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ON THE DECISION TO BE ASSERTIVE¹

Decky Fiedler²

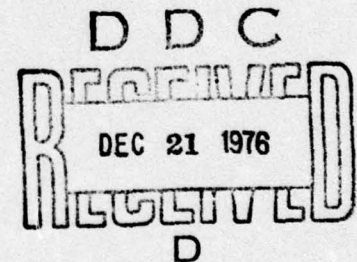
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This study examines the applicability of an Expectancy/Decision model to assertiveness in a non-clinical population. Assertiveness has been researched extensively from the viewpoint of behavior theory which prescribes anxiety reduction and skill acquisition for the training of assertive behaviors. However, little has been done to investigate the reasons why assertive behavior might occur in one situation and not in another. The results of this study suggest that participants, irrespective of their scores		

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20. on standard measures of assertiveness and of anxiety, consider the consequences of being assertive when making a decision about how to behave.

Moreover, it was found that the difference between participants who decided to be assertive and those who did not lies in the formers' assessments of the probabilities that bad consequences will occur and good consequences will not rather than in their evaluations of how bad or how good those consequences would be. These results imply that training programs should take into account the participant's perceptions of the risks involved in being assertive and that the focus should be on changing these perceptions rather than on attempting to change his or her values or focusing solely on specific assertive behaviors.

Because assertiveness training has focused particularly on women and because women are playing an increasingly important role in the armed forces, this line of research is of special pertinence.



On the Decision to be Assertive¹Decky Fiedler² and Lee Roy Beach

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Studies of assertiveness and designs for assertiveness training programs have revolved around two hypotheses about why some persons tend to be less assertive than they might. One hypothesis (Wolpe, 1958, 1969; Wolpe & Lazarus, 1966) is that nonadaptive anxiety inhibits the expression of assertiveness. The second hypothesis (Lazarus, 1971) is that unassertive people do not have the necessary behaviors in their repertoire. We propose a third hypothesis: Prior to acting either assertively or nonassertively, people weigh the consequences that could be expected to result from either behavior and elect the behavior that appears most favorable. That is, the decision to act assertively in any situation varies according to the expected consequences. Differences between persons who tend in general to be assertive and those who tend in general to be less so lie in differences in their expectations about these consequences.

Assertiveness training programs are designed to help people who have problems with interpersonal communication as a result of overly passive or nonaggressive behaviors. Using techniques such as instruction, modeling, rehearsal and feedback, training attempts to reduce the anxiety of interpersonal encounters and to teach specific behaviors such as appropriate eye contact, appropriate voice tone, use of "I" statements, and appropriate body language, etc. These programs have been successfully offered to a variety of clinical populations (Percell, Berwick & Beigel, 1974; Herson, Eisler & Miller, 1973; Gallassi, Gallassi & Litz, 1975).

In 1958, Wolpe proposed that assertive behaviors can become available to the trainee as a result of a reduction in anxiety due to training. This implies that even before training the person is cognizant of how he or she should behave but is unable to do so because of anxiety; the ability to express anger is seen as incompatible with anxiety. Training originally followed a simple model of reciprocal inhibition. However, later (Wolpe & Lazarus, 1966, Wolpe, 1969) it was suggested that both counter-conditioning of anxiety and the operant conditioning of motor acts may occur simultaneously.

In contrast, Lazarus (1971) proposes that unassertive people suffer from a lack of the necessary component skills for assertiveness. This leads to a response acquisition model of training: "Specific techniques are necessary to teach people to express feelings appropriately" (p. 116, Lazarus, 1971). Herson, Eisler, Alford and Pinkston (1973) working with hospitalized male schizophrenics in a clinical and experimental series of studies, found that "for many patients who fail to evidence appropriate interactions in interpersonal settings the relevant verbal and non-verbal responses have never been learned." These authors developed a training program to identify, teach, and measure the specific components of assertive responses.

While there is evidence that, as a result of decreased anxiety and acquired assertiveness skills, there are changes in both assertive behavior and self report of assertiveness (McFall & Lillisand, 1971; Percell, Berwick & Beigel, 1974; Rathus, 1973) there are still theoretical difficulties. One difficulty is that if either approach (or both) is correct, training that lowers anxiety or teaches skills should result in the trainee being rather consistently assertive in all subsequent situations that call for assertiveness. This, however, is patently not the case. One problem is that behaviors

encouraged by training often are not rewarded, or are even punished, by others. A woman who is learning to be assertive may find that she was more highly valued when she was accommodating, self-denying, and quiet. Her assertiveness may increase her self-respect but she may be unwilling to accept the reactions of others to her behavior and therefore cease to use her new skills. While in actual practice assertiveness trainers tacitly recognize this difficulty, the two theories do not, and in this regard they are incomplete.

