ABSTRACT

THE PERSONALITY CORRELATES OF, AND THE EFFECT OF REWARD AND COSTS ON, SOCIALLY RESPONSIBLE BEHAVIOR

by Irwin A. Horowitz

The present study was undertaken to reveal the personality correlates of socially responsible behavior and to delineate the conditions under which such behavior would occur.

The experiment was designed as a 3 x 3 x 2 factorial. Three levels of probability of shock, high, moderate, and none constituted one independent variable. The second independent variable, publicity, had two levels, high and none. Subjects were differentiated into three groups by the Byrne (1963) repression-sensitization scale.

Social responsibility was defined as the amount of electric shock the subject was willing to submit to on behalf of a dependent person.

Under conditions of no publicity, the hypothesis, derived from Homan's exchange theory, that social responsibility scores decrease as a direct function of increase in costs (electric shock), was supported.

The findings concerning the effect of high publicity on social responsibility were equivocal. Sensitizers, as predicted, exhibited higher social responsibility scores

than repressors or the non-defensive middle group under high publicity. The social responsibility scores of these latter two groups, however, seemed to have been lowered by high publicity. Furthermore, under high publicity, there were no differences between probability of shock conditions.

It was suggested that under conditions of high publicity, the experimental situation lost some of its credibility. Subjects may have been role-playing under the assumption that they were being evaluated with respect to something other than helping a dependent person.

The differences between the personality subgroups were discussed in terms of differential responsiveness to social comparison pressures. It was suggested that repressors and the non-defensive middle group were concerned with giving the socially desirable response in terms of honesty and, therefore lowered their social responsibility scores. Sensitizers, on the other hand, being more unsure of themselves, raised their social responsibility scores in order to be favorably compared with the peers in a public situation.

Future research was discussed in terms of a clearer specification of the effects of the dependent person on eleciting socially responsible behavior. Variation of the type of public one's act will be exposed to was also suggested. The possibility of employing the repression-sensitization scale for partialling out the effects of evaluation apprehension was presented.

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CHAPTER I

INTRODUCTION

Hartshorne and May are known, primarily, for their pioneering research with children on honesty as a trait. Less popular are their efforts in exploring a related characteristic which they labeled service (Hartshorne and May, 1930). They defined service as the extent to which children were willing to work for others rather than themselves. Operationally, service was defined in terms of the extent to which a child shared the contents of his play Kit with needier children. As was the case with honesty, the extent to which children exhibited "service like" behavior depended on such situational and personal factors as classroom code and school adjustment.

More recently, Berkowitz and his associates (Berkowitz and Daniels, 1963; Daniels and Berkowitz, 1963; Berkowitz and Daniels, 1964; Goranson and Berkowitz, 1966) have studied a similar phenomenon called social responsibility. Berkowitz and Daniels (1963) defined socially responsible behavior as actions which are carried out for another's benefit. In the laboratory investigations carried out by Berkowitz and his co-workers, socially responsible behavior was defined as increased effort by an individual (A) under conditions where such effort is apparently unrelated to A's

own goal attainment but is seen as instrumental for another person's (B's) goal attainment. These studies reveal that social responsibility is maximized when: (1) A perceived B as highly dependent on his (A's) performance, (2) A believed that B perceived the goal as highly desirable, and when (3) A experienced help in a similar situation prior to being asked to help B.

Berkowitz and Daniels (1964) account for this seemingly altruistic behavior in terms of a cultural norm prescribing that the individual should help those who are dependent upon him. This general approach is based on the assumption ". . . that persons in our society may be motivated to help others simply because others are dependent upon them" (Goranson and Berkowitz, 1966). Following this line of thinking, Berkowitz and Daniels (1964) posit a social responsibility norm. This internalized norm prescribes that people ". . . act on behalf of others not for material gain or social approval, but for their own self-approval, for the self-administered rewards from doing what is right" (Goranson and Berkowitz, 1966).

Gouldner (1960) has taken a similar approach, but is more concerned with long-term social interaction. Gouldner (1960) postulates that the socialization process internalizes complimentary rights and obligations in persons even before they begin to participate fully in the social system. He states that there is a universal norm of reciprocity and

"it . . . engenders motives for returning benefits even when power differences might invite exploitation" (Gouldner, 1960). This norm serves as a kind of all purpose "moral cement." The implication is that A's adherence to B's expectations reinforces B's conformance to A's expectations. The norm of reciprocity maintains a stable, shared value system.

Specifically, Gouldner (1960) has suggested that the norm of reciprocity entails two demands: (1) people should help those who have helped them, and (2) people should not injure those who have helped them. These obligations of repayment are contingent upon the imputed value of the benefit received (Gouldner, 1960).

What Gouldner (1960) is proposing essentially is a social standard principle which gives impetus to the payment and repayment of social debts. The norm of reciprocity may serve as a starting mechanism in social interaction. It enables the individual, with only a modicum of risk, to initiate interaction. The impasse of "you go first" is obviated (Gouldner, 1960).

Gouldner (1960) would view socially responsible behavior as actions carried out in accordance with the reciprocity norm. While Gouldner's approach specifies the payment and repayment of debts, it is not totally an economic or utilitarian model. In the short-term, the payment of debts may not be entirely equalized. It may not be

economically reasonable for A to repay B for B's help. Gouldner (1960) argues, however, that the reciprocity norm obliges A to repay the debt at some time. Thus A, having confidence that B will honor his debts, is more willing to incur costs for B. Furthermore, the reciprocity norm provides safeguards against exploitation of less powerful individuals by more powerful persons. This norm regulates the exchange pattern and inhibits exploitive relations (Gouldner, 1960).

Another way of looking at socially responsible behavior is offered by the economic models of social interaction devised by Thibaut and Kelley (1959) and by Homans (1961). Homans (1961) sees behavior as a function of its payoff; an individual's responses depend on the quantity and quality of reward and punishment his actions elicit (Gullahorn and Gullahorn, 1964). Thibaut and Kelley (1959) have developed a similar model employing the economic principle that each individual tends to maximize the difference between his rewards and costs. The basic premise of the economic model of social interaction is that individuals act in such a manner as to maximize their advantages.

In this study we will try to apply the economic model to socially responsible behavior. We will attempt to reveal some of the personality correlates of socially responsible behavior and delineate the conditions under which such behavior is most likely to occur.

Theoretical Considerations and Review of the Literature

The theoretical formulations of Thibaut and Kelley (1959) and Homans (1961) attempt to explain behavior in terms of rewards exchanged and the costs incurred during social interaction. Very simply, profit = reward - cost.

According to Homans (1961) for an activity to incur cost, an alternative and rewarding activity must be forgone. Cost, then, "as a value forgone, is a negative value" (Homans, 1961, p. 60). The cost of an activity would also include the punishment incurred in carrying out that activity (Secord and Backman, 1964).

Homans (1961) defines psychic profit as reward less cost. Profit is then the difference between a value of the reward of one activity and the value of the reward obtainable by emitting another activity (Homans, 1961).

The social responsibility norm may be translated into reward and cost terms. Let us consider the case of an individual highly proficient in mathematics who receives a request for aid from a student less highly skilled. The work of Berkowitz suggests that the inferior student's dependency requires that the superior individual give aid.

The proficient student gives up a certain amount of time (cost) and in return receives approval (reward). The request for aid may be seen as a cue for arousing the social responsibility norm (Schopler and Bateson, 1965). Deviation from this norm may bring about feelings of anxiety and guilt (Schopler and Bateson, 1965). This results in the lowering of the potential value of an alternative activity. The cost of not being socially responsible therefore may be greater than being socially responsible.

There are factors which may change the reward-cost outcome with respect to socially responsible behavior. Berkowitz and Daniels (1964) have demonstrated that perceived dependency is an important factor in eliciting socially responsible behavior. Subjects in the high dependence condition were told that their supervisors would be rated on how well they (the subjects) performed in the experiment. The subjects performance would reflect the supervisors ability to motivate her workers (Berkowitz and Daniels, 1964). Low dependency was created by telling the subjects that their performance would not be related to their supervisor's ratings. The experiment was purported to be concerned with the evaluation of supervisory skill. Subjects were told either that their work would determine whether their supervisor would receive a $5.00 gift certificate or that their performance was unrelated to the

supervisor's chances of receiving the gift certificate (Berkowitz and Daniels, 1964). The subject's task was to build boxes in cooperation with the supervisor. Social responsibility was defined in terms of the number of boxes the subject built. The high dependence group constructed significantly more boxes than the low dependence group.

This paradigm for manipulating dependence has been employed by Berkowitz in all of his studies. In each experiment subjects in the high dependence group did more work in order to aid their partner or supervisor. Subjects gave aid to the dependent person in absence of return payment. It would seem that subjects are willing to incur greater costs for a highly dependent person.

There are, however, distinct limits to the effectiveness of dependency as an eliciting factor. Schopler and Mathews (1965) were concerned with the perceived locus of B's dependence as a limiting factor. These investigators found that if A perceives B's dependence to be beyond B's control than A is more likely to give aid.

The subjects in the Schopler and Mathews (1965) experiment were males. In this connection Schopler and Bateson (1965) have proposed that the extent of a partner's dependence instigates the norm--conforming process differently in males and females. These findings are in accord with results reported in the Walker and Heyn's (1962)

monograph on conformity. In the experimental situation devised by Walker and Heyns (1962) subjects were asked by their partner to help them solve an anagram puzzle. To accede to this request meant that the subject would decrease his own chances of winning. Walker and Heyns (1962) report that females yielded to the request, while males did not. The cost of yielding in this situation outweighed any advantages which might accrue to the subject for obeying the social responsibility norm. When male B is too dependent upon male A, it threatens A's own freedom to act. It would appear that to retain their own independence, males forgo the approval of acting in a socially responsible manner when that independence is threatened. The alternative act is more highly valued.

Walker and Heyns (1962) have suggested that there is a general cultural pattern of sex differences whereby males have a greater need for achievement while females have a greater need for affiliation. To conform to the social responsibility norm in the Walker and Heyns (1962) experimental situation required that males forgo the more highly valued activity, winning the game. The importance of a norm, as Homans (1961) has stated, is not that a certain behavior conforms to the norm, but that the behavior is valued. If the cost of conforming to the norm, in this case the social responsibility norm, is greater than the cost embodied in another activity, then we should not expect socially responsible behavior.

One way to overcome these barriers to socially responsible behavior is to increase the subjects awareness of the social responsibility norm. Berkowitz and Daniels (1964) have shown that if one increases the saliency of the norm one can expect socially responsible behavior. These investigators reasoned that since the norm prescribes giving aid to others, a person should be most aware of this cultural prescription after someone has voluntarily helped him. In the prior help condition in this experiment, subjects were given a boring task to work on for ten minutes. At the end of this period, a confederate entered the room, explained that her (all subjects were female) task was relatively easy, and offered to help. Both individuals then worked together completing the letter cancellation task. The second half of the experiment, described earlier in this discussion, required that the subject give aid to a supervisor in order that the latter might win a prize.

Goranson and Berkowitz (1966) sought a direct comparison of the reciprocity principle and the social responsibility norm with respect to prior help. The three conditions in this experiment which most directly concern the present discussion were based on whether prior help to the subject was: (1) voluntary, (2) compulsory, or (3) refused. The basic assumption was that if prior help was voluntary then the saliency of the social responsibility norm was increased. The second part of the experiment

pertained to the amount of help the subject gave to the same or different partner in a box building task. The findings were, as predicted, that persons in the voluntary help condition gave more aid in the second part of the experiment. More aid, however, was given to the original partner than to the different partner.

Goranson and Berkowitz conclude that the observed behavior should not be considered "simply as an instance of 'rational' or economic interchange" (p. 232). They point out that subjects had no reason to assume any material return. They further note that the "perceived voluntariness" of prior help does not conform to a utilitarian notion.

