

OPINION CHANGE AND COMMUNICATOR-COMMUNICATEE SIMILARITY AND DISSIMILARITY¹

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Investigations of similarity and opinion change seem to have inadvertently fostered the conclusion that any communicator-communicatee similarity will lead to opinion change, and that the resultant change is due directly to similarity and not to increased feelings of attractiveness for similar communicators. It was hypothesized and confirmed that, when communicator attractiveness is controlled, communicator-communicatee similarities which are relevant to the communicator's influence attempt effect considerably more opinion change than do similarities which are irrelevant to the communication. In a 2nd experiment, it was further hypothesized and confirmed that communicator-communicatee dissimilarities relevant to a communication, in which an opinion taken by the communicatee prior to the communication is advocated, effect opinion change away from the position advocated by the communicator (and initially by the communicatee himself). Communicator-communicatee dissimilarities irrelevant to the communication appear to produce no such "boomerang" effect.

A number of studies have shown that a communicatee's perception of his similarity to a communicator is one determinant of the extent of the communicator's effectiveness (Back, 1951; Brock, 1965; Burnstein, Stotland, & Zander, 1961; Stotland, Zander, & Natsoulas, 1961). Not only does similarity between communicator and communicatee appear to increase the degree to which the communicator can influence the communicatee, but there is also evidence that similarity produces liking for the similar person (Byrne, 1961; Byrne & Wong, 1962; Newcomb, 1961). And, in addition, there are data which indicate that attraction between communicator and communicatee increases the effectiveness of the communicator's influence attempts (e.g., Schachter, Ellertson, McBride, & Gregory, 1951). Because the effects of similarity and attractiveness upon opinion change have not been isolated, it is not clear whether a similar communicator is more effective because similarity, independent of attractiveness, facilitates influence or whether feelings of attractiveness generated by similarity are responsible for increased influence.

The confounding of similarity and attractiveness becomes an important problem when predictions are to be made regarding the specific situations in which communicator-communicatee similarity will or will not lead to an opinion change in the direction advocated by the communicator. Many studies dealing with communicator-communicatee similarity and opinion change use Festinger's (1954) theory of social comparison processes to derive their hypotheses and explain their results. Festinger hypothesized that people who are similar to oneself with regard to an opinion, or attributes related to that opinion, will be seen as the proper referents for that particular opinion. If a discrepancy in opinion exists between people who perceive each other to be the proper referents for an opinion, Festinger predicts there will be tendency to change one's opinion to move it closer to the opinion of the referent. This tendency should exist apart from any feelings of attractiveness for the referent. But it also should be noted that Festinger's theory of social comparison processes, although not completely explicit on this point, seems not to predict that similarity to a communicator on *any* dimension makes the communicator an adequate referent for *every* opinion the communicator happens to express. Rather, the theory seems to predict that someone close to one's own opinion, or someone

¹ This research was conducted while the author was a National Institute of Mental Health Research Fellow at the Laboratory for Research in Social Relations, University of Minnesota. The many valuable comments and suggestions of Elliot Aronson and Dana Bramel are gratefully acknowledged.

who possesses similar attributes related to that opinion, will be chosen for purposes of evaluating the correctness of that particular opinion.

Investigations of similarity and opinion change have perhaps inadvertently fostered the conclusion that *any* similarity between communicatee and communicator will lead to opinion change, and that the resultant change is due directly to similarity and not to increased feelings of attractiveness for the communicator. In the Burnstein et al. (1961) study, for example, an adult communicator, whose occupation was described as deep sea diving, was presented to a group of children as being either highly similar or only slightly similar to the children in background and other attributes. The similar sea diver was described as having been raised in the same town in which the children were now living. He had gone swimming in the same swimming hole and fishing in the same fishing hole, and, in general, had led a life very similar to those of the children he was addressing. The dissimilar communicator was described as having been raised in a large city in a different part of the country and as having had amusements and pursuits quite foreign to those with which the children were familiar. The investigators found that the children adopted more of the sea-diving preferences of the similar diver than of the dissimilar diver. This result was explained in terms of Stotland's theory of identification which hypothesizes that the existence of similarities between people leads to their perceiving or creating even more similarities between themselves.

