

The Open-Mindedness of the Counterattitudinal Role Player¹

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Subjects first expressed their own position on whether college education should be general (liberal arts) or specialized (career preparatory), then were led to expect that they would write essays supporting one or the other of these positions, next judged the validity of a standard set of statements representing both views, and last again expressed their opinions on the issue. Validity judgments indicated that subjects tended strongly to accept arguments supporting their own position and reject opposing ones when expecting to defend their own position, but accepted nearly equal numbers of arguments on both sides when expecting to advocate the opposing position. Final opinion judgments were influenced in the direction of the assigned position even though the role playing task was not performed. It was concluded that the effectiveness of role playing in inducing opinion change may be due in large part to its success in getting subjects to evaluate information opposing their own position in unbiased fashion.

It has been observed in several experiments that role playing, or active involvement by a subject in presenting arguments supporting a controversial position, has a uniquely effective capacity to induce the subject's acceptance of that position. The experimental literature, it may be noted, is not unequivocal in indicating the efficacy of role playing (see reviews by Insko, 1967, and McGuire, 1966); however, the most recent relevant studies have indicated that, compared to the effects of passively received communications, role-played communications (a) are more likely to be accepted (Greenwald and Albert, 1968; Janis and Mann, 1965) and (b) produce more persistent persuasion (Mann and Janis, 1968; Watts, 1967).

The basis for the effectiveness of role-playing procedures in persuasion

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is poorly understood, although a number of reasonable hypotheses have been advanced. The five hypotheses listed below, although not directly tested in the present research, must be regarded as promising.² With the exception of the dissonance hypothesis, all of these derive from the discussion of role-playing effectiveness given by Hovland, Janis, and Kelley (1953, Chapter 7); references given in parentheses indicate only more recent treatments.

1. *Selective learning*. Playing the role of an advocate of a given position may facilitate opinion change by prompting selective attention to or retention of arguments supporting that position (Greenwald and Albert, 1968; Watts, 1967).

2. *Biased scanning*. When the role playing assignment is accepted, the subject may become temporarily motivated to seek arguments that support his assigned position (Elms and Janis, 1965; Janis and Gilmore, 1965).

3. *Self as source*. Arguments perceived as self-originated may be more readily accepted than ones perceived as externally originated (Greenwald, 1968; Greenwald and Albert, 1968; King and Janis, 1956).

4. *Hand-tailoring*. An individual may be able to construct a communication that is uniquely effective for his own belief structure.

5. *Dissonance*. Acceptance of the role-played position may be in the service of reducing dissonance aroused by counterattitudinal performance (Festinger, 1957) or by the effort of performing the role playing task (Watts, 1967; Zimbardo, 1965).

Cognitive Response Analysis

Without taking a position with regard to the above hypotheses, the present research tested an interpretation of role-playing effectiveness derived from the general hypothesis (Greenwald, 1968) that persuasion effects are mediated by the rehearsal and learning of attitude-relevant cognitive responses elicited in the persuasion situation. According to this analysis, the "role-playing effect" would be expected if agreement to advocate a view opposing one's own entailed adopting a disposition to react cognitively in a fashion more than usually favorable to information supporting that opposing position.

To test this interpretation, the experiments reported here started by establishing expectations in subjects that they would be obliged to write essays supporting a given arbitrarily selected side on the issue of general (liberal arts) versus specialized (career preparatory) undergraduate edu-

² A Ph.D. dissertation currently being completed by Stuart M. Albert, under the author's supervision, is concerned with testing some of the hypotheses listed, but not tested, here.

cation. Before being allowed to carry through these assignments, subjects were given the task of judging the validity of a standard set of arguments supporting each position. If the cognitive response analysis is correct, then subjects should judge arguments supporting a given position as having more validity if assigned to advocate that position than if asked to support the reverse position. In advance of considering specific procedures and results, it should be observed that findings consistent with the present hypothesis should not be interpreted as indicating that alternative hypotheses (listed above) are in error. The question of compatibility of the cognitive response analysis with the other hypotheses will be considered after the presentation of results.

PRELIMINARY EXPERIMENT

Subjects and Procedure

Sixty-six undergraduate students in the introductory psychology course at Ohio State University were recruited, in partial fulfillment of their course requirements, for an "expository writing" study. The study was conducted in a single group session with experimental materials presented in a 6-page booklet.