It would seem that, if anything, the results of the above experiment conform to a utilitarian view of social interchange. Certainly, Gouldner's (1960) reciprocity principle prescribes the repayment of debts. If B has given aid to A, then A is obligated to repay B. Why, then, should more aid have been given to the same partner than a different partner?

What exactly was interchanged in these series of studies reported by Berkowitz and his colleagues? The subjects costs were in terms of effort and time. To give aid to a dependent person requires that the subject help solve some problems and give some of this time. However, there were no alternative activities inherent in the

situation. The subjects all spent the same amount of time on the experimental situation and received equal credit. The subjects reward consisted, presumably, of self-approval, for giving this aid. The costs appear to be minimal. When Walker and Heyns (1962) asked their subjects (males) to forgo the reward of winning an anagram solving game and aid another person, these subjects refused. Social or self-approval did not outweigh the advantages of winning.

Altruism, in the sense of giving aid to a dependent person without receiving material reward, apparently has many strings attached to it. The social responsibility norm may apply to a limited domain of behavior in which costs are kept to a minimum. Schopler and Bateson (1965) have reported that a person whose outcomes are considerably reduced by yielding will in fact yield less than one whose outcomes are only slightly reduced. The Schopler and Bateson (1965) experimental situation was in the form of a mixed motive game. In the high dependence situation, in order for the partner to win money, the subject had to cooperate by yielding to the partner's preferred answer. On the critical trials, the subject could choose another alternative which would maximize his gains. Cost was defined by the size of the decrement of probability of winning from each of four alternatives. If the partner picked an alternative which increased the subjects cost of yielding, the subject was not likely to yield.

The kind of social responsibility Berkowitz seems to be dealing with is on the order of the norm-conforming processes which impel someone to buy Girl Scout cookies, despite their taste. The attempt to minimize one's costs seems to be a pervasive theme in these experiments even when the costs are minimal to begin with.

One would expect subjects to be more willing to incur costs for someone they felt they liked. It is not surprising then to find that in the Berkowitz and Daniels (1964) study subjects in the prior help condition tended to have a relatively high liking for the supervisor to whom they extended aid.

The Application of Exchange Theory to Social Responsibility

One may legitimately ask of Berkowitz's studies if aising someone on a simple motor or intellectual task is analogous to aiding a dependent person when one's principles or even one's life and limb may be at stake? The costs incurred in this type of situation far outweigh those observed in previous experimental studies. It may involve exposing oneself to harmful stimuli. This conception of social responsibility is one in which A is willing to incur great costs for dependent B. But these costs will not be borne in absence of tangible rewards. The reward-cost outcome may, however, be initially unfavorable. Furthermore, there must be an alternative form of behavior

available. A person listening to someone's screams on the street has several alternatives, one of which is not to do anything. This person incurs costs in any event. If he does not give aid, he will feel guilty. If, however, he does give aid his costs may be infinitely greater for he is exposing himself to dangerous stimuli. This does not mean that the person giving aid automatically assumes an unfavorable reward-cost outcome. Giving aid to a dependent person will bring approval not only from the dependent individual but also from the community in general.

In the present study socially responsible behavior is defined by the costs, in terms of noxious stimuli, an individual is willing to incur for a dependent person. Using the profit = reward - cost formula, and following the results of the Schopler and Bateson (1965) experiment, we would expect that, with the absence of tangible external rewards (publicity), as costs increased, subjects would exhibit fewer socially responsible acts. Since subjects will have before them the alternative of not submitting themselves to a situation involving great costs, it is expected that this latter activity will be more highly valued.

One way to increase the probability of socially responsible behavior, following Berkowitz, is to increase the saliency of the social responsibility norm. In this

situation, the reward-related aspects of being socially responsible are brought to the subject's attention. We would expect that a more favorable reward-cost outcome would be apparent if subjects knew that their acts would be brought to the attention of a group of people likely to give approval for such acts.

Rewards and costs are both intrinsic and extrinsic. Consider the situation in which an individual receives a request for aid under circumstances in which his actions will bring him into contact with noxious stimuli. Furthermore, he is aware that B, the dependent individual, is not in a position to reciprocate. A is further aware that he will remain completely anonymous during the entire episode. There are no extrinsic rewards for giving aid. Internally he may be rewarded with feelings of self-satisfaction. The value of internal rewards may not counterbalance the lack of external reward. In the Walker and Heyns (1962) experiment, it was noted the reward of feeling self-satisfied did not overcome the subject's desire to win the game.

External costs in this situation are defined in terms of the amount of noxious stimuli the person may receive by giving aid to a dependent individual. Internally, costs may be defined in terms of the experienced guilt and anxiety if A does not go to B's aid.

We assume that in a short-term situation, particularly one in which the dependent person is not a friend of the subject, external rewards and costs will be the determining factors in eliciting socially responsible behavior. Therefore, in the situation described above, we would expect socially responsible behavior to decrease as the cost of giving aid increases. Figure 1 presents these predictions. It shows that when extrinsic reward is zero, we predict that social responsibility decreases in a linear fashion as the probable costs of such acts increase.

If we increase the value of external rewards then the reward-cost outcome is altered. This outcome can be altered by making a person aware that his acts will become known to a public, providing he values this publicity, which will give him approval for aiding a dependent person. In this situation the difference between A's rewards and costs are not as great as in a situation where external rewards are not present.

Consider the situation in which A knows that his acts will be made public, but that his probable costs are zero. This would be somewhat analagous to a lifeguard saving a pretty girl wading in two feet of water. In a laboratory situation in which probable cost is varied from none to high, one might expect, under condition of high publicity, that the zero probable cost group would exhibit the highest social responsibility scores.

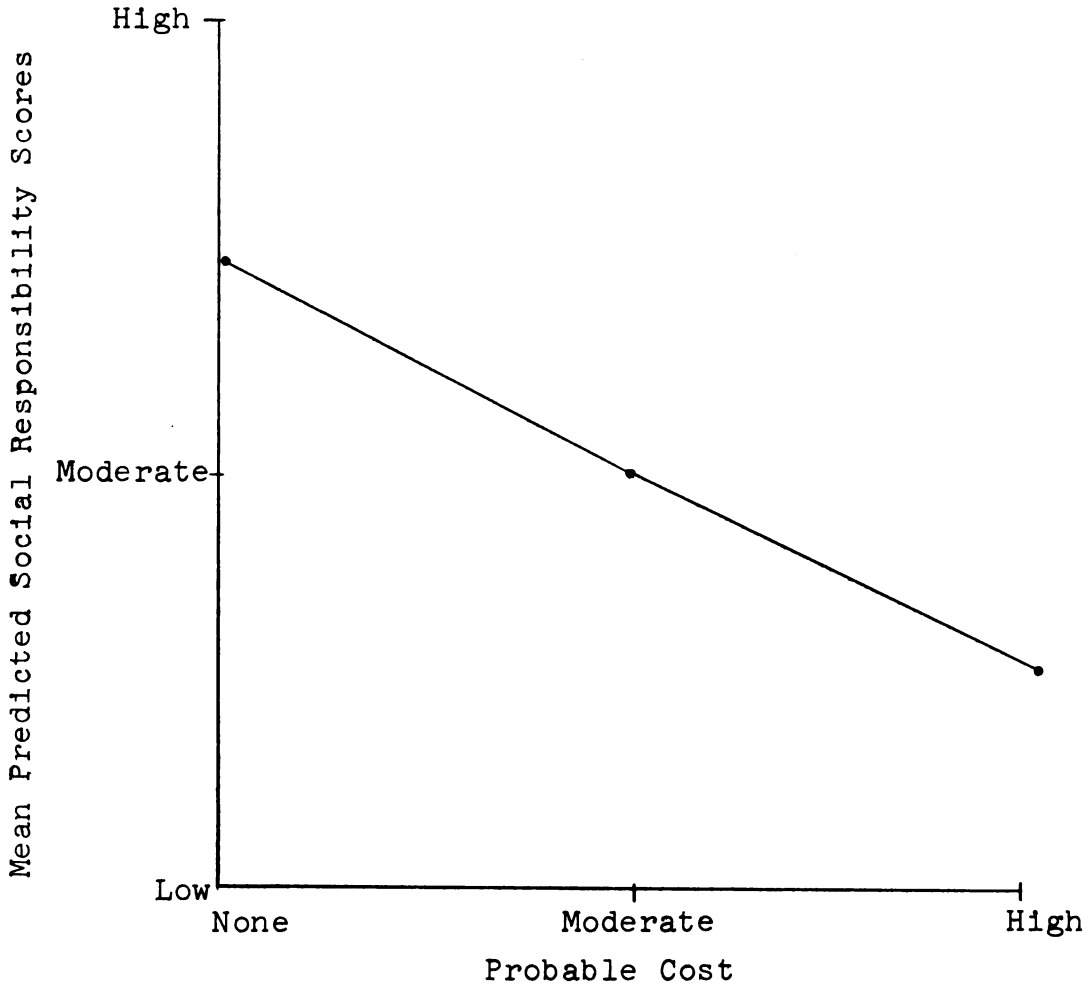

Figure 2.1.--Predicted amount of socially responsibile behavior for subjects in a non external reward (no publicity) situation, as a function of probable cost.

However, it has been shown by many writers that an individual defines an experimental situation in light of his own conceptions (Kelman and Eagly, 1965). Orne (1962) has pointed out that subjects inevitably formulate hypotheses about the experimental situation and then may respond in ways related to these hypotheses rather than the experimental stimuli. Rosenberg (1965) has shown that the typical subject enters a psychological experiment with the notion that he is to be evaluated. If this idea is confirmed then subjects will experience evaluation apprehension; "that is, an active anxiety-toned concern that he (the subject) wins a positive valuation from the experimenter, or at least that he provides no grounds for a negative one" (Rosenberg, 1965, p. 29).

It is proposed that under conditions of high publicity, the profit = reward - cost formula is no longer additive as was the case when external rewards were absent. Instead, it is proposed that profit is a function of reward x cost. External reward, in terms of publicity, remains stable at a value of let us say 1.0. The profit that accrues to an individual for giving aid to a dependent person depends upon the costs he is willing to incur for that dependent individual. Costs may, for example, range from 1 to 10.

Profit = reward x cost 1.0 x (1 to 10)

The greater the costs A is willing to incur on B's behalf, the greater the profit A will receive in this situation.

The costs A incurs for B is directly related to a favorable reward-cost outcome.

One's costs, however, must have a real value. A must make a definite investment to help B in terms of, at least in the present situation, A exposing himself to noxious stimuli. If A is asked to give aid to a dependent B in a situation wherein no cost expenditure is necessary, the question arises for A as to what aspect of his behavior is being looked at. If it is not necessarily his willingness to incur great costs for B, for there are no costs involved, then it could very well be A's honesty; "Would I really go these great lengths if I knew I was actually going to incur these costs?" The expectation is that A will respond in a manner which would tend to decrease his social responsibility scores. This will be done in order to conform to what A believes his actions might be under conditions of real threat. Since A does not have a real criterion as to what kind of behavior would typically be expected, his social responsibility score may be quite low.

Consider a situation in which A may or may not, depending on pure chance factors, be asked to assume the costs of his actions in helping a dependent individual, B. The probability that A will incur these costs are $P_{cost} = .5$. In this instance A has a chance to maximize his profit for his actions are credible since there are

very real costs involved. McClelland (1956) has demonstrated that an individual who is motivated to achieve tends to take moderate ($P_{success}$ = .5) or calculated risks in preference to very speculative or very safe undertakings. When the probable costs are moderate, A has the opportunity to maximize profit while keeping his costs at a reasonable level. With P_c = .5, A may not be asked to assume the costs he may be willing to incur. This does not change the imputed value of his actions. A man saving a woman from an attacker does not receive any less approval if that attacker does not strike him and runs away. A's investment in terms of costs remains real whether or not he actually incurs these costs. It is hypothesized that when P_c = .5, A will be willing to assume greater costs than in any other probable cost situation.

