Journal of Abnormal and Social Psychology
1962, Vol. 65, No. 6, 395–402

THE EFFECTIVENESS OF "OVERHEARD" PERSUASIVE COMMUNICATIONS

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It is widely believed that a communication, if inadvertently overheard, is more likely to be effective in changing the opinion of the listener than if it had been deliberately addressed to him. Intuitively, the advantages of an overhearing situation for effective influence seem so obvious that it is accepted as virtually proven. Berelson (1950), for example, gives two reasons for the presumed extraordinary effectiveness of overheard communications. He states that,

> in such exposure defenses against new ideas are presumably weaker because preconceptions are not so pervasively present. Finally, there may be other psychological advantages centering around the gratification of "overhearing" something "not meant for you," a consideration that also weakens the resistance to "propaganda" (since "it would not be propaganda if it wasn't intended for you") (p. 458).

This last parenthetical remark is amplified by Hovland, Janis, and Kelley (1953) as follows:

> Remarks such as those overheard in subways and other crowded public places would be especially effective in this respect because under such circumstances it is quite apparent that the speaker has no intention to persuade the bystanders (p. 23).

In short, on an intuitive level, there seem to be three factors which increase the effectiveness of overheard persuasive communications.

1. Because of the accidental nature of the communication the listener is caught, so to speak, with his defenses down.
2. It is more powerful because the listener is not supposed to hear it.
3. The speaker cannot possibly be seen as intending to influence the listener.

Let us see to what extent there is experimental evidence to support these intuitively plausible assertions. On the first factor, namely, lack of defenses when the communication is unanticipated, there are some supporting experimental data. It has been shown (for example, Allyn & Festinger, 1961; Ewing, 1942) that if a person expects a communication to disagree with the opinion he holds, he does erect defenses, tends to reject the communicator, and is less influenced than if he hears the same communication without having been led to expect disagreement. It should be pointed out, however, that these studies did not involve accidental communications. There is no evidence in the literature that there would be fewer defenses to an accidental communication than to a purposeful one, provided the listener did not expect disagreement.

On the second factor, the gratification of hearing something one is not supposed to hear, there is no evidence at all. To our knowledge no studies which bear on this have been done.

On the third factor, however, there is some evidence. There are studies in the literature which have investigated the effectiveness of communications from biased and unbiased sources. A biased source may be seen as having some ulterior or personal motive for wanting to influence the listener. Hence, the difference in effectiveness of communications from biased and unbiased sources may be seen as relevant to the factor of whether or not the speaker is seen as "intending" to influence the listener. The evidence on this point, however, is ambiguous. Kelman and Hovland (1953), for example, find that when a communication is ascribed to a selffishly motivated communicator there is less influence. Hovland and Mandell (1952), however, find no difference in the amount of opinion change when the communication is ascribed to a partial or impartial person. This latter finding is of particular interest since the lack of difference in effectiveness existed in spite of the fact that the listeners rated

[1] The authors would like to express their appreciation to the Ford Foundation for its support of this research.

the impartial source as having done a better job and having been more fair and honest.

Clearly, the evidence for the assertion that overheard communications are especially effective in changing opinions is less than adequate. The first of the two studies to be reported in this paper was designed to provide some better evidence on this point. In order to narrow the field of possible interpretations, the study was designed to avoid entirely any differences which might be due to direct versus indirect persuasive communications. Thus, two conditions were set up in the experiment. In both conditions a subject listened to two persons carrying on a conversation. The only difference between the two conditions was that in one the subject thought that the speakers knew that some people were listening, while in the other the subject thought that the speakers were unaware that anyone at all was listening. The exact details of the experiment follow.

EXPERIMENT I

Procedure

During a lecture in the introductory psychology course at Stanford University, students were informed that, as part of the course, they were required to sign up for a 15-minute tour of the social psychology laboratory's observation room. The next day, in one-half of the recitation sections, arrangements were made with students to tour in groups of 2–4. Students in the other sections were told arrangements would be made with them later in the term—these students were then utilized as a control group. One hundred subjects actually took the tour; 84 subjects comprised the control group.

