



9-1-1977

Social irresponsibility in management

J. Scott Armstrong

University of Pennsylvania, armstrong@wharton.upenn.edu

Postprint version. Published in *Journal of Business Research*, Volume 5, Issue 3, September 1977, pages 185-213. The author has asserted his/her right to include this material in *Scholarly Commons@Penn*.

Publisher URL: [http://dx.doi.org/10.1016/0148-2963\(77\)90011-X](http://dx.doi.org/10.1016/0148-2963(77)90011-X)

This paper is posted at Scholarly Commons. http://repository.upenn.edu/marketing_papers/31

For more information, please contact repository@pobox.upenn.edu.

Social irresponsibility in management

Abstract

Previously published research suggested that the typical manager may be expected to harm others in his role as a manager. Further support for this was drawn from the Panalba role-playing case. None of the 57 control groups in this case were willing to remove a dangerous drug from the market. In fact, 79% of these groups took active steps to prevent its removal. This decision was classified as irresponsible by 97% of the respondents to a questionnaire. Because the role exerts such powerful effects, an attempt was made to modify subject's perceptions of their role so that managers would feel responsible to all of the firm's interest groups. Some subjects were told that board members should represent all interest groups; other subjects were placed on boards of directors where the different groups were represented. Subjects in both groups also received information on the impact of the decisions upon stockholders, employees, and customers. The percentage of irresponsible decisions was reduced under these conditions as only 22% of the 116 groups selected the highly irresponsible decision.

obedience to authority, Panalba, role-playing, social accounting, social responsibility, stakeholder theory

Comments

Postprint version. Published in *Journal of Business Research*, Volume 5, Issue 3, September 1977, pages 185-213. The author has asserted his/her right to include this material in *ScholarlyCommons@Penn*. Publisher URL: [http://dx.doi.org/10.1016/0148-2963\(77\)90011-X](http://dx.doi.org/10.1016/0148-2963(77)90011-X)

Social Irresponsibility in Management

J. Scott Armstrong

The Wharton School, University of Pennsylvania

Abstract

Previously published research suggested that the typical manager may be expected to harm others in his role as a manager. Further support for this was drawn from the Panalba role-playing case. None of the 57 control groups in this case were willing to remove a dangerous drug from the market. In fact, 79% of these groups took active steps to prevent its removal. This decision was classified as irresponsible by 97% of the respondents to a questionnaire. Because the role exerts such powerful effects, an attempt was made to modify subject's perceptions of their role so that managers would feel responsible to all of the firm's interest groups. Some subjects were told that board members should represent all interest groups; other subjects were placed on boards of directors where the different groups were represented. Subjects in both groups also received information on the impact of the decisions upon stockholders, employees, and customers. The percentage of irresponsible decisions was reduced under these conditions as only 22% of the 116 groups selected the highly irresponsible decision.

Keywords: obedience to authority, Panalba, role-playing, social accounting, social responsibility, stakeholder theory

"Social responsibility" is difficult to define. What *should* a manager do? It is easier to look at the problem in terms of what he should *not* do.— i.e., at "social irresponsibility." A socially irresponsible act is a decision to accept an alternative that is *thought by the decision maker to be inferior to another alternative when the effects upon all parties are considered*. Generally this involves a gain by one party at the expense of the total system.

To determine whether the above definition agrees with common-sense notions of social irresponsibility, a convenience sample of 71 subjects (faculty members, managers, and students) was asked on a self-administered questionnaire to "define a socially irresponsible act in 25 words or less." Much variability was found in the responses, and about 12% of the subjects were unable to provide any response. However, about 33% of the respondents suggested definitions that were similar to the above definition.

Although this definition is accepted by many, there is still some ambiguity about the meaning of social irresponsibility. Therefore, a second definition was used; this stated that an act was irresponsible if a vast majority of unbiased observers would agree that this was so.

To avoid problems arising from the above definitions, extreme cases of irresponsibility are examined in this article. It focuses upon cases where great harm is caused to the system, and where almost all unbiased observers are in agreement that an irresponsible act has occurred.

The current system is examined in the first section. What is the role of management and how is it perceived by managers? This provides clues as to whether socially irresponsible decisions might be expected under the current system. Evidence is drawn from previously published studies.

An alternative view of the role of management is described in the second section. This “stakeholder role” is designed to reduce the likelihood of irresponsible acts.

The third section describes a role-playing experiment, which was used to study three questions:

1. Will management act in an irresponsible manner under the current system?
2. Are there individual differences that may help to identify people who are less likely to commit irresponsible acts?
3. What changes in the system might reduce the level of irresponsibility?

Results are then provided from almost 2,000 subjects from 10 countries.

Social Irresponsibility Under the Current System

Many managers act in their own selfish interests. This often leads to irresponsible behavior. This investigation, however, studies whether managers may commit irresponsible acts when they behave according to the expectations of their role. *Do they do harm when they try to do good?* A review of the empirical evidence, in particular the work of Milgram [42], suggests that they do. The evidence is consistent with Reich’s [56] viewpoint that “Evil now comes about not necessarily when people violate what they understand to be their duty, but more and more often, when they are conscientiously doing what is expected of them.”

The Role of the Manager. The U.S. legal system advocates a “stockholder role” for managers. This role, summarized by Berle in the Dodd-Berle exchange of the 1930s [3, 4] states that the manager is directly accountable *only* to the stockholder. This was stated in an emphatic way by Rostow [59]:

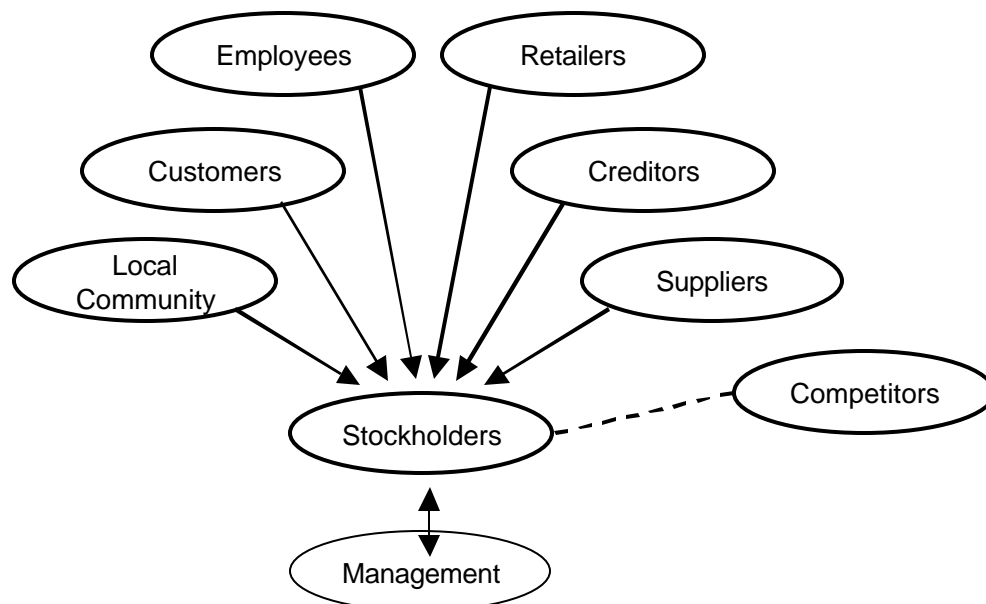
The law books have always said that the board of directors owes a single-minded duty of unswerving loyalty to the stockholders, and only to the stockholders.

Henn's [27] *Handbook of the Law of Corporations* states that the duty of management is to be obedient and loyal (to the stockholder). Finally, Blumberg [7], in his review of legal trends, finds little change since the 1920s in the legal primacy of stockholder interests.