Yet, it does not seem reasonable that similarity to a communicator on dimensions irrelevant to that upon which opinion change is sought should increase the communicator's influence apart from feelings of attractiveness which the similarity may generate. Since whether or not the communicator had been raised in the same town bears only tenuous logical connection to whether or not he prefers to sea dive at night or in the morning, it appears quite possible that the results were obtained because the children perceived the similar communicator to be more *attractive*, and a more attractive communicator was more effective.

Two experiments attempting to investigate similarity, isolated from attraction, as a determinant of opinion change are reported here. The first experiment was designed to investigate whether similarity between communicator and communicatee, with attractiveness controlled, increases communicator influence; and whether similarities which are relevant to the communicator's influence attempt are more effective than similarities which are irrelevant to the communication.

METHOD: EXPERIMENT I

Design

For half of the subjects, the communicator (A) was described as having values similar to the subject in one area, education, and values dissimilar to the subject in another area, international affairs. For the other subjects, the communicator (B) was described as having values similar to the subject in the area of international affairs, and values dissimilar to the subject in the area of education.² The communicator then attempted to influence one group of subjects on a topic related to international affairs and the other group of subjects on a topic related to education, thus yielding a 2 × 2 design. Because similarity generates feelings of attractiveness and dissimilarity does not, and because it is possible that attractiveness alone produces influence, it was desirable that both communicators possess approximately the same degree of *global* similarity, and, thus, the same degree of attractiveness to the subjects. Pretest data, however, indicated that the effort to control the degree of global similarity between the subjects and the two communicators would not be completely successful. If the difference in global similarity proved to be large enough, one communicator would be perceived by the subjects to be more attractive than the other and, consequently, would be more effective in his influence attempts, irrespective of their relevance to the dimension upon which he was similar to the subjects. The above design allowed the variance due to communicator alone to be pulled out, as well as the variance due to topic to be evaluated.

The communicator always took a position exactly 3 points away, on 13-point scale, from that advocated by the subject on a premeasure.

Questionnaire Materials

Values were defined for the subjects as being basic underlying orientations toward a specific area of content and were chosen as the dimension upon

² Though a single confederate played both roles, he will be referred to as Communicator A when he was described as having similar educational values and Communicator B when he was described as having similar values in international affairs.

which to vary similarity to the communicator because of the special relevance or irrelevance a set of values may have for a specific opinion. The two specific value areas of education and international affairs were decided upon because it was felt that similarity in educational values did not preclude a dissimilarity in international affairs values, or vice versa. In addition, it was hoped that a person described as similar to the subject in his educational values and dissimilar in his international affairs values would be roughly perceived by the subjects to be as intelligent, as likable, and as globally similar to himself as a person who was described as similar to the subject in international affairs values and dissimilar in educational values. A pretest question designed to obtain information on how subjects would perceive these two stimulus people indicated that the two were perceived to be of approximately the same intelligence, but that the person who was described as being dissimilar to the subject in educational values was perceived as being slightly less likable and less globally similar to the subject.

Two critical questions, one relevant to the value area of education and the other relevant to the value area of international affairs, were chosen. The premeasure questionnaire contained both these questions and, in addition, three other questions whose only purpose was to disguise the critical question.

The postmeasure question, which was administered after the communicator had made his influence attempt, consisted only of the underlined part of the premeasure question and, of course, the scale.

In order to establish value similarities or dissimilarities between the subjects and the communicators, each subject filled out an "International Affairs Value Scale" and an "Educational Value Scale." These value scales were not designed to measure anything in particular. The questions included on the scales were designed to appear, hopefully, relevant to values.

Subjects

The 29 subjects who participated in this experiment were male freshmen enrolled in the General College of the University of Minnesota. The subjects had previously indicated their willingness to participate in a psychological experiment in return for earning points to be applied to their final grade in the psychology class in which they were enrolled. Each subject was scheduled singly for a ½-hour experiment to be conducted at the University of Minnesota Student Activities Bureau.

Procedure

When the subject arrived at the experimental rooms, he was ushered directly into the office of the first experimenter. She greeted the subject and immediately asked him to fill out the premeasure questionnaire. The response to the critical question contained in this questionnaire served as the premeasure. The critical question relevant to education was:

Some educators feel that undergraduate scholarships should be awarded solely on the basis of need. Others feel that they should be awarded solely on the basis of merit. And still others feel that both need and merit should be considered. *What do you feel should be the basis for awarding undergraduate scholarships?*

-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6
↓												↓
Should be awarded solely on the basis of need							Should be awarded solely on the basis of merit					

The international affairs question was:

Recently France's De Gaulle brought attention to inadequacies of the world monetary system and publicly advocated a return to the gold standard. Most United States officials believe that the world monetary system is in urgent need of revision and some believe, with De Gaulle, that the most sensible revision is to return to the gold standard—particularly in view of the fact that France has now decided to pay all foreign deficits in gold.