When subjects reported for the tour, the mechanics and common uses of the observation room (a small booth from which one could look into a larger room through a one-way mirror and could listen through earphones) were explained. Subjects were told that a common technique for analyzing group behavior was "blind listening." The experimenter explained that they would be told more about, and given a chance to try, this technique later. After these instructions the experimenter took the subjects to the observation room.

As the groups began walking down the corridor toward the observation room, the experimenter remarked casually,

> Since the large observation room is rarely in use for experiments, graduate students usually use it as a lounge. There's almost always someone in there.

One-half of the groups were given instructions to convince them the graduate students would know they were listening; the other subjects were led to believe the graduate students would be unaware of their presence.

For the Regular condition, subjects were told that,

> A couple of graduate students are in there now. I'll tell them we're coming through.

Upon reaching the end of the corridor, the experimenter stuck her head into the large room to the right of the small observation booth, and said to the two graduate students within,

> Hi. Some Psych I people are coming through. Would you mind just continuing your conversation so we can try a little blind listening?

For the Overheard condition, the experimenter said instead,

> I think a couple of graduate students are in there now. If we're quiet, we can probably get into the observation booth without their hearing us.

The experimenter then led the subjects quietly past the large room into the booth, shut the door of the booth, and looking through the one-way mirror at the graduate students, who had not looked up, said,

> Well, I guess we made it.

In both conditions, as subjects watched the graduate students talking, the experimenter described some of the techniques of blind listening. (Noticing incomplete sentences, pauses, etc.) Subjects were then told to try a little blind listening. Curtains were drawn over the one-way mirror, and earphones passed out. (Instruction in this "technique" had been so sketchy and uninformative that subjects really had nothing to do but listen casually.)

The "conversation" all subjects heard through the earphones was actually a taped 6-minute persuasive communication. On this tape, two speakers discused the common "misconception" that smoking causes lung cancer. A series of (nonexistent) studies were described which showed there was no relationship between smoking and cancer when all confounding factors were eliminated. In fact, the data were said to suggest that smoking might even be beneficial since it released tension.

The degree to which the subjects agreed with the communication was assessed a week later. A mimeographed questionnaire purporting to be from the National Institutes of Health was given to the 100 experimental and the 84 control subjects during the regular class recitation sections by a second experimenter. The "medical survey" included four questions concerning students' opinions about the causal relationship between smoking and cancer.

About 10 minutes after this health questionnaire was completed, the first experimenter entered the classroom and passed out a second questionnaire asking students to evaluate the tour she had con-

ducted. These data were presumably "to be used in planning next quarter's demonstrations."

Fourteen of the 100 subjects in the experimental conditions indicated on this second questionnaire that they thought the conversation they heard from the observation booth was a prepared recorded conversation. The data from these 14 subjects were discarded.

Following the collection of data, the true purposes of the experiment were explained to all subjects.

Results

The answers to the four questions on the Health Questionnaire which concerned their opinions about the link between smoking and lung cancer provided a measure of the relative extent to which the persons in our various conditions were influenced by the persuasive communication they listened to in the guise of a conversation. Since all the questions yielded comparable results, we summed the responses to all four questions to provide one measure of agreement with the communication. On each question an answer was given a higher score the more it agreed with the position that the link between smoking and lung cancer was *not* proven—the position advocated by the communication. Table 1 presents these data for the three conditions.

It is clear from an examination of Table 1 that the conversation between the two graduate students was an effective persuasive communication. While the control group (who did not hear the conversation) shows an opinion score of 11.4, those in the Regular condition have a score of 13.6, and those in the Overheard condition have a score of 14.5. The differences between the Control condition and each of the experimental groups are both highly significant. We are, however, more concerned with the difference between the two experimental groups. As seemed plausible and as most persons would have expected, the Overheard condition produces more opinion change than the Regular condition. The difference is significant at the .08 level of significance ($t = 1.76$). In other words, if a person feels that the speaker does not know that anyone is listening he is influenced more than if he thinks the speaker knows someone is listening.