In other words, the legal system has relieved the manager of responsibility for assessing the impact of his decisions upon other interest groups. He should only be concerned with these groups to the extent that they affect the well-being of the stockholder. For example, air pollution is acceptable if there is no response from the public, and, therefore, no threat to profit-maximization. Something would be done, however, if it were expected that air pollution might lead to a boycott of the firm's products.

The relationship of management to the stockholders and to the other interest groups under the stockholder role is illustrated in Fig. 1. One-way arrows are used between the interest groups and the stockholder, implying that the group must take the initiative to have its interests recognized by the firm.

Figure 1: Stockholder Theory



The stockholder role advocates that the manager distributes rewards to maximize the returns to the stockholder. Since the market is generally imperfect, decisions to maximize the benefits to the stockholder can often be accomplished at the expense of the other interest groups. Consider again the case of air pollution; the local community provides a resource (clean air) to the firm and, in return, it receives dirty air. The stockholder gains in this transaction, and the local community loses.

As the imperfections of the market increase (e.g., as entry of new competitors is restricted, as collusion among competitors increases, as free choice by the consumers is restricted, or as the flow of information is distorted) the relative gain to the stockholder can be increased, while other interest groups receive less. As a result, the manager following the stockholder role is encouraged to take action that will reduce the effectiveness of the free market. The stockholder role encourages the manager to create

situations where one party gains at the expense of another. This argument is discussed further in Nason and Armstrong [50].

Managers' Viewpoints on What Role They Should Follow. The stockholder role is advocated by the legal system. This role is also supported by schools of management. Furthermore, it is the position that is publicly adopted by most firms. Do managers feel that they should follow the stockholder role?

In a survey of executives (Lorig [39]), respondents stated that they owed first allegiance to the stockholders. Barksdale and Darden [1], in a survey of executives from *Fortune's* directory of the 500 largest U.S. corporations, reported over 40% of the respondents agreeing with the statement that, "In event of a conflict between consumer orientation and profit objectives, profits would be the overriding consideration." A survey of subscribers to the *Harvard Business Review* [20] found about 40% of the responses were consistent with the stockholder role. A replication of Ewing's survey [35] yielded a somewhat stronger orientation toward the stockholder role. Nichols [52], in a survey of British managers, found that 68% of the respondents believed in some form of profit maximizing.

The surveys indicate that although a substantial proportion of managers believe in the stockholder role, many managers question this role. For example, in Ewing's study, only 2% of the respondents selected the most extreme position that "a corporation's duty is to its owners and only to its owners." Similarly, in Baumhart's [2] survey of subscribers to the *Harvard Business Review*, 83% of the respondents agreed that "for corporation executives to act in the interest of shareholders alone, and not also in the interest of employees and consumers" is unethical.

Expected Behavior under the Stockholder Role. What type of behavior might be expected from a manager who believes in the stockholder role? How would he act in an extreme situation in which the stockholder gains by harming other interest groups and in which the whole system is worse off? A variety of evidence was examined: laboratory experiments, field experiments, attitude surveys, and documented case histories.

Laboratory Experiments The most relevant set of studies were the "obedience to authority" studies in social psychology. The basic design of these studies was for someone in a position of legitimate authority to command a subject to harm a third party. Most subjects showed a high level of obedience.

There are many variations to the obedience studies, but the most widely known design is Milgram's [42]. Here, one accomplice and one naive subject arrived for what was ostensibly a "learning experiment." Each subject was paid \$4.50 at the start and was told that the payment is theirs no matter what happens. A rigged random drawing was then held to see who would be the "teacher" and who would be the "learner." The naive subject was always the teacher. This subject was instructed to teach the learner a list of paired associates, to test him on the list, and to administer punishment whenever the learner erred. Punishment was administered in the form of an electric shock to the learner, who was strapped in an electric chair. (No shock was actually administered.) According to a specified plan, the learner provided 30 wrong answers and the teacher was instructed to increase the shock from 15 to the

maximum of 450 volts. The shock generators bore designations going from “Slight Shock” to “Danger Severe Shock” to AXXX.” To convince the naive teacher of the authenticity of the experiment, he himself was given a sample shock of 45 volts.

At first, no feedback from the learner was used. It was expected that the designations on the control panel would be sufficient to curtail the subject’s obedience. Virtually all subjects, however, followed instructions and administered the maximum shock.

Various forms of feedback from the learner were then introduced – e.g., the learner would cry out in pain. While a large percentage of subjects continued to shock on command, many subjects did stop the punishments; about one-third of the subjects stopped when they could hear the victim, and two-thirds of the subjects broke off the experiment when they were placed in the same room as the victim (who was a professional actor).

The obedient subjects followed instructions even though they were performing a task that was distasteful to them [42] . This was apparent from the fact that few subjects would administer severe shocks when they personally could decide on the level of punishment [41, 42]. Furthermore, the act of shocking people was shown to lead to a sense of guilt [12]. Finally, subjects shocked on command even though they thought that the learner was being seriously harmed; in Mantell [41], 28% of the obedient subjects thought that the learner had probably died.

Milgram’s conclusion from the obedience studies was [42:6]¹

“... ordinary people, simply doing their jobs, and without any particular hostility on their part, can become agents in a terrible destructive process. Moreover, even when the destructive effects of their work become patently clear, and they are asked to carry out actions incompatible with fundamental standards of morality, relatively few people have the resources needed to resist authority.”

Additional studies suggest that subjects pay little attention to the consequences of their actions. Orne [53] was unsuccessful in devising a task that was so useless that the subject would not obey. In this experiment, subjects would add up a series of random numbers and then destroy this work as ordered; then they would move onto the next page to repeat the same process, etc. Subjects apparently assume that no matter how absurd the task, some higher authority has good reason for demanding that it be carried out. Similar results had also been reported by Frank [21] where subjects persisted in an unpleasant and senseless study on cracker eating.

¹The obedience studies have been subjected to much criticism [70]. Concern has been expressed over the well-being of the subject (Milgram’s results indicated that there was little danger and this was supported by Ring et al. [57]), and also to the possibility of a tautology (Orne [53] with reply by Milgram [42]).

Field Experiment Hofling et al. [18] studied obedience among nurses. Ninety-five percent of the nurses ($N = 22$) administered a medicine as ordered by a doctor even though the medicine was unauthorized, the dosage was twice that listed on the pill box, the doctor who gave the order was unknown to the nurse, and the ordering of medication by telephone was in violation of hospital policy. (The medicine was actually a placebo.) A survey of 33 graduate and student nurses supported the assumption that the act was obviously wrong; 94% of these respondents claimed that they would not give the medicine under such circumstances.

Attitude Surveys Kelman and Lawrence [33] examined the My Lai incident. A national opinion survey in the U.S. ($N = 989$) asked: "What would you do if ordered to shoot all inhabitants of a Vietnamese village suspected of aiding the enemy, including old men, women and children?" Fifty-one percent of the respondents said that they would "follow orders and shoot," and only 33% said they would "refuse to shoot."

In a study related to business management, Baumhart [2], in a survey of 1,800 subscribers to the *Harvard Business Review*, found that unethical practices were widespread. Only 18% of the respondents said that there were no "generally accepted unethical practices in his industry." The primary influence in making these unethical decisions was reported to be the behavior of one's superior. A survey of managers in the private sector [13] found that 64% of the respondents agreed with the statement "managers today feel under pressure to compromise personal standards to achieve company goals." This study was replicated with managers in the public sector [9].

Krishnan [35] asked subjects what they would do in a case where an engineer was fired for refusing to "edit" the results of a product liability survey to enable a company to receive an order. The engineer had also informed the customer on the actual results and this had resulted in the loss of the order. Almost two-thirds of the respondents said the company should not reinstate the engineer.