Other United States officials feel that even though there may be a few problems in the recent monetary system, there should be no revision since the major nations of the world hold substantial reserves in dollars and pounds and any revision would weaken these currencies and hurt the international economy. Only France, which has large gold reserves, would escape unscathed.

Still other officials feel that a revision is needed, but a return to the gold standard is too radical an approach. They think a revision should be made within the framework of the current system which is based on currencies of dollars and pounds as well as gold. *How do you feel about revision of the international monetary system?*

-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6
↓												↓
Should not be revised at all							Should be completely revised with return to the gold standard					

Immediately after the subject had been handed the premeasure questionnaire, there was a rap at the door and an apologetic student, who was a paid confederate playing the roles of Communicators A and B in this experiment, entered. He explained that he had been scheduled to take part in the experiment ½ hour later, but that he had been able to get a needed appointment at the University of Minnesota Health Service only at that time. He asked if it would still be possible to participate in the experiment. The experimenter replied that she could fit him into the experimental schedule immediately and asked him to fill out the premeasure questionnaire.

When both the subject and the confederate had finished and had turned in their questionnaires, the experimenter instructed them as follows:

The Student Activities Bureau is involved in conducting a small portion of a rather gigantic survey currently being done by the United States Department of Health, Education, and Welfare. . . .

Just recently the department came to the conclusion that they really don't know enough about the typical American college student. They feel that they don't, for example, know enough about his opinions on various topics and that they don't know enough about the values he holds in various areas. Consequently, they decided to conduct an information-gathering survey. . . .

The first thing we want to do today is to find out just exactly what your values are in a couple of different areas. Then, because the department wants to get the flavor of student opinion in various locations around the country, they have asked us to have each student record on a tape recorder his opinion on a specific topic. Mr. Barclay is doing these recordings in the room next door and they will take only a few minutes. . . .

What we'll do right now is find out just exactly what values you hold in two different areas. . . .

At this point, the experimenter handed out the two value scales. One value scale was clearly labeled "Educational Value Scale" and the other, "International Affairs Value Scale."

The confederate had been instructed to observe how fast the subject was filling out the scales, and to hand in his value scales a minute or so before the subject finished. When the confederate brought his completed scales to the experimenter's desk, he glanced down at a pad of note paper upon which was written the position the subject had taken on the critical question. This was necessary because the confederate had to take, in his communication, a position exactly 3 points away from the subject's initial position. (The confederate's position was always 3 steps toward the opposite end of the scale from the subject's original position. If, for example, the subject initially took a position of +1 on the critical question, the confederate would take a position of -2 in his communication. When the subject took a position of 0, the confederate would always take a position of +3.)

The experimenter took the scales from the confederate, told him that he could go next door where Mr. Barclay was doing the recordings, and thanked him for his participation in the survey.

The experimenter began "scoring" the confederate's value scale with large keys so that it was obvious to the subject, who had finished his value scales by this time, that the scales were in the process of being scored. The experimenter also explained to the subject, at this point, that "they should be done recording in a few minutes."

After the experimenter had finished scoring both the confederate's scales and the subject's scales, she said to half of the subjects, "This is interesting. Your values and that other fellow's values in the area of international affairs are very similar, but your

values in the area of education are almost completely different." To the other half of the subjects she said, "This is interesting. Your values and that other fellow's values in the area of education are very similar, but your values in the area of international affairs are almost completely different."

Before the subject could comment on this "interesting" fact or otherwise engage the experimenter in a conversation regarding the scales, the experimenter quickly rose from her desk, went to the door, and said, "They should be done now, so you can take your things and come with me."

When the experimenter opened the door of the second experimental room, she and the subject discovered the confederate sitting before a microphone and the second experimenter³ fiddling with a number of tubes in the tape recorder. The second experimenter explained that the tape recorder had broken down, but that he thought he had it fixed. He invited the subject to come in and sit down. The first experimenter then thanked the subject for his participation in the survey and left the room.

