

## WARNING, DISTRACTION, AND RESISTANCE TO INFLUENCE<sup>1</sup>

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2 hypotheses about resistance to influence were tested: (a) warning Ss that they are going to be exposed to a communication with which they disagree will increase their resistance to influence; (b) distracting Ss from the content of such a communication will decrease resistance to influence. The results support the 1st hypothesis, but provide only minimal support for the 2nd. In addition the study provides data on the mechanisms by which forewarning increases resistance, and suggests that an active rehearsal of supporting arguments is the major process by which resistance is increased.

It has generally been assumed that subjects who are forewarned about the content of a communication with which they disagree will be less influenced by it than subjects who are not forewarned. This has occasionally been stated explicitly (for example, Lazarsfeld, Berelson, & Gaudet, 1948, p. 152), but more often has been an implicit assumption built into research on attitude change, and into actual attempts to influence people's opinions. Although this assumption appears quite plausible, there is little experimental evidence supporting it.

The only experimental study that provides directly relevant data is one conducted by Allyn and Festinger (1961) in which they report that subjects who were forewarned are influenced less by a persuasive communication than subjects who were not warned. Unfortunately, an important source of ambiguity in the design of the study makes this result difficult to interpret. The forewarned subjects were told that they would be asked for their opinions after the talk, while the nonwarned subjects were told that they would be asked for their impressions of the speaker's personality. Festinger and Maccoby (1964) point out this confounding of warning and orientation and contend that the difference between the groups in amount of opinion change was due primarily to the difference in orientation. They suggest that the personality instructions tended to distract subjects from the content of the speech, made it more difficult for them to defend themselves against the speaker's arguments, and consequently produced more change in the direction advocated by the talk. They present additional evidence to support this distraction hypothesis.

Although this explanation by Festinger and Maccoby is quite compelling, the original hypothesis, that forewarning increases resistance to

influence, remains both plausible and interesting. Because of the confounding in the Allyn and Festinger study, however, it remains essentially untested. The primary purpose of the present study is to provide an effective test of this hypothesis.

The study also attempts to specify in more detail the mechanisms by which the forewarning increases resistance, if such an increase is found. One possible reason forewarning may increase resistance is that source derogation may occur when the subject expects a highly discrepant communication from a previously unknown source. Telling the subject that the speaker is going to disagree with him may tend to make the subject suspicious of and hostile to the speaker, and thus cause him to derogate him. To the extent that the speaker is derogated, the communication will have less effect. To test this possibility, all subjects in the present study are given a neutral description of the speaker prior to the speech, and measures of rejection of the speaker are taken after the speech.

Another mechanism which might decrease the effectiveness of the talk is decreased attentiveness on the part of the subject. If the subject does not listen at all, presumably he will not be influenced. Telling the subject ahead of time what position the speaker will take, may cause him to avoid listening in order to avoid exposure to discrepant opinions. A recall test was given after the speech to test this possibility.

In addition to these mechanisms, the warning may activate a more active defensive process. During the period between the warning and the communication subjects may rehearse, recall, or even construct arguments supporting their initial position, and may attempt to refute arguments against their position. This would strengthen their position by making them more confident and giving them additional information with which to counter the arguments presented in the

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communication. An important implication of this type of defensive mechanism is that a longer warning should produce a greater increase in resistance since it would enable the subjects to go over more arguments. Therefore an indirect test of this active process would be a comparison of the effect of different lengths of warning on resistance to influence. If increased resistance stems only from increased suspiciousness or from lack of attentiveness, a 2-minute warning should be as effective as a 10-minute warning; but if this active defensive process occurs, the longer warning should produce greater resistance than the shorter one.

A final purpose of the study is to provide additional evidence on the idea advanced by Festinger and Maccoby that mild distractions increase the effectiveness of a persuasive communication. In the present study some subjects are told to pay attention to the content of the communication, and some are instructed to pay attention to extraneous stimuli. If distraction does reduce resistance to influence, there should be more change in the distraction condition.

To summarize, the study is designed to test two main hypotheses:

1. Subjects who are forewarned about the content of a talk that disagrees with them will change less than those who are not forewarned.
2. Subjects who are told to pay attention to extraneous stimuli will change more than those who are told to pay attention to the content of the talk.

In addition, an attempt is made to specify how the forewarning increases resistance. Three possible defensive mechanisms are considered: increased derogation of the communicator, decreased attentiveness to the talk, and rehearsal of supporting arguments before the counter-communication.

