Most studies of interpersonal attraction and rejection have come to the unremarkable conclusion that persons who are perceived as similar to one's self in beliefs and values are liked better than those perceived as dissimilar. This experiment was designed to vary in an orthogonal design (1) perceived similarity between a subject and another person, and (2) classically acquired attitudes toward that person. After receiving treatments which conditioned a positive, negative or neutral attitude toward a name, the subjects interacted with another person bearing that name who was made to appear similar or dissimilar to the subject. The subject then expressed acceptance or rejection of the other person. In this way, the effects of similarity-dissimilarity and conditioned affect could be assessed independently. The results support the view that perceived similarity is a determinant of attraction among people and tend also to support earlier findings (Eriksen and Knurek) that attitudes conditioned to a name generalize to a person bearing that name, at least when the degree of similarity of that person to the subject is not made salient. (Author/IA)
The Relationship of Belief Similarity to Attraction Following Conditioning and Generalization of Affect

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Most studies of interpersonal attraction and rejection have come to the unremarkable conclusion that persons who are perceived as similar to one's self in beliefs and values are liked better than those who are dissimilar. Explanations for this finding have generally gone in one of two directions. One point of view is that the person, the other, and the belief or value constitute a closed system in which cognitive balance is preferred to imbalance (e.g., Newcomb, 1956). The other approach has emphasized learning theory in that it regards positive or negative attitudes toward another person as conditioned responses with the person as CS and "similarity", which is assumed to be a rewarding state, as UCS. Thus, the rewarding properties of "being agreed with" generalize to the person who does the agreeing (Byrne and Clore, 1971).

The present experiment was designed to vary in an orthogonal design (1) perceived similarity between a subject and another person and (2) classically acquired attitudes toward that person. After receiving treatments which conditioned a positive, negative, or neutral attitude toward a name, Ss interacted with another person bearing that name who was made to appear similar or dissimilar to S. S then expressed acceptance or rejection of the other person. By means of this design, the effects of similarity-dissimilarity and conditioned affect could be assessed independently.
We were particularly interested in the way in which the two independent variables are related to each other. If perceived similarity to another person produces liking for the person according to a classical conditioning model, the two variables should be related additively because positive affect which is a CR to the other person should summate with similar positive affect acquired through previous association of the person with a different UCS. On the other hand, any departures from additivity would suggest some alternative explanation to that derived from classical conditioning. For example, a combination of previously conditioned positive affect for a person and perceived dissimilarity to him could create a state of cognitive conflict. The effects of such conflict might not be predictable from a simple assumption that similarity breeds affection through association. Resolution of such possible conflict could add still another dimension to the problem of why similar others are liked more than dissimilar others.

Method
Fifty-four female Ss were run in 18 groups of 3. None of the 3 Ss within each group knew the names of the other two and all 3 were isolated from each other in separate cubicles immediately after entering the laboratory. The experiment was described as one on "how people form impressions of each other" and was described as consisting of two parts. In the first, each S would attempt to learn some pertinent facts about other people while being distracted by irrelevant information. A paired associates learning task was used. Each S observed a screen placed before all 3 cubicles on which 12 S terms
(first names of girls) and 12 R terms (names of girls' residence halls at the university) appeared. As the S term appeared, the "distracting stimulus" was presented orally by E and received via headphones by the Ss. This consisted of an adjective which pretesting had shown to be either pleasant (e.g. "good", "compassionate", "happy"), or unpleasant ("treacherous", "violent"), or neutral ("tall", "early"). S was instructed to repeat the word to herself silently as soon as she had heard it. A total of 16 trials was run, with a different adjective paired with each name on each trial.

The first independent variable was introduced at this point. For one-third of the groups, the name "Nancy" was paired with pleasant words on 14 of the 16 trials and with neutral words on the other 2. We shall call this the Positive Conditioning treatment. For another third, the name "Nancy" was paired with unpleasant words on 14 trials and with neutral words on the other 2. This will be called the Negative Conditioning treatment. For the final third of the Ss, "Nancy" was paired with neutral words on 14 trials, with a pleasant word on one trial and with an unpleasant word on one. This will be called the Neutral Conditioning treatment. Each other name on the list was paired with pleasant, unpleasant, and neutral words approximately one-third of the time, according to a random assignment of words to trials.

The second part of the experiment involved a simulated group discussion in which each S was told to express her opinion on a controversial statement after which she would learn opinions of the other 2 Ss. A modified 3-station Crutchfield apparatus was used, by which S could express "agree" or "disagree" with any one of 12 statements presented on the screen. Each S was instructed privately that
she was to be the first to respond. E then explained that the opinions of the other two Ss would appear on two sets of lights, and he labelled each set with what were said to be the names of the other Ss. Actually, he labelled one set "Nancy" and the other "Jane", a name not previously associated with the experiment. On the 12 attitude items, Nancy was made to agree with S on 10 for one-third of the Ss, and on 2 with another third of the Ss. The other third of the Ss were given no feedback on the opinions of the other Ss. These treatments represent the second independent variable and will be designated the Similar, Dissimilar, and No Treatment groups, respectively.