The limiting case of profit as a function of reward x cost occurs when the cost of one's acts becomes prohibitive. This would occur when A is certain that he would have to assume the costs of his actions when giving aid to B. When the cost of an act becomes too great, the value of that act is decreased. The more valued alternative in this instance is to avoid the harmful stimuli. Behavior conforming to the social responsibility norm decreases in value. Figure 2 presents the above predictions.

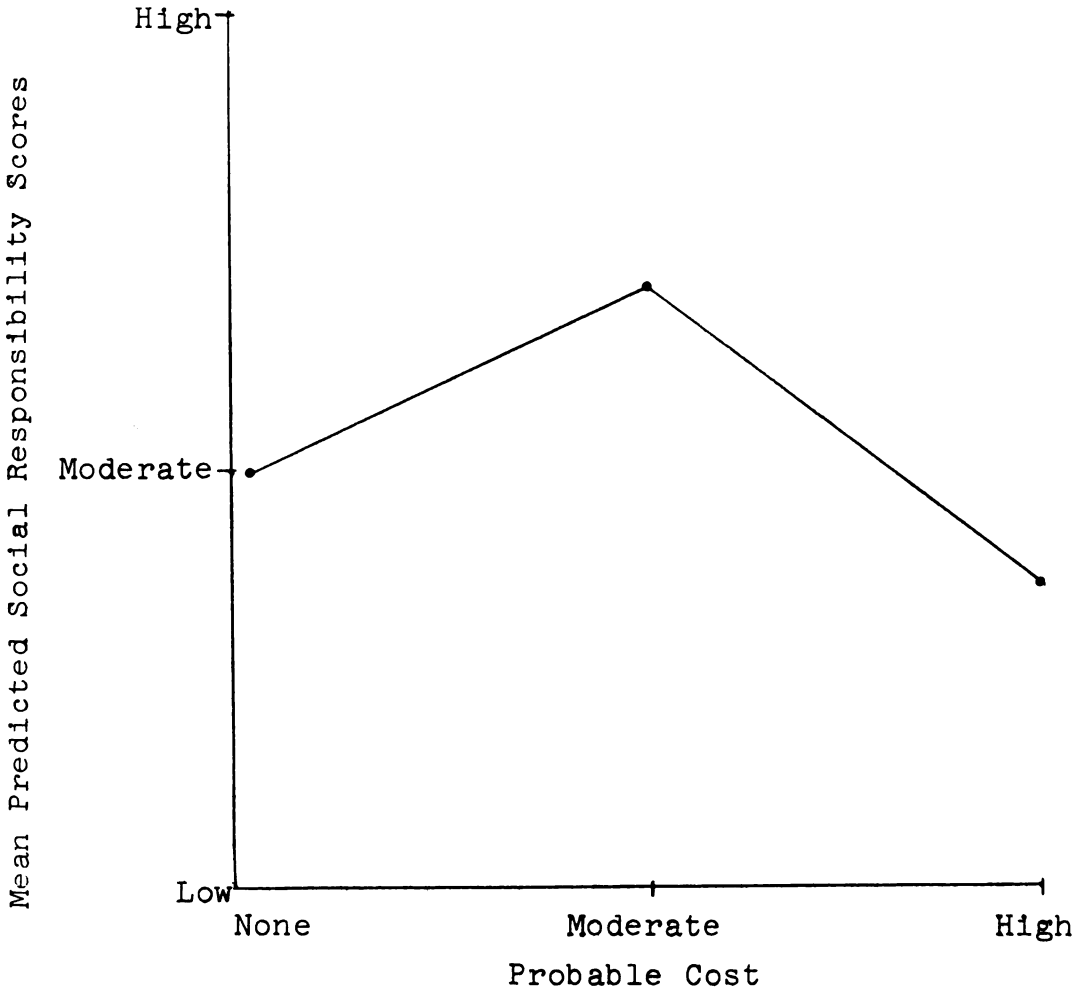

Figure 2.2.--Predicted amount of socially responsible behavior for subjects in a high external reward (high publicity) situation as a function of probable cost.

Following the findings of Berkowitz and Daniels (1964), we expect that individuals who do give aid to the dependent person (B) will have a higher degree of liking for B than persons who give a lesser amount of aid. This is not to say that I must first decide if I like a drowning person before I jump in to save him. Though it is to be expected that the degree of liking we have for an individual does effect the amount of cost we are willing to incur for him. It may be that the act of helping a dependent person, at some risk to ourselves, puts us in a good mood. Our rewards are both intrinsic and extrinsic. We have invested costs in the dependent person and this may account for the relatively high degree of liking that Berkowitz and Daniels (1964) found.

Personality Correlates of Social Responsibility

Social responsibility may be seen as an orientation held by certain individuals. This orientation may be seen simply as a conception in the minds of individuals of the degree to which they should be helpful to others. As a personality variable, social responsibility may range from a weak to a strong orientation. The stronger the orientation, the greater should be A's willingness to incur costs for B. If social responsibility, as an orientation, plays any part in determining A's behavior, then the more dependent B is, the more willing A will be to help.

There have been few attempts at delineating the personality correlates of socially responsible behavior. Goranson and Berkowitz (1966) have suggested that individuals are socially responsible in order to gain self-approval. Harris (1957) has attempted to measure the social responsibility tendencies of individuals by developing a self-report scale. Berkowitz and Daniels (1964) modified the Harris self-report scale (it was originally devised for children) and found that the scores on this scale correlated significantly with dependent variables designed to measure social responsibility. Berkowitz and Daniels (1964) suggest that high scores on the Harris scale reflect more than just a willingness to reciprocate for past favors. They state that individuals who scored high on the Harris scale have strong moral standards and have sufficient ego strength to conform to those standards.

Stone (1965) has contended that the items used in the Berkowitz and Daniels (1964) modification of the Harris scale do not appear to be subtle at all and if a person (who was answering the items) wished to present a favorable picture of himself, he could do so without much difficulty. Stone argues that the Harris scale was, to a significant extent, confounded by a social desirability bias.

Berkowitz (1965), in a rejoinder to Stone, argues that it is these very individuals who tend to do the socially desirable thing who are in fact the socially responsible people in our society.

It may very well be that social desirability and social responsibility are highly correlated in the studies carried out by Berkowitz and his colleagues. The tasks Berkowitz typically requires of his subjects are rather innocuous and demand only a small amount of extra time and effort on their part. A's cost for helping B are minimal.

In the present study, in which socially responsible behavior is seen as imposing an unfavorable reward-cost outcome upon A, social desirability is not at all synonymous with social responsibility. In terms of Homan's exchange theory, an individual is expected to maximize his profits. Homans (1961) law of distributive justice implies that to increase one's profits is the socially desirable course to follow.

In a situation in which A is asked to incur costs in terms of exposing himself to noxious stimuli for a dependent B, with whom A has had no previous contact, the socially desirable action, we expect, is for A to minimize his costs. This is particularly true of a situation in which only a single exchange is involved and is transient in nature.

Assuming the absence of pathology, we predict that the typically self-critical individual, the person who, in Rotter's (1954) terms has a "generalized expectancy" for punishment deriving from the violation of or failure to attain an internal standard, will be most likely to respond in a socially responsible manner. Individuals who usually have strong feelings of self-criticism and self-blame may be expected to incur greater costs in helping a dependent person in order to attain these (violated) internal standards. The greater the costs these individuals incur the more they will meliorate their own self-criticism. Since we have defined socially responsible behavior in terms of A accepting a highly unfavorable reward-cost outcome to help B, then we expect those individuals who are characterized by strong feelings of self-doubt, and self-criticism, to be more socially responsible than individuals not characterized by such feelings.

The Repression-Sensitization Dimension

The repression-sensitization dimension, the terms having been applied by Gordon (1957) to a categorization employed by Lazarus, Eriksen, and Fonda (1951) in their work on perceptual defense, is one which categoriezes individuals along a continuum with respect to their characteristic mode of response to threatening stimuli. Eriksen (1951) noted that the concept of perceptual defense implies

the use of the ego or self, which is responsible for the selection and screening of stimuli. Lazarus, Eriksen, and Fonda (1951) found that sensitizers had lower thresholders for the perception of threatening materials than did repressors. Byrne (1963), who designed the scale which measures repression-sensitization, points out that the repressive pole of the scale involved the use of avoidance defenses, while the sensitizing end refers to approach defenses.

We have hypothesized that the typically self-critical individual will be prone to incur costs for a dependent person. We have also suggested that the greater A's orientation towards socially responsible behavior, the greater is the eliciting power represented by B's dependence. The repression-sensitization scale seems to be particularly effective in distinguishing individuals with respect to anxiety and defensiveness.

Tempone (1962) was able to predict, from scores on the Byrne repression-sensitization scale, differential thresholds for the perception of failure and success words following a failure experience. Sensitizers perceived significantly more failure words than did repressors. These findings corroborate the work of Gordon (1975) who found that repressors and sensitizers were characterized by differential recall of threat and non-threat materials.

Gordon (1959) reports that sensitizers, whose recall for threat-related material is sharpened, rather than depressed, reflect little defensiveness and a high degree of anxiety.

We have suggested that the self-critical individual who has failed to attain internal standards will be the more socially responsible person. Evidence points to the fact that sensitizers fit this description. Altrocchi, Parsons, and Dickoff (1960) found that sensitizers manifest larger self, ideal-self discrepancies than do repressors.

We have further assumed that in the present study in which socially responsible behavior is defined in terms of A incurring great costs to aid dependent B, social desirability and social responsibility will not be related. It has been noted that responses by repressors are typically socially desirable in nature, while the sensitizers pole of the scale is not so characterized (Byrne, 1963; Jackson and Messick, 1962). Based on the experimental evidence and our theoretical formulations, we expect that sensitizers will exhibit more socially responsible behavior than repressors.

More specifically, it is hypothesized that sensitizers will have higher social responsibility scores than repressors in a situation in which external rewards (high publicity) are present. Since reassurance of self-worth can

only be attained by a social comparison with other people, it is expected that sensitizers will be more socially responsible under conditions of high publicity. The necessary defense against feelings of self doubt is to obtain reassurance from others about one's reality and importance (Watson, 1963).

A subsidiary hypothesis pertains to Gordon's (1957) finding that repressors emphasize similarities between themselves and others, while sensitizers emphasize the real or imagined differences between themselves and others. It is hypothesized that repressors, when asked to predict the social responsibility scores of others under similar conditions, will assume that others act much the same as they do. Conversely, it is predicted that sensitizers will see others as giving higher social responsibility scores than they themselves give.

Berkowitz and Daniels (1964) have suggested that as the social responsibility norm is made more salient, more norm-conforming behavior is observed. Following Berkowitz and Daniels (1964) it is predicted that social responsibility scores will increase as the number of requests for aid from the dependent person increases.

Restatement of Hypotheses

I. Under conditions of no publicity, social responsibility scores will decrease in a linear fashion as costs increase.

II. Under conditions of high publicity, a curvilinear relationship between social responsibility scores and costs as presented by Figure 2 is predicted.

III. Sensitizers will have higher social responsibility scores under condition of high publicity than will repressors.

   A. Repressors predicted scores for others in a similar circumstances will closely correlate with their own social responsibility scores. Conversely, sensitizers will predict higher social responsibility scores for others as compared to their own scores.

IV. Subjects with higher social responsibility scores will exhibit a higher degree of liking for the dependent person that subjects with lower social responsibility scores.

V. Social responsibility scores will increase as a function of the number of requests for aid from the dependent person.

CHAPTER II

METHOD

Subjects

The subjects were 216 undergraduate male volunteers from the introductory psychology course at Michigan State University. The subjects were participating for experimental points to be added to their grades. Prior to entering the laboratory, subjects were questioned to insure that they were not previously acquainted. Subjects were assigned to the six experimental conditions in a 1 2 3 4 5 6 order.