Documented Case Histories Assuming that the stockholder role is accepted by many managers and that blind obedience is a common trait among people, then it should not be difficult to find examples of socially irresponsible decisions by managers. Indeed, there are many documented cases where managers have brought serious harm to employees, to the local community, or to the customers. The conflict between the desires of employees and those of stockholders was strong in the early part of this century (e.g., see Schultz and Coleman [60] for a description of the Ludlow Massacre where an effort to unionize was put down by John D. Rockefeller). More recently there has been much conflict between stockholders and customers. Examples have been documented by Nader [48] in the description of the Corvair; by Sjoström and Nilsson [64] in their description of the thalidomide case; and by the various examples presented in Heilbroner et al. [26], in Mintz and Cohen [46], in Nader et al. [49], and in the *First Report by the National Commission on Product Safety* [51]. These cases refer primarily to managers who felt that they were acting as they *should* act. They were obedient to their roles.

In summary, the stockholder role encourages socially irresponsible acts. People who believe in this role may be expected to seriously harm others, and "trying harder," in the sense of following the role more faithfully, will increase the level of irresponsibility.

The Stakeholder Role. Assume that groups a, b, and c were brought together in a common undertaking. The inputs of each of these groups are necessary for satisfactory performance. Now for whom does the system *really* exist – a? for b? or for c? One cannot answer this. But when we put labels on a, b, and c – such as stockholder, employee, and customer – the situation becomes clearer. Tradition has taught us to perceive this system from the viewpoint of the stockholder.² We “maximize profits” rather than “wages” or “consumer satisfaction.” What is *done* becomes a value. A change from this value is resisted on the basis that economics does not deal with values.

The problem is that the manager is asked to place the welfare of one of the groups in this system above the welfare of the other groups. In a perfectly competitive market, the manager’s perception of his role (e.g., to maximize wages or to maximize profits) is of no importance. But the perception is important where imperfections exist. Here, attempts to place the welfare of one group above another may lead to irresponsible actions. This is expected no matter which group is given priority. For example, the Yugoslavian solution to maximize wages rather than profits [6, 67] is not expected to remove incentives to harm others. It only leads to changes in who is injured.

There are many ways in which one might try to reduce the likelihood of socially irresponsible actions by managers. One of the most effective ways would be to increase competition. Other approaches would be class action suits, greater publicity about actions by firms, and strict product liability laws. This article considers one of the many possible approaches – how one might change the managers’ perception from the stockholder role to one where he views himself as being responsible to those groups that are affected by the firm’s actions. This is referred to as the “stakeholder role.”

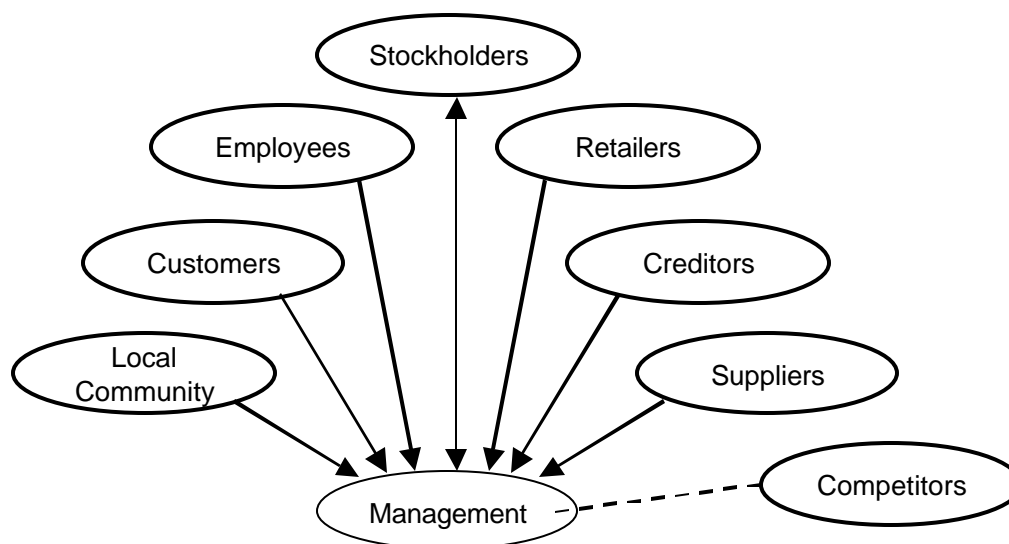
This attempt to change managers’ perceptions of their role is consistent with one of the conclusions from the obedience studies: “Control the manner in which a man interprets his world, and you have gone a long way toward controlling his behavior” [42, p. 145] .

In contrast to the stockholder role, or any other “sub-optimization” approach, the stakeholder role suggests that the manager serves many masters. He is responsible to a *and* b *and* c. A distinction is drawn, however, between primary and secondary interest groups. A primary stakeholder is affected by the decisions of the firm and also makes some contribution to the firm. A secondary stakeholder is affected by the firm’s decisions, but makes no direct contribution to the firm. An illustration of management’s relationship to the primary and secondary stakeholders for a typical firm is presented in Fig. 2. (The secondary stakeholders are designated by a dotted line.)

Management, under the stakeholder role, should try to ensure that the marginal rate of return on contributions is equal for each of the primary interest groups. He should also avoid bringing unnecessary harm to competitors. Two-way arrows are used in Fig. 2 to indicate that management should take the initiative in keeping the interest groups informed and in providing adequate rewards.

² According to the survey by Dent [16], the shift from owner-manager to professional-manager has not led to any shift in the reported profit orientation of the managers.

Figure 2: Stakeholder Theory



The stakeholder role advocates responsibility to all of the interest groups and *only* to these interest groups. It does *not* advocate that the manager act in the best interests of society. This is vague and may lead to arbitrary actions. For example, assume that General Motors donated money to the University of Pennsylvania. Under the stakeholder role, such a contribution would be regarded as irresponsible since the university would hardly be considered as one of General Motors' interest groups. (In this case, the burden of proof would be on the management of G.M. to show that the donation was a good "investment" for its primary stakeholders.) Incidentally, although both the stakeholder and the stockholder roles [23,35] are in agreement that charitable donations are irresponsible, they are legal in the U.S., having survived a legal challenge [7].

From the previous definitions of social irresponsibility, it seems that managers who follow the stakeholder role would not act irresponsibly. The question is how to get managers to adopt such a role. Although the stakeholder role was discussed at least 40 years ago [17, 18], there has been little movement in this direction. For example, "Campaign GM," an effort to place consumer and community representatives on the General Motors board of directors, received only about 3% of the stockholders' votes [61].

The Panalba Role-Playing Experiment

Validity of Role-Playing: Survey research presents a number of difficulties in the study of social irresponsibility. Respondents describe themselves in a favorable light. Furthermore, they often have difficulty in deciding how they would respond in various situations. On the other hand, field experiments on irresponsibility are expensive and difficult to arrange, and subjects can also become upset in field experiments (e.g., the nurses in the Hofling et al. [28] study were upset when they found that they were the subjects of an experiment).

Role-playing offers one approach to studying social responsibility. It avoids some of the difficulties of survey research, while being substantially cheaper than field experimentation. Role-playing, however, has been subject to much criticism [22, 43]. For that reason, it is useful to provide a brief review of the evidence on the validity of role-playing.

Face Validity: Janis and Mann [32] used role-playing to modify smoking habits; subjects who role-played a lung cancer patient were observed by the experimenter to become emotionally involved with the role. In a follow-up study, Mann [40] provided reports from the role-players that indicated a significant amount of emotional involvement. Zimbardo [72] created realistic role play of a prison. The subjects displayed much emotion and were even surprised at their behavior in their roles. Orne et al. [54] reviewed research showing that subjects can role-play as hypnotics in such a convincing manner that observers cannot distinguish between role-players and hypnotics. These studies suggest that role-playing provides responses that are representative of those by people in an actual situation.

