the organism to a state in which the drive is at a lower level of arousal (Brehm & Cohen, 1962, p. 224)". Once the subject replies and the confederate yields, it can be assumed that the state of arousal created by dissonance through disagreement was reduced, and that reduction

of dissonance through yielding should have reinforced the instrumental response that immediately preceded dissonance reduction.

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Figure Captions

Fig. 1. Acquisition and extinction curves of response speeds under three reinforcement conditions.

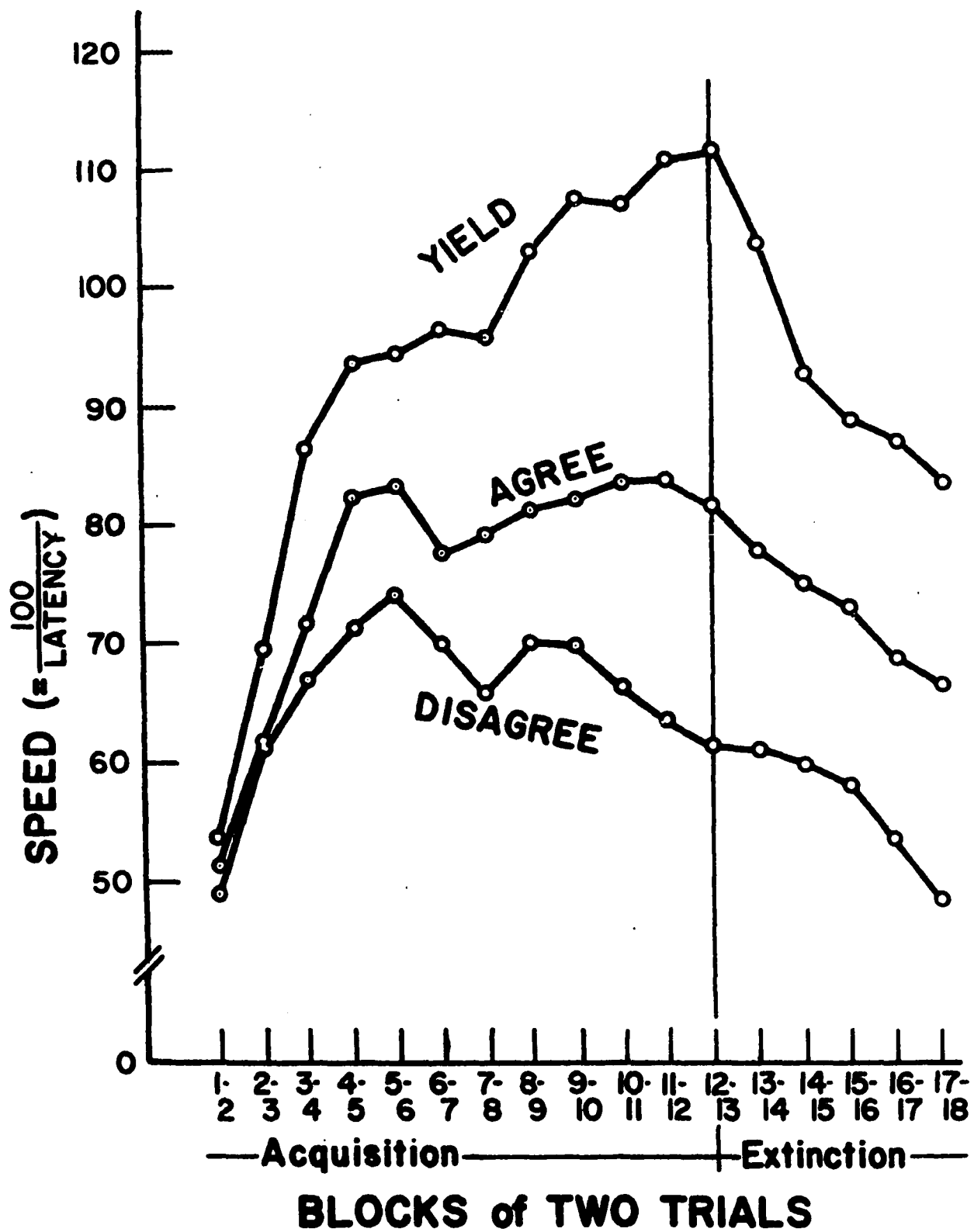


Fig. 1. Acquisition and extinction curves of response speed under three conditions of social reinforcement: yielding; agreement; and disagreement.

APPENDIX A
PROSPECTUS

PROSPECTUS

CHAPTER I

INTRODUCTION

The present study is concerned with the application of principles taken from the reinforcement theory of interpersonal attraction in an attempt to explain instrumental conditioning in human subjects. The following will consist of: (1) a review of early correlational studies dealing with attitudinal similarity and attraction; (2) a review of the reinforcement theory of attraction; (3) reinterpretation of attraction literature and applying its principles to relevant escape conditioning literature and proposal.

