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# Background similarity-dissimilarity, interpersonal attraction and change in confidence

Lewis J. Levine

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BACKGROUND SIMILARITY-DISSIMILARITY, INTERPERSONAL  
ATTRACTION, AND CHANGE IN CONFIDENCE

Lewis J. Levine

A thesis submitted in partial fulfillment  
of the requirements for the degree of Master of Arts  
in psychology in the Graduate School of the  
University of Richmond

June, 1967

**To Leslie**

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## Chapter I

### INTRODUCTION

Several theorists have assumed that interpersonal attraction functions to aid individuals in understanding their environment, and have postulated that one antecedent to interpersonal attraction is actual or perceived similarity among persons. Festinger (1954) has hypothesized the existence of a drive to evaluate one's opinions and abilities which, in turn, leads to comparison with and attraction toward those most similar to oneself (Zander & Havelin, 1960). Heider (1958) predicts a person tends to like a similar individual, and assumes it is B's similarity to A which underlies A's attraction to him. Newcomb's (1953) A-B-X model deals with a need for cognitive symmetry with respect to the attitude of two individuals toward one another and toward the object of communication. He maintains a strain toward symmetry operates, and equilibrium is advantageous because it (1) makes the other person's behavior more predictable and (2) increases

one's confidence in his own cognitive and evaluative orientations. Similarity between persons, because it is rewarding, is said to account for more of the variance in interpersonal attraction than does any other single variable (Newcomb, 1956, p. 579). And Homans (1961), with regard to interpersonal attraction, assumes the more valuable a person's activities are to others the greater is the esteem in which he is held. From this it follows that persons will provide more value to one another if they share the same orientations, or have similar background.

That the degree of similarity among persons is a powerful factor in their reactions to one another has been one of the most commonly observed and widely studied phenomena in interpersonal relations (Asch, 1952; Back, 1951; Raven, 1959; Schachter, 1951; Sherif, 1936). In a similar vein, a number of studies have found greater similarity among friends than among nonfriends with respect to a variety of issues (Bonney, 1946; Loomis, 1946; Newcomb, 1956; Precker, 1952; Richardson, 1940; Winslow, 1937).

In a number of experimental studies, attitude similarity has been manipulated as an independent variable. For example, relatively positive feelings are evoked toward a stranger who is



similar to the S on the Allport-Vernon Scale of Values (Smith, 1957), who expresses a value orientation similar to that of the S (Jones & Daugherty, 1959), who agrees about what should be done with "Johnny Rocco" (Schachter, 1951) or has attitudes congruent with those of the S on 26 out of 26 issues (Byrne, 1961a, 1961b; Byrne & Wong, 1962). Byrne (1961b) also found that a stranger who is known to have attitudes similar to those of the S was judged to be more intelligent, better informed, more moral, and better adjusted than a stranger with attitudes dissimilar to those of the subject.

In another study, Byrne (1962) found that given little information about a stranger beyond his opinions on seven issues, the similarity between these opinions and those of the S accounted for over a third of the variance in attraction ratings. Thus, it appears that attitude similarity is probably one of the major sources of reward in interpersonal relationships. But what of the effect of background similarity on interpersonal attraction?

Festinger (1950) found in a laboratory group composed half of Jewish girls and half of Catholic girls, the girls in each category split their votes for club officers equally between Jews and Catho-

tics before members were identified by religious affiliation. After identification, the Jewish girls continued to split their votes, but the Catholic girls overchosed within their subgroup. In a subsequent situation where religious identification of the voter was not possible, both Jewish and Catholic girls voted in the direction of their respective subgroups. Choice of roommate on the basis of similar religion has also been reported by Goodnow & Tagiuri (1952) among boys attending a liberal preparatory school. Other investigators have reported similarity of occupation to be a basis for friendship choice among adult members of training groups (French, 1951), and similarity in the education and salary of fathers to be a basis for not desiring a change in roommate among freshman girls (Broxton, 1962). Similarly, Burnstein, Stotland and Zander (1961) found that grade school children who were told that an adult model was highly similar to them in background accepted his preferences relevant to a specific issue, more so than Ss who were told that he was not similar to them.

Thus, several experiments would seem to imply that background similarity is an antecedent to interpersonal attraction. One purpose of this study was to investigate this directly.