TABLE 1

OPINIONS CONCERNING THE LINK BETWEEN SMOKING AND LUNG CANCER

Condition	Smokers	Nonsmokers	Total
Students not participating in the demonstration (Controls)	11.8 (24)[a]	11.2 (60)	11.4 (84)
Regular	13.6 (12)	13.6 (36)	13.6 (48)
Overheard	15.3 (9)	14.2 (29)	14.5 (38)

[a] Number in parentheses is the number of cases on which the cell mean is based.

A difference which is of such borderline significance statistically, however, is not entirely satisfactory. We, hence, attempted to gain further insight into the data by doing some further analyses. Because of the content of the persuasive communication, the first variable which suggested itself for internal analysis was, of course, the smoking behavior of the subjects in the study. It seemed possible to us that, since smokers might be very desirous of believing the content of the persuasive communication, they might have changed a great deal, and equally, in both experimental conditions thus, perhaps, attenuating the difference. The analysis of the data, however, revealed a very perplexing finding. Not only was this suggestion not true, but the opposite was true. Table 1 presents the data separately for smokers and nonsmokers for the three conditions.

It is clear in this table that the differential effectiveness of the Regular and Overheard conditions is due almost entirely to the small group of smokers. For the nonsmokers there is a very small difference between these two conditions which is not significant. For the smokers, however, the difference is significant at better than the .10 level ($t = 1.88$) even though the number of cases is very small. It is also clear that the smokers are not more influenced than are the nonsmokers in the Regular condition. These means are almost identical. It is only in the Overheard condition that the smokers, who presumably would like to believe the content of the communication, are actually more influenced than the nonsmokers.

In an attempt to understand the reasons for this surprising finding we looked at the

data from the second questionnaire where the subjects were asked how sincere and honest they thought the speakers had been. Perhaps the smokers, for some reason or other, attributed greater sincerity to the speakers in the Overheard condition than did the nonsmokers. The data show, however, that this cannot account for the obtained result. Everyone, it turns out, rates the speakers as more honest and sincere in the Overheard than in the Regular condition. In the Overheard condition the mean ratings are 6.4 and 6.1 for the smokers and nonsmokers, respectively. The comparable figures for the Regular condition are 5.6 and 4.8. Thus, actually, the nonsmokers are the ones with the bigger differential between the two conditions in the rating of the speakers' sincerity but it is the smokers who show a differential in how influenced they were. None of the other questions that were asked on this second questionnaire revealed any differences at all in reactions to the two conditions.

The remaining alternative is that the obtained result may be a chance difference. After all, it seems somewhat implausible that the Overheard condition should only be more effective for persons who are behaviorally involved in the issue. We, consequently, carried out a second experiment which was more adequately controlled and which was specifically designed to see if this implausible finding was or was not correct.

EXPERIMENT II

Procedure

Two groups of persons, wives of college students living in an on-campus housing development, and Junior and Senior women students living in dormitories, were used as subjects in the experiment. Two persuasive communications were employed. One of them, "Student husbands should spend a great deal more time at home," was expected to be an involving issue primarily for the married women. The other, "Junior and Senior women should be allowed to live off campus if they desire," was relevant only for the unmarried students living in dormitories.

Two weeks before the experimental sessions, prospective subjects were sent letters from the National Institutes of Mental Research, informing them that a nationwide study of the therapy process was being conducted, and inviting them to observe and evaluate a regular therapy session. Final appointments were made with 41 married women and 40 single students in follow-up telephone calls. Groups of one to four subjects were scheduled at a time. One-half of these groups were randomly assigned to the Regular condition; the remaining groups were placed in the Overheard condition.