Since the early 1930's the relationship between people having similar attitudes and attraction has been consistently shown. The early correlational investigations dealing with husband-wife similarity appeared to support Schooley's statement that "Husbands and wives tend to marry persons similar to themselves [p. 346]." These early studies of attraction and attitudinal similarity in husbands and wives found

consistent and high correlations between the attitudes of husbands and wives on such diverse topics as: communism and birth control (Schooley, 1936), church, war and communism (Newcomb and Svehla, 1937); economic, racial, religious, industrial and social matters (Schiller, 1932); and cleanliness, courage and obedience (Hunt, 1935).

Studies of attitude similarity between pairs of friends have led to results that are similar to those involving married couples. Winslow (1937) suggested: "It may well be that an awareness of unanimity of opinion by two individuals fosters the establishment of friendship [p. 433]." In order to test his hypothesis, Winslow gave a questionnaire dealing with: the negro; American foreign policy; economic policy and religion to a group of subjects. These subjects then gave the same questionnaire to a friend of their own sex. The results revealed positive correlations between the friends opinions. Richardson (1940) tested the attitude similarity-attraction hypothesis by comparing the degree of similarity between friends versus the similarity of random pairs of individuals on the Allport-Vernon scale. Richardson found positive correlations on all values from the Allport-Vernon scale, while all correlations with one exception in the random pairs tended to be negative. Recently, Newcomb (1961) studied friendship formation in a group of students that volunteered to live together at the University of Michigan. The results of Newcomb's study indicated that agreement did not predict initial attraction but, agreement did effect attraction later on in the semester.

Walster and Walster (1963) reasoned that one explanation to like

and choose to affiliate with people who are similar to us is that those people often like us. We support their beliefs and attitudes just as they support ours. Based on this assumption, Walster and Walster hypothesized that their tendency to like us should make us like them all the more. If this were true, then people should anticipate that they will be liked by strangers who are similar to them. In their experiment Walster and Walster found support for their hypothesis, i.e., the more subjects were induced to be concerned about how much a discussion group would like them, the more they expressed a preference for being in a group of people similar in background to themselves.

Extensions of the expectancy hypothesis of Walster and Walster (1963) were carried out by McWhriter and Jecker (1967) and Griffitt (1969). In both experiments the extent to which a stranger appeared to agree with the subject on a set of attitudes was manipulated. McWhriter and Jecker (1967) found that the greater the perceived agreement, the more the average subject expected to be liked by the stranger. Griffitt (1969) found that attraction toward the stranger, anticipated positiveness of contact and estimated speed of success in solving a problem with the stranger as a partner were all significantly related to the proportion of similar attitudes expressed by the stranger.

Reinforcement theory of attraction

The attraction of one person to another has been studied by cognitive theorists (Festinger, 1955; Newcomb, 1956; 1961; 1963), and by the application of a reinforcement model derived from learning theory (Byrne, 1969; Byrne and Nelson, 1965a; Lott & Lott, 1968; Stapert &

Clore, 1969). Both theoretical positions agree that the important element involved in interpersonal attraction revolve around a commonality of attitudinal interests (Byrne, 1969; Clore & Baldridge, 1968; Newcomb, 1956).

The effect of attitude similarity-dissimilarity on attraction has been interpreted as a special case of reward and punishment and attraction toward another person has been hypothesized as a function of the relative number of rewards and punishments associated with that person.

A type of "secondary motive" has been hypothesized by Byrne (1969) based on the premise that attitude statements are affect arousing. According to this assumption, disagreement produces a state of arousal or tension, and the ensuing dislike of the disagreeer is due to his association with the unpleasant state of arousal (Stapert & Clore, 1969). The "secondary motive" was first hypothesized by Byrne (1961) as a result of the work of Pervin (1963) in which a need to be able to know and predict the environment was hypothesized, from White's (1959) effectance motive which involved a process related to effective interaction with the environment, and from Dollard and Miller's (1950) learned drive to be logical and make a correct report of the environment.

Studies in a wide variety of settings have shown that physical and functional distance influence interaction and interpersonal attraction (Byrne, 1969). However, once interaction has begun, reciprocal reward and punishment was proposed as the crucial determining factor. Newcomb (1956) has suggested that attraction between persons

is a function of the extent to which reciprocal rewards are present in their interactions and that dislike may be a function of reciprocal punishments. Byrne (1961) perceived similarity and dissimilarity of attitudes as being a special subclass of that variable. He assumed that persons in our culture have well established learned drives to be logical and to make a correct report of the environment. According to Byrne (1969) it is primarily through consensual validation that we determine whether we or anyone else is logical or correct in interpreting environmental events. Hence, anytime that another person offers us validation by indicating that his percepts and concepts are congruent with ours, it constitutes a rewarding interaction and, hence one element in forming a positive relationship. Anytime that another person indicates dissimilarity between our two attitudes, it constitutes a punishing interaction and thus one element in forming a negative relationship.