The second difficulty lies with the "lack of skills" hypothesis: There is evidence that unassertive persons do know the appropriate assertive responses. Gottman and Schwartz (1976) found that nonassertive persons did not differ from highly assertive persons in their ability to construct a written response or verbally deliver an assertive response in a hypothetical situation. The difference between the two groups of persons did not become apparent until they were confronted with a situation that was highly similar to an actual interpersonal confrontation. In short, nonassertive people may well know what to do but in stressful or high risk situations they tend not to do it.

If assertiveness can be influenced by the negative effects it produces even when anxiety presumably is low because of training, and if nonassertive persons know the necessary behaviors but do not use them, neither theory is adequate and a different approach is called for. To this end we propose a cognitive approach to determine the conditions under which a person will choose to act in an assertive manner and why he or she may not act that way in another situation that ostensibly calls for similar behavior. The proposal is that a person's willingness to attempt assertive interpersonal behaviors

can be predicted from knowing how he or she evaluates the possible consequences of being assertive in various kinds of situations. It may be that what differentiates assertive and nonassertive persons is less a matter of their "personalities" or differences in their repertoire of skills than it is of differences in how they evaluate the consequences of being assertive in different kinds of situations. This hypothesis implies that if a person maintains a rather stable, say, negative, evaluation of a specific class of situations it would be expected that he or she would characteristically be nonassertive in such situations but not necessarily in other situations. Observations by Wolpe and Lazarus (1966) are congruent with such a hypothesis: "Usually the interpersonal anxiety and correlated functional inadequacy are limited to the presence of particular categories of people or situations" (p. 38) . . . and . . . "the development of the assertive patterns is determined by the consequences of individual acts of assertion" (p. 43).

Decision/Expectancy Theory. Decision/Expectancy Theory provides a model for describing choice behavior. The basic assumptions are (1) that people act in a fairly rational way, that their behavior is determined by (2) their expectation that the behavior will lead to various consequences, and (3) their evaluation of those consequences (Mitchell & Biglan, 1974). Choosing the action which will result in the maximum expected long-range gain requires comparing the alternatives in terms of the decision maker's utility for each of the possible consequences and in terms of the decision maker's expectation that the action will result in the attainment of each of those outcomes; the action the promises larger expected gain (or the least expected loss) is the one to be selected.

Actually, there are two similar but formally different models. The first, Expectancy Theory, as described by Fishbein and Ajzen (1975), is concerned with the relationships among beliefs and values and behavioral intent (BI). BI is defined as the intention to perform a behavior and its magnitude is assessed by obtaining the person's subjective judgment about whether or not he or she will perform that behavior. The attitude toward a behavior, and therefore BI, is related to the person's evaluation of potential consequences, measured on a seven-point bipolar affective dimension, and a similarly measured belief about the likelihoods that the consequences will occur. In the present case, a subject's evaluation of various consequences that could result from assertion would be multiplied by his belief that these will occur as a result of assertion. The sum of these products is added to a component that reflects relevant social pressures and this sum is assumed to be monotonically related to the magnitude of the person's intention to perform (BI) the assertive act in question.

The second model, Subjective Expected Utility (SEU), comes from the area of decision theory (Edwards, 1954). It differs from the expectancy model primarily in its greater mathematical simplicity, but the logic is quite similar; when the person must decide between an assertive and a nonassertive course of action he or she must evaluate these actions in terms of the utilities of their positive consequences (U), the utilities of their negative consequences (\bar{U}), and the subjective probabilities (P and 1-P) of these consequences occurring if one or the other course of action is selected.

$$SEU_A = P_{1A} U_1 + P_{2A} U_2 + \dots + P_{nA} U_n + (1-P_{1A}) \bar{U}_1 + (1-P_{2A}) \bar{U}_2 + \dots + (1-P_{nA}) \bar{U}_n$$

$$SEU_{\bar{A}} = P_{1\bar{A}} U_1 + P_{2\bar{A}} U_2 + \dots + P_{n\bar{A}} U_n + (1-P_{1\bar{A}}) \bar{U}_1 + (1-P_{2\bar{A}}) \bar{U}_2 + \dots + (1-P_{n\bar{A}}) \bar{U}_n$$