After all the women in any group had arrived, the supposed "purposes" of our study were discussed at greater length. Subjects were told they were to evaluate two therapists, the patient's regular therapist and a visiting psychiatrist who was consulting with the patient's regular therapist. Subjects were instructed just to listen casually to the therapy session in order to give us some very general impressions at the end. It was explained to the subjects that they were to listen to the sessions from individual listening rooms connected to the therapy room by a one-way speaker. Separate listening rooms were used "since we wanted independent judgments" and since they "obviously could not sit *in* the therapy room."

At this point Regular condition subjects were told,

> Of course both the therapists and the patient know you'll be listening in today.

Those in the Overheard condition were told,

> Of course, the therapists don't know you're listening in today.

As they were led to their individual rooms, the experimenter commented to Regular condition subjects,

> Now I'll run downstairs and tell the therapists you're here and turn on the main speaker.

Overheard condition subjects were merely told,

> You'll be able to hear as soon as I turn on the main speaker.

Instead of "turning on the main speaker," the experimenter actually turned on a tape recorder which began playing a casual conversation between the two "therapists," through the subjects' speakers. The experimenter then returned to the subjects' rooms, identified the therapists' voices, and remarked to the subjects in the Regular condition,

> When I looked in downstairs, Bill [the patient] hadn't arrived yet.

Subjects in the Overheard condition were told,

> Bill apparently isn't there yet.

The experimenter then left the subjects alone to hear the remainder of the tape. The "conversation" between the two waiting therapists continued for 14 minutes. During his discussion of student problems, the visiting therapist spent 6 minutes delivering the first persuasive communication, "Women should be allowed to live off campus." The regular therapist only commented in order to clarify and agree with the arguments of the visitor. The regular

TABLE 2

INDEX OF AGREEMENT ON RELEVANT AND IRRELEVANT ISSUES FOR MARRIED WOMEN AND SINGLE STUDENTS

Issue	Married women		Single students	
	N	Mean index score	*N*	Mean index score
Involving				
Control subjects	18	7.11[a]	18	7.57[b]
Regular condition	20	6.71	20	8.85
Overheard condition	21	8.48 $p = .01$, $t = 5.18$	20	9.69 $p = .02$, $t = 2.45$
Noninvolving				
Control subjects	18	7.20[b]	18	8.58[a]
Regular condition	20	8.47	20	8.17
Overheard condition	21	8.75 *ns*	20	8.49 *ns*

[a] Husband issue.
[b] Dormitory issue.

therapist then began discussing a problem "common to his patients." During the next 6 minutes, he presented the second persuasive communication, "Husbands should spend more time at home."

At the end of this discussion, the patient arrived, his therapy session began, and for the next 35 minutes both therapists limited their remarks to "Yes," "No," and extremely obvious interpretations. At the end of the 50-minute taped "session," subjects were asked for their evaluations of the therapists' competence—supposedly the focus of our study. The experimenter then gave them a questionnaire asking for their opinions on several problems of concern to Stanford students and student-wives. From a few of the questions in this attitude survey, an Index of Agreement with each of the communications presented by the therapists was computed.

Control Group. In order to get some indication of the attitudes of subjects who did not hear the tape, the questionnaire was also mailed to 21 married women and 20 single students selected in the same way as our experimental subjects. Seventeen married women and 17 students returned the completed forms. Since Control subjects answered the questionnaire at home with unlimited time to complete it, their responses may not be completely comparable to those of our experimental groups.

Results

Each subject in the experiment heard two persuasive communications, one of which was supposed to be personally involving and the other not. It is important to assess the extent to which we were successful in accomplishing our purpose in the design. On the questionnaire, subjects were asked how intensely they felt about each of the issues and also how often they discussed each of them. The results show that the appropriate conditions were, indeed, created. The dormitory women report feeling more intensely about the "off-campus living" issue than do married women ($t = 3.98$) and report having discussed it much more often ($t = 8.32$). On the "husbands at home" issue, on the other hand, the married women feel more intensely than do the dormitory women (although not significantly so) and report discussing the issue much more often ($t = 8.05$).