In order to test the proposition that the effect of attitude similarity was a causative one, an experiment was performed (Byrne, 1961) to test the hypothesis that (a) a stranger who was known to have attitudes similar to those of the subject would be better liked than a stranger with attitudes dissimilar to those of the subject, (b) a stranger who was known to have attitudes similar to those of the subject would be judged more informed, more intelligent and better adjusted than a stranger with attitudes dissimilar to those of the subject, and (c) a stranger who was known to have similar attitudes on issues important to the subject and dissimilar attitudes on unimportant issues would be

evaluated more positively than a stranger for whom the reverse was true.

In order to test the hypotheses outlined above a 26 item attitude scale was administered to the Ss. They were also asked to indicate which 13 items they believed to be the most important and which 13 items represented the least important issues. Two weeks later the original S pool was divided into four groups; one group was shown questionnaires exactly as theirs had been, one received scales with exactly opposite views expressed, one received scales with similar opinions on the most important issues and dissimilar on the least important, and the fourth received scales with similar opinions on the least important issues and dissimilar opinions on the most important. The results confirmed the first two hypotheses, that is, Ss indicated positive feelings toward a stranger when the stranger's attitude scale was similar to their own. The Ss also rated such strangers as more intelligent, more informed on current events and better adjusted than disagreeing strangers. The third hypothesis, concerning the influence of important vs. unimportant issues was only partially confirmed. Two later studies also failed to support the hypothesis that importance of the issue had an effect on attraction (Byrne & Nelson, 1964; Byrne & Nelson, 1965 (b)).

According to Byrne & Clore (1967), Byrne, Nelson & Reeves (1966) and Stapert & Clore (1969) the experimental investigations performed on interpersonal attraction based on attitude similarity-dissimilarity are dependent upon the reduction or arousal of the effectance motive. The

position taken by the authors is that attitudinal agreement provides consensual validation and either reduces or prevents arousal of the effectance motive, while attitudinal disagreement leads to arousal of the effectance motive through consensual invalidation.

Byrne, Nelson & Reeves (1966) performed a study which indicated that the level of effectance arousal was a decreasing function of the ease of verification of the attitude statements i.e., topics on which the correctness or incorrectness of one's position is not open to empirical verification. The authors used three types of questionnaires: (1) Unverifiable; (2) Verifiable in future; (3) Verifiable in present, and found that Ss exposed to questionnaires of fictitious others were more attracted to those who agreed with them on unverifiable issues. The idea that ease of verification and certainty effected attraction was supported in an earlier study by Worchel and McCormick (1963). Their study found that subjects who were more uncertain of their opinion about a given issue expressed the greatest liking toward an agreeing stranger and the greatest derogation of a disagreeing stranger.

A series of studies were conducted by Byrne and Clore (1967) in an attempt to arouse the effectance motive independently of the attitude situation, to devise a behavioral index of arousal, and to determine the way in which effectance arousal influence the attraction relationship. The authors assumed that any situation which provided evidence of one's predictive accuracy, ability to understand, correctness, logicity, etc., i.e., any information which permits or indicates effective functioning would satisfy the effectance motive, and any situation providing the

opposite type of evidence would frustrate the effectance motive. In order to test the hypothesis that the effectance motive is aroused by stimulus conditions which are unpredictable the authors developed the Effectance Reaction Scale which taps the Ss feelings of confusion, unreality, dream-like feelings, and a desire for social comparison. As an independent arousal stimulus, a non-predictable movie was constructed. In the first experiment of the series the non-predictable movie was found to yield higher effectance arousal scores than either a neutral movie or a predictable but emotion-arousing movie depicting a cataract operation. In their fifth study Byrne and Clore found attitude items to arouse the effectance motive to a greater extent than a neutral stimulus and less than a nonpredictable movie. Further, the degree of arousal was a positive function of the proportion of dissimilar attitudes. In addition, as arousal increased, responses to a dissimilar stranger became more negative. On the basis of the findings mentioned above, the authors concluded that moderate drive arousal heightens the attitude-attraction relationship, while high drive arousal has the opposite effect.

Proportion of reinforcements and punishments and attraction

Attraction between individuals was called a function of the extent to which reciprocal rewards were present in their interactions (Newcomb, 1956; 1963). As an extension of this conceptualization Byrne (1961) suggested that attraction toward a person is determined by the number of rewards relative to the number of punishments received from him. Various types of reward and punishments have been utilized experimentally; gain and loss of self-esteem (Aronson & Linder, 1966), expecting to

be liked by a stranger (Aronson & Worchel, 1966; Walster & Walster, 1963), but the major portion of attraction research has utilized similarity and dissimilarity of attitudes. The rationale for the research rested on the concept of a learned drive to be logical. According to this position interpreting incoming information correctly was reinforced by consensual validation and frustrated by consensual invalidation.