A second purpose of the present study was to examine the effect of background similarity-dissimilarity on changing one's confidence. A number of studies stimulated by Festinger's (1957) theory of cognitive dissonance (Adams, 1961; Canon, 1964; Ehrlich, et al, 1957; Mills, et al, 1959; Rosenl 1961) have found that following a choice, people tend to prefer information favoring the chosen alternative (consonant information) to information favoring rejected alternatives (dissonant information). Two recent studies (Mills, 1965a, 1965b) found when people are not committed to any of a number of alternative courses of action and are completely uncertain about which is best, information favoring any of the alternatives will increase their certainty about which is best. However, if they are somewhat certain that one is best, information favoring that alternative will increase their certainty, while information favoring the other alternatives will decrease their certainty. This result was predicted on the basis of a theory which differs in some respects from dissonance theory. The basic assumption of the theory (Mills, 1965c) is that people want to feel certain when they take an action that it is better than the alternatives, that it will lead

to the most favorable consequences for motive satisfaction. If they are not certain the action is the best one, they will try to increase their certainty; the lower their certainty the stronger will be their desire to increase it. They will also avoid decreasing their certainty. Certainty is assumed to be higher, the more the information which is possessed favors the action over the alternatives. The results of these experiments coupled with the implications of the several theorists previously mentioned would lead to the prediction that agreement by a person similar in background will increase one's confidence in his judgment about a particular issue of which he was somewhat certain more than agreement by a dissimilar other. Recently, however, a few studies have seemingly refuted this notion.

Harvey (1962) found a tendency for subjects to react more positively to a stranger than a friend when they were listed as sources of a relatively positive evaluation of the subject. Moreover, subjects tended to react more negatively to a friend than a stranger when they were listed as sources of negative evaluations of the subject. Similarly, experiments with children indicate that strangers are more effective as agents of social

reinforcement than parents, and that strangers are also more effective than more familiar people (Shallenberger & Zigler, 1961; Stevenson & Knights, 1962; Stevenson, et al, 1963). Aronson & Linder (1965) have proposed a "gain-loss effect" to account for these findings. They hypothesize that when we have grown certain of the rewarding behavior of a person, the person may become less potent as a source of reward than a stranger. The assumption is that people are accustomed to receiving approval from familiar people. Therefore, additional approval from them does not represent much of a gain. However, approval from a stranger is a gain (i. e., unexpected positive reinforcement) and should result in a greater improvement in performance. Similarly, the results of an experiment by Wheeler & Levine (1966) lend support to this "unexpected reinforcement effect." Each S engaged in a "discussion" with two tape recorded confederates. The first confederate expressed opinions designed to anger the S; the second confederate (the model) then aggressed against the first confederate. Prior to the "discussion," the S had been made to feel very similar in background to the model or very dissimilar.

It was found that Ss who observed a dissimilar model aggressed more toward the instigating confederate than did Ss who were paired with a similar model. The authors advanced the hypothesis that (a) disagreement by another person similar in background reduces one's confidence because it is unexpected, while disagreement by a dissimilar other is merely what one would expect; and (b) agreement by another person dissimilar in background will enhance one's confidence more than agreement by a similar other because justification for one's opinions has come from an unexpected direction.

The purpose of the study was to investigate the effects of background similarity-dissimilarity on interpersonal attraction and on changing one's confidence in his own judgment. The hypotheses were as follows:

1. A stranger with a similar background to that of the S will be better liked (i. e., more attractive) than a dissimilar stranger.
2. Agreement by another person (regardless of whether he is similar or dissimilar in background) will increase one's certainty of judgment about a particular issue.
3. Disagreement by another person (regardless of whether he is a similar or dissimilar other) will decrease one's certainty of judgment about a particular issue.

4. Disagreement by a person similar in background will decrease one's certainty of judgment about a particular issue more than disagreement by a dissimilar other.
5. Agreement by a person similar in background will not change one's certainty of judgment about a particular issue more than agreement by a dissimilar other.

## Chapter II

### PROCEDURE

#### Subjects

The subjects were 61 undergraduate students from two general psychology courses at The University of Richmond.

#### Procedure

The subjects were told that E was representing an opinion research outfit which had been asked to obtain the opinions of various groups on topics of current political, economic, or moral interest and controversy. They were further told that E, as part of a continuing survey, would be obtaining the opinions of college students at several schools in the area on these issues. Before filling out the opinion questionnaire, the Ss were instructed to complete a biographical inventory.

Two weeks later E returned to the class and the instructions were as follows:

As part of this continuing survey of opinions on current topics of interest and controversy I am back again to obtain your feelings on these same issues. In the last few weeks there may have been some



developments which could have changed your feelings on some of these topics. This is what we want to find out. Also, each of you will be receiving the background inventory of a student from another school in the area. This is just like the background inventory you completed the first time I was here. The reason for this is two-fold. First, it has been found that peoples' first impressions are often very accurate. We would like to find out about your first impressions of another person based only on some background information you will have of this person. The second reason is to give you an idea of the opinions of another person on each of the issues on the opinion questionnaire. You will see that we have placed an asterisk by the choice of this other student on each of the issues of the opinion questionnaire. So, when you get to the opinion questionnaire remember the asterisk indicates the choice of this other student whose background inventory you have. Also, I am going to give each of you back your own background inventory because we have some additional questions we need answered. Please make sure to answer these questions before proceeding on with the other materials. Now to go back over the procedure briefly: First, answer the questions we have added to your own background inventory; then carefully read over the background inventory of the other student; then answer the questions concerning your first impressions of this person; then again fill out the opinion questionnaire as you did the last time I was here, remembering the asterisk indicates the choice of this other student whose background inventory you have.