We may then look at the results to see if the findings from the first experiment do or do not hold up. In order to present one measure, for each issue, of extent of agreement with the persuasive communication, the answers to the relevant questions on the questionnaire were summed. In all cases higher scores were assigned to those responses which indicated more agreement with the position advocated in the communication. Table 2 presents these data.

An examination of the data makes it clear that we obtained precisely the same kinds of results in this experiment as were obtained in the first experiment. When the issue is one which is immediately involving for the subject ("husbands at home" for married women and "living off campus" for dormitory students) there are large and significant differences in the persuasive effectiveness of the communication between the Regular and Overheard conditions. When the issue is not immediately involving, the differences between the Regular and Overheard conditions are negligible and not significant.

For the dormitory issue, the interaction between listening condition (Overheard or

Regular) and degree of subjects' involvement, was significant at $p < .05$ ($F = 5.44$, $df = 1/77$). The interaction was not significant for the "Husbands at home issue."

It is worth emphasizing at this point that the design used in this experiment is rather well controlled. The types of subjects and content of issues were chosen for the specific purpose of testing the suggestion from the first experiment and each subject is, in a sense, her own control. The same subjects who are more affected by the "overheard" conversation when the issue involves them actively are *not* more affected by the "overheard" communication when the issue does not involve them. The consistency of the results we have obtained warrants rather high confidence in the effect. The degree to which the results are consistent may be seen by looking simultaneously at the results of both experiments. We have presented these results graphically in Figure 1.

The data in Figure 1 are plotted, for all three issues used in the two experiments, in terms of presumed change of opinion as a result of hearing the persuasive communication. In other words, the data are plotted in terms of differences from the control groups who never heard the communication. The solid lines indicate data from subjects for whom the particular issue was an actively involving one. The dashed lines represent the data when the issue was not involving for the subjects. The consistency of the data is so immediately apparent in the figure that it hardly needs comment. We may certainly conclude that, at least when the position advocated by the persuasive communication is one which the involved subjects would like to accept, overheard communications are more effective for involved subjects and not particularly more effective for subjects not directly involved in the issue.

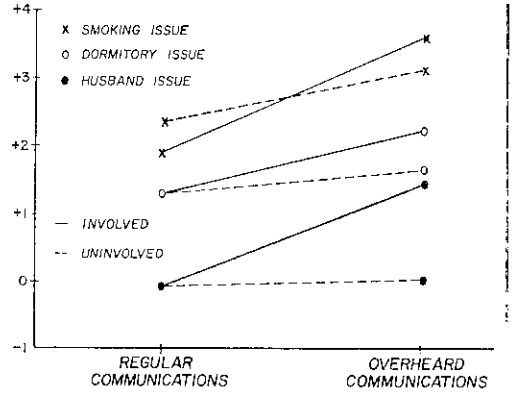

FIG. 1. Opinion change with "regular" and "overheard" communications.

DISCUSSION

There is clearly a problem involved in explaining these results. Let us say right now that we have no explanation to propose in any true sense of a theoretical explanation. There are, however, some specific directions into which one seems to be forced by the data, and these are worth discussing.

We will begin this discussion by examining what our results have to say about the three "plausible" factors which have been generally presumed to make overheard communications more effective. It will be recalled that we listed these and discussed them somewhat in the introduction to this article. We will examine them in relation to our data in turn.