An experiment performed by Byrne and Nelson (1965a) independently varied the number of similar and dissimilar attitudes as well as the ratio of similar to dissimilar attitudes. Eight scales of different lengths (4 to 48 items) were constructed and matched with respect to the importance of the topics. The design permitted comparison of the effects of number of positive reinforcements (16, 8 and 4) with the effects of proportion of positive reinforcements (1.00, .67, .50, .33) on attraction in a 4 x 3 factorial design. The results indicated a significant effect due to proportion of agreements. With the stimulus determining attraction identified as the proportion of similar attitudes, data from previous experiments were combined and reanalyzed. A total of 790 subjects had each been exposed to one of eleven proportions of similar attitudes attributed to a stranger and then evaluated that stranger. By plotting the mean attraction scores for the 11 stimulus values, a straight-line function was fitted to the data by the least squares method. Two later studies (Byrne, London & Griffitt, 1968; Clore and Baldridge, 1968) supported the findings of Byrne and Nelson (1965a). By using the formula derived from Byrne and Nelson both studies

(Byrne, London & Griffitt, 1968; Clore and Baldridge, 1968) were able to predict specific attraction responses.

In an attempt to further identify independent variables involved in the attitude-similarity-attraction relationship Byrne and Nelson (1964) and Byrne and Nelson (1965b) varied topic importance in addition to proportion of similar attitudes. Both studies failed to find a main effect attributed to item importance. However, an experiment by Clore and Baldridge (1968) varied topic interest rather than importance, and found item interest to have an effect on attraction. Clore and Baldridge reasoned that although most subjects would attest to the importance of such issues as socialized medicine or racial integration, many were not personally interested in them.

Attitude statements as reinforcements and punishments

If the reinforcement interpretation of attitude similarity-dissimilarity and attraction is correct, attitudinal statements should function as other known reinforcers and alter response probabilities when presented after a specific response. Specifically, the probability of the occurrence of a response should increase if that response is followed by the presentation of a statement that is in agreement with an attitude held by the responder, and decrease the probability of that response if it is followed by a statement that is in disagreement with an attitude held by the responder. Several experiments have supported this hypothesis by showing that attitudinal statements altered response probabilities in both discrimination learning tasks (Byrne, Griffitt & Clore, 1968; Byrne, Young & Griffitt, 1966; Golightly & Byrne, 1964;

Lamberth & Craig, 1971) and in discrete-trials instrumental conditioning studies (Lamberth, 1970).

Golightly and Byrne (1964) employed a simple discrimination learning task in which correct responses were followed by the presentation of an attitude statement in agreement with the subject's views while incorrect responses were followed by attitude statements opposite to the subject's views. In addition to the attitude similarity-dissimilarity group a traditional reward-punishment and control group were employed. The reward-punishment group had each response followed by the words right or wrong. Although the traditional reward-punishment group performed better than the other groups, the attitude similarity-dissimilarity group performed significantly better than the control group. The study was successful in finding that attitudinal material could successfully be used as reinforcing stimuli in a discrimination learning task.

An in depth study of the problem was carried out by Byrne, Young and Griffitt (1966) using the same discrimination learning task as Golightly and Byrne (1964). Byrne, Young and Griffitt investigated the effects of four different types of stimuli on learning: right-wrong statements; neutral statements; similar attitudes and dissimilar attitudes. The results of their first experiment indicated that dissimilar attitudes served as punishers when used in conjunction with either similar or neutral attitudes. However, similar attitude statements were not effective as positive reinforcers when contrasted with neutral statements. The results of their second and third

experiments indicated that learning was most facilitated for the right-wrong groups and least facilitated for the neutral statements groups, with attitudes being intermediate.

The hypothesis that performance level in a discrimination learning task would be a positive function of the homogeneity of attitude content was tested by Byrne, Griffitt and Clore (1968). Three conditions were employed--(1) a traditional reward and punishment, (2) a heterogeneous or complex similarity-dissimilarity (an attitude statement agreeing with Ss viewpoint followed correct responses, and a disagreeing statement followed incorrect responses) and, (3) a new condition. The new condition was the homogeneous or simple similarity-dissimilarity group in which agreeing and disagreeing attitude statements followed correct and incorrect responses but for each S only one topic was represented. The results indicated that when stimulus homogeneity was controlled for learning was facilitated equally by traditional reinforcing stimuli (right-wrong) and by attitude statements.

Attraction theory and escape conditioning

In several experiments, attraction towards another person has been shown to be a function of a "sequence" effect in which subjects were more attracted towards agreeers after initial exposure to disagreeers (Stapert & Clore, 1969, Worchel & Shuster, 1966). A similar effect was found when the same person began disagreeing with the subject and at some point changed to agreeing with the subject (Byrne, Lamberth, Palmer & London, 1969; Gerard & Greenbaum, 1962; Sigall, 1968; Aronson &

Linder, 1965 found similar results using personal evaluations rather than attitudinal agreement).