The first page of the booklet introduced the study by defining the alternative points of view on general and specialized undergraduate education and asking subjects to indicate "which of these positions you think has more merit." Subjects indicated their own initial position by checking either "general undergraduate education" or "specialized undergraduate education." On page 2, expository writing ability was defined as "the ability to present, forcefully, persuasively, and originally, a position on one side or another of an issue." Subjects were then arbitrarily assigned to advocate only one side of the general-specialized education issue by reading the sentence,

You have been assigned, arbitrarily, to write in support of a _____ college education. [The blank was filled, in handwriting, with either the word "general" or "specialized."] Since there are many valid arguments to be made on both sides of this issue, we feel that no one will be disappointed by this arbitrary assignment.

Subjects then read three questions that they were to answer with short essays supporting their assigned position, but were advised that they would not answer these questions immediately. These questions were intended to reinforce the assigned position manipulation without containing persuasive content. For example, one of the questions was:

How does a (specialized, general) [one or the other of the words in parentheses was crossed out, as appropriate] college education facilitate the student's successful placement in a future career?

Page 3 was headed "Expository Writing—Preparatory Materials." On this page, subjects were instructed that a short period was to be spent examining the topic prior to writing their essays. During this period they were to indicate their reactions to each of 12 statements printed on pages 4 and 5. The instructions continued:

Try to evaluate each of these statements in terms of its objective merits, considering its relevance to your expository writing task. That is, if it is a statement that supports the position for which you are to write, indicate whether or not you think it is a valid argument that you could use in your essay—if so, why, and if not, why not. Similarly, if it is a statement that opposes the position for which you are to write, indicate whether or not you think it is a valid opposing argument that merits your attempting to provide a counterargument for it—again, if valid, why, and if not, why not.

Following each statement on the next two pages, three blank lines were provided for subjects to indicate their reactions. Half of the statements were one-sentence arguments supporting general education, e.g.:

The student who has the opportunity to attend a variety of courses in college is in a better position to decide which area is best suited to his needs and abilities.

The remaining statements were one-sentence arguments supporting specialized education, e.g.:

Without specialization starting early in college education it will be impossible to train the average student to fit into the highly specialized positions of the future American economy.

Subjects were allowed 15 minutes for reading and reacting to the 12 statements, following which they responded (page 6) to a 4-item Likert-type opinion measure on the general-specialized education issue. Subjects were then given an explanation of the hypotheses underlying the experiment, were cautioned to regard the experimental procedures and hypotheses as confidential, and were dismissed.

Results and Discussion

For each statement, subjects' reactions were classified as indicating that they regarded the statement as valid (+1), invalid (-1), or neither (0). The sum of these scores for the six statements supporting general education was then subtracted from that for the six supporting specialized education, resulting in a cognitive reaction index with a potential range from -12 to +12 (observed range: -11 to +12). These judgments were made by two judges, whose index scores differed by more than two points on the 25-point scale for only six of the 66 subjects. The means for this index for one of the judges are given in Table 1 together with final opinion data with subjects classified in terms of their initial and assigned positions.

Analyses of variance were conducted on the data for the two measures given in Table 1. For the index of reactions to the 12 statements, strong main effects of both initial position ($F = 12.00$, 1 and 62 *df*, $p < .001$), and assigned position ($F = 37.02$, 1 and 62 *df*, $p < .001$) were obtained, with no interaction ($F < 1$).³ The effect of initial position, indicating

³A least squares solution for unequal cell frequencies was employed in the analyses reported here.

TABLE 1
 REACTIONS TO CONTROVERSIAL INFORMATION AND FINAL OPINION AS A
 FUNCTION OF INITIAL POSITION AND ASSIGNED POSITION
 (PRELIMINARY EXPERIMENT)

Dependent measure and assigned position	Subject's initial position		Average
	Favors general	Favors specialized	
Mean reaction index			
Assigned specialized	1.58 (19)	6.60 (15)	3.79
Assigned general	-5.62 (16)	-1.81 (16)	-3.72
Average	-1.71	2.26	
Mean final opinion			
Assigned specialized	7.74	14.47	10.70
Assigned general	5.87	12.44	9.15
Average	6.89	13.41	

Note.—Cell *n*'s are given in parentheses in the upper part of the table. The potential range of the cognitive reaction index was -12 to +12 while that for the opinion measure was 0-20. In both cases, the higher end of the scale represents favorability to specialized undergraduate education. The within-cells standard deviation estimates were 5.18 for the reaction index and 3.73 for the opinion measure.

that subjects' reactions to controversial statements tended to be consistent with their initial opinions, was expected (cf. Greenwald, 1968), while the effect of assigned position was exactly that suggested by the cognitive response analysis—information supporting a given position was evaluated more favorably when the position was the assigned one than when it was not.