1. Because of the accidental nature of the communication the listeners' defenses are not prepared. This factor, whether or not it is relevant to other situations, cannot conceivably account for our data. After all, we were not comparing a "direct attempt to influence" with an "overheard communication." Neither of our experimental conditions represented direct attempts to influence the subject. In neither case were they prepared for the communication. There is also another interesting point that should be made about the meaning of the term "defenses," a term widely used in discussing resistance to persuasive communications. If one does a study in which one attempts to persuade persons of something which they do not want to believe, it is intuitively plausible to think of the person defending himself. But in our study we were not doing this. Why would a smoker defend himself against the opinion that smoking is not harmful; why would a student living in a dormitory defend herself against the opinion that, if she wanted to, she should be allowed to live off campus?

2. Because the listener is not supposed to hear it, an overheard communication is

more powerful. This factor, at least as specified, also cannot account for our results. In the overheard conditions neither the subjects who were or who were not involved in the issue were "supposed to hear the communication." Nevertheless, we obtain a difference favoring the Overheard condition only when the issue is one which is involving for the subjects. One might argue that perhaps the psychological interest aroused by hearing something one is not intended to hear is greater if the content is immediately relevant. This, of course, is possible. But, if this is true, it would seem equally plausible that psychological interest would be heightened equally in the Regular condition if the content is immediately relevant. Consequently, it is difficult to see why this factor alone would make for a differential between our two conditions.

3. Because the speaker does not know the listener is there, the speaker cannot be seen as intending to influence the listener. This factor seems to be the one to which we are driven in our search for an explanation of our findings. It seems reasonable that if a speaker is seen as intending to influence one, then suspicions concerning possible ulterior motives may serve to nullify the possible effectiveness of the communication. But how does this apply to our data? Let us look at our experimental conditions and examine to what extent it would be possible, in any of them, to impute "intention to influence" to the speaker. First of all, let us dispose of the overheard conditions. Clearly, since the speaker does not know anyone is listening, it is not conceivable that the listener, knowing this, could imagine that the speaker intends to influence him. In the Regular condition, however, the situation is a little different. Here the speaker knows that someone is listening but does not know who. Since the listener in the Regular condition knows he has not been personally identified by the speaker, if the content of the communication is not personally relevant, it would also seem quite difficult to imagine that the speaker was intending to influence him. If, however, the content of the communication in the Regular condition is of direct personal relevance, then it is possible for the listener to feel that the speaker is, indeed, attempting to influence him and has ulterior motives.

If this is correct, then one comes to the conclusion that the difference between the two conditions for those who were involved in the issue exists because the effectiveness of the communication in the Regular condition was partially nullified by the possibility of imputing ulterior motives to the speaker. When this possibility is eliminated, as in the Overheard condition, those involved in the issue change more in the direction of the communication. This is, of course, to be expected since the communication urges them in a direction they would like to move.

There is, of course, still the interesting question, to which we have no answer, as to why, when the involved subjects hear a communication *which advocates a position they would like to accept,* they still tend to impute ulterior motives to the speaker when this is at all possible.

Clearly, these are suggestions for explanation and for futher exploration rather than actual theoretical explanation of the findings. The results certainly indicate that the effectiveness of overheard communications is a more complicated matter than has been generally assumed. If imputation of ulterior motives to the speaker only comes into play, or comes primarily into play, when the content of the communication is personally involving, this may indeed account for the inconsistency of previous experimental results on this topic. And it may also be, of course, that if the communication urges the listeners in a direction in which they do not want to move, quite different results might be obtained.

SUMMARY

Two experiments were conducted to assess the effectiveness of overheard communications:

1. When subjects touring an observation room "overheard" a persuasive communication, they changed their attitudes more than when they were told speakers knew they were listening. Quite unexpectedly, those subjects for whom the communication (smoking is not harmful) was especially relevant and involving (smokers) accounted almost entirely for the difference between the two conditions.

2. A second study was done to verify this finding. Two groups, married women and women in dormitories, were each given two communications, one concerning husbands and one dormitory living. It was expected that when the issue was an involving one for the group, the overheard communication would be especially effective. When the issue was not involving, the difference between the overheard and regular conditions was expected to be small. The results completely confirmed those expectations.

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(Received September 18, 1961)