#### METHOD

Measures of attitudes toward teenage driving were obtained from high-school students several weeks before and immediately after these students listened to a talk<sup>2</sup> which was strongly opposed to teen-age driving. The design included four main conditions. Some subjects were warned 10 minutes before the talk that it would be against teen-age driving; some subjects were given no warning. Half of each of these groups were instructed to pay attention to the content of the talk and half were instructed to pay attention to the personality of the speaker. In addition, a fifth group was given the content instruc-

<sup>2</sup>The authors are grateful to Vernon Allen and Alan Gross for giving these talks in the various administrations.

tion, and was warned only 2 minutes before the talk. This group was included specifically to test the hypothesis that earlier warning would produce greater resistance; hence no comparable personality condition was required.

The subjects were 198 seniors from Cubberly High School in Palo Alto, California, and 143 seniors from Mountain View High School in Mountain View, California. Of these, 299 both took the prequestionnaire and were present at the talk. The data from 7 of these subjects were discarded because they arrived late to the final testing session or did not fill out the second questionnaire.

The experimental sessions were conducted in large classrooms or auditoriums at the high schools. A total of four sessions were run, two at each school. All instructions and questionnaires were included in a booklet that was handed to each student after all were seated. The booklets were handed out in a random order, and subjects in all five groups were run in each session.

All subjects went through the following steps. Ten minutes before the beginning of the talk, they read the initial instructions; then they took a brief, irrelevant questionnaire which was included to make the delay seem reasonable and to occupy some of that time; 2 minutes before the talk they read a second set of instructions; and then the speaker was introduced. Immediately after the talk, which lasted for about 12 minutes, the subjects filled out a questionnaire containing questions on attitudes toward teen-age driving and toward the speaker.

The initial instructions for all subjects began with the following:

This is part of a survey of students' opinions on a wide variety of topics. We are going to ask you a number of questions and would appreciate it if you would answer them all as honestly as possible.

They also included these two sentences:

The speaker is Dr. Vernon Allen, a noted expert on automobiles, highway administration and driving in general, who has kindly agreed to come here today and talk to you. [and] Please pay close attention to him and listen carefully to what he has to say.

The rest of the initial instructions differed for the various groups.

#### *Warning Manipulation*

For the 10-minute warning group the initial instructions also included the following warning:

The title of his [Dr. Allen's] talk is "Why Teen-Agers Should Not Drive." Dr. Allen will tell you why he thinks that teen-agers should not be allowed to drive.

For the no-warning and 2-minute warning groups, the initial instructions simply omitted this statement of the title and content of the talk. However, the statement *was* included in the second set of instruc-

tions for the 2-minute group; whereas for all other subjects the second instructions merely stated:

You are now going to hear the talk by Dr. Allen.  
Pay close attention during the talk.

In other words, the warning was given either in the initial instructions which were read 10 minutes before the talk, in the second instructions which were read 2 minutes before the talk, or only immediately before the talk when the speaker was introduced and the title of his talk was announced. The presence or absence of the two-sentence warning is the only difference between warning conditions.

### *Distraction Manipulation*

The orientation of subjects was varied in the initial instructions. Content orientation instructions included the following sections:

In particular we are interested in your reactions to a talk which you are going to hear. . . . You will be asked to give your opinions on this problem after he has finished his talk.

The corresponding parts of the personality orientation instructions read:

In particular we are interested in your impressions of a speaker you are going to hear. . . . You will be asked to give your impressions of his personality after he has finished his talk.

This was the only difference between orientation conditions.

The data consisted of responses to the two questionnaires. The prequestionnaire contained two questions on teen-age driving for Cubberley subjects, and four for Mountain View subjects. For both schools the critical items were imbedded in irrelevant items to make a total of 12 questions. The postquestionnaire contained 4 questions on teen-age driving, ratings of rejection of the speaker, a number of other evaluations of the speaker, and (for Cubberley subjects) a recall measure. All questions were answered on undivided scales labeled at both ends.

### RESULTS

Scores on the prequestionnaire indicated that before the talk virtually all subjects were against any limitations on teen-age driving. The overall mean was 3.75 with 14 being maximum agreement with the limitations. There were no

TABLE 1  
MEAN CHANGE FOR ALL CONDITIONS

Orientation	Warning*		
	0	2	10
1. Content	1.54 (68)	.94 (57)	.55 (56)
2. Personality	1.83 (53)		1.31 (58)

Note.—Group *N* appears in parentheses.  
\* In minutes.