The attraction of people to others having the same attitudes as themselves has been attributed to the effectance motive (Byrne & Clore, 1967) which is defined as a learned drive elicited by failure to be logical, consistent and accurate in interpreting the stimulus world (Byrne & Clore, 1967; Dollard & Miller, 1950). According to effectance theory, disagreement arouses a noxious drive state (Stapert & Clore, 1969) through consensual invalidation, while attitudinal agreement reduces drive or prevents arousal of drive through consensual validation (Byrne & Clore, 1967; Byrne, Nelson & Reeves, 1966). Support for a disagreement-arousal relationship has been reported in experiments using both the GSR (Burdick & Burnes, 1958) and self reports after exposure to disagreeing attitudes (Byrne & Clore, 1967; Stapert & Clore, 1969) and to disagreements in a line judging task (Gerard & Greenbaum, 1962). According to Stapert and Clore ". . .disagreement produces a state of tension, and the ensuing dislike of the disagreeer is due to his association with the unpleasant state of arousal. . .and that one source of attraction toward another person is his association with drive reduction [p. 64, 68]."

Several recent experiments have supported the assumption of Byrne and Clore (1967) and Stapert and Clore (1969) that disagreement produces a state of drive and further indicate that presentation of disagreeing opinions (effectance arousal) is noxious. Using a discrete-trials instrumental conditioning paradigm Weiss, Lombardo, Warren and Kelley

(1971) had subjects make an instrumental response that gave them the opportunity to reply to someone who disagreed with them. In four separate experiments, the learning curves were isomorphic with those typically obtained in escape conditioning studies. Because of the similarity of their results to those of escape conditioning studies Weiss, Lombardo, Warren and Kelley concluded that effectance aroused through disagreement is noxious, and that reduction of the effectance through speaking in reply reinforced the instrumental response that gave the subjects the opportunity to reply.

If the results of the studies reviewed above are examined using learning theory as a model as Byrne (1969) suggests, four conclusions are suggested: (a) if disagreement has the functional properties of drive, reduction of it through agreement following an instrumental response should serve to reinforce that response; (b) the interest a subject has in an opinion statement determines both its drive arousing properties if disagreed with and, its reinforcement value if agreed with; (c) that disagreement (drive arousal) followed by agreement (drive reduction) has greater reinforcement value than agreement not preceded by disagreement; (d) that reinforcement through agreement on items of high interest to a subject should be more reinforcing than agreement on items of low interest. Therefore, the purpose of the present experiment is to study the reinforcing effects of (1) agreement following disagreement on items of high interest to the subject (yield condition); (2) agreement without prior disagreement on items of high interest (agree condition) and (3) agreement on items of low interest

to the subject without prior disagreement. The reinforcing effects of the three conditions outlined above were studied in a procedure modeled on discrete-trials instrumental escape conditioning, i.e., reinforcement referred to the termination or offset of an aversive stimulus and was contingent upon an instrumental response (lever press).

Proposal

Based on the studies presented above and its formulation within a learning theory framework, it was assumed that the three conditions in the present experiment are analogous to escape conditioning studies using three levels of drive. Reinforcement (drive reduction) for subjects in the present experiment will be the opportunity to listen to another person agree with them on high or low interest items.

Instrumental escape conditioning studies controlling the magnitude of reinforcement have yielded conflicting results (Campbell & Kraeling, 1953; McAllister & McAllister, 1967; Woods, Davidson & Peters, 1964). However, when shock is terminated completely after each escape, there is no doubt that speed is an increasing function of drive (e.g., Franchina, 1969; Trapold & Fowler, 1960). Therefore, it is hypothesized that response speed would be an increasing function of type of agreement, with type of agreement being analogous to magnitude to reinforcement. The specific hypotheses are: (1) that subjects in the yield condition (high magnitude of reinforcement) would acquire and respond significantly faster than subjects in the agree condition (moderate magnitude of reinforcement) and disagree condition (low magnitude of reinforcement). The first hypothesis is based upon the

evidence presented above in support of the "sequence effect"

(inducement of a negative drive state followed by reduction through agreement led to greater attraction). (2) Subjects receiving reinforcement (agreement) on high interest items (agree condition) and disagreement on low interest items would respond faster than subjects receiving agreements on the same number of items, but of low interest to the subject (disagree condition). The second hypothesis is based upon the results of attraction data indicating that subjects were more attracted to others who agreed with them on items of high interest (Clore & Baldrige, 1968). (3) Subjects in the disagree condition (low magnitude of reinforcement; agreement on items of low interest, disagreement on items of high interest) would show an increase in response speeds over the first few trials of acquisition, followed by a decreasing trend in response speed over the remaining trials of acquisition. The third hypothesis is based on the assumption that the negative effects (drive arousal not followed by reduction) of disagreement on items of high interest would negate any reinforcing effects of agreement on items of low interest. (4) Response speeds would decrease over trials as reinforcements are discontinued, i.e., constant disagreement in all groups would lead to extinction of the lever press response.