Apparatus

Facing each subject was a black box with a (control) panel of eleven single-pull, single-throw toggle switches. Above each switch was a numerical designation ranging from zero to ten. Above these numbers were verbal descriptions which were as follows: 0-2 mild; 3-5 moderate; 6-8 moderately severe; 9-10 severe. Panels were arranged so that subjects were not able to see the responses of any of the other subjects.

Each of the four boxes was connected, by prominently displayed wiring, to the experimenter's control panel. On

this panel were four sets of eleven lights corresponding to the eleven toggle switches on the subject's control panel. Each toggle switch activated one of these lights.

Experimental Conditions

Subjects were run in groups ranging from two to four. Subjects in all groups were given the following instructions:

Instructions

First, I'd like to thank you for coming. Your participation in the experiment is much appreciated.

There are two parts to this experiment. In the first part of the experiment, which will take place in this room, we would like you to help us select a research assistant for a long-term, follow-up project. The primary concern that this assistant will have is to convince people to submit themselves to electric shock. This, as you might well imagine, is a difficult task.

The procedure that we are using is to have each candidate write five fairly brief messages, each one conveying a different argument pertaining to the use of electric shock on human subjects. The candidate, in order to better understand the requirements of his job, will usually be present, and will actually go through the same experiment that you will. Naturally, in order not to prejudice anyone's chances, I will not point that individual out.

After you read each of this candidate's messages, which have been placed on your table, please press one of the switches in front of you indicating the level of shock which you would be willing to submit to. Please leave the switch on until you finish reading the next argument. After you have finished reading the next argument, reset the switch, and make another response. You may make the same resonse more than once.

As you can see each switch denotes a specific level of shock. We have described the type of shock it is in verbal terms (i.e. mild, moderate, etc.) in order to aid you in making your responses. The research candidate's job is to persuade you to submit to as high a level of shock as possible. To be fair, I must tell you that his chances of getting this job depend on your performance. I have not restricted the type of arguments that the candidate may use in any way.

There is, however, a second part to this experiment, which will take place in a specially designed room in another part of the building. Essentially, it is concerned with performance under stress. You will be given more details after this part of the experiment.

Independent Variable Manipulation

A. Probability of Shock

1. High probability.

Subject in this group were then informed that "What you will be doing, in essence, is setting your own level of shock for the second part of the experiment. This second part will be concerned with learning under stress and the five levels of shock that you indicate you are willing to take correspond to the five learning trials you will be required to go through later on. You will all be requested to participate in the second part of this experiment.

2. Moderate probability.

Subjects in this group were given the same instructions as the high probability group with the additional information that ". . . due to limitations in time and space, only one-half of this group will be asked to go through the second part of the experiment. These subjects will be randomly selected after we finish the present task."

Subjects in this group were run in sets of two or four in order to keep the probability of shock constant at $P_s = .5$.

3. No probability.

Subjects in this group were given the same basic instructions with the additional information that ". . . due to limitations in time and space we are not going to require anyone to go through the second part of the experiment today. However, we would like you to try to respond as if you would be asked to participate in the second part of the experiment."

B. Publicity

1. High Publicity.

Subjects in this condition were told that: "In addition, you will have a chance to air your feelings, and report your reactions to your 151 lecture class. We have been asked to set up a discussion session pertaining to this experiment. You will be asked to participate, so please write your name, class section, and student number on the sheet of paper requesting this information. I must point out that your responses here will be an important part of that discussion session."

2. No publicity.

Subjects in this condition were told that anonymity was an important factor in this experiment. To protect this anonymity, subjects were given a number. They were informed that their individual responses would not be shown to anyone.

Procedure

After experimenter was certain that the instructions were understood, the subjects were given five written messages composed by "candidate #3."

The text of each message was composed in a manner which endeavored to keep the stimulus person as neutral as possible in order not have the subjects responses influenced by attraction or dislike for the candidate. Each message contained a sentence which explicity pointed out that the "candidate" needed the subject's aid. Messages were rated for "persuasibility" prior to the experiment by ten judges on a one to ten scale. Persuasibility scores had a very narrow range of four to six. Messages were presented in a random order.

Subjects were told to read each message and to indicate, by pressing one of the eleven switches, the amount of electric shock they would be willing to submit to in the second part of the experiment.

Dependent Measure

Social responsibility scores were computed by taking the average of each subject's five responses. Thus, if after each message the subject pressed levers 5, 6, 7, 8, 9, his social responsibility score would be 7. The higher the score, the more socially responsible the subject was deemed to be.

Questionnaires

After termination of the experimental manipulations, subjects were given a post-experimental questionnaire designed to elicit their reactions to the experiment, their reasons for selecting their particular levels of shock, and their impressions of the stimulus person. Subjects were also presented with a question designed to check on the effectiveness of the experimental manipulations. They were asked to indicate, on a ten point scale, the degree of confidence they had that their performance was related to the candidate's chances of getting the job.

The Byrne (1963) repression-sensitization scale was then given to the subjects. This instrument is a modification of several scales of the MMPI. As developed by Byrne (1961), the scale has a split-half reliability of .88 and a test-retest reliability, after six weeks, also at .88. High scores on the scale indicate sensitization, low scores indicate repression.

Subjects scoring 0 to 33 on the Byrne scale were designated as repressors. Scores from 34 to 49 were categorized as the middle, or non-defensive, group. Sensitizers scored from 50 to 90.

Subjects then were told the purpose of the experiment. The need for deception was explained. They were asked for their reactions and suggestions. The personality test was explained by telling the subjects that we were only trying to categorize people on a scale and we were not looking for pathology.

CHAPTER III

RESULTS

Effectiveness of Experimental Manipulations

The postexperimental questionnaire included one item designed to determine the effectiveness of the experimental manipulations. Subjects were asked to indicate on a ten point scale the degree to which they believed that their performance (i.e. the level of shock they selected) was related to the candidate's actual chances of obtaining the research position. The means for this degree of confidence item for all conditions are presented in Table 3.1. Table 3.2 summarizes the analysis of variance of the responses to this questionnaire item.

The data presented Table 3.1 indicates that subjects in the high and moderate probability of shock groups felt that their performance was strongly related to the candidate's chances of getting the research job. The significant probability of shock main effect, presented in Table 3.2, reveals that as the probability of shock decreased (i.e. no probability), the relationship between subjects performance and the candidate's job possibilities became ambiguous. This is a reasonable finding because subjects in the no probability of shock conditions were not asked to

TABLE 3.1.--Means and standard deviations of all experimental conditions for the question, "To what degree do you believe that the level of shock you are willing to take in this experiment is related to the candidate's chances of obtaining the research position?"

Personality Category		High Publicity			No Publicity		
		High Probability	Moderate Probability	No Probability	High Probability	Moderate Probability	No Probability
Repressors	$\bar{x}$	7.2	7.3	5.5	7.3	7.2	5.1
	σ	1.36	1.33	1.04	1.18	1.35	2.01
Non-defensive	$\bar{x}$	6.8	7.0	5.9	7.0	7.1	5.8
	σ	1.41	1.45	1.05	1.29	1.20	1.08
Sensitizers	$\bar{x}$	8.0	7.5	6.5	7.6	7.5	5.1
	σ	1.35	1.55	1.50	1.60	1.58	1.03

Note: The higher the score, the greater the degree of confidence.

N = 12 in each cell.

TABLE 3.2.--Summary table for the analysis of variance of scores on the degree of confidence question.

Source	d.f.	M.S.	F
A (Repressor-Sensitizer)	2	4.5	2.27
B (Probability of Shock)	2	44.5	22.47*
C (Publicity)	1	3.0	1.51
A x B	4	1.5	--
A x C	2	3.0	1.51
B x C	2	2.5	1.26
A x B x C	4	<1.00	---
Error	198	1.98	

*$p < .05$.

submit to the shock levels they choose. This finding lends credence to our hypothesis concerning the effect of evaluation apprehension under conditions of no probability of shock. There were, however, no significant differences between personality categories on this item.

The subjects' degree of confidence in the dependence of the candidate's job on their performance, is not directly related to whether they actually believed that they would eventually be asked to submit to shock. An item directly related to this problem was not included for fear of arousing the subject's suspicion. It may be stated with some degree of confidence that the threat of shock was credible. Table 3.3 reflects the fact that when there was any probability of shock present, subjects selected levels in the mild, and moderate ranges. It is not until the no publicity, no probability of shock condition that subjects are willing to venture forth into the moderately severe range. The post-experimental session gave further evidence that subjects felt the threat of shock to be real. Subjects related that while they felt the threat of shock to be real, they doubted that it would involve severe pain for it was being conducted under the aegis of the University. Subjects were most anxious to ascertain their "standing" in the experiment but were told that the information was not at the experimenter's disposal at the moment and all

TABLE 3.3.--Mean social responsibility scores and standard deviations for the eighteen experimental conditions.

Personality Category		High Publicity			No Publicity		
		High Probability	Moderate Probability	No Probability	High Probability	Moderate Probability	No Probability
Repressors	$\bar{x}$	3.70	4.55	4.03	3.03	4.25	4.81
	σ	2.19^{ab}	1.22^{bc}	1.55^{ab}	1.42^{ab}	1.21^{bc}	1.91^{cd}
Non-defensive	$\bar{x}$	3.37	4.55	4.45	3.22	3.72	6.75
	σ	1.78^{ab}	1.12^{bc}	0.93^{bc}	1.33^{ab}	1.47^{ab}	1.72^{c}
Sensitizers	$\bar{x}$	5.25	5.30	5.41	2.75	4.21	5.90
	σ	1.27^{cd}	0.68^{cd}	1.49^{cd}	1.73^{a}	1.86^{abc}	1.81^{cd}

Note: Means with common subscripts are not significantly different (at .05 level) by Duncan Multiple range test.

The higher the score, the higher the level of shock the subject was willing to take.

N = 12 in each cell.

that could be said is that they were at least "average." Most subjects reported that they felt anxious about the experiment, however, they pointed out that this anxiety was mitigated by the realization that they could control directly the amount of shock they would subsequently receive.

Performance on the Experimental Task

A 3 x 3 x 2 analysis of variance was performed on the social responsibility scores. The mean social responsibility scores for each condition is presented by Table 3.3, while the analysis of variance of these scores is summarized by Table 3.4.

The only significant main effect was probability of shock ($p. < 001$). As the probability of shock increased, subjects lowered the levels of shock that they were willing to take on behalf of the candidate. The significant probability of shock x publicity (B x C) interaction ($p. < .05$), presented in Figure 3.1, clarifies the exact nature of this relationship. Under conditions of no publicity, it can be seen that social responsibility scores decrease as a direct function of an increase in probability of shock. Thus, hypothesis I is supported.

The relationship between social responsibility scores and probability of shock is not as clear in the high publicity condition. A Duncan multiple range test was

TABLE 3.4.--Summary table for the 3 x 3 x 2 analysis of variance of the social responsibility scores.