The reason several questions were added to the Ss biographical inventories was to provide an excuse for giving out the materials by name. This was necessary in order to be able to tailor the independent manipulations to each S.

### Measuring Instruments

Interpersonal Attraction. A four item "Personal Impression Questionnaire" completed by the S immediately after having read over the supposed other student's background inventory and again after the S had completed the opinion questionnaire which indicated this supposed other student's choice on each of the issues was used to measure interpersonal attraction. Likert-type scales dealt with political orientation, knowledge of current events, possibility of friendship, and feelings about having as a roommate.

Confidence. The certainty measure was a 7-point scale asking the S to rate how certain he was that he had selected the best of several alternatives with regard to nine topics of current interest and/or controversy such as the war in Viet Nam, mercy killings, capital punishment, The Draft, etc. The S indicated his degree of certainty following each of the issues before and after the independent manipulations.

### Conditions

Background similarity-dissimilarity was induced through the use of the biographical inventory supposedly completed by another student. For half of the Ss the inventory of the other

person was made quite similar to S's inventory in terms of age, family size, ordinal position, parents' ages, home state, father's occupation, hometown size, college major, marital status, favorite sports, hobbies, and religious preference. For the remaining Ss, the supposed other student's inventory was made very dissimilar on these descriptors.

Then, for half of the Ss in each of these two background conditions the opinion of the supposed other student was filled out to agree with the initial choice of the S on all topics that had been rated in the middle of the certainty scale (i. e., 3, 4, or 5 based on a 7-point scale). For the other Ss the opinion of the supposed other student was filled out to disagree with the initial choice of the S on those topics rated in the middle of the confidence scale. For all Ss the supposed other person's choice was filled out to agree or disagree (depending on the condition) for seven of the nine topics. In all cases, where possible, the two topics filled out to agree with the S in the disagree conditions and to disagree with the S in the agree conditions were topics that the S had initially rated a 7 (very certain). In those instances where this was not possible, a topic rated 6 was used. If this, too, failed

to produce the two necessary topics, then a topic rated 1 was used.

And finally, if necessary, a topic rated 2 was used.

Thus, the two independent manipulations, background similarity-dissimilarity and opinion agreement-disagreement, yielded the following four groups: (1) Similar background-opinion agreement (SA); (2) Similar background-opinion disagreement (SD); (3) Dissimilar background-opinion agreement (DA); (4) Dissimilar background-opinion disagreement (DD).

### Chapter III

### RESULTS

#### Interpersonal Attraction

After having read the background inventory of the supposed other student, and before seeing the choices of this other person on the "Opinion Questionnaire," Ss completed the "Personal Impression Questionnaire." The relevant questions were: (a) Do you think you could be friends with this person?, and (b) How would you feel about having this person as a roommate? It is evident from the data presented in Tables 1, 2, and 3 that each question strongly differentiated the conditions, with but one minor exception. Thus, prior to seeing the choice of the other person on each issue of the opinion questionnaire, Ss in the similar background conditions(SA and SD) more than Ss in the dissimilar conditions (DA and DD) perceived the other student to be a more likely friend.

After completing the opinion questionnaire for the second time, and thus seeing the choices of the other person on each of the issues,

Ss were again given the "Personal Impression Questionnaire."

The results of Tables 4 and 5, concerning the question of possible friendship, indicate the following: (a) Ss in both the SA and DD conditions did not change their perception of the possibility of being friends with this other student; (b) Ss in the DA group significantly increased in their feelings about the possibility of being friends with this other person; and (c) Ss in the SD condition significantly decreased in their feelings about possible friendship. The results of a 4x2 Analysis of Variance on the other relevant question (Table 6) failed to yield significant results, although there was a definite trend in the same direction.

### Change in Confidence

Scoring System. Following each of the nine topics of the opinion questionnaire Ss were asked to rate how certain they felt that they had selected the best alternative on the following type of scale:

7	6	5	4	3	2	1
Very					Very	
Certain					Uncertain	

There were a number of ways in which the dependent variable, change in certainty, could be evaluated. First, the S's absolute

change in certainty over all nine items might be evaluated. However, there are several reasons why this would not be feasible. First, all choices of the supposed other student were not filled out to agree with the S's initial choice for all nine topics in the opinion agreement groups, nor were all choices filled out to disagree with the S's choices in the opinion disagreement conditions. The reason this was done was to avoid creating suspicion that might result from an S seeing a person either agree or disagree with him on all nine topics. Second, for those items initially rated 6 or 7 on the certainty scale, there was little or no opportunity for an S to increase his certainty, and for those items rated 1 or 2 there was little or no opportunity for an S to decrease in confidence. Third, there were a number of instances in which the Ss made conforming and nonconforming changes in alternative. For example, say an S initially selected alternative #2 on a certain issue, the supposed other person picked alternative #3, then the S selected alternative #3 the second time. This would be a conforming change. On the other hand, say an S initially selected alternative #2, the other student picked alternative #3, then the S chose alternative #1 the second time. This is a nonconforming change. And the final

reason for not evaluating the S's absolute change in confidence over all nine topics was because of "boomerang changes." Say an S initially selected alternative #2 on a certain issue, and the supposed other student's choice was filled out to agree with the S's choice (i. e., also alternative #2), then the S selected alternative #3 the second time. This would be a "boomerang change."

A method of evaluating change in certainty, which did seem reasonable in terms of the hypothesis, was to consider only those items initially rated in the middle of the scale (i. e., 3, 4, or 5). In addition, it seemed logical to score a conforming change in alternative as a decrease in certainty to 1 (a conforming change in alternative for those items initially rated either 3, 4, or 5 could only occur in the disagree conditions, since for all items rated 3, 4, or 5 in the agree conditions the supposed other person's choice was filled out to agree with the S's initial choice). For example, if an S rated his degree of certainty on a topic as 4, then made a conforming change in alternative, this was scored as a decrease of 3 in certainty. Those items filled out as agreeing in the disagree conditions and as disagreeing in the agree conditions, nonconforming changes, and boomerang changes were not included.



For each S, his change in confidence was the mean for those items rated 3, 4, or 5. For example, if an S initially rated his degree of certainty as 3 on two of the topics and his post-ratings were 4 and 6, then the amount of change was 1 and 3, with the mean being 2. And if the mean change in confidence for those items rated 4 and 5 was 2 and 2 respectively, then that S's total mean change was 6.

Results. Table 7 presents mean pre- and post-certainty scores for the SA and DA groups. The difference between means in the SA condition was significant beyond the one-tailed .01 level ( $t=4.32$ ,  $df=13$ ); and for the DA condition the difference was significant beyond the one-tailed .05 level ( $t=2.32$ ,  $df=11$ ). Combining the two conditions the difference is significant beyond the one-tailed .01 level ( $t=4.65$ ,  $df=25$ ). The difference between the two conditions was not statistically significant ( $t=1.08$ ,  $df=24$ ).

Table 8 presents mean pre- and post-certainty scores for the SD and DD groups. The difference between means in the SD condition was significant beyond the one-tailed .10 level ( $t=1.42$ ,  $df=10$ ); and for the DD condition the difference was significant beyond the one-tailed .05 level ( $t=2.36$ ,  $df=11$ ). Combining the

two conditions the difference is significant beyond the one-tailed .01 level ( $t=2.58$ ,  $df=22$ ). The difference between the two conditions was not statistically significant ( $t=0.09$ ,  $df=21$ ).

Table 9 presents the mean number of boomerangs/number of topics filled out to agree for Ss in the SA and DA conditions. The difference between the two groups was significant beyond the two-tailed .05 level ( $t=2.16$ ,  $df=26$ ).

Finally, it was found that 1 out of 14 Ss in the SA condition made conforming changes in alternative, while 8 out of 14 Ss in the DA group conformed to the supposed other student's choice one for more times. A Fisher exact two-tailed test indicates the difference was significant ( $p=.0064$ ).

TABLE 1.

Mean Responses to Questions Indicating Attraction Toward The Supposed Other Person Prior to Seeing His Choices on the Opinion Questionnaire

Question	Condition		<u>t</u>	<u>p</u>
	Similar (28)	Dissimilar (28)		
Possibility of				
friendship (0-6)	5.14	4.25	4.41	<.01
Feeling about having				
as roommate (0-7)	5.18	4.18	3.38	<.01

Note: Since an assertion was made about the direction of the difference, a one-tailed test was used.

TABLE 2.

Mean Responses to Questions Indicating Attraction Toward The Supposed Other Person Prior to Seeing His Choices on the Opinion Questionnaire

Question	Condition		<u>t</u>	<u>p</u>
	SA (14)	DA (14)		
Possibility of				
friendship (0-6)	5.14	4.07	3.77	< .01
Feeling about having				
as roommate (0-7)	5.14	3.86	3.90	< .01

Note: A one-tailed test was used.

TABLE 4.

Summary of Analysis of Variance of Pre- and  
Post-Responses to Question 1 (Possibility of  
Friendship) on "Personal Impression Question-  
naire"

Source of Variation	df	MS	F
<u>Between Subjects</u>	55		
A (Condition)	3	3.39	3.15*
Ss within groups	52	1.075	
<u>Within Subjects</u>	56		
B (Friendship)	1	.14	-
AB	3	1.72	8.19**
B x Ss within groups	52	.21	

\*p < .05

\*\*p < .01

TABLE 5.