For the final opinion measure, a strong and expected main effect of initial position was found ($F = 52.01$, 1 and 62 *df*, $p < .001$) and a significant, but weaker, main effect of assigned position was also obtained ($F = 4.44$, 1 and 62 *df*, $p < .05$); again there was no interaction effect ($F < 1$). The main effect of assigned position indicated opinion change effects of the role playing assignment without actual role playing.

MAIN EXPERIMENT

In considering possible alternative interpretations of the large main effect of assigned position on reactions to the controversial statements, the author speculated that two possibly complicating factors prevented a firm conclusion supporting the cognitive response interpretation. First, it might be that the instructions to consider the statements' "relevance to your expository writing task" led subjects to react to each statement in

terms of whether or not it might be usable in their essays; this would naturally lead to a tendency to accept more statements supporting the assigned position, but would not necessarily reflect a corresponding difference in evaluative cognitive responses to the two sets of statements. Second, the same aspect of the instructions might establish demand characteristics in the sense of making the purpose of the "preparatory" task relatively transparent; the subjects might have been able to detect the author's interest in the relation between assigned position and reactions to the controversial statements. In recognition of these possible restrictions on interpretation of the preliminary experiment's findings, the preparatory task and its instructions were redesigned so as to reduce their transparency while also decreasing the apparent relevance of the statement judging task to the anticipated essay writing task.

Subjects and Procedure

Fifty additional subjects were recruited from the same population used for the preliminary experiment. This study was also conducted in a single session, using a 6-page booklet that differed from that for the preliminary experiment in three of its pages. Page 1 (introduction of the general-specialized education issue and classification of initial opinion), page 2 (arbitrary assignment to one of the two positions), and page 6 (final opinion measure) were identical to those previously used. The three new pages were those for the "preparatory" task of judging the validity of statements pertinent to the experimental issue.

The instructions for the statement validity-judgment task (page 3) were modified so that the essential portion read:

Your task for these statements will be to evaluate each, to the best of your ability, in terms of its *objective merits*, regardless of whether it supports your assigned position or not. Try to judge each statement as a *valid* or *invalid* statement about the issue in question. A valid statement is one that should be taken into account in forming an intelligent opinion on this topic, while an invalid statement is one that needn't be given detailed consideration.

(While it was not expected that these instructions would eliminate demand characteristics from the experiment, it did seem that they would reshape any existing demand characteristics in the direction of promoting objective judgment, thus possibly attenuating rather than enhancing the predicted effects.)

The number of statements to be judged was reduced from 12 to 10 by eliminating two statements, one supporting each side, that also appeared as items in the final opinion measure. Last, the format for judging the statements' validity was modified so as to allow fully objective scoring. Instead of writing only an overall reaction to each statement, subjects were asked to indicate for each statement (a) which position, general or specialized education, they thought it supported, (b) whether they judged the statement to be valid or invalid, and (c) the reason for their validity judgment. Fifteen minutes were allowed for these judgments, followed by the final opinion measure, which concluded the experiment.

Results

Only subjects' judgments as to which side each statement supported and whether each statement was valid or invalid were used for scoring their reactions to the statements. A reaction was considered to favor specialized education (+1) if the subject either felt that the statement supported specialized education and was valid or supported general education and was invalid; correspondingly a reaction was considered to support general education (-1) for items judged to support general education and to be valid or to support specialized education while being judged invalid. With few exceptions, subjects identified all 10 statements as supporting the intended viewpoints; in the case of these exceptions, the subject's actual judgment as to side supported was used as the basis for scoring. A cognitive reaction index based on the sum of scores for the judgments of the 10 statements had a potential range of -10 to +10 (observed range: -10 to +10). The means for these index values, classified by subjects' initial and assigned positions, are given in Table 2, together with final opinion data.