Source	d.f.	M.S.	F
A (Repressor-Sensitizer)	2	6.35	2.69
B (Probability of Shock)	2	60.85	25.78**
C (Publicity)	1	0.60	--
A x B	4	1.82	0.77
A x C	2	11.70	4.95*
B x C	2	37.60	15.95**
A x B x C	4	1.42	0.60
Error	198	2.36	--

*$p < .05$

**$p < .001$

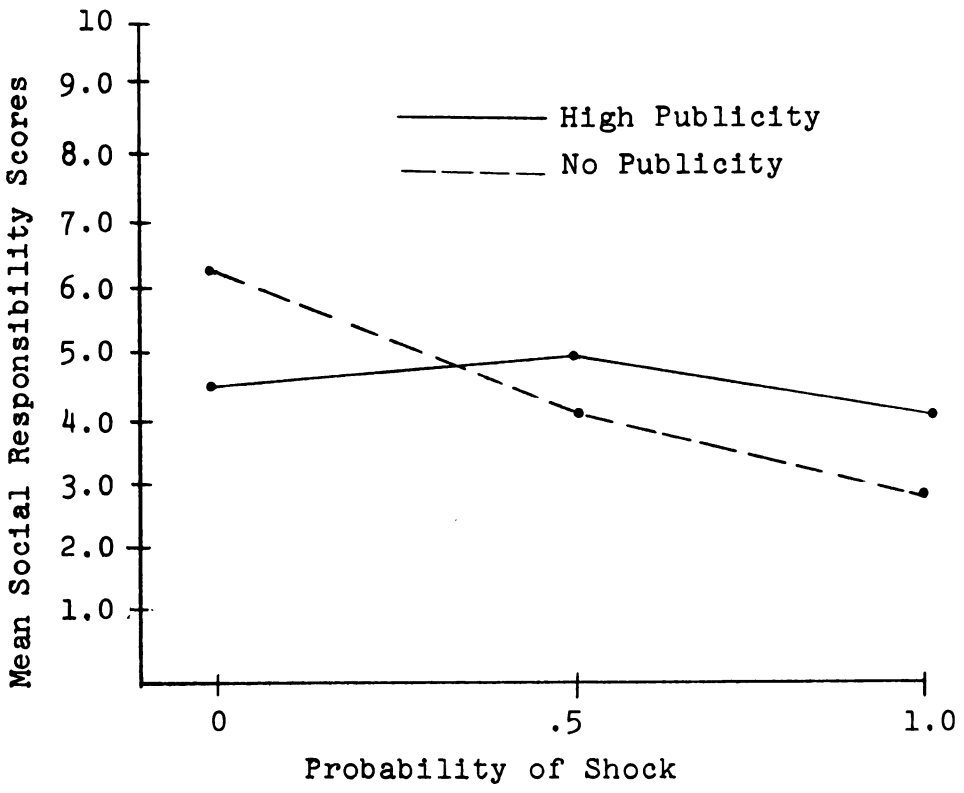

Figure 3.1.--Mean social responsibility scores for subjects in no publicity and high publicity conditions (B x C).

performed on the means for each experimental condition and the results of this analysis is presented by Table 3.3. There were no significant differences between probability of shock conditions under high publicity.

The Duncan multiple range test reveals that under conditions of high publicity and high probability of shock, sensitizers were willing to submit to a significantly higher ($p. < .05$) level of shock than either repressors or the non-defensive group. Table 3.3 also reveals that sensitizers were willing to submit to a higher level of shock ($p. < .05$) than repressors in the high publicity, no probability of shock condition. Repressors and sensitizers did not differ significantly from the non-defensive group.

The moderating effects of personality on social responsibility scores under conditions of high publicity is presented in Figure 3.2. Figures 3.3, 3.4, and 3.5 present a closer look at the social responsibility scores of each personality category under high publicity and no publicity conditions. Particularly striking are the large differences between scores in the high publicity, no probability of shock and no publicity, no probability of shock conditions for repressors and the non-defensive group. For the same two conditions, sensitizers show only a negligible difference in social responsibility scores.

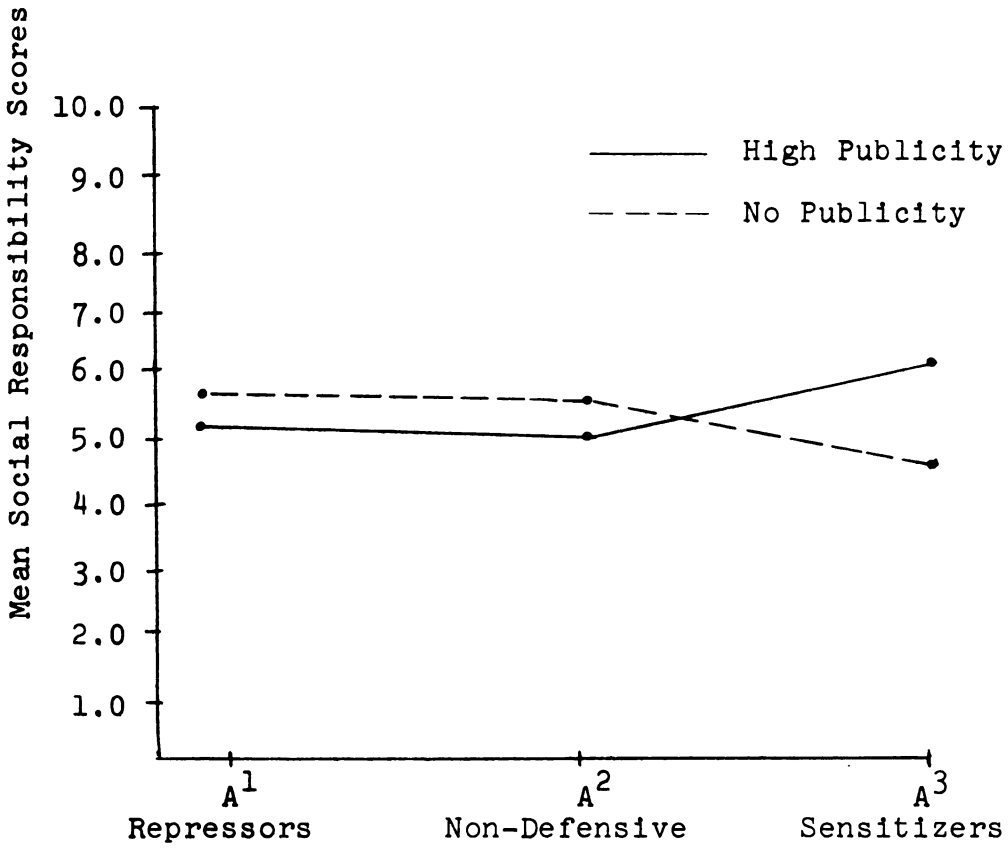

Figure 3.2.--Mean social responsibility scores for the three personality categories under conditions of no publicity and high publicity.

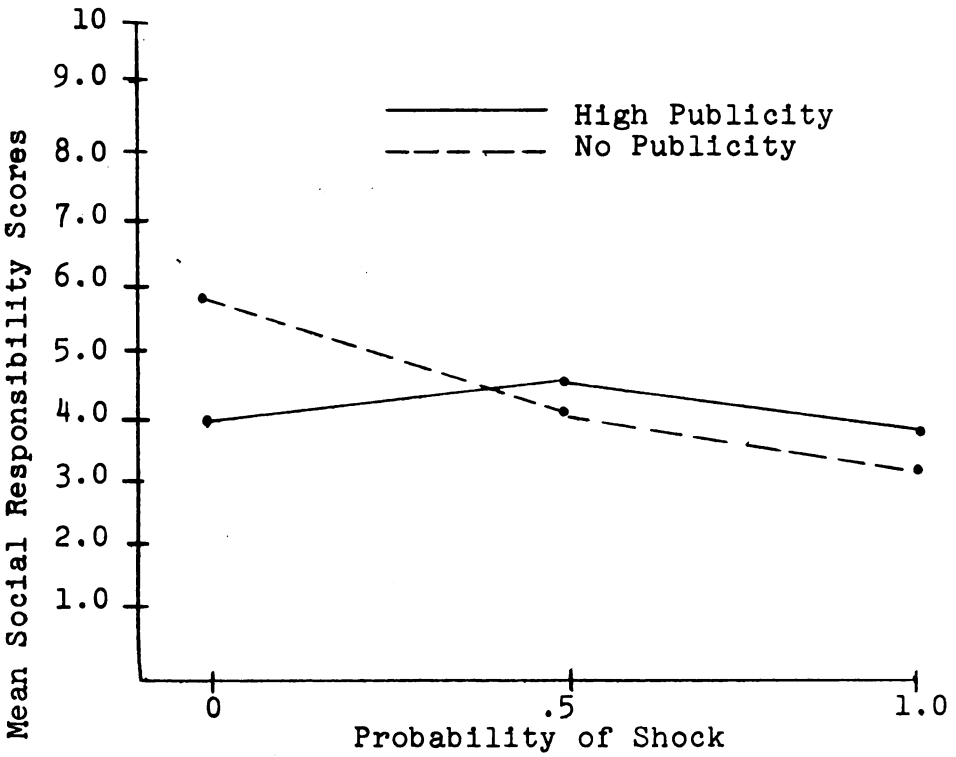

Figure 3.3.--Mean social responsibility scores of repressors under conditions of high and no publicity.

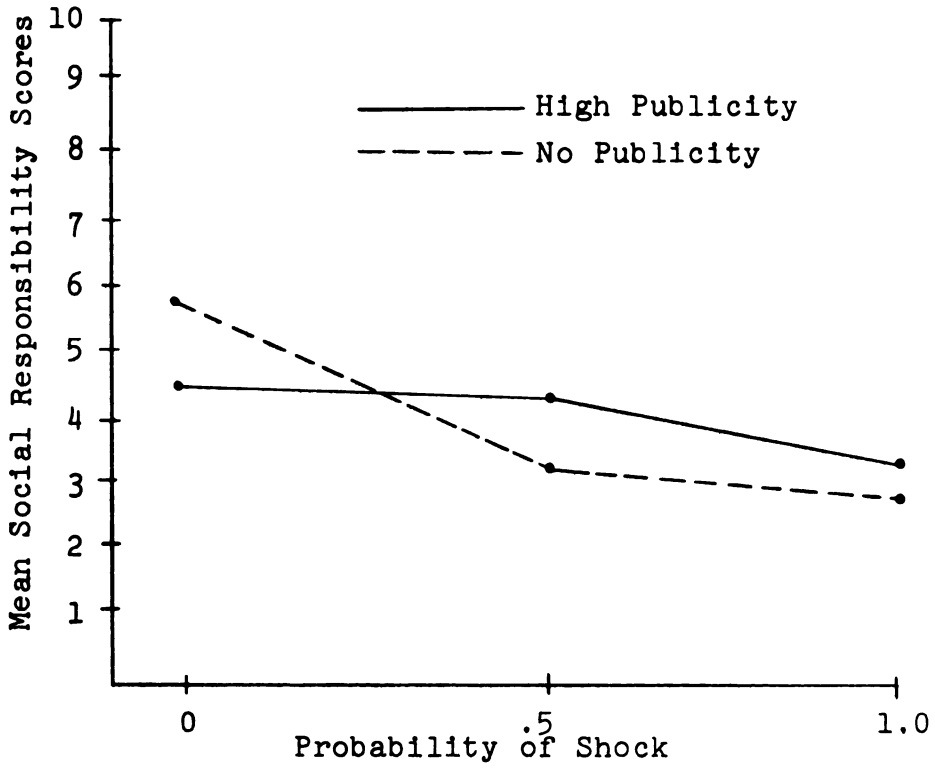

Figure 3.4.--Mean social responsibility scores of non-defensive group under conditions of high and no publicity.