Each S was then given a questionnaire containing 2 copies of Byrne's Interpersonal Judgment Scale (Byrne, 1965) and two items by which she expressed the degree to which she perceived Nancy and Jane to be similar to herself. The latter was a check on the effectiveness of the similarity manipulation while the Byrne scales were the means by which S expressed liking for Nancy and Jane.

The experiment was concluded by E's interviewing each S to determine whether the experimental deceptions had been successful and to inform each girl of the true nature of the experiment.

Results and Discussion

Results on each item consisted of a seven-point scale score with the content of the measurement determined by the nature of the question. Since Ss were run in 2 groups of 3 Ss each within each of the 9 cells of the 3 x 3 design, results were analyzed according to a 3 x 3 x 2 analysis of variance with groups nested within the two treatment variables. Mean scores rating "Jane" revealed no variance due to
treatments for any question. Ratings of "Nancy" produced significant differences among groups on two items, the ones measuring perceived similarity and overall likeability. Analysis of perceived similarity scores revealed a significant main effect for the Similarity-Dissimilarity manipulation only (F=7.12, df=2, 9, p<.05), showing that this manipulation was successful. When Nancy had agreed with S on 10 of 12 items she was rated as more similar to S than when she had agreed on 2 of 12. Results for the item measuring liking for Nancy, with a low scale score representing greater liking, appear in Figure 1. A significant main effect for Similarity-Dissimilarity was found (F=4.75, df=2, 9, p<.05), indicating that Nancy was liked more when similar to S than when dissimilar. The interaction between the Similarity and Conditioning variables was also significant (F=4.29, df=2, 9, p<.05). A further analysis for main effects was made by analyzing differences across each variable within what was essentially the no-treatment group on the other variable. In this way it was found that the difference between Ss in the Similar-Neutral Conditioning and Dissimilar-Neutral Conditioning groups was significant (t=2.79, df=10, p<.05) and that the difference between the Positive Conditioning-No Treatment and Negative Conditioning-No Treatment groups reached borderline significance (t=1.95, df=10, p=.075).

The results of the experiment support the view that perceived similarity is a determinant of attraction among people. They also tend somewhat to support the earlier findings of Berkowitz and Knurek...
(1969) that attitudes conditioned to a name generalize to a person bearing that name, at least when the degree of similarity of that person to the subject is not made salient. The interaction between the two variables results from the fact that a similar other to whose name a positive attitude had been conditioned was preferred to a similar other to whose name a negative attitude had been conditioned, whereas a dissimilar other was preferred after a negative attitude had been conditioned to her name.

The reasons for this interaction are not readily apparent since it cannot be predicted either from a simple cognitive consistency model or a classical conditioning approach. We propose that cognitive balance is involved, but as the first step in a two-stage process. When the degree of similarity of another person to the self is inconsistent with previously existing feelings for the other person, a state of tension is created. This tension produces aversion which then becomes associated with objects in the situation, including the other person. To explain this further, consider the two conditions in which Nancy is relatively well liked by S (Positive Conditioning-Similar and Negative Conditioning-Dissimilar). As indicated in Figure 2, both of these conditions represent balanced states which should create a condition of cognitive consistency, the rewarding effects of which could generalize to Nancy and cause her to be liked. In the same way, the conditions Negative Conditioning-Similar and Positive Conditioning-Dissimilar are unbalanced states producing aversion which would likewise generalize to Nancy and make her unattractive.
The results fail to support the theory of Byrne and his colleagues. Had the similarity-dissimilarity manipulation merely produced positive or negative conditioned affect for Nancy, this affect should have summated with the conditioned affect arising from the previous conditioning treatment. It should be pointed out, of course, that Byrne and his colleagues have generally paired agreeable or disagreeable statements with stimuli which had been hitherto neutral in affect. Our data for Ss who had received no prior conditioning reveal the same general effect for similarity as that found in Byrne's work. However, we believe that our data also show that any discussion of the implications of perceived similarity-dissimilarity for interpersonal attraction must take into account possible pre-existing attitudes toward the persons involved. Under such conditions a two-step process involving cognitive consistency and cognitively engendered conflict may accurately predict the outcome.
Footnotes

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References


Fig. 1. Ratings of Liking for 'Nancy'
Fig. 2. Experimental Conditions in Terms of Balance Theory