Analysis of Variance for Simple Effects

Source of Variation	SS	df	MS	F
Factor B at $a_1$ (Friendship for SA Condition)	.15	1	.15	-
Factor B at $a_2$ (Friendship for DA Condition)	1.75	1	1.75	8.33*
Factor B at $a_3$ (Friendship for SD Condition)	2.90	1	2.90	13.81*
Factor B at $a_4$ (Friendship for DD Condition)	0	1	-	-
Factor A at $b_1$ (Conditions for pre- friendship response)	12.05	3	4.01	6.24*
Factor A at $b_2$ (Conditions for post- friendship response)	2.76	3	.92	1.44
Error <sub>within</sub>	10.69	52	.21	
Error <sub>between</sub>	66.62	104	.64	

\*p < .01

TABLE 6.

Summary of Analysis of Variance of Pre-  
and Post-Responses to Question 3 (Feeling  
About Having as Roommate) on "Personal  
Impression Questionnaire"

Source of Variation	df	MS	F
<u>Between Subjects</u>	55		
A (Condition)	3	4.65	1.96
Ss within groups	52	2.37	
<u>Within Subjects</u>	56		
B (Pre-Post)	1	.22	-
AB	3	1.82	1.55
B x Ss within groups	52	1.17	

TABLE 7.

Pre- and Post-Certainty Means for SA  
and DA Groups

Condition	Pre-Certainty	Post-Certainty	<u>t</u>	<u>p</u>
SA	7.22 N=14	8.81 N=14	4.32	<.01
DA	6.58 N=12	7.71 N=12	2.32	<.05
Total	6.90 N=26	7.76 N=26	4.65	<.01

Note: A one-tailed test was used.



TABLE 8.

Pre- and Post-Certainty Means for SD  
and DD Groups

Condition	Pre-Certainty	Post-Certainty	<u>t</u>	<u>p</u>
SD	6.82 N=11	5.45 N=11	1.42	<.10
DD	7.25 N=12	5.78 N=12	2.36	<.05
Total	7.04 N=23	5.62 N=23	2.58	<.01

Note: A one-tailed test was used.

TABLE 9.

Mean Number of Boomerangs/Number of Topics  
Filled Out to Agree

Condition			
SA (14)	DA (14)	<u>t</u>	<u>p</u>
2.26	4.10	2.16	< .05

## Chapter IV

### DISCUSSION

The results indicate that a stranger having a similar background is more attractive than a dissimilar stranger. In addition, some implicit assumptions of Cognitive Dissonance theory (Festinger, 1957) have received the following confirmation: (a) Having someone of similar background subsequently agree with one's opinions is to be expected, and thus does not change one's impressions of this other person; (b) Having someone of dissimilar background subsequently disagree with one's opinions also is to be expected, and therefore, one's feelings toward this other person do not change; (c) Having someone of similar background subsequently disagree with one's opinions produces dissonance, which is reduced by changing one's attitude toward this other person in the direction of perceiving him as a less likely possible friend; and (d) Having someone of dissimilar background subsequently agree with one's opinions produces dissonance, which is

reduced by changing one's attitude toward this person in the direction of perceiving him as more likely of being a possible friend.

The results also support the hypotheses that agreement by another person, regardless of whether he was a similar or dissimilar other, increases one's certainty in his own judgment, and that disagreement by either a similar or dissimilar other decreases one's confidence of judgment on the same issue. These findings are in agreement with those of Mills (1965a, 1965b) in that they show that when one is somewhat certain (since only those topics initially rated in the middle of the certainty scale were included in the statistical analyses) that one alternative is the best choice, information favoring that alternative increases one's certainty, while information favoring a different alternative decreases one's certainty.

Though not a stated purpose of the study, the finding of significantly more conforming changes in opinion among Ss in the DA condition than among Ss in the SA group would seem to support the "unexpected reinforcement hypotheses." Agreement by someone of dissimilar background provided highly effective support because

it indicated that one's opinions were more widely held, whereas agreement by someone similar in background was merely what one would expect. Further support for this notion comes from the finding of a significant increase in interpersonal attraction (as measured by the question of possible friendship) among Ss in the DA condition after seeing the opinions of the supposed other person. This latter finding would also be predicted by dissonance theory, which likewise accounts for the boomerang results, since agreement by someone of dissimilar background presumably produced dissonance, which S reduced by changing his opinion away from that advocated by the dissimilar other (and initially by the S himself). In a similar vein, the results of a study by Berscheid (1966) found 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).

The failure to find significant differences with respect to change in confidence between either the SA and DA groups or between the SD and DD groups suggest that the dimension of simi-

larity of background did not provide enough value to allow any possible differential effects upon change in confidence to be significant with the measuring instrument used in the present study. An experiment where background similarities are more relevant to the influence attempt might increase the probability of finding possible significant differential effects on change in confidence.