CHAPTER II

METHOD AND PROCEDURE

Subjects

A sample of 108 undergraduate volunteer subjects will be selected from the introductory psychology course at the University of Oklahoma. The subjects will be randomly assigned to the three treatment conditions.

Apparatus and materials

The subject's room and the experimenter's control room share a common wall. The subject will be seated at a table facing this wall, which includes four windows of transparent mirror glass. The windows will be opaque except when illuminated from behind. Instructional signals will appear in each window upon illumination. The signals are the large printed words (1) "listen," (2) "throw switch if you wish to comment," (3) "talk," (4) "move dial to final opinion." A panel mounted on the table top will contain the subjects "comment" switch (a telephone toggle switch with a spring return), a microphone, and a speaker, as well as an opinion change indicator used in the masking task.

Also mounted in the wall are two Standard Electric timers, by means of which the subject could monitor the length of time he and the "other subject," respectively, had spoken.

On the experimenter's side of the wall are the controls for turning on the various signals, a loudspeaker for monitoring the subject's comments, a microphone and a control timer. A digital stop clock (Lafayette 5720, 1/100 digital readout stop clock) will automatically measure the subject's response latency to .01 sec. (the time between the signal "throw switch if you wish to comment" and the time the circuit is broken by the switch being thrown). The subject's masking-task opinion change dial is attached to a synchronous motor which will drive a matching dial in the control room, enabling the experimenter to determine when the subject is finished with the intertrial masking-task and therefore ready for a new trial.

Deception and masking task

The experiment will be presented to the subjects as a study of opinion change. The subjects will be told: "We are interested in how your opinions may be affected by what someone else says; how your opinions may be affected by what you yourself say; and how what you say may affect the opinions of someone else." After each statement by the subject and reply by the confederate the subject will indicate whether he changed his opinion by moving the opinion change dial.

Questionnaire

In order to select opinions with which each subject will agree or disagree before the experiment, a number of introductory psychology

classes will be given a 50-item questionnaire. The questionnaire will deal with current controversial issues such as, family size regulation by the government, forced integration, socialized medicine, etc. In order to maximize effectance arousal during the experiment all topics will be unverifiable i.e., topics that cannot be proven true or false (Byrne, Nelson & Reeves, 1966). The students will be asked to respond to each item on a seven point scale, ranging from "strongly agree" to "strongly disagree". After completing the questionnaire all students will be given a second sheet with the instructions to rank order the 15 items they are most interested in and the 10 items they are least interested in. Because of the reinterpretation of attraction data for the present experiment, item interest will be an important part of pretesting. For the purpose of the present experiment it is assumed that the interest a subject has in an item will determine its drive arousing properties if disagreed with.

Procedure

The experiment will be conducted in the following order:

Attitude testing. The questionnaire described above will be given to a number of introductory psychology classes. Students from these classes will then be given an opportunity to volunteer for the experiment.

Acquisition. As each subject arrives for the experiment, the experimenter will explain that the other "subject" (the confederate, referred to as subject A) has not yet arrived. After a short time both subjects will receive the deceptive rationale and the operating instructions over the intercom (the confederate will be in the control

room with the experimenter throughout the course of the experiment). The subject will be told that subject A (the confederate) is in another room and has been provided with a list of topics they are to discuss. Both subjects will be asked to keep their statements to about 20 seconds if they can, but they will not be interrupted if they speak more than 20 seconds, since interruption has been shown to be punishing (Mandler & Watson, 1966). During acquisition all subjects will be given six reinforced and six non-reinforced trials in four prearranged random orders (with the exception that the first and eleventh trial of every subject be reinforced).

An experimental trial will begin with the "listen" signal. In the yield condition the confederate will read the topic. When the confederate either finishes commenting on the topic or reading it, the experimenter will operate the control switch which both (a) presents the CS, the signal "throw switch if you wish to comment", and (b) starts the latency timer. When the subject throws the comment switch the latency timer will stop. Latency will be recorded and converted to speed. If the trial is reinforced the confederate will agree with the subject. If the subject does not throw the comment lever within 20 seconds, latency is considered to be infinite and speed counted as zero. In this case an unscored makeup-trial will be given to equalize the number of reinforcements.

Extinction. All subjects will be given six extinction trials. In the yield condition, the confederate will maintain his/her initial disagreeing position after the subject makes the instrumental response

and gives his/her opinion. In the agree and disagree conditions the confederate simply disagrees with the subject after the subject makes the response and gives his/her opinion.