It was necessary that the subject know that he would be recording his opinion on exactly the same question as that upon which the confederate was about to record his opinion. Consequently, after the second experimenter had seated the subject in a chair in a corner of the room, the experimenter made a big show of looking at the question on the slip of paper that the confederate was holding. He said to the confederate, "Let's see . . . you're doing the education (or international monetary system) question. Well, I need another recording on the exact same question." Then, handing the subject a similar slip of paper, he said, "You can be thinking about what position you want to take on this question."

Turning to the confederate, he said:

All right, I guess we can give it another try. I'll go over the instructions again for you. When I give the signal, speak right into the microphone. State your name, the fact that you are at the University of Minnesota, your class, and then state the number on the scale which best expresses your opinion on this question and make a short statement of why you chose that number.

On the education question, the confederate said:

My name is Terry Williams, and I'm a sophomore at the University of Minnesota. My position on this question is number Considering my values in education, number . . . is definitely the best answer. Number . . . expresses the relative emphasis that should be placed on need and merit in awarding scholarships. Number . . . is my position.

On the international monetary system question, the confederate said:

My name is Terry Williams, and I'm a sophomore at the University of Minnesota. My position

³ Special thanks are due Andrew Barclay who played the role of the second experimenter in both experiments.

on this question is number . . . Considering my values in international affairs, number . . . is definitely the best answer. Number . . . expresses the amount of revision that I feel the international monetary system should undergo. Number . . . is my position.

After the confederate had made his recording, the experimenter had him fill out a card so that he would be awarded his experimental points, thanked him for participating in the survey, and said good-bye.

As soon as the confederate had left, the experimenter said to the subject:

All right, please step up to the microphone. When I give the signal, state your name, the fact that you're at the University of Minnesota, your class, the number on the scale which best represents your feelings on this question, and a short statement of why you chose that number.

The subject's scale position on the question was the postmeasure.

After the subject had made his recording, in order to check on whether the similarity manipulation had worked, the second experimenter said, "That's sort of interesting. Do you happen to know how you and that other guy came out on those value scales?" All subjects but one recalled correctly upon which values they were similar to the confederate and upon which they were dissimilar. Data gathered from the one subject who could not recall were not included in the analyses.

After the check on the manipulation, all subjects were told the true purpose of the study, why the deception was necessary, and were thanked for their participation.

RESULTS AND DISCUSSION: EXPERIMENT I

Scoring System

There were a number of ways in which the dependent variable, the subject's postmeasure, could be scored. First, the subject's absolute movement toward or away from the confederate's position could be scored. For example, in a case where the subject's initial position was -4 , the confederate took -1 , and the subject moved to -2 on the postmeasure, the subject could be scored as having moved $+2$ points toward the confederate. Had he moved to -5 , he would be scored as -1 . However reasonable this system may appear at first glance, it breaks down in cases where the subject "jumps over" the confederate's position (4 of the 28 subjects actually did this). If, in the above case, the subject had moved to a $+6$, it would be clearly unreasonable to score this subject as having moved $+10$

points *toward* the confederate. This is particularly true in view of the nature of the questions. On the education question, for example, suppose the confederate states that -2 expresses the relative emphasis that should be placed on need and merit in awarding scholarships. Plus six, which indicates that the endorser believes that scholarships should be awarded *solely* on the basis of merit, can hardly be considered as moving toward the confederate's position that need should be considered slightly *more* than merit. In terms of the hypothesis that if the subject and communicator share a similarity on a dimension relevant to the communication, the subject will change his opinion in such a way as to make it more similar to the communicator's opinion, the scoring system used must take into account the similarity between the subject's postmeasure and the position advocated by the confederate.

Another possibility, of course, was to consider those subjects who jumped over the confederate as uninterpretable and to discard their data. This, however, did not seem reasonable, since a subject who originally endorsed -4 , heard the confederate take -1 , and then jumped over the confederate to a 0 is clearly supporting the hypothesis if he happens to be in a condition in which the communicator's similarity is relevant to the communication, and negating it if he is in a condition in which the similarity is not relevant. It should be pointed out that the "jumping over" phenomenon was not peculiar to a particular topic or to a particular communicator, the four cases being distributed 1-0-1-2 throughout the four experimental conditions.