## Chapter V

### SUMMARY

Many studies have demonstrated that interpersonal attraction functions to aid individuals in understanding their environment, and several theorists have postulated that one antecedent to interpersonal attraction is actual or perceived similarity among persons. The purpose of the present study was to investigate the effect of background similarity-dissimilarity on interpersonal attraction and on changing one's confidence in his own judgment. The hypotheses were: (a) A stranger of similar background will be more attractive than a dissimilar stranger; (b) Agreement by either a similar or dissimilar stranger will increase one's confidence in his own judgment; (c) Disagreement by either a similar or dissimilar stranger will decrease one's confidence in his own judgment; (d) Disagreement by a similar other will decrease one's confidence in his own judgment more than disagreement by a dissimilar stranger; and, stated in the null form, (e) Agreement by a stranger of similar background

will not significantly differ from agreement by a dissimilar stranger with respect to increasing one's confidence in his own judgment.

Undergraduate students from two general psychology courses initially filled out an opinion questionnaire. Two weeks later they were given the background inventory of a supposed other student and instructed to read it over carefully, answer some questions about their first impressions of this person, then again complete the opinion questionnaire on which the choices of this supposed other student were indicated. Two independent manipulations—background similarity-dissimilarity and opinion agreement-disagreement—yielded the following four conditions: (1) Similar background-opinion agreement (SA); (2) Similar background-opinion disagreement (SD); (3) Dissimilar background-opinion agreement (DA); (4) Dissimilar background-opinion disagreement (DD).

The major results from the statistical analysis were as follows: (a) A stranger of similar background is more attractive than a dissimilar stranger; (b) Having someone of similar background subsequently disagree with one's opinions changes one's attitudes toward that person in the direction of perceiving him as



a less likely possible friend; (c) Having someone of dissimilar background subsequently agree with one's opinions changes one's attitude toward that person in the direction of perceiving him as a more likely possible friend; (d) Agreement by either a similar or dissimilar stranger increases one's confidence in his own judgment; (e) Disagreement by either a similar or dissimilar stranger decreases one's confidence in his own judgment; (f) Significantly more conforming changes in alternative among Ss in the DA condition than among Ss in the SA condition; (g) Ss in the DA condition changed their opinion away from that advocated by the supposed other person significantly more than did Ss in the SA group; and (h) No significant differences in confidence change between either the SA and DA or SD and DD conditions.

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## APPENDIX

# Biographical Inventory

1. Name \_\_\_\_\_

2. Age \_\_\_\_\_

3. Ages of brothers and sisters

Brothers

Sistefs

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Father's age \_\_\_\_\_

5. Mother's age \_\_\_\_\_

6. What state are you from? \_\_\_\_\_

7. What is your father's (guardian's) chief occupation?

- \_\_\_ Professional (physician, lawyer, scientist, engineer, etc.)
- \_\_\_ Semi-professional (teacher, artist, social worker, etc.)
- \_\_\_ Business (factory or store owner, banker, store mgr., etc.)
- \_\_\_ Agriculture and Mining (farm or ranch owner, forester, etc.)
- \_\_\_ White collar worker (clerk, salesman, supervisor, etc.)
- \_\_\_ Skilled manual worker (machinist, mechanic, electrician, etc.)
- \_\_\_ Unskilled manual worker (factory worker, janitor, etc.)
- \_\_\_ Community Service Worker (policeman, milkman, etc.)
- \_\_\_ Military (captain, corporal, etc.)
- \_\_\_ Other

8. How many times did your permanent address change before you were 17 years old?

- \_\_\_ Never
- \_\_\_ One or two
- \_\_\_ Three or four
- \_\_\_ Five or six
- \_\_\_ Seven or more times

9. In which one of the following kinds of communities have you resided the longest period of time?

- \_\_\_ Urban (a medium or large size city, population of 50,000 or above)
- \_\_\_ Suburban (a residential area where the people commute to work or shop in a large or medium size city)
- \_\_\_ Town (having a population of 5,000 to 50,000)
- \_\_\_ Small town (having a population of less than 5,000)
- \_\_\_ Rural area (a farm or ranch)

10. Marital status:

- \_\_\_ Single
- \_\_\_ Married with no children
- \_\_\_ Married with one or more children
- \_\_\_ Married, but permanently separated
- \_\_\_ Divorced
- \_\_\_ Widowed



11. Which of the college subjects listed below did you or do you plan to major in?

- ☐ Foreign languages
- ☐ Social sciences, philosophy, history, economics, law
- ☐ Education, teacher-training, physical education
- ☐ Fine arts, music, architecture, etc.
- ☐ Business, commerce, journalism, etc.
- ☐ Industrial arts, agriculture, etc.
- ☐ Biological sciences, medicine, dentistry, psychology, etc.
- ☐ Physical sciences, mathematics, engineering, etc.
- ☐ English, literature, drama, etc.