Construct Validity: Numerous studies have compared role-playing to experiments. Greenberg [25] found similar results for role-playing as for a laboratory experiment on the relationship between anxiety and the need for affiliation. Willis and Willis [69] used role-playing to successfully replicate the main effects from a laboratory study on conformity, although the interaction effects were not the same. Horowitz and Rothschild [30] found that “forewarned role-playing” provided similar results to a laboratory experiment on conformity. The forewarned role-playing instructions were to “act as you think subjects would act in this particular situation.” Wexley et al. [68] used role-playing of the appraisal interview and obtained results similar to those from a field study, Terry [65] used role-playing and successfully replicated his experiment on expectancy in food tasting. Darroch and Steiner [15] used role-playing to replicate an experiment on attitude change and found some similarities and some differences. In the only completely negative study, Yinon et al. [71] found substantial differences between role-playing and decisions made by students on a grading issue.

A number of the role-playing studies have been done in connection with the obedience experiments. Holmes and Bennett [29] and Houston and Holmes [31] asked subjects to act as if they would be receiving an electric shock; subjects gave similar responses on a questionnaire as did subjects who expected to receive the shocks, but they did not show the same types of physiological changes. Berscheid et al. [5] used role-playing to replicate the obedience experiment by Ring et al. [57], and obtained similar results on the effect of debriefing upon subjects. Mixon [47] used role-playing and replicated the Milgram experiment. Finally, Simons and Piliavin [63] failed to obtain the same results in studying subject’s reactions to someone who had been punished by electric shocks.

While these results from role-playing are not identical to those from experiments, there were substantial differences in only 2 of the 13 studies involving construct validity. It is not clear which approach is closer to truth, but it is clear that they generally produce similar results.

Predictive Validity: Crow and Noel [14] had subjects play the role of the Mexican leader in a disguised version of the events leading to the annexation of Texas by the U.S. Subjects were asked to

reach a decision ranging from 1 (a peaceful response) to 11 (a warlike response). According to historians, the optimal decision would have been a 1 or 2. One percent of the subjects selected a 1 or 2, and 57% selected a 4 or 5. The actual decision was classed as about a 4 or 5, and it proved disastrous for Mexico. Thus, role-playing provided a good way to predict how the Mexican leader would act.

Panalba as an Extreme Case: A case was desired that would allow stockholders to gain at the expense of other interest groups. Furthermore, the gain to the stockholders should be much less than the loss to the other groups. The Panalba case met these criteria.

The basic model for this case was “what decision would a manager make if he could earn \$1,000,000 for each customer that he was willing to kill?” Of course, the problem was not stated in such a direct manner; instead, it was cast in a legitimate framework. The subjects acted as members of the Board of Directors of the Upjohn Company. Upjohn had a very profitable drug named Panalba. There was much evidence that substitute drugs from Upjohn’s competitors provided the same benefits at the same price. Panalba, however, had serious side effects such as death, while the substitutes were virtually free of side effects. The question was whether Upjohn should remove Panalba from the market. (See Appendix A for a description of the case.)³

To determine whether this case allowed for irresponsible behavior, a self-administered questionnaire was given to captive audiences of faculty, students, and managers. This described the Panalba case (from Appendix A) and explained that Upjohn had taken legal and political action to prevent the removal of Panalba from the market (decision “e”). Almost all respondents viewed Upjohn’s decision as socially irresponsible (Table 1). Furthermore, only 2% of the respondents selected this decision when asked, “If you were Chairman of Upjohn, what decision would you have made?”

Table 1: Attitudes Toward Upjohn’s Decision (N = 71)

In Your Opinion, Did Upjohn Act:	Percentage of Responses
In a socially responsible manner?	0
In a socially irresponsible manner?	97
No opinion	3

The Sample: The role-playing sample was selected on the basis of convenience. The subjects were from undergraduate and graduate courses in management (g = 264), and also from executive training programs (g = 55). Although managerial experience was limited for the undergraduates, most graduate

³The description was based upon the true case of Panalba as reported by Mintz [45]. Information was also taken from Upjohn’s Annual Reports. I made up details for this case, such as the accounting estimates of Table 2, to make the extreme nature of this case obvious. Attempts were made to obtain further information from the Upjohn Co. to ensure that the facts were accurately presented, but they refused to answer.

students had previous experience. Results were obtained from groups in 10 countries: U.S. (166), Sweden (109), Belgium (11), France (8), Canada (6), Norway (4), England (8), Denmark (3), Finland (2), and Mexico (2). No one in the sample had heard of Panalba.

All groups were from captive audiences. This seemed advantageous since studies of volunteers have shown that they are less authoritarian and they have a higher need for social approval [58]. Both of these factors would be expected to affect decision-making in the Panalba case.

Role Descriptions. The role descriptions were simple and realistic, and they allowed flexibility for each member. The instructions (Appendix B) emphasized that the subject should “*act as you would act if you were in the role of the person described.*” “Of the seven roles in the control group, the chairman was asked to help the group reach consensus; he had no prior position on the subject, and he had no information other than the background information. The president of the company had no prior position, but some possible courses of action had been suggested to him by others in the company. Two other board members had no predisposition and no additional information. The remaining three members were favorably disposed toward Panalba prior to the meeting, but there was nothing in the role that would prevent them from changing their opinion during the meeting. (The roles are shown in Appendix C. All subjects received the background information, Appendix A.)

The roles were altered in two respects when trying to emphasize the *stockholder* role. The first change was to add the following passage to each subject’s role:

It is important to note that the members of the Upjohn Board had a number of discussions in the past as to the proper role that a Board member should take. A resolution had been passed in 1950 which stated that the board’s duty was to represent the stockholders. It was felt that society’s needs would be served best if the board acted in such a way as to maximize the return to the stockholder – i.e., to maximize profits. (All of the current board members are well aware of this policy statement.)

The second change was to provide subjects with accounting information to show how the various decisions would affect the stockholders (column 1 in Table 2). There were two different approaches to implementing the *stakeholder* role. One was to say that the board believed in the stakeholder role by adding the following statement to each subject’s role:

Finally, it is important to note that the members of the Upjohn Board had a number of discussions in the past as to the proper role that a Board member should take. A resolution had been passed in 1950, which stated that the Board’s duty was to recognize the interests of each and every one of its “interest groups” or “stakeholders.” The stakeholders are those groups which make specific contributions to the firm. Thus, the board is to consider the effects of decisions upon employees, creditors, stockholders, customers, suppliers, distributors and the local community. Furthermore, the board should consider only its own

stakeholders in making decisions. It shall not attempt to serve the common good or society in general. (All of the current board members are well aware of this policy statement.)

These instructions did not command the subject to follow the stakeholder role; they state that the board advocated such a role. Beyond this the roles were identical to those described for the traditional board. The other approach to the stakeholder role was to provide representation to the various interest groups. No single group would dominate the board in this democratic version. The Chairman, the President, and a stockholder representative were the same as described in the traditional board. In addition, there was one representative each for employees, customers, suppliers, and the local community. (These roles are presented in Appendix D.) Again, it may be seen that the roles allow flexibility in decision making.