TABLE 2
REACTIONS TO CONTROVERSIAL INFORMATION AND FINAL OPINION AS A
FUNCTION OF INITIAL POSITION AND ASSIGNED POSITION
(MAIN EXPERIMENT)

Dependent measure and assigned position	Subject's initial position		Average
	Favors general	Favors specialized	
Mean reaction index			
Assigned specialized	0.00 (13)	4.08 (12)	1.96
Assigned general	-3.87 (15)	1.70 (10)	-1.46
Average	-2.07	3.00	
Mean final opinion			
Assigned specialized	10.15	14.08	12.04
Assigned general	6.87	13.10	9.36
Average	8.40	13.62	

Note.—Cell *n*'s are given in parentheses in the upper part of the table. The potential range for the cognitive reaction index was -10 to +10 while that for the opinion measure was 0 to 20. In both cases, the higher end of the scale represents favorability to specialized undergraduate education. The within-cells standard deviation estimates were 3.86 for the reaction index and 3.52 for the opinion measure.

Analysis of variance of the data for judgments of the 10 statements (reaction index) indicated significant main effects of initial position ($F = 19.03$, 1 and 46 *df*, $p < .001$) and assigned position ($F = 8.62$, 1 and 46 *df*, $p < .01$) with no interaction ($F < 1$). The main effect of assigned position, as in the preliminary experiment, was in the direction predicted by the cognitive response analysis. In light of the modifications of the statement judgment task employed in the present experiment, a conclusion in favor of the cognitive response interpretation of role playing can now be made with increased confidence. The fact that the effect was statistically weaker than in the preliminary experiment reinforces the author's suspicions concerning the possible contribution of demand characteristics to the earlier finding.

Also in confirmation of results obtained in the preliminary experiment, it was found that both initial position and assigned position had significant main effects on subjects' final opinions ($F = 25.33$, 1 and 46 *df*, $p < .001$, and $F = 5.28$, 1 and 46 *df*, $p < .05$, respectively), with no significant interaction. The latter main effect, indicating again that the "role-playing effect" occurred without actual role playing, will be considered further below.

GENERAL DISCUSSION

Unbiased Cognitive Responding in Role Playing

In the author's previous research (Cullen and Greenwald, 1967; Greenwald, 1968), in the literature on social judgment (e.g., Hovland, Harvey, and Sherif, 1957), and for subjects expecting to defend their initial positions in the present research, it has generally been found that initial opinion accounts for substantial variance in evaluative cognitive responses to controversial information. The data from the present experiments indicated, however, that for subjects expecting to advocate a position opposing their own, initial opinion accounted for little or no variance in such responses. That is, subjects expecting to play counterattitudinal roles did not systematically favor either their initial or their assigned position in judging controversial information. As Table 1 shows for the preliminary experiment, when expecting to defend their initial positions, subjects with opposing initial positions were very far apart in their evaluations of the controversial statements (difference between mean index scores = 12.22, $F = 43.16$, 1 and 62 *df*, $p < .001$); on the other hand, the difference in evaluations of the statements for subjects with opposing initial positions who expected to advocate the position opposing their own fell short of statistical significance (difference between means = 3.39, $F = 3.72$, $p > .05$). A similar pattern was observed for the validity judgment task in

the main experiment (see Table 2), with significant separation as a function of initial position for subjects expecting to defend their positions ($\bar{X}_{diff} = 7.95$, $F = 28.30$, 1 and 46 df , $p < .001$), but not for subjects expecting to advocate positions opposing their own ($\bar{X}_{diff} = 1.70$, $F = 1.17$, ns). These results may alternately be expressed by noting that the mean reaction index differed significantly from zero in the direction of initial opinion for all four groups of opinion-defending role players ($p < .005$, two-tailed, in all cases), while this index mean did not differ significantly from zero for any of the four groups of expectant counterattitudinal role players ($p > .15$, two-tailed, in all cases).

In summary, subjects expecting to play an opinion-defending role tended strongly to accept statements supporting their own position and to reject opposing ones, while those expecting to play a counterattitudinal role accepted approximately equal numbers of statements favoring both positions. These findings support the conclusion that counterattitudinal role-playing assignments induce a disposition toward *unbiased* evaluation of controversial information, in sharp contrast with the biased (opinion-consistent) disposition of subjects who expected to advocate their own opinions.