12. Which of these sports have you played often? (Check one or more)

- ☐ Basketball
- ☐ Baseball or softball
- ☐ Football
- ☐ Boxing or wrestling
- ☐ Tennis
- ☐ Track
- ☐ Swimming or boating
- ☐ Skiing
- ☐ Golf
- ☐ None of the above

13. Which of these activities have you spent considerable time on so that you think of it as one of your hobbies? (Check one or more)

- ☐ Photography
- ☐ Fishing and hunting
- ☐ Music
- ☐ Social dancing
- ☐ Poetry
- ☐ Art
- ☐ Creative writing
- ☐ Sports
- ☐ Automobile repairing
- ☐ Chess, checkers, or dominoes
- ☐ Card playing (poker, bridge, etc.)
- ☐ Collecting stamps, coins, etc.
- ☐ Model building
- ☐ Hot-rod cars
- ☐ Reading for self-education
- ☐ Other

14. What is your religious preference?

- ☐ Catholic
- ☐ Jewish
- ☐ Protestant
- ☐ None
- ☐ Other

15. Approximately how far did your father (guardian) go in school? (If he attended school in a foreign country, estimate about how far he went).

- ☐ Grade school
- ☐ Some high school
- ☐ High school graduate
- ☐ Some college or some advanced technical training
- ☐ College graduate

16. Approximately how far did your mother go in school? (If she attended school in a foreign country, estimate about how far she went).

- ☐ Grade school
- ☐ Some high school
- ☐ High school graduate
- ☐ Some college or some advanced technical training
- ☐ College graduate

17. Your father's religious preference:

- ☐ Catholic
- ☐ Jewish
- ☐ Protestant
- ☐ None
- ☐ Other

18. Your mother's religious preference:

- ☐ Catholic
- ☐ Jewish
- ☐ Protestant
- ☐ None
- ☐ Other

## Opinion Questionnaire

This questionnaire contains several topics of current political, economic, or moral interest and controversy. Would you please weigh each of the alternatives for each issue carefully and give an honest and sincere opinion as to which of the alternatives you think would be the best one. You'll notice that after each topic there is a scale asking you to rate how certain you are that you have made the best choice. For example, if you felt neither particularly certain or uncertain that you had selected the best alternative, you would place a mark as shown in the example below.

/ / / / X / / / /  
Very                      Very  
Certain                      Uncertain

Please make sure to rate your degree of certainty following each topic, again giving sincere thought before making your choice.

1. What age do you think a President of the U. S. should be?

- ☐ Under 30
- ☐ 30-39
- ☐ 40-49
- ☐ 50-59
- ☐ 60-69
- ☐ 70 or older

How certain do you feel that you have selected the best alternative?

/ / / / / / / / /  
Very                      Very  
Certain                      Uncertain

2. Which do you feel are more important—domestic or foreign political policies?

- ☐ Foreign political policies are much more important than domestic policies.
- ☐ Foreign political policies are slightly more important than domestic policies.
- ☐ Domestic political policies are much more important than foreign policies.
- ☐ Domestic political policies are slightly more important than foreign policies.

How certain do you feel that you have selected the best alternative?

/ / / / / / / / /  
Very                      Very  
Certain                      Uncertain

— Mercy killings should be allowed in cases of extensive brain damage which renders the patient incapable of caring for himself, thus causing an emotional and financial burden on the family.

Mercy killings should be allowed in the terminal stages of a painful, incurable disease when the patient requests it.

     Mercy killings should be allowed in both of the above cases.

How certain do you feel that you have selected the best alternative?

[illegible]

4. How do you feel about capital punishment for criminals?

\_\_\_Capital punishment should only be used when a person has been convicted of more than 2 premeditated murders.

\_\_\_ Capital punishment should only be used when a person has been convicted of 1 or more premeditated murders.

Capital punishment should only be used when a person has been convicted of premeditated murder or rape.

— Capital punishment should only be used when a person has been convicted of premeditated murder or treason against the U. S.

Capital punishment should be used when a person has been convicted of either premeditated murder, rape, or treason against the U. S.

How certain do you feel that you have selected the best alternative?

Very Certain / / / / / / / / Very Uncertain

5. What do you think the maximum speed limit on interstate highways should be?

50

55

60

65

70

How certain do you feel that you have selected the best alternative?

Very Certain                      Very Uncertain



8. How do you feel about our policy in Viet Nam?

— I am in agreement with the policy our government is now following.

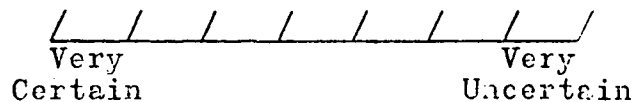
\_\_\_\_We should increase our bombings of North Viet Nam to include industrial centers.