Where A and \bar{A} represent the two courses of action, assertive or nonassertive. SEU is equal to the sum of the utilities of the possible positive and negative consequences weighted by their probabilities of occurrence, and the person should select the action with the larger SEU. The social component of the Expectancy Model is treated as just another utility in the SEU model, which is what makes the latter a simpler model. Merging Expectancy Theory and the SEU model yields the prediction that the greater the SEU for an action, the more the person should intend to follow that course of action (BI). This model has been applied to a number of areas including career decision planning (Holmstrom & Beach, 1973; Muchensky & Fitch, 1975; Mitchell & Beach, in press), third grade children's decisions to attempt academic tasks (Gray, 1975), and family planning decisions (Townes, Beach, Campbell & Martin, in press).

This study examines women's intent to act or not act in an assertive manner in light of their evaluations of the possible consequences of the two behaviors and the amount of risk perceived to be involved in performing either behavior given the characteristics of the situation. The strength of BI is measured by the number of times the participant states her intent to refuse a series of unreasonable requests that are made in videotaped or written scenes involving a high or low status, male or female antagonist. Separate judgments of utility and probability permit computation of SEU's for assertion and nonassertion; persons differing in BI should have corresponding differences in their SEU's.

METHOD

General strategy. First, participants were administered an assertiveness test and an anxiety test. Next they were presented with nine scenes (via

videotape or written scripts) in which a male or female, authority or peer made an unreasonable request. They were then given a list of 15 possible consequences of assertiveness/nonassertiveness and asked to rate the utility (desirability) of each. Then the scenes were presented again and after each scene the participants assessed their subjective probabilities that each of the aforementioned consequences would eventuate should they act either in an assertive or nonassertive manner. Finally, for each scene they were asked whether they would in fact comply or refuse. The utilities and subjective probabilities were used to compute a SEU for each scene for each participant, and the comply-refuse statements were used to compute an overall index of BI for each participant.

Participants. Sixty-four women attending undergraduate psychology classes and 47 women in a professional dental hygiene program participated in this study. The women were asked to attend one session lasting about one and one half hours, and were seen in small groups. Following the experiment they were either given credit or offered a short assertiveness training course.

Procedure. Participants were told that this study concerned decision making in difficult interpersonal situations; the term "assertiveness" was not mentioned until the debriefing explanation following the experiment. First they were given the Rathus Assertion Inventory (Rathus, 1973) and the trait part of the Spielberger Trait Anxiety Scale (1968). They they were given a list of 15 positive and negative consequences (feelings and actions) that might result from interpersonal conflict. This list was developed by presenting six assertiveness trainers with three sample situations and asking them to generate lists of positive and negative consequences commonly

experienced by clients. The resulting core list of consequences was similar to those suggested by Alberti and Emmons (1973).

Participants reviewed the nine video or written scenes rapidly to give them an idea about what they were like and then rated their utilities for the consequences. They were asked first to decide if the consequence was positive or negative, and then to show how positive by marking one end of a scale that ran from 1 to 4, or if negative, how negative by marking the other end of the scale from -4 to -1. A response of 0 indicated that the consequence was neutral.

They then were given a booklet of nine identical response sheets. The sheets were divided into two sections, the first for compliance and the second for refusal. Each was followed by a list of 10 consequences which were generated from the core list used for the utility ratings. They were told that for each scene individually they were to mark on a scale from 1 to 100 how probable each consequence would be if they personally were to comply and then how probable each would be if they personally refused to comply. When the probabilities were completed participants were asked to mark whether they thought that they actually would comply or refuse the request; the proportion of refusals over the scenes was taken as the overall BI measure for each person.

The scenes. Eight of the nine scenes that were used were from among those developed by Nedelman (1976) for a study of the generalization of assertive behaviors; all eight scenes involved an unreasonable request. A ninth scene, involving a reasonable request, was included to see if there was a tendency for subjects to refuse to comply regardless of the appropriateness of the request; results for this scene revealed no such bias and responses to it are not included in the data analysis. The scenes and

characters were described by a female narrator. Then there followed a direct request by the antagonist to the participant. Antagonists were either males or females, presented as either authorities or peers; each participant saw two examples of the four male-female/authority-peer combinations. For each session the sequences of scenes were presented in a scrambled order with the restriction that each scene was presented as the first one in one of the sessions in order to spread the effect of presentation order.