Table 2: Accounting Provided in Panalba Case. Estimated Losses (in Millions of Dollars)^a

Alternatives	Stockholders	Customers	Employees	Total Losses
a. Recall immediately	20.0	0.0	2.0	22.0
b. Stop production	13.0	13.6	1.8	28.4
c. Stop promotion	12.0	16.8	1.2	30.0
d. Continue until banned	11.0	19.6	1.0	31.6
e. Prevent ban	4.0	33.8	0.2	38.0

^a These estimates represent present value losses to each group affected by this decision. The losses to customers represent deaths and illnesses caused by Panalba for which no compensation is received; losses to employees represent lost wages and moving expenses beyond those covered by severance pay and unemployment benefits.

The stakeholder role was reinforced by providing explicit measures on how each of the interest groups would be affected (all information from Table 2). This is referred to as Asocial accounting.” It is not a new concept, having been suggested at least as early as 1953 (e.g., see Bowen [8]). Referring again to the obedience studies, social accounting would be analogous to the feedback from victims; this feedback led to substantial reductions in blind obedience [10, 42, 66]. One might also infer from Tilker [66] that feedback is most effective when it is perceived as being legitimate to the person’s role; in his experiment, the feedback had the greatest impact when the subject felt responsible for the safety of the victim. The assumption used in the Panalba case was that social accounting will be most effective if the subject perceives himself as being responsible to all interest groups.

Administration of the Experiment: The case was not introduced to the subjects as an experiment; instead, it was used as a teaching vehicle. Furthermore, it was not introduced as a case on social irresponsibility, but as a decision-making exercise in a crisis situation. In no instance was it implied that

performance in this situation would be related to a subject's grade in a course; in fact, the case was generally administered in nongraded courses.

Administrative instructions were standardized (Appendix B). To date, the administration has been conducted by 33 different people, although about 40% of the groups were run by the author. It was administered on 91 different occasions over a period of over 5 years (February 1972 to March 1977). The administration by different people in different settings at different times should help to compensate for biases.

Table 3: Decisions in Panalba Case: Control Condition

Level of Social Irresponsibility	Percentage of Groups (g = 57)
High (decision e: block FDA)	79
Moderate (decisions b, c, d)	21
None (decision a: remove drug)	0

Results: The results address the following three questions: *First*, can managers be expected to act in an irresponsible manner? *Second*, do differences among backgrounds of managers lend to differences in socially irresponsible behavior? *Finally*, can the role perceptions of managers be modified so that they affect decision-making?

Social Irresponsibility under the Current System: The control version of the Panalba case provided evidence on the likelihood that managers will make socially irresponsible decisions. It should be noted that subjects were not instructed to maximize profits. However, as noted by Larsen et al. [36] in their study of obedience, it seems sufficient merely to put people in a mildly compelling situation. That is, subjects in the Panalba case were expected to feel some pressure toward that stockholder role because of their background. The fact that they were working in a group was expected to increase this pressure because the stockholder role was expected to be the dominant viewpoint in the group.

The results are presented in Table 3. *None* of the groups removed the drug from the market. In fact, 79% of them selected the highly irresponsible decision. This was the decision that had been made by Upjohn. According to Mintz [45], Upjohn had a judge serve an injunction on the FDA, and they also used political pressure. Although Upjohn was eventually forced to remove Panalba from the U.S. market in March 1970, it continued to sell Panalba in foreign markets [46].

The possibility of biases in the control version was examined. Although many researchers have suggested that subjects help the researcher prove his hypotheses, Sigall et al. [62] reviewed the evidence and found little empirical evidence to support such a viewpoint. Furthermore, Carlsmith et al. [11] found no differences in their role-playing study when comparing results from two experimenters who held contradictory hypotheses. A follow-up survey of 32 subjects in the control version of the

Panalba role-playing case (after the role-playing, but prior to any discussion), found that 90% were unable to guess that the hypotheses being tested related to social irresponsibility. Finally, there were no differences in the decisions for groups administered by the author ($g = 26$) and those for all other administrators ($g = 31$).

Subjects in the Panalba case often seemed to be bothered by their decision. As in Milgram's [42] and Larsen's [36] studies on obedience, subjects seemed to feel that they were being asked to do something wrong. Some subjects dealt with this by misinterpreting the information in order to minimize the bad effects of the decision. Others tried to justify their decision to keep Panalba on the market; they would suggest, for example, that they were merely following their role. This argument was suspect in view of the difficulty in getting many of the subjects to follow the stakeholder role.

The results from the control condition were in agreement, then, with the previously cited evidence that the typical manager may be expected to seriously harm others in carrying out his duties. (From a methodological viewpoint, these results add support for the use of role-playing as a predictive device.)

Differences among Managers: An examination was made of differences among managers. Two possible factors were examined: nationality and age.

The popular press has suggested that managers in various countries differ in their social responsibility. For example, the *Financial Times* (March 29, 1974) suggested that Norwegian managers have objectives that differ from those of American managers; they are more interested in A... the effectiveness of the social system." Furthermore, previous research on the obedience studies suggested that there were differences according to nationality [34, 41].

Differences due to nationality were examined by analyzing the results from the 57 groups in the control condition. For Sweden ($g = 18$), 72% of the decisions were classed as highly irresponsible. The corresponding figure for the U.S. ($g = 29$) was 79%. Results from the other six countries ($g = 10$) showed 90% highly irresponsible. There were no statistically significant differences among these groups.

Observers have suggested that younger people are more concerned with social irresponsibility, and that they are less profit oriented [55]. Empirical evidence on this issue is limited. Baumhart's [2] survey of subscribers to the *Harvard Business Review* suggested that younger managers are more irresponsible. Krishnan [35] found younger managers to be more oriented toward profit maximizing. Goodman and Crawford [24] found no differences by age in a survey that asked respondents what decisions they would make in various situations, many of which allowed for socially irresponsible decisions.

Differences due to age were examined in the Panalba study by comparing results from advanced management courses (where average ages were generally above 30) against those from undergraduate and graduate programs (where the average ages generally ranged from 20 to 25). Older managers ($g = 15$) selected the highly irresponsible decision in 73% of the groups, while younger managers ($g = 42$) selected this decision in 81% of the groups. Although this difference is not statistically significant, the

direction is in agreement with the previously cited evidence; younger managers tend to be more irresponsible.

The Stakeholder Role: Consideration was given to ways in which the role perceptions of the subject might be modified. The first step was to ask subjects about these perceptions. A “managerial orientation questionnaire” (MOQ) was administered to a subset of the subjects both before and after the role-playing exercise. The MOQ described the stockholder and stakeholder roles as they were presented in the role-playing instructions. Before the role-playing, the subjects were asked, “Which of these descriptions best represents the role which you feel that you would use as a manager?” The results (summarized in Table 4) were inconsistent with the assumption that subjects would normally adopt the stockholder role. Only 21% of the respondents said that they would use the stockholder role, while 76% said they would use the stakeholder role.

Table 4: “A Role That I Would Use”: Before Role-Playing of Panalba (N = 268)

Stockholder		Undecided		Stakeholder
(-2)	(-1)	(0)	(1)	(2)
5%	16%	3%	62%	14%

After the role-playing, but before any discussion, the same subjects were given the same scale and asked to “Mark the category that best represents how you feel that *you acted* in this role-playing case.” The responses are summarized in Table 5. All group’s averages moved toward the stockholder end of the continuum, indicating that the respondents felt that their behavior in this case was more oriented toward the stockholder role than were their attitudes. Note, however, that the change in the stockholder version of the case was greater than that in the control group, which, in turn, was greater than that in the two stakeholder versions. Although the role manipulations did have the intended effect, the magnitude of the effect was not large. Subjects bring a perception of their role into the case that is not easily changed.