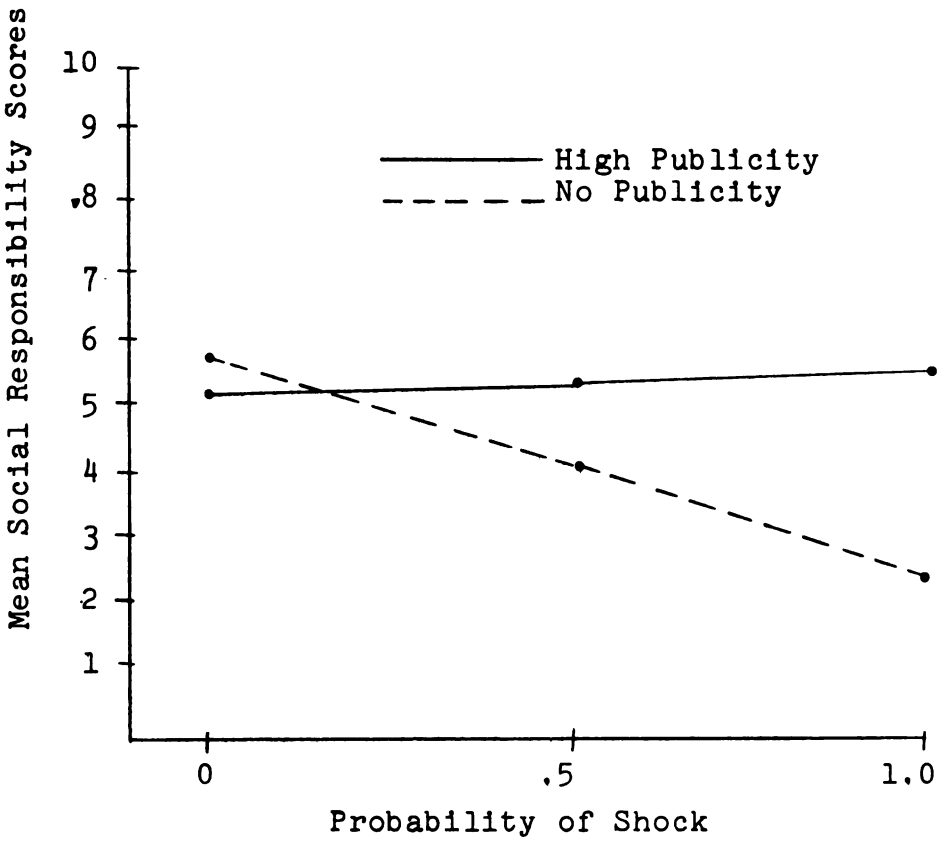

Figure 3.5.--Mean social responsibility scores of sensitizers under conditions of high and no publicity.

Questionnaire Data

The postexperimental questionnaire, in addition to the item designed to check the effectiveness of the experimental manipulation, endeavored to elicit the subjects reasons for their shock level selections, and to reveal the impressions subjects had formed of the job candidate, the stimulus person.

The most obvious fact reflected by by the questionnaire data as presented in Table 3.5, is that significantly more subjects viewed the stimulus person in a negative manner than a positive one. In both the high publicity and no publicity conditions, forty-four subjects reported a positive impression of the stimulus person, while sixty-four subjects reported a negative impression. These results differ significantly from chance ($X^2 < .001$). A point biserial correlation was performed between impressions of the stimulus person and social responsibility scores. This correlation yielded an $r_{pbi} = .52$. A t test revealed this correlation to be significant ($P. < .001$). This is in accord with hypothesis IV.

Table 3.5 shows that sensitizers formed significantly more positive impression ($X^2 < .001$) of the dependent person under conditions of highpublicity than no publicity. The dependent person elicited significantly more favorable impressions ($X^2 < .01$) from the non-defensive group under

conditions of no publicity than high publicity as seen in Table 3.5. These subjects did give higher social responsibility scores in the no publicity condition, but this was primarily in the no probability of shock group.

Table 3.5 shows that repressors formed, predominately a negative impression of the dependent person in both high and no publicity conditions.

Table 3.6 presents the distribution among groups of one of the least often reported reasons for choosing a particular level of shock. This reason was termed hedonistic because these subjects reported they had chosen their particular shock level in order to minimize the effects of that shock. What is interesting about this finding is that while only 33 subjects reported fear of shock as the determining factor, eleven of these were in the high publicity, no probability of shock condition. This, we interpret, as lending credence to our suggestion that evaluation apprehension would be an important determinant of behavior in the latter condition. While these subjects were aware that shock would not be forthcoming, they still reported that their actions were based on fear of that shock. It is argued that subjects were trying to give a response that would satisfy the hypotheses that their honesty was being evaluated.

A fuller presentation of the questionnaire data will be found in the Appendix.

TABLE 3.5.--Impressions of the stimulus person under conditions of high publicity and no publicity.

Personality Category	High Probability		No Probability	
	Positive Impression	Negative Impression	Positive Impression	Negative Impression
Repressors	14	22	14	22
Middle	6	30	19	17
Sensitizers	24	12	11	25
Total	44	64	44	64

TABLE 3.6--Number of subjects in each experimental conditions who gave a hedonistic reason for the level of shock they selected.

Personality Category	High Publicity			Low Publicity		
	High Probability	Moderate Probability	No Probability	High Probability	Moderate Probability	No Probability
Repressors	0	2	6	3	2	1
Middle	0	0	4	3	2	1
Sensitizers	0[a]	1	1	2	3	2

[a]Total number of subjects in each cell was 12.

Table 3.7 presents the relationship between the subject's predicted score for "the average individual in a similar situation" and his own social responsibility score. While the trend is in the hypothesized direction, a chi square test proved these differences not to be significant ($X^2 = 2.53$). A further analysis, by experimental conditions did not reveal any significant results. Hypothesis IIIa is not supported.

Figure 3.6 presents mean social responsibility scores as a function of the number messages read. While there is an increase in mean social responsibility scores from message one to message two, there is no discernible pattern subsequent to message two. Hypothesis V is not supported.

TABLE 3.7.--The relationship between subjects predicted score for "the average individual in a similar situation" and their actual social responsibility scores for N of 216.

Personality Category	Higher Scores	Same Scores	Lower Scores
Repressors	31	31	10
Middle	35	26	11
Sensitizers	38	22	12

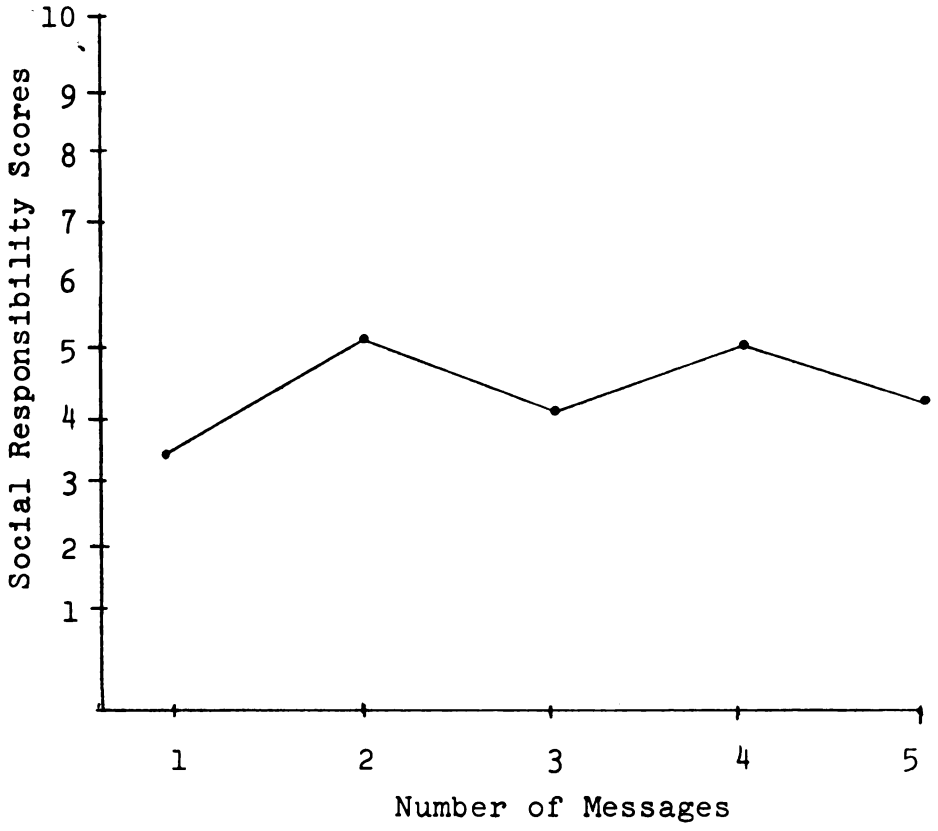

Figure 3.6.--Mean social responsibility scores as a function of the number of messages received from the stimulus person.

CHAPTER IV

DISCUSSION

The present data indicates that social responsibility scores decrease as a direct function of an increase in costs under conditions of no publicity. This supports Hypothesis I. The utilitarian model of social interaction as stated by Homans (1961) proved to be the most effective predictor of socially responsible behavior when external rewards, in the form of publicity, were absent.

The nonlinear relationship predicted between social responsibility scores and costs under conditions of high publicity as stated in Hypothesis II was not established. Under conditions of high publicity, there were no differences between probability of shock groups.

It can be argued that subjects in the high publicity condition were role-playing. There is no reason to believe that they expected shock to any less extent than subjects in the no publicity condition. It would appear, however, that the publicity variable was not entirely credible. Evaluation apprehension as to what course to follow in light of subsequent public exposure, may have been the determining factor in this condition. Except for the

sensitizer group, publicity seems to have had an inhibiting effect upon the social responsibility scores of all subjects.

It was expected that evaluation apprehension would be operative in the high publicity, no probability of shock group. There is some evidence that this in fact happened. Despite the fact that shock would not be forthcoming, almost half of the non-defensive and repressor subjects in the latter condition reported that their reasons for selecting a shock level was related to their fear of shock. It appears that these subjects tried their best to give an "honest" response.

It may be suggested that in all the conditions under high publicity, the uniformly low social responsibility scores of repressors and the non-defensive group are in response to their hypothesis that they were being evaluated as to their honesty. Credibility could have been vitiated to the extent that these subjects may have felt exposure to this type of audience, their own psychology class, entailed some kind of deception in the experimental situation.

Hypothesis III was supported. The data shows that sensitizers gave significantly higher social responsibility scores under conditions of high publicity than did repressors. These higher scores, in what may essentially have been a role-playing situation, may be explained by

suggesting that sensitizers were reacting to different kinds of pressures than were the other two groups.

Since there was no criterion or standard against which sensitizers could judge the adequacy of their response, in order to satisfy the need to be favorably compared with their peers, sensitizers were more willing to assume greater costs than other subjects. Repressors and non-defensive subjects, more aware that they know what the socially desirable action is, gave lower scores. It is suggested that sensitizers were reacting to the need to be favorably compared with their peers, while the other groups attempted to be positively evaluated as to their honesty. The subjects' definition of the rewards in the situation were different. Sensitizers may have defined rewards in terms of public approval while repressors and the non-defensive group saw rewards in terms of being socially desirable by being "honest." Whether sensitizers were "role-playing" or not, they were more socially responsible in the sense of their willingness to incur costs to a greater extent for a dependent person.

The explanation of the subjects' social responsibility scores in the high publicity condition in terms of differential responses to social comparison pressures seems to fit both the theory and the data. However, this explanation would be more tenable had there been a statistical difference

between the personality subgroups in regard to their predicted scores for "the average person in a similar situation." Sensitizers did not, however, predict that the average person would be willing to assume greater costs than themselves. One possible explanation for the lack of statistical support for this hypothesis (IIIa) is the presence of a ceiling on predicted scores. Since sensitizers did respond with comparatively higher social responsibility scores, under high publicity, the range thay had to predict from was fairly narrow. Since any predicted score which differed by less than one from the subject's actual social responsibility score was deemed to be the "same," sensitizers, for all practical purposes, had a "higher" range of approximately 6.5 to 8.0. Very few individuals predicted that the "average person" would be willing to select shock levels in the 9 to 10 range, the very severe shock.

Hypothesis IV concerning degree of liking for a dependent person as a function of costs incurred for helping him was only partly supported. Sensitizers displayed a significantly higher degree of liking for the dependent individual in the high publicity conditions than they did under low publicity. Repressors did not change their impression at all under high and no publicity, but neither did their social responsibility scores change,

except for the no publicity, no probability of shock condition. In this latter circumstance, the costs they incurred were minimal and since their investments were low, degree of liking for the stimulus person had little effect on their responses. Data for the non-defensive group are also equivocal. Their degree of liking for the dependent person changed significantly from high publicity to no publicity conditions, but their social responsibility scores changed little, except, again, but the no publicity, no probability of shock condition.