Half the participants saw video-tape dramatizations of the scenes and half received the same scenes as written scripts in booklet form.

Analysis of SEU. A subjective expected utility (SEU) was computed for each scene by multiplying rated utilities by the rated probabilities of each of the 20 consequences. The SEU's were computed separately for compliance and for refusal then combined to yield a single score for each scene by subtracting the smaller SEU from the larger and assigning a minus (-) sign to the difference if the larger SEU was for compliance and a plus (+) sign if it was for refusal to comply. This was done so that there would be only one SEU datum for each scene rather than two--two would be awkward to analyze. SEU's for each pair of similar scenes were averaged giving each participant four SEU's, one for each of the variations--male authority, female authority, male peer, and female peer. First, participants were divided into three equal-sized groups according to their scores on the assertion measure, high, medium, and low. An analysis of variance for repeated measures was performed to compare groups' SEU's and to examine the effects of the sex and status of the antagonist on SEU's. Then the analysis was repeated dividing the participants into three equal-sized groups according to their scores on the anxiety measure, high, medium, and low. Finally, they were again analyzed

after having been divided into three equal-sized groups on the basis of BI, high, medium, and low. Significant interactions were further analyzed using Duncan's Multiple Range Test and only significant effects will be discussed.

RESULTS

Assertiveness and anxiety. The first analyses were to see whether measured assertiveness and/or measured anxiety were related to BI and to each other. Table 1 contains the intercorrelations among these three variables for the psychology students and the dental hygiene students separately (later analyses show the two groups to be significantly different). Neither the assertiveness nor the anxiety test scores are very related to BI and they are only slightly, and negatively, related to each other.

Insert Table 1 about here

The SEU's. As was previously explained each participant's SEU was computed for each of the four different kinds of scenes. Thus there is no single overall SEU for each of the participants that could be correlated with their single BI measures. Therefore, participants were divided into psychology and dental hygiene students, and each group of students was divided into three equal-sized groups on the basis of BI measure, high, medium, and low. Then a 3 x 2 x 2 x 2 x 2 repeated measures analysis of variance was performed on the SEU's with the independent variables being BI (high, medium, and low refusal to comply), kind of student (psychology or dental hygiene), method of presentation of the scenes (video or written) and the variables that defined the scenes; the status of the antagonist (authority/

Table 1
Correlations Among the Assertiveness Test Scores, the Anxiety
Test Scores, and BI for Two Kinds of Students

Psychology Students

Assert and anxiety	R = -.25	p < .05
Assert and BI	R = .18	n.s.
Anxiety and BI	R = .03	n.s.

Dental Hygiene Students

Assert and anxiety	R = -.28	p < .05
Assert and BI	R = .26	p < .05
Anxiety and BI	R = -.17	n.s.

peer) and sex (male/female). Similar analyses were performed using the assertiveness test scores and the anxiety test scores in the place of BI; both analyses showed these two variables to be unrelated to the SEU's so they will not be discussed further.

For the BI analysis all main effects and three interactions (BI x status, method of presentation x sex of the antagonist, status x sex of the antagonist) were significant.

The first main effect is BI ($F = 9.6$, $df = 2,94$, $p < .01$), with a mean SEU for the high BI group of 10.99, for the medium BI group of 9.60 and for the low BI group of 4.09. By Duncan's test between means the difference between the high and low BI group was significant at $p < .05$. The medium BI group did not differ from either the low or high BI groups.

For the second main effect, kind of student ($F = 6.8$, $df = 1,94$, $p = .01$), the psychology students has a group mean SEU of 6.67 and the dental hygienists' mean was 9.42. This shows that the SEU;s for the latter favored refusal more than did the SEU's for the psychology students. Further, the mean BI for the hygienists (1.72) was significantly higher ($t = 2.80$, $df = 104$, $p < .01$) than the mean BI for the psychology students (1.44) indicating the hygienists said that they would refuse to comply with the requests in the scenes more often than the psychology students did.

The third main effect, method of presentation of the scene ($F = 10.0$, $df = 1,94$, $p < .01$) had a SEU for the written presentation (9.09) that was higher than for video presentation (6.02). The corresponding mean BI's were 1.55 for the written presentation and 1.50 for video presentation ($t = .5$, $df = 104$, n.s.). These results suggest that BI is independent of the method

of presentation but that the participants' expectations for refusal (SEU) were more positive for those who saw the written scripts and that those who saw the videotapes--a more realistic stimulus--were more likely to have less favorable expectations for refusal.