A scoring system which did seem reasonable in terms of the hypotheses was to score the point distance between the subject's postposition and the position taken by the confederate. Before the influence attempt by the confederate, all subjects were 3 points away from his position. Using this scoring system, any score *less* than 3 would indicate that the subject's postposition was more similar to the confederate's position than was his initial position. Any score *higher* than 3 would indicate that the subject's postposition was more dissimilar to the confederate's position than was his original position.

TABLE 1
OPINION CHANGE MEANS FOR EXPERIMENT I

Topic	Communicator	
	Similar education, dissimilar international affairs	Similar international affairs, dissimilar education
Education ^a	1.86	2.71
International affairs ^b	3.43	1.43

Note.—Any mean score less than 3.00 indicates that subjects, on the average, changed their initial positions in such a way as to make them more similar to the position advocated by the communicator.

^a $N = 7$ for both conditions.

^b $N = 7$ for both conditions.

All data from Experiment I were scored using this scoring system.⁴

Results

Subjects were assigned randomly to the four experimental conditions, and the means of the premeasure scores of the subjects assigned to each condition were $-.71$, -1.57 , $-.29$, and -1.00 . These means were not significantly different from each other.

It was predicted that, if a person perceives that he and a communicator share a similarity on a value dimension *relevant* to the communicator's influence attempt, and if he also perceives that his own opinion is dissimilar to that advocated by the communicator, he will change his opinion to make it more similar to the communicator's opinion. However, if he and the communicator share similarity on a value dimension irrelevant to the communication, and if the person perceives that his opinion is dissimilar to that advocated by the communicator, he should not feel as much need to change his opinion.

The results of Experiment I are expressed in Tables 1 and 2. When Communicator A (i.e., when the confederate was described as having educational values similar to the subject and values in the area of international affairs dissimilar to the subject) delivered a communication relevant to education, the subjects' mean score in this condition was 1.86. In other words, the mean distance of the subjects' postpositions was 1.86 points away from the position advocated by the communi-

⁴ No effects using the alternative scoring system approached significance.

cator. But when the same communicator delivered a communication irrelevant to education, the mean score of the subjects was 3.43. Communicator A's influence attempt, then, was much more effective when it was relevant to the similarity dimension than when it was not. Similarly, when Communicator B (or, when the confederate was described as having similar values in international affairs) delivered a communication relevant to the similarity dimension shared by himself and the subjects, the mean score of the subjects in this condition was 1.43. But when he delivered a communication irrelevant to the similarity dimension, the mean score was 2.71. Thus, while there was neither an effect due to topic alone, nor to communicator alone, the interaction between the two was significant ($F = 8.66$, $p < .01$).

Influence attempts by the communicator, then, which were relevant to the value dimension upon which the subject and the communicator shared a similarity were more effective in getting the subjects to change their opinion in such a way as to make it similar to that of the communicator than were influence attempts which were not relevant to the value dimension upon which the similarity occurred.

Discussion

Because there was no effect due to communicator alone, the two were evidently not perceived to be significantly different in attractiveness. And, because the interaction between topic and communicator was significant, it is clear that similarity, unmediated by attractiveness, did cause a person who shared a similarity on a dimension relevant to an opinion to be seen as the proper referent for that opinion. A communicator whose similarity is

TABLE 2
SUMMARY OF ANALYSIS OF VARIANCE
OF OPINION CHANGE DATA FOR
EXPERIMENT I

Source	df	MS	F
Communicator (A)	1	2.29	1.39
Topic (B)	1	0.14	<1.00
A × B	1	14.29	8.66*
Error-w	24	1.65	—

* $p < .01$.

relevant to the communication he delivers appears to cause a person to change his own position so as to make it more similar to that of the referent.

It also seems clear that when the communicator and the communicatee shared a similarity which was *not* relevant to the dimension upon which the influence attempt was made, the communicatee did not perceive the communicator to be a proper referent for that particular opinion and was little influenced. We must conclude that the results of those experiments in which the similarities between the subjects and the communicators were either not relevant, or only slightly relevant, to the influence attempts, were quite possibly due to differential attractiveness of the similar and the dissimilar communicators. Since similarity, relevant or irrelevant, produces attractiveness, the similar communicators could have been more attractive to the subjects than the dissimilar communicators and could produce opinion change even though their similarities were not relevant to their influence attempts.