The fact that Hypothesis V was not supported presents certain doubts as to the credibility of the experimental situation. The finding that successive requests for aid did not elicit higher social responsibility scores may be taken as evidence that the social responsibility norm was not made salient. There are two mitigating factors, however. The first concerns the possibility that each additional message increased B's dependence upon A. If this is true, then male subjects would tend not to incur great costs for the dependent person (Schopler and Bateson, 1965). Secondly, each message had different informational content. Subjects may have reacted favorably to one kind of argument and not another.

Further Research

Further research is required to give a clearer delineation of the effect of publicity on socially responsible

behavior. We would suggest that an audience divorced from the academic setting may have a greater effect upon subjects' responses. The type of public used in this experiment may have only served to elicit evaluation apprehension.

Related to this is the use of shock as part of the experimental design. While we wanted to employ noxious stimuli, electric shock has been used so frequently, particularly in deception-types of experiments so that it may immediately arouse the subject's suspicions.

Perhaps the most important limiting factor in this study is that the dependent person, though his presence was implied, remained unidentified. A hypothetical individual is never going to persuade people to incur great costs on his behalf. An actual stimulus person could be used in this type of experiment. His qualities might be varied along the dimensions of perceived dependence, strength, and attractiveness. Given the fact that the stimulus person was unidentifiable, and he presented primarily a negative impression, it is surprising to find subjects choosing even moderate levels of shock on his behalf.

Finally, the possibility exists that the repression-sensitization scale could be used as a device for categorizing subjects prior to evaluation apprehension. Van de Castle (1960) has shown that repressors tend to reject

the experimenter's suggestions, while sensitizers are prone to accept them. It may be that repressors are more prone to define an experimental situation in light of what they feel will be the socially desirable course to follow. This may be in terms of hypotheses concerning the testing or one's honesty, gullibility, or some other characteristic.

CHAPTER V

SUMMARY

The present study was undertaken to reval the personality correlates of socially responsible behavior and to delineate the conditions under which such behavior would occur.

The experiment was designed as a 3 x 3 x 2 factorial. Three levels of probability of shock, high, moderate, and none constituted one independent variable. The second independent variable, publicity, had two levels, high and none. Subjects were differentiated into three groups by the Byrne (1963) repression-sensitization scale.

Social responsibility was defined as the amount of electric shock the subject was willing to submit to on behalf of a dependent person.

Under conditions of no publicity, the hypothesis, derived from Homan's exchange theory, that social responsibility scores decrease as a direct function of increase in costs (electric shock), was supported.

The findings concerning the effect of high publicity on social responsibility were equivocal. Sensitizers, as predicted, exhibited higher social responsibility scores than repressors or the non-defensive middle group under

high publicity. The social responsibility scores of these latter two groups, however, seemed to have been lowered by high publicity. Furthermore, under high publicity, there were no differences between probability of shock conditions.

It was suggested that under conditions of high publicity, the experimental situation lost some of its credibility. Subjects may have been role-playing under the assumption that they were being evaluated with respect to something other than helping a dependent person.

The differences between the personality subgroups were discussed in terms of differential responsiveness to social comparison pressures. It was suggested that repressors and the non-defensive middle group were concerned with giving the socially desirable response in terms of honesty and, therefore lowered their social responsibility scores. Sensitizers, on the other hand, being more unsure of themselves, raised their social responsibility scores in order to be favorably compared with the peers in a public situation.

Future research was discussed in terms of a clearer specification of the effects of the dependent person on eliciting socially responsible behavior. Variation of the type of public on's act will be exposed to was also suggested. The possibility of employing the repression-sensitization scale for partialling out the effects of evaluation apprehension was presented.

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APPENDICES

APPENDIX A

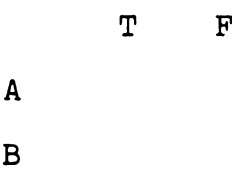
THE REPRESSOR-SENSITIZER SCALE

HEALTH AND OPINION SURVEY

This inventory consists of numbered statements. Read each statement and decide whether it is true as applied to you or false as applied to you.

You are to mark your answer on the answer sheet you have. Look at the example of the answer sheet shown at the right. If a statement is TRUE or MOSTLY TRUE, as applied to you, blacken between the lines in the column headed T. (See A at the right.) If a statement is FALSE or NOT USUALLY TRUE, as applied to you, blacken between the lines in the column headed F. (See B at the right.) If a statement does not apply to you or if it is something that you don't know about, make no mark on the answer sheet.

Section of answer sheet correctly marked.



Remember to give YOUR OWN opinion of yourself. Do not leave any blank spaces if you can avoid it.

In marking your answers on the answer sheet, be sure that the number of the statement agrees with the number on the answer sheet. Make your marks heavy and black. Erase completely any answer you wish to change. Do not make any marks on this booklet.

Remember, try to make some answer to every statement.

One point is given for each item answered in the predicted direction. High scores indicate sensitization.

NOW OPEN THE BOOKLET AND GO AHEAD

1. I have a good appetite.
2. I wake up fresh and rested most mornings.
3. I am easily awakened by noise.
4. I like to read newspaper articles on crime.
5. My hands and feet are usually warm enough.
6. My daily life is full of things that keep me interested.
7. I am about as able to work as I ever was.
8. There seems to be a lump in my throat much of the time.
9. I enjoy detective or mystery stories.
10. Once in a while I think of things too bad to talk about.
11. I am very seldom troubled by constipation.
12. At times I have fits of laughing and crying that I cannot control.
13. I am troubled by attacks of nausea and vomiting.
14. I feel that it is certainly best to keep my mouth shut when I'm in trouble.
15. At times I feel like swearing.
16. I find it hard to keep my mind on a task or job.
17. I seldom worry about my health.
18. At times I feel like smashing things.
19. I have had periods of days, weeks, or months when I couldn't take care of things because I couldn't "get going."
20. My sleep is fitful and disturbed.
21. Much of the time my head seems to hurt all over.
22. I do not always tell the truth.
23. My judgment is better than it ever was.
24. Once a week or oftener I feel suddenly hot all over, without apparent cause.

25. I am in just as good physical health as most of my friends.

26. I prefer to pass by school friends, or people I know but have not seen for a long time, unless they speak to me first.

27. I am almost never bothered by pains over the heart or in my chest.

28. I am a good mixer.

29. Everything is turning out just like the prophets of the Bible said it would.

30. I do not read every editorial in the newspaper every day.

31. I sometimes keep on at a thing until others lose their patience with me.

32. I wish I could be as happy as others seem to be.

33. I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others.

34. I get angry sometimes.

35. Most of the time I feel blue.

36. I sometimes tease animals.

37. I am certainly lacking in self-confidence.

38. I usually feel that life is worthwhile.

39. It takes a loss of argument to convince most people of the truth.

40. Once in a while I put off until tomorrow what I ought to do today.

41. I think most people would lie to get ahead.

42. I do many things I regret afterwards.

43. I go to church almost every week.

44. I have very few quarrels with members of my family.

45. I believe in the second coming of Christ.

46. My hardest battles are with myself.

47. I have little or no trouble with my muscles twitching or jumping.

48. I don't seem to care what happens to me.

49. Sometimes when I am not feeling well I am cross.

50. Much of the time I feel as if I have done something wrong or evil.

51. I am happy most of the time.

52. Some people are so bossy that I feel like doing the opposite of what they request, even though I know they are right.

53. Often I feel as if there were a tight band about my head.

54. My table manners are not quite as good at home as when I am out in company.

55. I seem to be about as capable and smart as most others around me.

56. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.

57. The sight of blood neither frightens me nor makes me sick.

58. Often I can't understand why I have been so cross and grouchy.

59. I have never vomited blood or coughed up blood.

60. I do not worry about catching diseases.

61. At times my thoughts have raced ahead faster than I could speak them.

62. If I could get into a movie without paying and be sure I was not seen I would probably do it.

63. I commonly wonder what hidden reason another person has for doing something nice for me.

64. I believe that my home life is as pleasant as that of most people I know.

65. Criticism or scolding hurts me terribly.

66. My conduct is largely controlled by the customs of those about me.

67. I certainly feel useless at times.

68. At times I feel like picking a fist fight with someone.

69. I have often lost out on things because I couldn't make up my mind soon enough.

70. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.

71. I would rather win than lose in a game.

72. Most nights I go to sleep without thoughts or ideas bothering me.

73. During the past few years I have been well most of the time.

74. I have never had a fit or convulsion.

75. I am enither gaining or losing weight.

76. I cry easily.

77. I cannot understand what I read as well as I used to.

78. I have never felt better in my life than I do now.

79. I resent having anyone take me in so cleverly that I have to admit that it was one on me.

80. I do not tire quickly.

81. I like to study and read about things that I am working at.

82. I like to know some important people because it makes me feel important.

83. What others think of me does not bother me.

84. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of thing.

85. I frequently have to fight against showing that I am bashful.

86. I have never had a fainting spell.

87. I seldom or never have dizzy spells.

88. My memory seems to be all right.

89. I am worried about sex matters.

90. I find it hard to make talk when I meet new people.

91. I am afraid of losing my mind.

92. I am against giving money to beggers.

93. I frequently notice my hand shakes when I try to do something.

94. I can read a long while without tiring my eyes.

95. I feel weak all over much of the time.

96. I have very few headaches.

97. Sometimes, when embarrassed, I break out in a sweat which annoys me greatly.

98. I have had no difficulty in keeping my balance in walking.

99. I do not have spells of hay fever or asthma.

100. I do not like everyone I know.

101. I wish I were not so shy.

102. I enjoy many different kinds of play and recreation.

103. I like to flirt.

104. In walking I am very careful to step over sidewalk cracks.

105. I frequently find myself worrying about something.

106. I gossip a little at times.

107. I hardly ever notice my heart pounding and I am seldom short of breath.

108. I have at times stood in the way of people who were trying to do something, not because it amounted to much but because of the principle of the thing.