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APPENDIX B
INSTRUCTIONS

Before we begin let me tell the two of you something about the experiment.

The experiment deals with controversial attitudes and opinions and the effect that conversation has on these opinions. There are no right or wrong opinions. We are interested in the effectiveness of your conversation on the other persons attitudes. Due to the nature of the attitudes which will be expressed during the course of your conversation, it is possible that there will be some initial disagreement between the two of you. Do not hold back any opinions you have--remember there are no right or wrong opinions, but only your true feelings on the topic.

INSTRUCTIONS:

ICOM TALK

I'm going to go through a typical cycle of this program with the two of you, showing you everything that may happen. I won't refer to you by name; the person in the small room at the front of the wing will be "Subject A", and the person in the large carpeted room at the back of the wing will be "Subject B".

S8 DOWN

Now the first signal light is on, instructing Subject A to "Talk" and Subject B to "Listen". Subject A, you'll see the "Press Mike Switch" light on the table. Go ahead and press the button labeled "Mike Switch" and you'll get the green "Talk" light. Okay, that's good. Now, as long as you hold the mike switch down and have the green light, you have an open intercom line to Subject B. Whenever you finish talking, release the mike switch and the program will continue. You'll also see a clock below the "Talk" light. We'd like each of you to try to hold comments to 20 secs., but you won't be cut off if you run over. Now Subject A, when you get this first talk signal, you should read the topic from your list, and then state your opinion on it. [Don't take any time to debate what your opinion should be; just state your initial opinion, and make no comment on it. Read this for "yield" only.]

S1 DOWN

Subject B, you now see the "Comment" signal. If you have any comment at all on the topic, move the switch marked S3 forward, in the direction of the illuminated arrow, until the light goes off. Now go ahead and try throwing that switch.

WHEN T2 STOPS

Okay, Subject B, you now have the "Talk" signal on the panel, and the "Press Mike Switch" light on the table. Go ahead and press the button marked "Mike Switch".

WATCH FOR L9. Okay, that's good. Now, as long as you have the green "Talk" light, you have an open intercom line to Subject A, so you can go ahead and make your comment. Try to hold it to 20 sec., and when you're finished just release the mike switch. Subject B do not limit yourself to simple statements like "I agree" or "I disagree". Tell Subject A more about your opinion. Now Subject B, on some trials you may throw the switch and you will not get the talk signal. This means you will not have an open line to Subject A, and you will not be able to talk to him/her on that particular topic. You'll have to watch, each time, to see whether or not you get the talk signal.

S1 UP

Subject A, you now have your "Comment" signal; if you wish to make a comment throw the switch marked S9 toward the arrow. Okay, good, you now see the "Talk" signal. Again, as with Subject B, you may or may not get the talk signal, so don't start talking unless you do get the signal.

S8-1-2-5 DOWN

Now both of you have the final signal, instructing you to move the opinion change dial. Each of you should decide if your opinion is the same as it was when the topic was first read, or if it's grown stronger or weaker; then move the dial to the appropriate position. This is not whether you agree or disagree with the topic, or with what the other person said, but whether or not your initial opinion on the topic has changed. Now both of you try moving the dial to the "Much Stronger" position. WATCH DIAL Okay--when you've moved it, just releast it; I'll reset the dials from here. ALL SWITCHES UP: DIAL TO GREEN SEGMENT. That's the complete cycle; you'll then go on to the next topic. As the general instructions said, we're studying how what each of you says may affect your own and the other person's opinions on a topic. The topics we've chosen are deliberately very controversial, and again, whatever you say will be kept strictly confidential. Before we begin, do either of you have any questions? Subject A...Subject B, any questions? ICOM LISTEN, S8-1-2 DOWN
ALL SWITCHES UP: ICOM TALK
We'll begin then, and A, you can start with the first topic on your list as soon as you get the signal.

APPENDIX C

MEAN SPEEDS FOR TRIALS OF ACQUISITION

MEAN SPEEDS FOR TRIALS OF ACQUISITION

Trial	Yield	Agree	Disagree
1	.447	.441	.406
2	.621	.582	.575
3	.772	.653	.650
4	.952	.778	.696
5	.921	.865	.723
6	.972	.791	.760
7	.961	.774	.636
8	.948	.814	.682
9	1.107	.810	.716
10	1.038	.828	.677
11	1.091	.852	.651
12	1.124	.816	.619

APPENDIX D

MEAN SPEEDS FOR TRIALS OF EXTINCTION

MEAN SPEEDS FOR TRIALS OF EXTINCTION

Trial	Yield	Agree	Disagree
13	1.111	.814	.611
14	.972	.782	.608
15	.890	.752	.589
16	.895	.730	.575
17	.844	.691	.499
18	.837	.666	.472