Table 5: Perceived Behavior vs. Prior Attitude

Role Emphasis	Number of Groups	Perceived Behavior Minus Initial Rating	Final Rating
Stockholder (board agrees)	10	- 1.7	- 1.0
Control group	9	- 0.9	- 0.4
Stakeholder (board agrees)	13	- 0.1	+0.5

Stakeholder (democratic board)	11	- 0.3	+0.6
--------------------------------	----	-------	------

Primary interest lay in the extent to which decision-making was influenced. The results, summarized in Table 6, indicate that the attempts to change the role orientation did have an effect upon decision-making. Decisions under the stakeholder version were less irresponsible: 76% of the decisions in the stockholder version were classed as highly irresponsible, compared with 22% of the stakeholder decisions (taking the last two columns together). None of the stockholder decisions were free of irresponsibility vs. 21% of the stakeholder decisions. These results were statistically significant at the 0.05 level (calculated level of significance was less than 0.001 using the test).

Although the democratic board was more effective than was a prior agreement by the board to represent all interest groups, the difference was not statistically significant.

The stakeholder version changed the role and the method of accounting. An analysis was conducted to assess the relative contribution of each aspect. The hypotheses in this report suggested an interaction: social accounting should be of greater value where it is part of the legitimate framework. Also, the stakeholder role becomes stronger when the accounting system is designed along the same framework. Still, some effect was expected if either of these components was used by itself.

The impact of social accounting was tested by varying the information in the control condition (where no statement was made on roles.) Financial accounting was used for 30 groups and 24 groups received social accounting. The results were surprising: instead of a reduction in irresponsibility, there was a tendency (not significant) for irresponsibility to be greater with social accounting.

Neither a reorientation of the role nor social accounting, by themselves, proved effective. It was only when used to reinforce one another that significant reductions in irresponsibility were obtained. These results are relevant to those advocates of social accounting who are concerned with changing the method of accounting alone.

The results would seem to be subject to serious biases because different versions were run during each administration of the role-playing case and the biases would be expected to be constant across the different versions.

Table 6: Decisions in Panalba Case: Stockholder and Stakeholder Conditions

Level of social irresponsibility	Role: Percentage of Groups Selecting Each Decision		
	Stockholder (Board Agrees)	Stakeholder Versions	
		Board Agrees	Democratic Board
High	76	23	22
Moderate	24	65	49

None	0	12	29
(g =)	(41)	(57)	(59)

The results from Table 6 also indicate that the stockholder results, with 76% of the groups selecting the highly irresponsible decision, were no different than those from the control group where the corresponding figure was 79%. This supports the hypothesis that managers tend to act in accordance with the stockholder role.

Conclusions

A review of previous evidence suggested that a substantial proportion of managers may be expected to bring serious harm to others in situations where they feel it is proper behavior for their role. Further evidence was provided by the Panalba role-playing study, where 79% of the groups selected a highly irresponsible decision and none chose the decision that was free of irresponsibility. These results were due to the pressure of the role rather than to differences among individuals; differences in irresponsibility were not related to nationality or to age.

The stakeholder role led to a reduction in irresponsibility. Instructions that a board member should represent all interest groups, along with the evidence on how these groups were affected, led to a reduction in irresponsibility as only 23% chose the highly irresponsible decision. Reductions also occurred when the interest groups were represented on the board of directors; 22% of these groups selected the highly irresponsible decision.

Appendix A: Background Information for the Panalba Case

Assume that it is August, 1969, and that Upjohn Corporation has called a Special Board Meeting to discuss what should be done with the product known as “Panalba.”

Panalba is a “fixed-ratio” antibiotic sold by prescription. That is, it contains a combination of drugs. It has been on the market for over 13 years and has been highly successful. It now accounts for about 18 million dollars per year, which is 12% of Upjohn Company’s gross income in the U.S. (and a greater percentage of net profits). Profits from foreign markets, where Panalba is marketed under a different name, are roughly comparable to those in the U.S.

Over the past 20 years there have been numerous medical scientists (e.g., the AMA’s Council on Drugs) objecting to the sale of most fixed-ratio drugs. The argument has been that (1) there is no evidence that these fixed-ratio drugs have improved benefits over single drugs, and (2) that the possibility of detrimental side effects, including death, is *at least* doubled. For example, these scientists have estimated that Panalba is causing about 14 to 22 unnecessary deaths per year. *i.e.*, deaths which could be prevented if the patients had used a substitute made by a competitor of Upjohn. Despite these recommendations to remove fixed-ratio drugs from the market, doctors have continued to use them. They offer a shotgun approach for the doctor who is unsure of his diagnosis.

Recently a National Academy of Science - National Research Council panel, a group of impartial scientists, carried out extensive research studies and recommended unanimously that the Food and Drug Administration (FDA) ban the sale of Panalba. One of the members of the panel, Dr. Eichewald of the University of Texas, was quoted by the press as saying, “There are few instances in medicine when so many experts have agreed unanimously and without reservation” (about banning Panalba). This view was typical of comments made by other members of the panel. In fact, it was typical of comments which had been made about fixed-ratio drugs over the past 20 years. These impartial experts then believe that while all drugs have the possibility of side effects, the costs associated with Panalba far exceed the possible benefits.

The Special Board Meeting has arisen out of an emergency situation. The FDA had told Upjohn that it plans to ban Panalba in the U.S. and wants to give Upjohn time for a final appeal to them. Should the ban become effective, Upjohn would have to stop all sales of Panalba and attempt to remove inventories from the market. Upjohn has no close substitute to Panalba, so consumers will be switched to close substitutes which are easily available from other firms. Some of these substitutes offer benefits which are equivalent to those from Panalba, and yet they have no serious side effects. The selling price of the substitutes is approximately the same as the price for Panalba.

It is extremely unlikely that bad publicity from this case would have any significant effect upon the long term profits of other products made by Upjohn.

The following possible solutions were considered by the Board:

1. Recall Panalba immediately and destroy.
2. Stop production of Panalba immediately but allow what's been made to be sold.
3. Stop all advertising and promotion of Panalba but provide it for those doctors that request it.
4. Continue efforts to most effectively market Panalba until sale is actually banned.
5. Continue efforts to most effectively market Panalba and take legal, political, and other necessary actions to prevent the authorities from banning Panalba.

You, as a member of the Board, must help to reach a decision at today's meeting. The Chairman of the Board, Ed Upjohn, has provided this background information to each of the Board members. He is especially concerned about selecting the most appropriate alternative for the U.S. market. (You must decide which if the possible alternatives is *closest* to your preferred solution.)

A similar decision must also be made for the foreign market *under the assumption that the sale of Panalba was banned in the U.S.* This decision will be used as a contingency plan.

Appendix B

Instructions The major instructions given to the subjects are provided below. The underlined statements were also written on the blackboard.

“I am providing one envelope to each group. *Please do not write on these materials unless you are the Chairman.* The Chairman will complete a group decision form. When you receive the envelope, please remove the contents, take the “role” on top and pass the roles to the person on your right, etc., until everyone has a role.

“When you receive your role, remove the 3 x 5 card and place it on you or in front of you so that the others in your group can tell who you are. Then read your role and *act as you would act if you were in the role which is described.* (Repeat this.) *Improvise as necessary but do not step out of your role.* The roles all differ so do not discuss your role with others in your group.

“This meeting has been called by E. G. Upjohn, the Chairman of the Board at Upjohn. Due to time pressures, your group must reach a decision in 45 minutes. Dr. Upjohn will start the meeting as soon as you have read your roles.”

Appendix C: Roles for “Traditional Board”

Chairman of the Board As Chairman of the Board, it is your job to have the Board reach a decision on the two issues within the time allowed. Unfortunately, you have only 45 minutes to reach a decision since some of the Board members can stay no longer than that.

Your general philosophy about meetings is to try to allow for various sides of the issue to be discussed before a decision is reached.