The results of the present experiment support those of a recent field experiment on communicator-communicatee similarity done by Brock (1965). Brock found that communicators whose paint consumption was similar to that of department-store customers were more effective than dissimilar communicators (who reported their magnitude of paint consumption as 20 times that of the subject's prospective purchase) in getting the customers to change their minds about the paint they wanted to purchase. No control was employed for possible differential attractiveness of the similar and dissimilar communicators.

In Brock's experiment, both communicator similarity and dissimilarity were relevant to the influence attempt, and Brock raises the question of whether behavior can be modified as readily when the similarity attribute is irrelevant to the change dimension. The results of the present experiment suggest that it cannot, at least when not mediated by attractiveness.

Although there has been a great deal of hypothesizing about the antecedents of the "boomerang" effect, or the phenomenon in

which a communicator's influence attempt moves the audience *away* from the position advocated (e.g., Hovland, Janis, & Kelley, 1953), there has been little effort directed toward the experimental creation of a boomerang effect. The experimental evidence appears to consist of a few incidental findings (e.g., Kelley & Volkhart, 1952) and a few studies not directly related to communicatee boomerang effects (e.g., Cohen, 1962; Thibaut & Strickland, 1956).

Festinger's theory of social comparison processes does not appear to predict that a person *dissimilar* on attributes or dimensions relevant to an opinion will be seen as a proper referent for that particular opinion. Festinger (1954, p. 168) states that ". . . those with whom one does not compare oneself are different kinds of people or members of different groups or people with different backgrounds." A more global theory, however, which would predict a boomerang effect in this situation is Festinger's (1957) theory of cognitive dissonance. The existence of a similarity of opinion with a communicator who possesses dissimilar attributes, or values, relevant to the opinion, should be dissonance arousing. Dissonance could be reduced by changing one's opinion *away* from that advocated by the communicator. A similarity of opinion with a communicator who possesses dissimilar values which are irrelevant to the communication should be less dissonance arousing and should produce little opinion change.

The second experiment to be reported was designed to test the hypothesis that if a person perceives that he and the communicator are dissimilar on a value dimension relevant to an influence attempt and if he also perceives that his opinion and that of the communicator are similar, he will change his opinion *away* from that of the communicator to a greater extent than if he and the communicator are dissimilar on an irrelevant value dimension.

METHOD: EXPERIMENT II

Pilot Study

In order to create dissonance in the situation in which the communicator and the subject were dissimilar on a dimension relevant to the communi-

cation, it was necessary that the subjects perceive their own positions and those advocated by the communicator as similar. It was hoped that if the communicator took a position only 1 point away from that taken by the subject on the premeasure, the subject would perceive the two as being very similar. If the communicator always took a position 1 step away toward the extreme end of the scale, that end could be considered "blocked off," and the prediction could be made that the subject would move toward the opposite end of the scale.

Preliminary experimentation and subject interviews, however, indicated that a position 1 step away, when advocated by the relevant-dissimilar communicator, was perceived by a large number of subjects as being different, or dissimilar, to their own positions.

It is possible that subjects in the relevant-dissimilar condition were able to reduce the dissonance generated by the communicator's taking a position similar to their own by simply "stretching" the 1-point distance on the scale and making the communicator's position appear dissimilar to their own. If dissonance could be reduced in this way, there would be no need to change their initial positions. Of course, a perception of a 1-point distance as dissimilar need not necessarily have been the consequence of dissonance reduction; the two positions may have been perceived as different before dissonance arousal. However, only subjects in the relevant-dissimilar condition reported in postexperimental interviews that, "Well, I know that his values are dissimilar to mine, but my position was different from his."

In any event, it was necessary that the position advocated by the communicator be perceived by all subjects as similar to their own and dissonance reduction by means of subjectively increasing the distance between the two positions be blocked. Consequently, in Experiment II, each communicator took a position that was exactly the same as that advocated by the subject on his premeasure questionnaire.

Design

One communicator (A) was described as having values dissimilar to the subject's in international affairs and the other communicator (B) was described as having values dissimilar to the subject's in education. (As in Experiment I, a single confederate played both communicator roles.) No mention was made of any similarities the subjects and the communicators might possibly have shared. Each communicator delivered the communication concerning the international monetary system and advocated the same position the subject had taken in the premeasure. Communicator A's dissimilarity was relevant to his influence attempt. Communicator B's was not. It was predicted that subjects who received the communication regarding the international monetary system from Communicator A would be more likely to change their opinion in such a way as to make it dissimilar to Communicator A's

than would subjects who heard the same communication from Communicator B.