APPENDIX E
STATISTICAL TESTS

GROUPS X BLOCK OF TWO TRIALS REPEATED MEASURES

Analysis of Variance of Acquisition

Response Speeds

Source	SS	df	MS	F
Between Subjects	23.134	107		
A (Mag. of Reinf.)	2.761	2	1.381	7.118*
Ss/groups	20.373	105	.194	
Within Subjects	25.279	108		
B (Trials)	6.741	1	6.741	42.665**
A X B	1.963	2	.982	6.213*
B X Ss/groups	16.575	105	.158	

* $p < .005$

** $p < .001$

GROUPS X BLOCKS OF TWO TRIALS REPEATED MEASURES

Analysis of Variance of Extinction

Response Speeds

Source	SS	df	MS	F
Between Subjects	29.055	107		
A (Mag. of Reinf.)	6.594	2	3.297	15.406*
Ss/groups	22.461	105	.214	
Within Subjects	13.454	108		
B (Trials)	1.765	1	1.765	16.045*
A X B	.106	2	.053	<1
B X Ss/groups	11.583	105	.110	

* $p < .001$

APPENDIX F
THE QUESTIONNAIRE

1. Divorce is never justifiable.
2. Family size should be regulated by the government.
3. A truly moral person should refuse to engage in any war, no matter what the consequences might be for his country.
4. Integration in public schools is necessary and should be promoted even if bussing is involved to achieve it.
5. The American way of life is not the best.
6. There is nothing wrong with premarital sex relations.
7. Money is about the most important goal in life.
8. The Democratic party is by far the best party.
9. People should go along with group opinion even if they disagree with it.
10. God is dead.
11. All collegiate athletic scholarships should be discontinued.
12. Loud music is bad music.
13. Under no circumstances should a parent ever strike a child.
14. The practice of birth control is equivalent to murder.
15. Patients discharged from mental hospitals should not be allowed to marry.
16. Criminals can only be corrected by extreme brutal punishment.
17. Universities should have strict rules and regulations regarding protests--those who break the rules should be expelled and subject to a criminal trial.
18. The United States has no right to be in Vietnam.
19. War is the only solution to world problems.
20. Atheists and communists should not be allowed to teach in public schools.
21. Sex education should be taught in the public schools.
22. I feel great admiration for highly intelligent people.
23. I feel great admiration for people who do their own thing.
24. The U.S. should have completely socialized health care, regulated by the government.
25. All collegiate athletic scholarships should be discontinued.

(26-50) The following items describe viewpoints or actions. Indicate whether you agree (or approve) or disagree (disapprove) of them.

26. Because of their religious views, parents refused to allow a critically-needed blood transfusion for their child.
27. An industry failed to maintain minimum health and safety standards for its workers to increase profits.
28. A producer of TV commercials used deception to make his product appear better than it was.
29. A person decided it was too much trouble to vote.
30. An engineer allowed faulty products to be marketed, since criticizing them would have cost him a promotion.

31. The Roman Catholic clergy of a city used political and economic means to prevent an anti-Catholic film being shown on TV.
32. A junior executive who considered some of his firm's practices improper and unethical remained silent for the sake of his career.
33. The moral wrong of birth control far outweighs any possible benefits.
34. An employer is entitled to deny employment to members of racial, religious or political groups of which he disapproves.
35. Colleges should forbid students to join fraternities and sororities.
36. Negroes should receive preferential treatment in applying for jobs to compensate for past discrimination against them.
37. The Federal Government should take over operation of the television networks.
38. Anyone convicted of a sex crime should be hospitalized rather than imprisoned.
39. Newspapers and magazines should not criticize the Federal Government.
40. Citizens should not have to obtain permits for firearms, and should not have to register them.
41. The advertising industry should be subject to regulations governing truthfulness, accuracy, and taste.
42. The age at which a person is allowed to drink alcoholic beverages is the concern of his parents, not the state.
43. People from foreign countries are too critical of America.
44. Among the things that impress me about a person are intelligence.
45. Among the things that impress me about a person are personality.
46. Police are justified in using any degree of force during civil disorders.
47. Lynching is justified in the case of monstrous crimes.
48. All communists, socialists, etc. should not be allowed to publicly express their opinions.
49. The United States should adopt socialized medicine.
50. All welfare legislation should be nullified.

Name: _____ Date: _____

Section: _____ Instructor: _____

As far as I am personally concerned, I consider the following fifteen issues to be the ones I am most interested in (try to arrange at least the first ten in order of interest--indicate by item number):

- | | | |
|----------|-----------|-----------|
| 1. _____ | 6. _____ | 11. _____ |
| 2. _____ | 7. _____ | 12. _____ |
| 3. _____ | 8. _____ | 13. _____ |
| 4. _____ | 9. _____ | 14. _____ |
| 5. _____ | 10. _____ | 15. _____ |

As far as I am personally concerned, I consider the following ten issues to be the ones I am least interested in (no particular order is necessary):

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |