Attraction as a function of attitude similarity-dissimilarity: the effect of topic importance¹

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Abstract

The similarity-dissimilarity of a stranger's attitudes with respect to those of Ss and the importance of the attitudinal topics were experimentally varied, and the attraction responses of 112 Ss obtained. Proportion of similar attitudes was found to have a highly significant effect on attraction, but neither topic importance nor the interaction was statistically significant.

Problem

Attraction toward a stranger has consistently been found to be a linear function of the proportion of attitudes expressed by that stranger which are similar to those of S (Byrne, 1962; Byrne & Nelson, in press). A number of variables which would conceivably have an effect on this functional relationship have been controlled via randomization in the reported experiments (e. g., order of presentation of similar and dissimilar attitudes). One of the most obvious of these variables is the importance of the topics about which S receives the stranger's views. Newcomb (1961) indicates that importance of the attitude object to the S is a parameter in the A-B-X model, and his index of agreement is specifically limited to agreement and disagreement about items of importance. With attitude similarity-dissimilarity conceptualized as positive and negative reinforcement (Byrne & Nelson, in press), the differential reinforcement value of consensual validation on topics of varying importance would be expected to yield different degrees of attraction.

In spite of the regularity with which topic importance is included in such formulations, very little relevant evidence is available. In the one reported investigation of attraction utilizing important and unimportant topics, equivocal results were obtained (Byrne, 1961). The present study investigates the effects of attitude similarity-dissimilarity on attraction when topic importance is systematically varied.

Method

In a preliminary study with 138 undergraduates, importance ratings for 56 attitudinal items were obtained. On the basis of these judgments, four 14-item attitude scales were constructed varying from the 14 least important items (e. g., gardening, modern art) to the 14 most important items (e. g., God, American way of life). Each of 112 Ss filled out one of these scales. Several weeks later, Ss were recalled for an "interpersonal judgment" experiment in which the attitude scale of an anonymous student was to be examined in order to be able to make a series of judgments about him (e. g., intelligence, adjustment). Included

among the latter were the two seven-point attraction scales which yield a measure of the dependent variable (Byrne & Nelson, in press). The "stranger's" scale was actually a bogus one constructed by E such that half of the Ss responded to a stranger similar to them in responses to all 14 topics and half to a stranger dissimilar on all 14 topics.

Results

The means and standard deviations of the attraction scores are shown in Table 1. Analysis of variance indicated that the proportion of similar attitudes exerted a highly significant effect on attraction ($F = 110.92$, $df = 1/104$, $p < .001$), while the effects of neither topic importance nor the interaction even approached significance.

Discussion

Since the effect of attitude similarity-dissimilarity on attraction was found to be independent of topic importance, should we conclude that Newcomb and others are incorrect in including that variable in their formulations?

Two considerations argue against premature acceptance of such a conclusion. First, it is possible that the range of topic importance utilized in this investigation was not sufficiently broad to elicit the hypothesized effect. It is proposed that the inclusion of more trivial items (such as attitude toward cole slaw) and of more personally involving items (such as attitude about S's sexual appeal) in the design would interact with the similarity-dissimilarity variable in determining attraction. Second, it may be that an adaptation effect obscured the operation of the importance variable. That is, each S responded to only one stranger and hence did not compare strangers identical in proportion of attitudes to his own but with differences in topic importance across strangers. With each S responding to several strangers, it seems quite possible that topic importance would yield a demonstrable effect on attraction. Some support for this hypothesis is supplied by Smith (1958) with respect to a

Table 1
Means and Standard Deviations of Attraction Scores
for Two Levels of Attitude Similarity and
Four Levels of Topic Importance

Proportion of Similar Attitudes	Topic Importance							
	Least		Next Least		Next Most		Most	
	M	SD	M	SD	M	SD	M	SD
1.00	11.43	1.72	11.21	2.01	11.86	1.64	11.14	1.81
.00	6.36	3.04	5.79	2.88	7.71	2.81	5.71	2.25

different dependent variable. He found that when Ss were given information about two individuals the difference between the similarity attributed to similar and dissimilar strangers was greater for high than for low valence topics (determined by the Allport-Vernon Scale of Values).

Each of the suggested alternative possibilities is now under investigation in work in progress.

References

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- BYRNE, D., & NELSON, D. Attraction as a linear function of proportion of positive reinforcements. *J. abn. soc. Psychol.*, in press.

Comment

In a recent experiment on "Classical appetitive conditioning in the pigeon," a CS was paired with food, and the anticipatory activity which it came in consequence to evoke was measured (Longo, Klempay, & Bitterman, *Psychon. Sci.*, 1964, 1, 19-20). The results obtained are quite different from those of human conditioning experiments on which Kimble has depended primarily for information about the role of the CS-US interval (Conditioning and learning, Appleton-Century-Crofts, 1961, pp. 155-160), and he sets out to define the discrepancy away (Comment, *Psychon. Sci.*, 1964, 1, 40). Conditioning is not *classical* "just because there is a non-contingent relationship between CR and reinforcement," he asserts; the CR must be a response "of the sort which Skinner called elicited and the layman calls involuntary." If the pigeon's response to the CS was not "elicited" or "involuntary," then the conditioning was "instrumental" rather than "classical," and if "experiments on instrumental conditioning" have no "relevance to the CS-US interval function," then the contradiction between the pigeon data and the human data disappears. Kimble concludes with an appeal for "caution" in the classification of conditioning experiments.

Now *classical conditioning* is a much-abused term which has carried so many meanings that we might do well, as I have suggested elsewhere, to give it up altogether (Techniques for the study of learning in animals: Analysis and classification, *Psychol. Bull.*, 1962, 59, 81-93). There can be little doubt, however, that the usage which Kimble criticizes is the modal one. About the usage which Kimble recommends I shall say only that it does not seem feasible without continuous recourse to the advice of Skinner or of a consulting "layman," on which one might well be reluctant to rely. Just how one decides whether a response has been "elicited" by a stimulus or "emitted" in its presence, I have never been able to understand. As to "the voluntary-involuntary dichotomy," Kimble himself has recognized that it is "difficult to support on objective grounds" (Conditioning and learn-

NEWCOMB, T. M. The acquaintance process. New York: Holt, Rinehart, and Winston, 1961.

SMITH, A. J. Perceived similarity and the projection of similarity: the influence of valence. *J. abn. soc. Psychol.*, 1958, 57, 376-379.

Note

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ing, p. 100). It does not reduce to a skeletal-autonomic dichotomy in Kimble's view, because 'there are some nonautonomic responses which can be conditioned classically' (ibid, p. 100).

Whatever the fate of the term *classical conditioning*, it seems rather obvious to me that our terminology must distinguish clearly between the procedures we employ in learning experiments and the processes we invent to account for their results. Under certain circumstances, S_2 follows S_1 independently of the animal's response to S_1 ; under other circumstances, S_2 follows S_1 only if the animal makes some specified response to S_1 ; under still other circumstances, S_2 follows S_1 only if the animal *fails* to make some specified response to S_1 . Having defined these different procedures, we may then ask about the similarities and differences in the processes responsible for the changes in behavior which they produce. The tendency to blur the distinction between procedure and process which is evident in Kimble's treatment (Conditioning and learning, pp. 78-108) seems to me to lead only to confusion.

The problem posed by the discrepancy between the pigeon results and the human results is an empirical rather than a definitional one; aside from the difference in species, there are a number of differences in method which may be responsible for the difference in outcome and whose significance should be assessed experimentally. Whether there is any relation between CS-US interval functions plotted by instrumental and by classical procedures also is an empirical problem, on which, incidentally, there has been some instructive recent work. The results suggest a rather close relation: From the function plotted for classical aversive conditioning in the goldfish, it is possible to deduce with considerable accuracy the effect of CS-US interval on this animal's performance in the shuttlebox (Bitterman, Classical conditioning in the goldfish as a function of the CS-US interval, *J. comp. physiol. Psychol.*, in press).

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