TABLE 2  
ANALYSIS OF VARIANCE OF FOUR MAIN GROUPS  
IN TABLE 1

Source	<i>MS</i>	<i>df</i>	<i>F</i>
Warning (A)	503	1	4.88
Orientation (B)	201	1	1.95
A × B	98	1	<1.0
Error	102.88		

appreciable differences among the groups on these ratings. All results are presented in terms of change scores from the initial ratings. For subjects from Cubberley the mean change scores for each subject are based on change on two questions; for Mountain View subjects they are based on four questions. Nevertheless, there are no differences between corresponding groups from the two schools that even approach significance; and a preliminary analysis indicated that no appreciable amount of variance was attributable to the different schools. Therefore, the analysis was done combining subjects from the two schools.

The major results are presented in Table 1, which shows the differences among groups in amount of change from initial to final questionnaire in attitudes toward teen-age driving. The first hypothesis to be tested is that forewarning increases resistance to influence. As may be seen in the table, both 10-minute warning groups changed less than the corresponding no-warning groups. The overall effect of warning is significant ( $F = 4.88$ ), although due to extremely large variances the separate differences within content and personality orientation conditions are not significant ( $F = 3.82$  and  $1.23$ , respectively). In addition, 67% of the subjects in the no-warning groups changed in the advocated direction compared to 52% in the 10-minute warning groups. This difference is significant ( $\chi^2 = 5.63$ ,  $p < .02$ ).

The second main hypothesis is that distracting subjects by telling them to pay attention to the personality of the speaker rather than to the content of the talk will reduce resistance to influence. The results are consistent with this hypothesis, but are not very strong. Both distraction (personality orientation) groups changed more than the corresponding no-distraction groups, but neither the overall difference between means nor either of the separate differences are significant ( $F = 1.95$  for combined groups,  $F < 1.0$  for no-warning groups, and  $F = 2.49$  for 10-minute warning). The results in terms of number of subjects who changed in the advo-

cated direction are somewhat stronger. In the content orientation conditions the figure is 54% and in the personality condition it is 66% ( $\chi^2 = 3.34, p < .10$ ).

Although these differences are in the expected direction, they cannot be considered as supporting the distraction hypothesis. The weakness of this effect, as contrasted with that reported by Festinger and Maccoby (1964), may be due to a number of factors. The most obvious possibility is that telling subjects to pay attention to the personality of the speaker is not as strong a distraction as showing an amusing, irrelevant film during a persuasive speech. It may also be that distraction reduces resistance to influence only under certain limited conditions involving the degree of commitment to the initial position, strength of the persuasive communication, etc., and that the present situation did not meet these special conditions.

Since the forewarning does appear to increase resistance, the question of interest becomes how it produces this effect. The study provides data on three different mechanisms which might have been activated by the forewarning. The first is increased derogation of the communicator, due presumably to increased suspiciousness and hostility on the part of the warned subjects. Data relevant to this is provided by responses to the question "How biased do you think the speaker was?" which was answered on an undivided scale ranging from not at all biased to extremely biased. Table 3 presents the means for the five groups. As may be seen, all groups reject the communicator equally except the 10-minute warning content group which has a somewhat higher rejection score. However, not even the largest difference approaches significance ( $t < 1.0$ ). Therefore, although there is a slight suggestion that the warning resulted in greater rejection, it seems unlikely that this factor accounted for the quite sizable differences in degree of resistance.

The second possibility was that warning caused the subject to attend less carefully to the talk. To check on this possibility subjects from Cubberley were given a recall test after the talk. Presumably if some subjects paid less attention they would recall less of the content of the talk. There were no appreciable differences among any of the groups in recall scores, thus making it appear that lack of attention was not a major cause of increased resistance. It might be added that it would have been quite surprising if the group that changed less had paid less attention. If the distraction hy-

TABLE 3  
MEAN RATING OF COMMUNICATOR BIAS

Orientation	Warning*		
	0	2	10
Content	8.20	8.25	9.48
Personality	8.77		8.24

Note.—A score of 14 indicates that the speaker is rated extremely biased.  
\* In minutes.

pothesis is correct, as evidence from both this and the earlier study seem to suggest, lack of attention would, if anything, produce greater change in the direction advocated.