Comparison with control data. In order to confirm that the observed unbiasedness of expectant counterattitudinal role players represented a deviation from normal tendencies toward biased evaluation of controversial information, 48 additional subjects were run as a control group after completion of the main experiment. These control subjects were exposed to a procedure identical to that used in the main experiment with the exception that there was no expectation of subsequent role playing. That is, the control subjects simply expressed their initially preferred positions and then gave validity judgments for the set of 10 statements on the general-specialized education issue. It was expected that control subgroups with opposing initial opinions would manifest a greater difference in mean reaction indexes than did opposing-initial-opinion subgroups of expectant counterattitudinal role players in the main experiment. This was indeed found to be the case. The mean reaction index was + 2.00 for control subjects with initial preference for specialized education ($N = 25$) and -3.44 for those initially preferring general education ($N = 23$). The difference between these means ($\bar{X}_{diff} = 5.44$) was significantly greater than the corresponding mean difference ($\bar{X}_{diff} = 1.70$) for expectant counterattitudinal role players in the main experiment ($t = 1.89$, 92 df , $p = .03$, 1-tailed), and was near-significantly smaller than that ($\bar{X}_{diff} = 7.95$) for expectant opinion-defending role players in the main experiment ($t = 1.34$, 92 df , $p = .09$, 1-tailed). These data demonstrate that the unbiased judgments of expectant counterattitudinal role

players represent a deviation from a normal tendency to give opinion-consistent judgments (both the control subgroup means were significantly different from zero at $p < .01$, 1-tailed). The suggestion of a bias-increasing effect of opinion-defending assignments is interesting in its own right, but the present data cannot be regarded as conclusive in demonstrating that effect.

Effects of the Role-Playing Assignment on Opinions

In both the preliminary and main experiments, reliable effects of the role-playing assignments on opinion were manifest, even though there was no actual performance of the assigned role. In order to determine whether these effects occurred primarily for expectant counterattitudinal role players rather than for expectant opinion-defending role players, comparisons were made with opinion data collected from the same subjects who provided control data for the reaction index findings. Control subjects who initially favored general education had a mean opinion score of 7.57, in contrast with a mean of 13.32 for those who initially favored specialized education. The difference between these means ($\bar{X}_{diff} = 5.76$) was near-significantly greater than the corresponding mean difference ($\bar{X}_{diff} = 3.05$) for expectant counterattitudinal role players in the main experiment ($t = 1.52$, 92 *df*, $p = .07$, 1-tailed), and was smaller than that ($\bar{X}_{diff} = 7.22$) for expectant opinion-defending role players in the main experiment, but not significantly so ($t < 1$). These findings suggest that the observed opinion effects in the main experiment reflected predominantly a shift toward the opposing point of view by expectant counterattitudinal role players. However, similar comparisons with opinion data for the preliminary experiment would suggest, in contrast, that the chief basis for the opinion effect in that experiment was polarization of the opinions of expectant opinion-defenders. Very likely, the effects of the role-playing assignments on opinion were distributed among both categories of expectant role players.

Three possible sources of these opinion effects were (a) the simple administration and acceptance of the role-playing assignments, (b) opportunity for covert role playing prior to the final opinion measure, or (c) the impact of the controversial information as evaluated under the influence of judgmental sets induced by the role-playing assignments. The design of the main experiment did not provide any basis for selecting among these alternative interpretations.

An additional uncertainty regarding interpretation of the present data concerns the conceptual relation between the tasks of giving validity judgments for the set of controversial statements and giving agreement judgments for the Likert-type opinion items. One possibility is to consider

these tasks conceptually the same—either as two varieties of opinion measurement items or as two formats for measuring cognitive response dispositions regarding controversial information. Supporting either of these interpretations is the fact that positive correlations were obtained between the two measures. In the main experiment, for subjects expecting to advocate specialized education the product-moment correlation between the two measures was .49 ($p < .01$, 1-tailed); for those expecting to advocate general education the correlation was .31 ($p < .07$, 1-tailed). At the same time, these correlations were sufficiently low to allow for the possibility that the two measures tap processes that are mutually quite distinct. Also supporting a conceptual distinction between the two measures is the difference between their patterns of means as shown in Tables 1 and 2; this difference can be summarized by noting that the reaction index for the validity judgment task was somewhat less sensitive to differences in initial opinion and somewhat more sensitive to the manipulation of assigned position than was the opinion measure. This last observation raises the interesting possibility that the cognitive reaction measure may be more sensitive than standard opinion measures for detecting effects of manipulated persuasion-relevant variables.