\_\_\_\_ We should bomb Hanoi (the capital city of North Viet Nam) to show the enemy "we mean business."

— We should stop all bombing of North Viet Nam since it doesn't seem to be accomplishing much militarily, while politically it would seem we are suffering a loss in world prestige.

       We should "get out" of Viet Nam.

How certain do you feel that you have selected the best alternative?



9. Among those advocating a change in the grading system used by most universities, the following alternatives have been suggested. Which do you consider to be the best alternative?

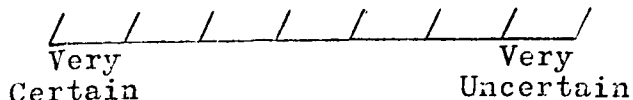
—Students should only be graded pass or fail to eliminate the pressures of four years of competition, with admission to graduate and professional schools being dependent on standardized tests.

Students should be graded excellent, satisfactory, or unsatisfactory, with admission to graduate and professional schools being dependent upon standardized tests and recommendations of teachers.

— Instead of receiving either A, B, C, etc. students should be graded on a percentage scale, i.e., 99, 86, 77, etc.

Grades should be abolished, with the attainment of a degree being dependent upon the student passing comprehensive examinations.

How certain do you feel that you have selected the best alternative?



## Personal Impression Questionnaire

It has been found that peoples' first impressions are often very accurate. Often this is true when you have a very little information about another person.

Based on the background information you have of this person we want you to give your impressions of this other person on the following questions.

1. Do you think you could be friends with this person?
  - ☐ Definitely could be friends
  - ☐ Probably could be friends
  - ☐ Perhaps could be friends
  - ☐ Perhaps could not be friends
  - ☐ Probably could not be friends
  - ☐ Definitely could not be friends
2. How knowledgeable do you think this person is of current events?
  - ☐ Extremely knowledgeable
  - ☐ Very knowledgeable
  - ☐ Somewhat knowledgeable
  - ☐ Not very knowledgeable
  - ☐ Not at all knowledgeable
3. How would you feel about having this person as a roommate?
  - ☐ I would very much like to have this person as a roommate
  - ☐ I would like to have this person as a roommate
  - ☐ I would probably like to have this person as a roommate
  - ☐ I would neither particularly like or dislike having this person as a roommate.
  - ☐ I would probably dislike having this person as a roommate
  - ☐ I would dislike having this person as a roommate
  - ☐ I would very much dislike having this person as a roommate
4. What do you think is the political orientation of this person?
  - ☐ Extreme conservative
  - ☐ Slight conservative
  - ☐ Middle of the road
  - ☐ Slight liberal
  - ☐ Extreme liberal

## Personal Impression Questionnaire

Now that you have seen the ~~xxx~~ opinions of this other person on a variety of issues, and thereby gained more information about this person, we again want you to give your impressions of this person on the following questions.

It may be that you feel the same as you did when you filled out the questionnaire before, or maybe you feel different now. This is what we want to find out.

1. Do you think you could be friends with this person?

- ☐ Definitely could be friends
- ☐ Probably could be friends
- ☐ Perhaps could be friends
- ☐ Perhaps could not be friends
- ☐ Probably could not be friends
- ☐ Definitely could not be friends

2. How knowledgeable do you think this person is of current events?

- ☐ Extremely knowledgeable
- ☐ Very knowledgeable
- ☐ Somewhat knowledgeable
- ☐ Not very knowledgeable
- ☐ Not at all knowledgeable

3. How would you feel about having this person as a roommate?

- ☐ I would very much like to have this person as a roommate
- ☐ I would like to have this person as a roommate
- ☐ I would probably like to have this person as a roommate
- ☐ I would neither particularly like or dislike having this person as a roommate.
- ☐ I would probably dislike having this person as a roommate
- ☐ I would dislike having this person as a roommate
- ☐ I would very much dislike having this person as a roommate

4. What do you think is the political orientation of this person?

- ☐ Extreme conservative
- ☐ Slight conservative
- ☐ Middle of the road
- ☐ Slight liberal
- ☐ Extreme liberal



VITA

Lewis J. Levine, the author, grew up in the Washington, D. C. area. Upon graduation from Coolidge High School in 1959, he entered the University of Maryland and was awarded his BS degree in psychology in June, 1963. He then went to work for Hazleton Laboratories, Inc., a private company specializing in research in the life sciences. In February, 1965 he accepted a position as Research Assistant in the Small Crew Effectiveness Division of The Naval Medical Research Institute. In September, 1965 he entered the University of Richmond and began work toward the degree of Master of Arts in psychology. He expects to be awarded his MA degree in June, 1967. In September, 1966 he began work toward the doctoral degree in Industrial Psychology at the University of Akron.