109. I get mad easily and then get over it soon.

110. I brood a great deal.

111. I have periods of such great restlessness that I can not sit long in a chair.

112. I dream frequently about things that are best kept to myself.

113. I believe I am no more nervous than most others.

114. I have few or no pains.

115. Sometimes without any reason or even when things are going wrong I feel excitedly happy, "on top of the world."

116. I can be friendly with people who do things which I consider wrong.

117. Sometimes at elections I vote for men about whom I know very little.

118. I have difficulty in starting to do things.

119. I sweat very easily even on cool days.

120. It is safer to trust nobody.

121. Once a week or oftener I become very excited.

122. When in a group of people I have trouble thinking of the right things to talk about.

123. When I leave home I do not worry about whether the door is locked and the windows closed.

124. I do not blame a person for taking advantage of someone who lays himself open to it.

125. At times I am all full of energy.

126. My eyesight is as good as it has been for years.

127. I have often felt that strangers were looking at me critically.

128. I drink an unusually large amount of water every day.

129. Once in a while I laugh at a dirty joke.

130. I am always disgusted with the law when a criminal is freed through the arguments of a smart lawyer.

131. I work under a great deal of tension.

132. I am likely not to speak to people until they speak to me.

133. I have periods in which I feel unusually cheerful without any special reason.

134. Life is a strain for me much of the time.

135. In school I found it very hard to talk before the class.

136. Even when I am with people I feel lonely much of the time.

137. I think nearly anyone would tell a like to keep out of trouble.

138. I am easily embarrassed.

139. I worry over money and business.

140. I almost never dream.

141. I easily become impatient with people.

142. I feel anxiety about something or someone about all the time.

143. Sometimes I become so excited that I find it hard to get to sleep.

144. I forget right away what people say to me.

145. I usually have to stop and think before I act even in trifling matters.

146. Often I cross the street in order not to meet someone I see.

147. I often feel as if things were not real.

148. I have a habit of counting things that are not important such as bulbs on electric signs, and so forth.

149. I have strange and peculiar thoughts.

150. I get anxious and upset when I have to make a short trip away from home.

151. I have been afraid of things or people that I knew could not hurt me.

152. I have no dread of going into a room by myself where other people have already gathered and are talking.

153. I have more trouble concentrating than others seem to have.

154. I have several times given up doing a thing because I thought too little of my ability.

155. Bad words, often terrible words, come into my mind and I cannot get rid of them.

156. Sometimes some unimportant thought will run through my mind and bother me for days.

157. Almost every day something happens to frighten me.

158. I am inclined to take things hard.

159. I am more sensitive than most other people.

160. At periods my mind seems to work more slowly than usual.

161. I very seldom have spells of the blues.

162. I wish I could get over worrying about things I have said that may have injured other people's feelings.

163. People often disappoint me.

164. I feel unable to tell anyone all about myself.

165. My plans have frequently seemed so full of difficulties that I have had to give them up.

166. Often, even though everything is going fine for me, I feel that I don't care about anything.

167. I have sometimes felt that difficulties were piling up so high that I could not overcome them.

168. I often think, "I wish I were a child again."

169. I have often met people who were supposed to be experts who were no better than I.

170. It makes me feel like a failure when I hear of the success of someone I know well.

171. I am apt to take disappointments so keenly that I can't put them out of my mind.

172. At times I think I am no good at all.

173. I worry quite a bit over possible misfortunes.

174. I am apt to pass up something I want to do because others feel that I am not going about it in the right way.

175. I find it hard to set aside a task that I have undertaken, even for a short time.

176. I have several times had a change of heart about my life work.

177. I must admit that I have at times been worried beyond reason over something that really did not matter.

178. I like to let people know where I stand on things.

179. I have a daydream life about which I do not tell other people.

180. I have often felt guilty because I have pretended to feel more sorry about something than I really was.

181. I feel tired a good deal of the time.

182. I sometimes feel that I am about to go to pieces.

APPENDIX B

TABLES SHOWING RELATIONSHIP BETWEEN SUBJECTS' REASON FOR SUBMITTING TO SHOCK, DESCRIPTION OF DEPENDENT PERSON, AND REPRESSOR SENSITIZER DIMENSION

Questionnaire Data: Tables presented below show the relationship between subjects' reasons for submitting to shock, description of the dependent person, and the repressor-sensitizer dimension.

CONDITION: HIGH PUBLICITY, HIGH PROBABILITY OF SHOCK

Personality Category	Dependency (Positive)	Dependency (Negative)	Objectivists	Stoic[a]	Hedonist
Repressors	2	6	2 Negative	2 Positive	
Middle	1	7	1 Positive 3 Negative		
Sensitizers	5	1	3 Positive 2 Negative	1 Negative	

[a]Typical statement classified as stoic would be "I feel I can take it."

CONDITION: NO PUBLICITY, HIGH PROBABILITY OF SHOCK

Personality Category	Dependency (Positive)	Dependency (Negative)	Objectivists	Stoic	Hedonist
Repressors	2	3	4 Positive		3 Negative
Middle	3	4	2 Positive		2 Positive 1 Negative
Sensitizers	1	5	2 Positive	2 Negative	2 Negative

CONDITION: HIGH PUBLICITY, MODERATE PROBABILITY OF SHOCK

Personality Category	Dependency (Positive)	Dependency (Negative	Objectivists	Stoic	Hedonist
Repressors	1	4	3 Negative	2 Positive	2 Negative
Middle		5	1 Positive 5 Negative	1 Negative	
Sensitizers	3	3	2 Positive		1 Positive

CONDITION: NO PUBLICITY, MODERATE PROBABILITY OF SHOCK

Personality Category	Dependency (Positive)	Dependency (Negative)	Objectivists	Stoic	Hedonist
Repressor	2	7	1 Positive		2 Positive
Middle	3	5	2 Positive		2 Negative
Sensitizers		5	2 Positive	2 Positive	1 Negative 2 Positive

CONDITION: HIGH PUBLICITY, NO PROBABILITY OF SHOCK

Personality Category	Dependency (Positive)	Dependency (Negative)	Objectivists	Stoic	Hedonist
Repressors		2	3 Positive	1 Positive	5 Negative 1 Positive
Middle	1	5	2 Positive		4 Negative
Sensitizers	6	1	4 Positive		1 Negative

CONDITION: NO PUBLICITY, NO PROBABILITY OF SHOCK

Personality Category	Dependency (Positive)	Dependency (Negative)	Objectivists	Stoic	Hedonist
Repressors	1	3	1 Positive 4 Negative	1 Positive 1 Positive	1 Negative
Middle	1	2	4 Positive 2 Negative	2 Positive	1 Negative
Sensitizers		5	4 Negative	2 Positive	2 Negative

APPENDIX C

THE CANDIDATE'S MESSAGES

In order to get this job as a research assistant I am going to have a try to convince you to submit yourself to some level of shock in the later part of the experiment. I don't know how the other candidates did it, but I must admit I'd like to have this job very much, so here goes.

The first reason I can give you for submitting yourself to shock is that it is one way you can help to advance our knowledge. It is true that sometime individuals must subject themselves to some form of discomfort in order for psychologists to learn something bout the way people behave.

It is difficult, of course, to want to take any kind of shock. You must know your own ability to take this kind of paid and, of course, you can choose your own level of shock. For my sake, of course, I wish you would submit to the highest level possible.

Many people fear the pain of electric shock. One of the things I have done in my effort to get this research job is to undergo various levels of electric shock to find out just how painful it was. I felt I had to do this because the main part of my job would be to convince other people to do the same thing.

It does seem to me that the pain was hardly as bad as I imagined. It was over very quickly. I have been told by medical experts that electric shock of the type that you will be asked to take is not damaging to the tissues or cells and leaves no after-effects at all. I can vouch for this.

Of course, I must admit that I am biased on this account for it is important to me that you take shock. Nevertheless, I feel that I can be somewhat objective in saying that I can assure you that the pain is not as bad as you might think, particularly if you were as anxious about it as I was when I decided to apply for this job.

I think that we all feel anxious when we are asked to do something that involves some kind of stress or pain. I know I certainly do. In a certain sense you really owe it to yourself to find out, in a scientific way, how you react under stress. I think this is very important. All our lives we have to perform under one kind of stress or another.

In the second part of this experiment, you can get a very clear and precise idea of how you perform when shock is applied. From my own experience in going through this experiment, I know some of you may be tempted to indicate the lowest shock levels you can possibly agree to submit to. But this would not be a true test, would it? Now, I'm not asking you to go to great extremes, but I think you ought to at least give yourself a reasonable chance to be tested. From the experimenter's viewpoint I know this is not the reason or the purpose of the experiment. But since my chances of getting this job depend on your performance, I feel you should get the most out of it.

Another reason why you might submit to electric shock is to learn about certain forms of psychological experiments. Besides money, of course, one of the main reasons I applied for this job is to gain experience in psychological research. Of course, you may not want, as I do, to enter this field in the future. Nevertheless, since everyday, you would gain a great deal by going through with the entire experiment.

One reason why psychologists use shock upon occasion is to test people's reactions, particularly in a learning situation, under stress. I think by going through an experiment such as this you can gain some insight into the effects of stress on behavior. When the experiment is over we will try to explain to you the exact purpose of the experiment. In this way you might be able to gain some very real psychological knowledge. I think this is a very valid reason for submitting yourself to shock.

Trying to conjure up these arguments has honestly not been an easy job for me. Frankly, right now I've just about run out of "logical" arguments which might convince you to submit yourself to electric shock.

Again, I don't know what the other candidates did, but let me try a personal sort of argument. Some of you may ask "why should I take shock for this person?" Well, I've given four reasons up until now. Let me just add that I'd like, and even need, this job. Would I do the same for you if things were truned around? Honestly, I don't know. I like to think I would. But I guess we never know unless we are put in this position.

Well, that's about all I have to say.

APPENDIX D

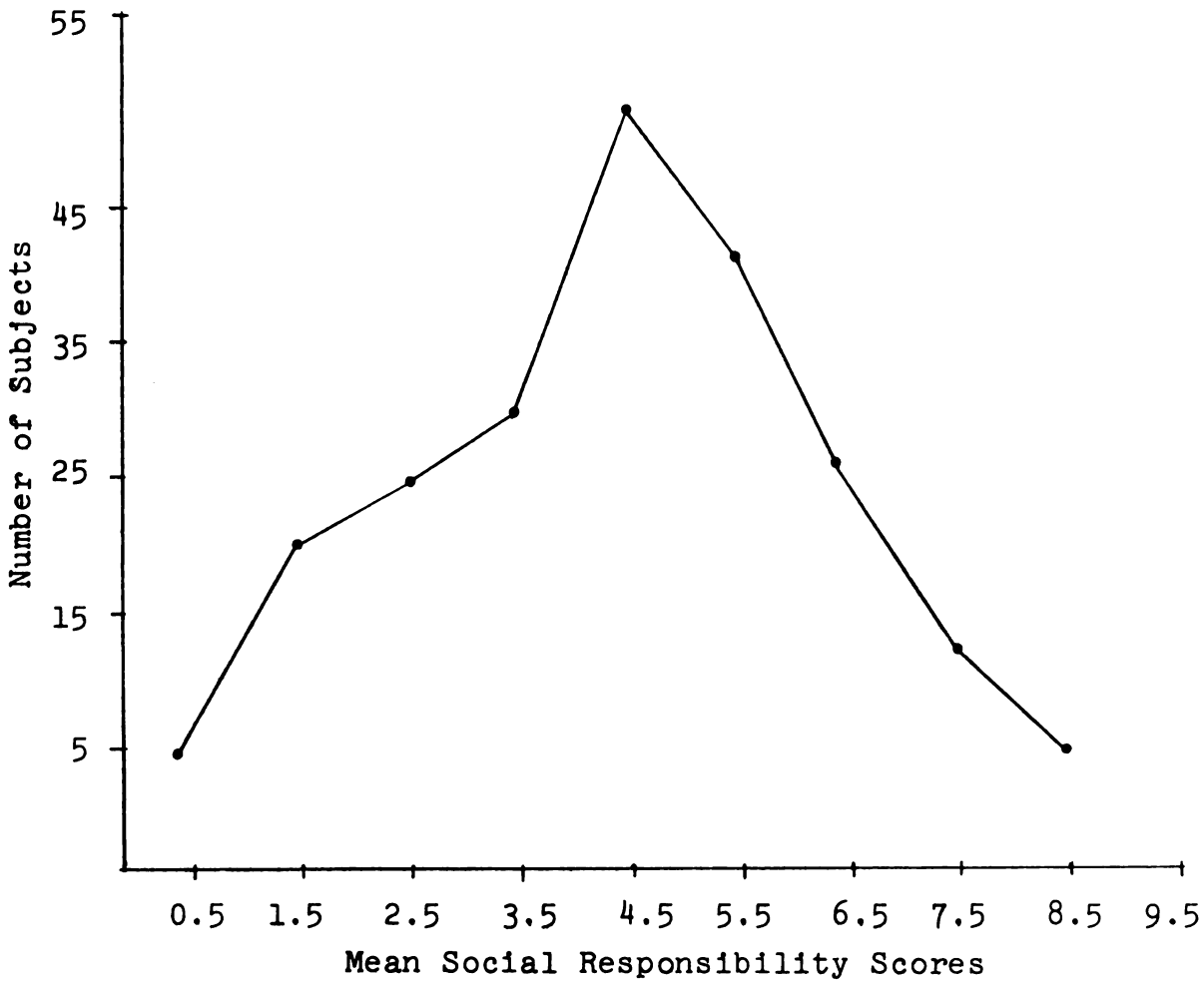


Figure D.--Distribution of the dependent variable, the mean social responsibility scores.