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Source: *The Academy of Management Review*, Vol. 2, No. 3 (Jul., 1977), pp. 490-495

Published by: Academy of Management

Stable URL: <https://www.jstor.org/stable/257705>

Accessed: 07-05-2020 08:36 UTC

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## The Effectiveness of Experiential Methods in Training and Education: The Case of Role Playing<sup>1</sup>

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*Received 8/17/76; Accepted 9/20/76; Revised 11/11/76;  
Revised 1/6/77.*

<sup>1</sup> This study is based on a paper by L. Fry, A. G. Kidron and C. Schriesheim: "The Effectiveness of Experimental Methods in Training and Education: A Review", presented at the second annual meeting of the Association of Business Simulation and Experiential Learning at Bloomington, Indiana, April 1975.

Experiential training and educational methods, such as business simulation games, role playing exercises, T-groups, in-basket exercises, committee participation, field trips, forums, group discussions, panel meetings, seminars, etc. (1) are widely used in industry and academia (4, 32). The demand for evidence of their effectiveness is growing and will probably intensify in the future. Because evaluative research relevant to these methods is widely dispersed, this synthesis summarizes research on one of the commonly used experiential methods: role playing exercises. The evidence reviewed is strictly empirical, rather than impressionistic or anecdotal.

Most of the material reviewed is directly related to the effectiveness of role playing. Several other studies are reported because of their relevance to the question of effectiveness. Role playing was used in them, either as an experimental method or as one of the treatments; thus an analogy could be drawn from the results, contributing to evaluation of role playing as an experiential training method. A review of all the literature related to the usage of role playing in research, social work, counseling and other disciplines (2, 10, 16) is beyond the scope of this review.

### Definition and Purpose

A role playing exercise may be defined as a dynamic process "that involves participants assuming specified roles and acting out significant events" (29, p. 29). Solem outlines some defining goals and characteristics of role playing:

1. Places problems in a life-like setting,
2. Involves problems with ongoing processes,
3. Typically deals with problems involving the participants themselves,
4. Deals with emotional and attitudinal antecedents of behavior in an experiential frame of reference,
5. Emphasizes the importance of feelings as sources of behavior,
6. Deals with participants who are placed

psychologically "inside" the problem situation,

7. Makes for emotional involvement,
8. Provides practice in interpersonal skills,
9. Provides for testing ideas and hypotheses about human behavior,
10. Trains in emotional control,
11. Provides for the execution of the action or solution,
12. Involves continuous feedback (29, pp. 34-35).

### Role Playing and Attitude Change

One of the earliest studies on role playing was by Lawshe, Bolda, and Brune (18), who used a "skit completion" method to evaluate the effects of single and repeated role plays. Evaluation criteria consisted of responses to a standard human relations training case on two dimensions, sensitivity and employee-orientation. Criterion responses were obtained before and after role playing in four groups and, after training, in a fifth group. While the first three groups role played only once, the last two used repeated role plays over a five-week period.

Examination of results of the single treatment indicated that only in one role in one experimental group was there a significant positive change on the sensitivity dimension. In the repeated exposure groups, the overall pre- and post-training sensitivity scores in group 4 were significantly positive. But neither of the repeated exposure groups indicated a favorable change on the employee orientation dimension. In their conclusion, the authors expressed doubt concerning the impact of role playing. The role play itself, and repeated exposures to it, contributed little to criterion response improvements. They hypothesized that impact may be a function of the type of exercise used and the type of discussions held after the role playing.

The impact of role playing on attitude change also was investigated by Janis and King (14) and King and Janis (17). Using experimental and control groups they found that the ex-

pressed opinion of role players shifted in the direction of the role more than the controls. The subjects expressed more confidence in their opinions, and defended their positions by improvising viewpoints that eventually contributed to a rationalization process and acceptance of their opinions. Their main findings supported the hypothesis that overt verbalization induced by role playing tends to augment the effectiveness of persuasive communications.

Teahan (31) reported a study investigating the effects of role playing on attitudes and values. During police academy training, 149 white and 31 black police officers participated in weekly sessions involving role playing and interpersonal feedback. Attitude instruments were administered before and after the sessions. White officers became both more sensitized to the presence of black - white problems and more prejudiced toward blacks. Black officers who attended became more positive toward whites. These results were interpreted partly as a result of the perception of white officers that the program was initiated for the benefit of blacks rather than for all.

In connection with changing racial attitudes, Gray and Ashmore (8) reported that a role playing group compared to a control group produced significantly lower racial prejudice in a post test. On a delayed post test, the treatment group was still lower in prejudice than the control group but this difference was not significant.

Situational variables and incentives have been identified as moderating variables in the effects of role playing on attitude change. Janis and Gilmore (13) used a three dimensional factorial design and found that high acceptance of counter-norm proposals occurred only under conditions of overt role playing with an acceptable justification for the role play and large rewards for role playing. In a complementary study, Elms and Janis (6) investigated acceptance of counter-norm attitudes as a function of the type of role playing and the monetary incentive associated with role playing performance. Students

were asked to invent arguments in favor of a proposal to allow American students to complete their education in the U.S.S.R. At the time of the study there was considerable tension between these countries, supposedly making this proposal of a counter-norm nature. Using analysis of variance, a significant positive interaction was found between degree of acceptance of the counter-norm, overt role-playing, and rewards. Attitude change was most effective when it was associated with high monetary reward and role play that involved verbal interaction with other members of the experimental group. Similar findings were reported by Elms (5).

Maier (19) reported a study that attempted to examine effects of previous training in role playing on the acceptance of work methods change. One hundred seventy-six supervisors were given eight hours of training in group decision making while another 144 supervisors received no training, but instead were given a lecture on attitudes. All participants were then divided into groups of four and participated in a role playing exercise. Acceptance of change and satisfaction was higher among supervisors who received previous training.