Finally, forewarned subjects might have spent the time between the warning and the talk rehearsing arguments in favor of their position, and perhaps refuting counterarguments. Only an indirect test of this notion is provided in the study. If increased resistance is due to this type of active process, a longer warning should give subjects more time to defend themselves and should produce greater resistance than a briefer warning. As is shown in Row 1 of Table 1, the results are consistent with this expectation. The 10-minute warning group changed less than the 2-minute group which in turn changed less than the no-warning group. Although the linear trend across these conditions is fairly strong ( $F = 3.65, p < .10$ ), the 2-minute warning group is not significantly different from either of the others. Thus, these data provide only weak support for the idea that an active defensive process occurs.

A second source of relevant data is the interaction of warning and orientation. It could be argued that the more concerned the subject is about the content of the talk, the greater effect the warning should have. The warning allows the subject to defend himself by rehearsing arguments, but the extent to which he will do this depends in part on how threatened he feels by the anticipated talk. If he has been told to pay attention to the personality of the speaker, presumably the content becomes less important and he should feel less threatened. Therefore, the warning should have less effect in the personality conditions than in the content conditions. The data give some support to this analysis. The difference between 10-minute and no-warning groups is twice as large in the content condition as in the personality condition. This difference does not approach significance, but is in the expected direction. Thus, although the present study does not provide any evidence which directly indicates the presence of the

active defensive process described above, two different sources of data provide some indirect evidence for such a process. This evidence is admittedly very weak, and it is hoped that subsequent studies will allow a more exact specification of the mechanisms involved.

## REFERENCES

ALLYN, JANE, & FESTINGER, L. The effectiveness of unanticipated persuasive communication. *Journal*

*of Abnormal and Social Psychology*, 1961, **62**, 35-40.

FESTINGER, L., & MACCOBY, N. On resistance to persuasive communications. *Journal of Abnormal and Social Psychology*, 1964, **68**, 359-366.

LAZARSFELD, P., BERELSON, B., & GAUDET, HAZEL. *The people's choice*. (2nd ed.) New York: Columbia Univer. Press, 1948.

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## LEADER BEHAVIOR, GROUP PRODUCTIVITY, AND RATING OF LEAST PREFERRED CO-WORKER

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Experimental psychology students formed into teams of controlled composition worked on 10 operant conditioning problems—9 problems under routine conditions and 1 problem under stress. Prior to formation of the teams, 8 of the appointed leaders gave favorable ratings to their least preferred co-worker (LPC) and 6 gave unfavorable ratings. Teams with leaders giving unfavorable ratings to LPC were superior to other teams on performance on the stress problem but equal on the routine problems. The 2 kinds of leaders showed little difference in observed behavior for the stress problem as a whole, but when the problem was analyzed according to phases, significantly different patterns appeared. Interpersonal attraction did not differ in the 2 kinds of teams.

Group productivity can be predicted from the way the group leader describes the personality of his least preferred co-worker (LPC), according to a number of investigations by Fiedler (1958, 1962). In several natural groups, the leader who described the LPC in unfavorable or socially undesirable terms tended to have a more productive group. The greater production secured by the leader giving unfavorable ratings to the LPC has been explained by this leader's ability to maintain the necessary social distance between himself and his workers (Fiedler, 1958). (For the remainder of this report an individual who gives generally favorable ratings to the least preferred co-worker will be called "favorable LPC" while the term "unfavorable LPC" will denote someone who rates LPC in a generally unfavorable direction.) The support for the social distance interpretation is based for the most part on the co-worker ratings.

In the present research, natural groups were studied while performing their regular task under stress. The team composition was controlled: some groups had a favorable LPC leader while

others had an unfavorable LPC leader. A major objective was to provide a description of the behavior within the two kinds of groups, and in particular, to see if the favorable LPC leader would respond to his group in a more positive socioemotional manner than would the unfavorable LPC leader.

Productivity of the natural groups was determined under stress and also under routine conditions. On the basis of Fiedler's findings, one would expect superior performance of the unfavorable LPC groups under stress. An additional aim of the present investigation was to examine interpersonal attraction expressed between group members in order to determine whether the unfavorable LPC leader generates more social distance between himself and his followers.

### METHOD

The independent variable was the LPC score of the appointed leader. Subjects rated their most preferred co-worker and their least preferred co-worker on 24 adjective pairs, such as friendly-unfriendly, quitting-persistent, on 8-point scales (Fiedler, 1958).