Legally speaking, a majority vote is required in order to reach a decision. You prefer that a consensus be reached, but a formal ballot may be used at the end of the meeting if necessary. (Please record the group decision on the form which has been given to you and give it to the administrator of this case.)

Vice Chairman of the Board You were the President of Upjohn when Panalba was introduced into the market. Naturally, you feel that Panalba was, and still is, a good product both for Upjohn and for the people who have used it. If you didn't feel this way, you would have never put Panalba on the market in the first place.

President You've been President for about two years. Since you have taken over, the economy has been slacking off and, as a result, company profits have been off somewhat. The Panalba problem seems to have come at an especially bad time, then.

You have been checking out various ways of handling the Panalba problem. One suggestion has been sent to you by an Upjohn lawyer. He had seen the Panalba issue develop over the past few years. He thinks that it would be possible to delay any action by the FDA. He suggests that Judge Kent of Kalamazoo (a man whom you know personally) would be willing to serve an injunction on the FDA. The injunction would prohibit the FDA from banning Panalba until such time as a formal hearing can be held. The results of the hearing, if unfavorable, could then be appealed. In effect, the case could be tied up in the courts for years. And, if the court action was successful, it would help to prevent the FDA from moving against other drug products in the future.

Another suggestion was sent to you by the Upjohn lobbyist in Washington. He suggests that it might be possible to bring political pressure to bear and to attempt to have Robert Finch, head of HEW (and therefore having jurisdiction over the FDA), overrule the proposed action by the FDA.

Vice President and Director You have, of course, been aware of the bad publicity on Panalba. One idea has been suggested to you, however. This is that an appeal should be sent to all doctors to protest to the FDA on the grounds that the FDA would be violating the physician's right to prescribe if they removed Panalba. You feel that the fact that the doctors have been using Panalba for the past 13 years indicates that it must have some value.

You've been a member of the Board of Directors for 8 years and you own 20,000 shares of Upjohn stock.

Executive V.P. - Upjohn You have been on the Board of Directors since 1955 and you own about 25,000 shares of Upjohn.

President: William John Upjohn, Assoc., Inc., Marketing and Advertising Consultants You are part of the Upjohn family and you own a considerable amount of stock. Your consulting firm does most of its work for the Upjohn Co.

Stockholder You are a practicing M.D. You've been prescribing Panalba for years and you have seen nothing wrong with it.

Appendix D: Description of the Roles for the Democratic Board

The roles for the *Chairman*, *President*, and *Stockholder* are exactly the same as in Appendix C. The four new roles are as follows.

Public Representative You have been selected by the Mayor to represent the community interests. The Mayor had to find someone who would represent all groups in the local community and your decisions are reported in the local papers. Prior to the meeting, you had not been able to think of any major impact which the ban on Panalba might have. True, there will be some impact upon the employment level but the community is so large that this would be very minor. You hold no shares of Upjohn stock.

Suppliers' Representative You represent the organizations that sell goods and services to Upjohn. Upjohn, of course, represents only a small part of each supplier's sales. And if the purchase were instead made by a competitor of Upjohn, the firm would also obtain its supplies from the firms which you represent. Your job is to try to make sure that the suppliers receive fair treatment. Whether or not Panalba will stay on the market is of little importance to the suppliers. You hold no shares of Upjohn stock.

Consumer Representative You are elected by a consumer's group. Your job is to ensure that the interests of the consumer are protected. Your decisions are widely reported by the press and by such groups as Consumer's Union. You have reviewed the evidence behind the Panalba case and you feel that the background information which was sent to the members provides a fair picture of the effect of Panalba upon consumers. You hold no shares of Upjohn stock.

Employee Representative You have been elected by the employees and they expect you to represent their interests. You have been a director since 1969. You've given some thought as to what would happen if Panalba were to be banned from the market. Approximately 200 jobs would be eliminated (out of the roughly 5,000 jobs at Upjohn). Naturally, your constituents won't be too happy about this. You hold no shares of Upjohn stock.

References

1. Barksdale, Hiram C. and Darden, Bill, "Marketers' Attitudes Toward the Marketing Concept," *J Marketing* 35 (October 1971): 29-36.
2. Baumhart, Raymond, *Ethics in Business*. Holt, Rinehart, and Winston, New York: 1968.
3. Berle, A. A., Jr., "Corporate Powers as Powers in Trust," *Harvard Law Rev.*, 44 (1931): 1049-1074.
4. Berle, A. A., Jr., "For Whom Corporate Managers are Trustees," *Harvard Law Rev.*, 45 (1932): 1365-1372.
5. Berscheid, Ellen, et al., "Anticipating Informed Consent," *Am. Psychol.* 7 (October, 1973): 913-925.
6. Blumberg, Paul, *Industrial Democracy: The Sociology of Participation*. Schocken Books, New York, 1968.
7. Blumberg, Philip, "Corporate Social Responsibility and the Social Crisis," *Boston University Law Rev.* 50 (Spring. 1970): 157-210.
8. Bowen, Howard R., *Social Responsibilities of the Businessman*. Harper Brothers, New York, 1953.
9. Bowman, James S., "Managerial Ethics in Business and Government," *Business Horizons* 19 (October, 1976): 48-54.
10. Buss, Arnold H., "Instrumentality of Aggression, Feedback, and Frustration as Determinants of Physical Aggression," *J. Pers. Soc. Psychol.* 3 (1966): 153-162.
11. Carlsmith, J. M., Collins, B. E. and Helmreich, R. L., "Studies in Forced Compliance I: The Effect of Pressure for Compliance on Attitude Change Produced by Face-to-Face Role Playing and Anonymous Essay Writing," *J. Pers. Soc. Psychol.* 4 (1966): 1-13.
12. Carlsmith, J. M. and Gross, A. E., "Some Effects of Guilt on Compliance," *J. Pers. Soc. Psychol.* 11 (1969): 232-239.
13. Carroll, Archie B., "Managerial Ethics: A Post-Watergate View," *Business Horizons* 18 (April, 1975): 75-80.
14. Crow, Wayman J. and Noel, Robert C., "The Valid Use of Simulation Results," Western Behavioral Sciences Institute, 1150 Silverado Street, La Jolla, California 92037 (June, 1965).

15. Darroch, R. K. and Steiner, I. D., "Role Playing: An Alternative to Laboratory Research?" *J. Pers.* 38 (1970): 302-311.
16. Dent, James K., "Organizational Correlates of the Goals of Business Managements," *Personnel Psychol.* 7 (Autumn, 1959): 365-393.
17. Dodd, F. Merrick, Jr., "For Whom are Corporate Managers Trustees?" *Harvard Law Rev.* 45 (1932): 1145-1163.
18. Dodd, E. Merrick, Jr., "Is Effective Enforcement of the Fiduciary Duties of Corporate Managers Practicable?" *University Chicago Law Rev.* 2 (1935): 194-207.
19. England, George W., "Organizational Goal and Expected Behavior of American Managers," *Acad. Management J.* 10 (1967): 107-117.
20. Ewing, David, "Who Wants Corporate Democracy?" *Harvard Business Rev.* 49 (September-October, 1971): 12.
21. Frank, Jerome D., "Experimental Studies of Personal Pressure and Resistance," *J. Gen. Psychol.* 30 (1944): 23-41.
22. Freedman, Jonathan L., "Role Playing: Psychology by Consensus," *J. Pers. Soc. Psychol.* 13 (1969): 107-114.
23. Friedman, Milton, *Capitalism and Freedom*. University of Chicago Press, Chicago; 1962.
24. Goodman, Charles C. and Crawford, C. Merle, "Young Executives: A Source of New Ethics?" *Personnel J.* 53 (March, 1974): 180-187.
25. Greenberg, Martin S., "Role Playing: An Alternative to Deception?" *J. Per. Soc. Psychol.* 7 (1967): 152-157.
26. Heilbroner, Robert, et al., *In The Name of Profit*. Doubleday, New York; 1972.
27. Henn, Harry C., *Handbook of the Law of Corporations*. West Publishing Co., St. Paul, Minn., 1970.
28. Hofling, Charles K., et al., "An Experimental Study in Nurse-Physician Relationships," *J. Nerv. Ment. Dis.* 143 (1966): 171-180.
29. Holmes, David S. and Bennett, David H., "Experiments to Answer Questions Raised by the Use of Deception in Psychological Research," *J. Pers. Soc. Psychol.* 29 (March, 1974): 358-367.