It was necessary that the communicator's position be exactly the same as that advocated by the subject immediately before the influence attempt. It was possible that subjects, who were told the communicator possessed values dissimilar to their own in a particular area, would experience discomfort that a fellow student did not share the same values in that area and would, as a consequence, change their premeasure opinion on the monetary system question *after* the manipulation, but *before* the influence attempt. To control for this possibility, a group of subjects who received the dissimilar-international affairs manipulation, but not the influence attempt, was included in the design. It was predicted, of course, that the manipulation and subsequent influence attempt would cause the subjects to change their initial opinion more than subjects who simply received the manipulation of value dissimilarity. It was also desirable to have a control group of subjects who received the irrelevant-dissimilarity manipulation, in order to obtain information about the relative amount of opinion change in this condition. If irrelevant dissimilarity causes no opinion change, then the irrelevant-dissimilarity experimental group, who received the influence attempt, should show no more opinion change than the irrelevant control group.

Thus, the design included an experimental relevant-dissimilarity group, a control relevant-dissimilarity group, an experimental irrelevant-dissimilarity group, and a control irrelevant-dissimilarity group. The prediction was made that the experimental relevant-dissimilarity group would show more opinion change away from the confederate than would any of the three other groups.

Subjects

The 42 subjects who participated in Experiment II were male summer-session students at the University of Minnesota who were under 20 years of age. Some were students enrolled in a psychology class in the College of Liberal Arts, earning experimental points to be applied to their final grade, others were General College students also earning experimental points, and still others were volunteers from various other summer-session classes.

The data from 2 subjects were discarded because the manipulation was not successful. The data of the remaining 40 subjects were those used for all analyses reported.

Procedure

To ensure that each subject would remember the position he had taken on the premeasure immediately before the influence attempt, and thus make certain that the distance between the positions advocated by the subject and by the confederate was 0, the premeasure questionnaire contained only three questions, rather than five as in the first experiment. The critical question concerning the international

TABLE 3
OPINION CHANGE MEANS FOR EXPERIMENT II

	Communicator	
	Irrelevant-dissimilar values	Relevant-dissimilar values
Experimental (<i>S</i> hears confederate's position) ^a	0.10	1.20
Control (<i>S</i> does not hear confederate's position) ^b	0.10	0.10

Note.—Any mean larger than 0 indicates that subjects, on the average, changed their initial positions in such a way as to make them more dissimilar to the position advocated by the communicator.

^a *N* = 10 for both conditions.

^b *N* = 10 for both conditions.

monetary system was placed last on the premeasure questionnaire to further guarantee the subjects' remembrance of their positions. In addition, there was no delay between the administration of the premeasure questionnaire and the experiment proper and, in this respect, with but two exceptions, the procedure of this experiment was the same as the procedure of the experiment previously reported.

One exception was that the experimenter performed the value dissimilarity manipulation after having scored only the scale in question. She made it quite clear that she had not yet scored the subject's international affairs value scale before saying, "Gee, this is interesting . . . you and that other fellow have very different values in the area of education." She accomplished this by leaving the scale not to be mentioned in the manipulation, un-scored, on the corner of the desk nearest the subject where it had been placed when he had finished it. The subject's chair was placed only inches from the desk so that the un-scored scale was almost directly under his nose.

It was important that the subject not think that both scales had been scored before the manipulation, since he might feel, for example, that because the experimenter had commented only on the education dissimilarity, he and the confederate shared fairly similar values in international affairs—or, at least, the dissimilarity was not marked enough to comment upon. If the subject thought this, the similarity effect observed in Experiment I could operate in the irrelevant-dissimilar condition to cloud the issue. An *assumed* international affairs similarity could crystallize the subject's opinion on the monetary system (since the assumed similar communicator was advocating the subject's own position) and could overpower any effect due to irrelevant dissimilarity.

By making it clear that the other value scale had not been scored, the experimenter herself gave no support to a conclusion of similarity in the other area. In addition, there is evidence that, at least

in the case of similarity, knowledge of a similarity in one area leads to the assumption of similarities in other areas (Byrne & Blaylock, 1963; Stotland et al., 1961). Whether or not evidence of a dissimilarity in one area leads to assumptions of dissimilarities in other areas is a moot question.

The other respect in which the procedure in Experiment II differed from that of Experiment I was, of course, in the manipulations. In the relevant-dissimilar conditions, the experimenter said, "Gee, this is interesting . . . you and that other fellow have completely different values in the area of international affairs." In the irrelevant-dissimilar conditions, the experimenter said, "Gee, this is interesting . . . you and that other fellow have completely different values in the area of education." The communicator then always gave the communication concerning the international monetary system.

The procedure for the control groups was exactly the same as that for the experimental groups except that they did not receive the confederate's communication. By the time control subjects reached the recording room, the confederate had supposedly already made his recording and had departed.

RESULTS AND DISCUSSION: EXPERIMENT II

As in the first experiment, the point distance between each subject's postposition and the position advocated by the confederate, and originally by the subject himself, constituted each subject's score. Any score larger than 0 would indicate that the subject had moved away from the position advocated by the communicator.

It was predicted that subjects in the experimental relevant-dissimilarity condition would show more opinion change away from the communicator than would subjects in the control relevant-dissimilarity condition, subjects in the experimental irrelevant-dissimilarity condition, or subjects in the control irrelevant-dissimilarity condition.

TABLE 4
SUMMARY OF ANALYSIS OF VARIANCE
OF OPINION CHANGE DATA FOR
EXPERIMENT II

Source	<i>df</i>	<i>MS</i>	<i>F</i>
Contrast ₁ ($C_1 = (3)\bar{X}_{\text{exp.-rel.}}, (-1)\bar{X}_{\text{cont.-rel.}}, (-1)\bar{X}_{\text{exp.-irrel.}}, (-1)\bar{X}_{\text{cont.-irrel.}}$)	1 ^a	12.67	15.56*
Error-w	36	0.82	—

^a The two other degrees of freedom were not used in analyses and therefore do not appear in the table.

* *p* < .01.

The results of Experiment II are expressed in Tables 3 and 4. The mean distance of subjects' postpositions from the position taken by the confederate in the experimental relevant-dissimilarity condition was 1.20. The mean distance in the experimental irrelevant-dissimilarity condition was .10; in the control relevant-dissimilarity condition, .10; and in the control irrelevant-dissimilarity condition, .10. An analysis of variance contrast between the experimental relevant-dissimilar group and the other three groups is significant beyond the .01 level of confidence ($F = 15.45$).⁵

If the relevant-dissimilar communicator had been more unattractive to the subjects than the irrelevant-dissimilar communicator, differential communicator attractiveness could have accounted for the obtained results. Subjects could have been expected to move further away from the position advocated by the least-liked communicator. The relevant-dissimilar communicator, however, was described as having values in international affairs dissimilar to the subject, and the irrelevant-dissimilar communicator was described as having educational values dissimilar to the subject. The results of tests preliminary to the first experiment indicated that a person described as dissimilar in international affairs was liked more than was a person described as dissimilar in educational values. Consequently, if an attractiveness effect was operating in this experiment, it was most probably operating against confirmation of the hypothesis.

It may be concluded that if a person perceives that he and the communicator share a dissimilarity on a value dimension relevant to an influence attempt, and if he also perceives that his own opinion is similar to that expressed by the communicator, he will change his opinion in such a way as to make it more *dissimilar* to the opinion of the communicator. The relevant-dissimilar communicator appears to act as a negative referent for that opinion. If, however, the value dissimilarity is irrelevant to the influence attempt, there seems to be little, if any, opinion change away from the communicator.

⁵ The null hypothesis was that $\gamma_1 = 0$, $\gamma_2 = (3)\mu_{\text{exp.-rel.}} - (-1)\mu_{\text{exp.-irrel.}} - (-1)\mu_{\text{cont.-rel.}} - (-1)\mu_{\text{cont.-irrel.}}$.

These results follow from Festinger's theory of cognitive dissonance, since opinion agreement with a relevant-dissimilar communicator can be presumed to be dissonance arousing. And the finding that people who are dissimilar on a value dimension relevant to their influence attempt will act as negative referents provides one concrete explanation for at least some boomerang effects.

The results of the two experiments reported here suggest that, when attractiveness is controlled, an important criterion for determining who will or will not constitute a referent is often simply knowledge of whether or not the person possesses attributes relevant to the issue in question. It further appears that, when the matter of attractiveness is neutralized, people tend to be selective in choosing their referents. A referent for one opinion is not necessarily a referent for another.

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(Received February 14, 1966)

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