Theoretical Interpretation

Of the five interpretations of role-playing effectiveness listed at the beginning of this paper, three—*selective learning*, *self as source*, and *hand-tailoring*—must be regarded as inapplicable to the present data because of the absence of actual role playing from the experimental procedures. It should not be concluded that these three interpretations are therefore incorrect; they may well account for some aspect of the effectiveness of actual role playing in inducing opinion change.

Dissonance. The dissonance interpretation proposes a motivational basis for cognitive effects of the role-playing procedure. Specifically, the counterattitudinal role player is assumed to credit increased validity to the role-played position in order to reduce dissonance aroused by advocating a disbelieved viewpoint (Festinger, 1957) and perhaps exacerbated by concomitant expenditure of effort (Zimbardo, 1965). It seems unlikely, however, that the present procedures satisfied the conditions (Brehm and Cohen, 1962) necessary to arouse dissonance: Subjects were allowed no choice in being asked to role play; it is therefore unlikely that they could have felt voluntarily committed to counterattitudinal advocacy; further, they had not yet played the counterattitudinal role nor engaged in role-associated effort at the time when the cognitive dependent measures were administered. Nonetheless, of course, dissonance in some anticipatory form could conceivably have been aroused. Fortunately, a judgment on

the applicability of the dissonance interpretation is quite tangential to the basic conclusion of the present study. The dissonance interpretation is concerned with *why* there are cognitive effects of counterattitudinal role playing. The present cognitive response analysis is basically concerned with *how* opinion change is produced by role playing. The suggested answer to this *how* question—that opinion change follows from the adoption of an unbiased evaluative disposition for attitude-relevant information—does not require commitment to any specific interpretation of the motivational correlates of the changed cognitive disposition.

Biased scanning. A recent statement of the *biased scanning* hypothesis has been given by Elms and Janis (1965):

According to "incentive theory," the attitude changes produced by role playing are mediated by intensive "biased scanning" of positive incentives, which involves two types of verbal responses: (1) fulfilling the demands of the role-playing task by recalling and inventing arguments that are capable of functioning as positive incentives for accepting a new attitude position, and (2) appraising the recalled and improvised arguments with a psychological set that fosters *open-minded cognitive exploration of their potential incentive value*, rather than a negativistic set of the type engendered by the arousal of feelings of hostility, resentment, or suspicion. (Elms and Janis, 1965, p. 59, italics in original.)

This statement appeals to several processes. The selective recall and invention (hand-tailoring) processes seem inapplicable to the present data for reasons already noted. However, the appeal to an open-minded cognitive set fits very well with the present data. In fact, the present study has confirmed the italicized clause in the Elms-Janis statement of "incentive theory" more directly than have any previous analyses of counterattitudinal role-playing performances. Previous findings have been limited to observation of quality variations in essays written under different incentive conditions (e.g., Janis and Gilmore, 1965; Rosenberg, 1965). Such observations do not necessarily indicate that counterattitudinal role players adopt an open-minded cognitive set and, in fact, have not always demonstrated even that larger incentives for counterattitudinal role playing yield superior role performance (e.g., Elms and Janis, 1965).

While incentives that may operate in persuasion situations have been defined in terms of "supporting reasons" (for opinion change) and "anticipated rewards and punishments" (Hovland, Janis, and Kelley, 1953, p. 11), exactly what these incentives may be for the counterattitudinal role player has not been explicitly specified by incentive-theory analysts (e.g., Elms and Janis, 1965; Janis and Gilmore, 1965). It is in response

to this problem that motivational analyses such as those based on cognitive dissonance, need for achievement, desire to please the experimenter, etc., may be of some use. As already noted, the present findings cannot be interpreted as implicating any specific source of motivation for the counterattitudinal role player's open-mindedness.

As a final comment on the incentive analysis, it may be suggested that the phrase "biased scanning" is inappropriate for designating the effects of the counterattitudinal role-playing assignment on cognitive information processing. The counterattitudinal role player appears, as has indeed been suggested by Elms and Janis (1965), to be unbiased and open-minded in his evaluation of controversial information, while it is the opinion-defending role player who is cognitively biased in the sense of rejecting good arguments favoring the opposing view and accepting weak ones favoring his own position.