30. Horowitz, I. A. and Rothschild, B. H., "Conformity as a Function of Deception and Role Playing," *J. Pers. Soc. Psychol.*, 14 (1970): 224-226.
31. Houston, B. Kent and Holmes, David, "Role Playing versus Deception: The Ability of Subjects to Simulate Self-Report and Physiological Responses," *J. Soc. Psychol.* 96 (1975): 91-98.
32. Janis, Irving L. and Mann, Leon, "Effectiveness of Emotional Role Playing in Modifying Smoking Habits and Attitudes," *J. Exp. Res. Pers.* 1 (1965): 84-90.
33. Kelman, Herbert C. and Lawrence, Lee H., "Assignment of Responsibility in the Case of Lt. Calley: Preliminary Report on a National Survey," *J. Soc. Issues* 28 (1972): 177-212.
34. Kilham, Wesley, and Mann, Leon, "Level of Destructive Obedience as a Function of Transmitter and Executant Roles in The Milgram Obedience Paradigm," *J Per. Soc. Psychol.* 29 (May, 1974): 696-702.
35. Krishnan, Tama, "Business Philosophy and Executive Responsibility," *Acad. Management J.* 16 (1973): 658-669.
36. Larsen, Knud S., et al., "Is the Subject's Personality or the Experimental Situation a Better Predictor of a Subjects Willingness to Administer Shock to a Victim?" *J. Pers. Soc. Psychol.* 22 (1972): 287-295.
37. Laski, Harold J., "The Dangers of Obedience," *Harper's*, 159 (1929): 1-10.
38. Lerner, Melvin J., "Observer's Evaluation of a Victim: Justice, Guilt and Veridical Perception," *J. Pers. Soc. Psychol.* 20 (1971): 127-135.
39. Lorig, Arthur N., "Where Do Corporate Responsibilities Really Lie?" *Business Horizons* 10 (Spring, 1967): 51-54.
40. Mann, Leon, "The Effects of Emotional Role-Playing on Desire to Modify Smoking Habits," *J. Exp. Psychol.* 3 (1967): 334-348.
41. Mantell, David M., "The Potential for Violence in Germany," *J. Soc. Issues* 27 (1971): 101-112.
42. Milgram, Stanley, *Obedience to Authority: An Experimental View*. Harper & Row, New York, 1974.
43. Miller, A. G., "Role Playing: An Alternative to Deception? A Review of the Evidence," *Am. Psychol.* 27 (1972): 623-636.
44. Mintz, Morton, *By Prescription Only*. Beacon Press, Boston, 1967.

45. Mintz, Morton, "F.D.A. and Panalba: A Conflict of Commercial and Therapeutic Goals," *Science* 165 (August, 1969): 815-881.
46. Mintz, Morton and Cohen, Jerry S., *America, Inc.* Dial Press, New York, 1971.
47. Mixon, Don, "Instead of Deception," *J. Theory Soc. Behav.* 2 (1973): 145-177.
48. Nader, Ralph, *Unsafe at Any Speed.* Grossman Publishers, Inc., New York, 1965.
49. Nader, Ralph, Petkas, Peter and Blackwell, Kate, *Whistle Blowing: The Report on the Conference on Professional Responsibility.* Grossman Publishing, New York, 1972.
50. Nason, Robert and Armstrong, J. Scott, "Role Conflict in Marketing: Society's Dilemma with Excellence in Marketing," *Wharton Q.* (Fall, 1972): 13-16.
51. National Commission on Product Safety, *Final Report.* U.S. Government Printing Office, 1970.
52. Nichols, Theodore, *Ownership, Control and Ideology.* George Allen, London, 1969.
53. Orne, Martin T., "On The Social Psychology of the Psychological Experiment: With Particular Reference to Demand Characteristics and Their Implications," *Am. Psychol.* 17 (1962): 776-783.
54. Orne, Martin T., Sheehan, P. W. and Evans, F. J., "Occurrence of Posthypnotic Behavior Outside the Experimental Setting," *J. Pers. Psychol.* 9 (1968): 189-196.
55. Reich, Charles A., *The Greening of America.* Random House, New York, 1970.
56. Reich, Charles A., "The Limits of Duty," *New Yorker* 47 (1971): 52-57.
57. Ring, Kenneth, Wallston, K. and Corey, M., "Mode of Debriefing as a Factor Affecting Subjective Reaction to a Milgram-Type Obedience Experiment: An Ethical Inquiry," *Representative Res. Soc., Psychol.* 1 (January, 1970): 67-88.
58. Rosenthal, Robert, "The Volunteer Subject," *Human Relations* 18 (1965): 389-406.
59. Rostow, Eugene V., "To Whom and For What Ends are Corporate Managers Responsible?" Edward S. Mason, ed., *The Corporation in Modern Society,* Harvard University Press, Cambridge, 1959.

60. Schultz, George P. and Coleman, John R., *Labor Problems: Cases and Readings*. McGraw-Hill, New York, 1959.
61. Schwartz, D. E., "Public Interest Proxy Contest: Reflections on Campaign GM," *Michigan Law Rev.* 69 (January, 1971): 421-538.
62. Sigall, Harold, Aronson, E. and Van Hoose, T., "The Cooperative Subject: Myth or Reality?," *J. Exp. Soc. Psychol.* 6 (1970): 1-10.
63. Simons, Carolyn W. and Piliavin, J. A., "Effect of Deception on Reactions to a Victim," *J. Pers. Soc. Psychol.* 21 (1972): 56-60.
64. Sjostrom, Henning and Nilsson, Robert, *Thalidomide and the Power of the Drug Companies*. Penguin Books, Baltimore, 1972.
65. Terry, Roger L., "Role Playing and the Effects of Expectancy Confirmation," *J. Soc. Psychology.* 94 (1974): 291-292.
66. Tilker, Harvey A., "Socially Responsible Behavior as a Function of Observer Responsibility and Victim Feedback," *J. Pers. Soc. Psychol.* 14 (1970): 95-100.
67. Vanek, Jaroslav, *The Participatory Economy*. Cornell University Press, Ithaca, 1971.
68. Wexley, Kenneth N., Singh, J. P. and Yukl, G. A., "Subordinate Personality as a Moderator of the Effects of Participation in Three Types of Appraisal Interviews," *J. Appl. Psychol.* 58 (1973): 54-59.
69. Willis, Richard H. and Willis, Y. A., "Role Playing versus Deception: An Experimental Comparison," *J. Pers. Soc. Psychol.* 16 (July, 1970): 472-477.
70. Wrightsman, Lawrence S., "The Most Important Social Psychological Research of this Generation? Review of Stanley Milgram's *Obedience to Authority*," *Contemporary Psychol.* 19 (December, 1974): 803-805.
71. Yinon, Yoel, Shoham, Varda and Lewis, Tirza, "Risky-shift in a Real vs. Role-played Situation," *J. Soc. Psychol.* 93 (1974): 137-138.
72. Zimbardo, Phillip, "Pathology of Imprisonment," *Society* (April 9, 1972); 4-8.