Janis and Mann (15) investigated the effectiveness of "emotional" role playing in modifying smoking habits and attitudes by asking women to play a lung cancer patient who receives bad news from a physician. The role playing group showed significantly greater changes in attitudes than the control group (who received information by listening to a tape recording of a role playing session).

### **Role Playing and Creativity**

Involvement in role playing is related to creativity of individuals and groups. Colgrove (3) reported an experimental study involving two student groups. While the control group was given standard instructions to solve a case, the experimental group was told to assume the role of a person who has a reputation "of being good

at coming up with answers to difficult problems", and then solve the problem. The experimental group produced a significantly higher proportion of high quality solutions than the control group.

In a related study Hoffman, Harburg, and Maier (9) examined the effects of introduction of conflict on the quality of the solution. Students played the roles of a supervisor and a subordinate under two conditions. The first condition involved subordinates playing a submissive role while the second group played roles of subordinates with strong involvement and commitment. These were combined alternatively with supervisors who were either dominant or considerate in their behavior. High quality solutions were produced by 45.8 percent of the groups with conflict situations and 18.8 percent of the groups under nonconflict situations. Similar results were reported by Maier and Hoffman (21).

When a role playing exercise is constructed in a context of solution rather than decision-making orientation the number of integrative solutions increases. Maier and Solem reported that college students and supervisors, when given the roles to play without specific instruction, produced significantly less integrative solutions than the experimental groups that were asked to regard decision making situations as specific problems to solve. They pointed out that this procedure tends "to increase the number of alternatives that come up for consideration, thereby increasing the quality of group problem solving" (24, p. 157).

Previous training in role playing, the sex of the role players, and the role played by the group leader have been found as moderators. Sashkin and Maier (28) in a follow-up study to a study by Maier and Thurber (26) reported that males and females differed in the amount of delegation they used under varying instructions. In the role playing situation, "It would seem that females are less likely to take liberties and act on their own, unless so instructed" (28, p. 475). Maier and McRay (22) found that groups with

leaders that were trained in posing problems and sharing information, produced substantially more solutions that were classified as integrative (or high quality) than groups with untrained leaders.

Similar findings were reported by Maier and Sashkin (23). Discussion leaders with previous training led the group to significantly more integrative solutions, tended to pose problems rather than solutions, and shared more information with group members. Maier (20) reported differences between males and females in the role playing situation. While in structured situations females were more persuasive and tactful than males; in unstructured situations females were more permissive and less confident.

### **Role Playing and Behavioral Change**

The research on behavioral change as a result of role playing is limited and sporadic. Janis and Mann (15) reported that in a role playing exercise, self-reports of participants concerning smoking habits showed a decreased, but insignificant, change.

In a related study by Streltzer and Koch (30) participants played the role of a lung cancer patient with experimenters posing either as high or low status doctors. Subjects with the high status experimenter showed significantly greater attitudinal change than those with the lesser status experimenter. But a significant difference was not obtained concerning change in smoking habits.

Gardner (7) used role playing exercises to teach behavior modification skills and compared the effectiveness of the method to lectures. Role playing was more effective in teaching skills, while lectures were more effective in teaching the theoretical principles of behavior modification.

Ingersoll (11) reviewed the existing literature and hypothesized: (a) role playing changes more behavior and attitudes than non-role playing situations, and (b) role playing situations that

produce involvement are more effective. Her findings indicated that role playing does not extend much beyond the boundaries of the role playing situation. Although awareness of the role playing topic was increased, the role play itself did not provide motivation. Also, she raised an important question concerning reported attitude changes resulting from role playing. She noted that an alternate explanation of such results arises from the ability of role playing to heighten the social desirability of certain responses, making these responses more likely on questionnaire self-reports without a corresponding change in the participants' true feelings.

### Summary and Conclusion

Empirical evidence, accumulated over the past 15 years, apparently substantiates only a small part of the Solem (29) description of role playing. Role playing seems effective in inducing relatively short lived and limited attitude change. Its effectiveness in changing behavior and inducing motivation remains to be demonstrated. The importance of the technique, viewed from the perspective of the Elms and Janis study (6), may lie in the so-called "unfreezing" stage of the training process. By inducing attitudinal changes and then reinforcing them by appropriate rewards, the effectiveness and usefulness of the technique may be increased. Janis (12) points out conditions under which role playing may be effective, which highlight the limits of the method:

1. *Interest in the issue.* When the role playing experience produces only marginal ego involvement, there is little chance for attitude change as a result of changed attitudinal balance sheet. Involvement in the role play will be based on an illu-

sion of commitment and not on the salience of self persuading arguments, and thus attitude change, regardless of its magnitude, will be short lived.

2. *Opportunity for genuine contemplation of the issue during the role playing experience.* If the procedure allows the role player opportunity to draw upon his or her cognitive repertoire to think up good arguments in support of his or her role, there is higher probability of long lasting attitude change.
3. *Voluntary commitment.* If a person participates voluntarily rather than being forced to play, the probability of attitude change is enhanced.
4. *Active rather than passive participation.* Despite contradictory findings on the effects of various degrees of participation (16, 27, 33), the majority of the findings seem to support active participation as more effective in attitude change.

Empirical evidence reviewed indicates that role playing exercises are effective to some extent as training and educational devices, but that more research needs to be performed on this experiential method. Attention needs to be paid to programmatic research efforts which involve at least four steps: (a) determination of behavioral objectives for each experiential method; (b) determination of specific and valid evaluative criteria; (c) development of maximally effective experiential methods; and (d) comparison and testing of a set of maximally effective experiential methods against alternative training and educational devices. Then, and only then, will the question of experiential training method effectiveness be adequately resolved.

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