Conclusion

The problems of interpreting the nature and basis of obtained opinion effects, the conceptual relation between the validity judgment and opinion measures, and the motivational determinants of cognitive processes in the role-playing situation must await further experimentation. However, these problems of interpretation are tangential to the basic conclusions of the present study—which are that judgmental (or cognitive response) dispositions regarding controversial information are reliably influenced by expected role-playing assignments and, more particularly, that subjects expecting to advocate a position opposing their own evaluate controversial information in a manner reflecting no initial position bias.

In summary, counterattitudinal role playing may be uniquely effective because it succeeds in getting the subject to give impartial evaluation to information opposing his own opinion—something he would do rarely, if at all, under other circumstances. Lest the reader be left with the feeling that role playing is an unfailling technique for persuasion, it must be noted that role playing does not always work (cf. McGuire, 1966, p. 498). An obvious limitation on the applicability of role playing as a persuasion technique is that there must be a situation in which the target of persuasion can be prevailed upon to play the counterattitudinal role. More directly pertinent to the present finding is the possibility that the role player's impartial judgment disposition may be applicable only to new information—that is, information for which the role player has not already learned negative cognitive responses. Given this possible limitation, it may be that the role player's impartiality will be of no avail on highly familiar issues or on issues for which there is little access to new information.

REFERENCES

- BREHM, J. W., AND COHEN, A. R. *Explorations in cognitive dissonance*. New York: Wiley, 1962.
- CULLEN, D. M., AND GREENWALD, A. G. The importance of recipient-generated messages in attitude change. Paper read at meetings of Midwestern Psychological Association, Chicago, May, 1967.
- ELMS, A. C., AND JANIS, I. L. Counter-norm attitudes induced by consonant versus dissonant conditions of role-playing. *Journal of Experimental Research in Personality*, 1965, 1, 50-60.
- FESTINGER, L. *A theory of cognitive dissonance*. New York: Harper, 1957.
- GREENWALD, A. G. Cognitive learning, cognitive response to persuasion, and attitude change. In A. G. Greenwald, T. C. Brock, and T. M. Ostrom (Eds.), *Psychological foundations of attitudes*. New York: Academic Press, 1968. Pp. 147-170.
- GREENWALD, A. G., AND ALBERT, R. D. Acceptance and recall of improvised arguments. *Journal of Personality and Social Psychology*, 1968, 8, 31-34.
- HOVLAND, C. I., HARVEY, O. J., AND SHERIF, M. Assimilation and contrast effects in reactions to communication and attitude change. *Journal of Abnormal and Social Psychology*, 1957, 55, 244-252.
- HOVLAND, C. I., JANIS, I. L., AND KELLEY, H. H. *Communication and persuasion*. New Haven, Conn.: Yale University Press, 1953.
- INSKO, C. A. *Theories of attitude change*. New York: Appleton, 1967.
- JANIS, I. L., AND GILMORE, J. B. The influence of incentive conditions on the success of role playing in modifying attitudes. *Journal of Personality and Social Psychology*, 1965, 1, 17-27.
- JANIS, I. L., AND MANN, L. Effectiveness of emotional role playing in modifying smoking habits and attitudes. *Journal of Experimental Research in Personality*, 1965, 1, 84-90.
- KING, B. T., AND JANIS, I. L. Comparison of the effectiveness of improvised versus non-improvised role-playing in producing opinion changes. *Human Relations*, 1956, 9, 177-186.
- MANN, L., AND JANIS, I. L. A follow-up study on the long-term effects of emotional role playing. *Journal of Personality and Social Psychology*, 1968, 8, 339-342.
- MCCUIRE, W. J. Attitudes and opinions. In P. Farnsworth (Ed.), *Annual Review of Psychology*, 1966, 17, 475-514.
- ROSENBERG, M. J. When dissonance fails: On eliminating evaluation apprehension from attitude measurement. *Journal of Personality and Social Psychology*, 1965, 1, 28-42.
- WATTS, W. A. Relative persistence of opinion change induced by active compared to passive participation. *Journal of Personality and Social Psychology*, 1967, 5, 4-15.
- ZIMBARDO, P. G. The effect of effort and improvisation on self-persuasion produced by role playing. *Journal of Experimental Social Psychology*, 1965, 1, 103-120.

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