The fourth and fifth main effects were for the status of the antagonist ($F = 27.3$, $df = 1,94$, $p < .01$) with mean SEU's of 9.22 for authorities and 6.35 for peers and for the sex of the antagonist ($F = 45.6$, $df = 1,94$, $p < .01$), with mean SEU's of 8.99 for males and 6.58 for females. Participants expectations for assertion to peers and to women were more negative than for assertion to authorities and males. Because these two variables define the scenes rather than serving to divide participants into groups, as did the student and presentation variables, BI's could not be calculated for each of the four variants for comparison with the SEU's. However, it is possible to calculate the proportion of times the participants stated an intent to refuse to comply for each level of the two variables. For authorities the proportion of refusal was .85, for peers it was .69, for males it was .77, and for females it was .76. Because these proportions each involve multiple contributions by all of the participants no statistical tests can be performed. However, the proportions appear to be congruent with the SEU for status, and less so for sex.

All three significant two-way interactions involve the status and sex variables. These are shown in Tables 2, 3, and 4.

Insert Tables 2, 3, and 4 about here

Table 2

Mean SEU's: BI x Status of Antagonist

(F = 5.7, df = 2,94, p < .01)

BI	Status	
	Authority	Peer
High	11.44	10.54
Med	11.23	7.96
Low	6.21	1.97

Table 3

Mean SEU's: Method of Presentation x Sex of Antagonist

($F = 4.1$, $df = 1,94$, $p < .05$)

Method of Presentation	Sex of Antagonist	
	Male	Female
Video	6.80	5.24
Written	10.61	7.57

Table 4

Mean SEU's: Sex x Status of Antagonist

(F = 6.6, df = 1.94, p < .01)

Sex of Antagonist	Status	
	Authority	Peer
Male	11.15	6.83
Female	7.28	5.87

Within the different kinds of scenes the participants in the high and the low BI groups differ significantly in their SEU's for refusal to peer scenes, although this is not true of their response to the authority scenes. For both scene types, as one moves from high to low BI, the SEU's for refusal to comply to authority and peer demands become increasingly disparate though these differences do not reach statistical significance. For those persons who have a high BI to refuse, the difference between refusal to peer and to authority is only .90, for the medium group it is 3.27 and for the low group it is 4.24. For the participants with a low BI to refuse, unlike the high group, it appears much more difficult to refuse requests made by peers than by authorities.

The interaction between method of presentation and sex of antagonist shows that the SEU's for written presentation are higher overall than SEU's for the video presentation for both scene types. SEU's for refusal to comply with males are higher than SEU's for refusal to comply with females for both methods of presentation.

The interaction between sex and status of the antagonists shows that the SEU's for refusal are higher for male authorities, than for female authorities, male peers, and female peers. The SEU's for female authorities are higher than for female peers, with no differences between the remaining categories. The corresponding proportions of refusal to comply statements (BI) for the four kinds of antagonists are .88 for male authorities, .82 for female authorities, .67 for male peers and .71 for female peers--moderate agreement with the SEU's. In sum, it appears that the highest SEU's for refusal occur among the dental hygiene students, for participants with high BI, and when participants are confronted with authority figures, particularly males.

Utility and probability. Because SEU is clearly related to BI, it is appropriate to see if the differences between participants who frequently state that they intend to refuse to comply and those who less frequently state intention to refuse can be attributed to differences in either their utilities for the possible outcomes or their subjective probabilities that those outcomes will occur. To do this the participants were divided into groups on the basis of the kind of student (psychology, dental hygiene), method of presentation (video, written), and BI (high, low). A repeated measures analysis of variance using utilities as the dependent variable yielded no significant effects of any of the independent variables. As can be seen in Figure 1, students at both levels of BI evaluated the utilities in the same way.

Insert Figures 1 and 2 about here

A similar analysis was performed using the probabilities as the dependent variable. Here all three variables had a significant effect on the probability estimates and all interactions also are significant. In short, the nurses' and the psychology students' estimates were different and the estimates differed for the two methods of presentation and for different BI's. This and the interactions agree with the results for the SEU analyses: Essentially, the participants pretty much agree about utilities. The differences in SEU's are due to differences in estimated probabilities. This is illustrated for high and low BI participants in Figure 2.

The graph shows that if they were to comply, the low BI participants expect the positive consequences to be more probable ($t = 6.08, df = 62,$

Utility Values for Participants High and Low in BI

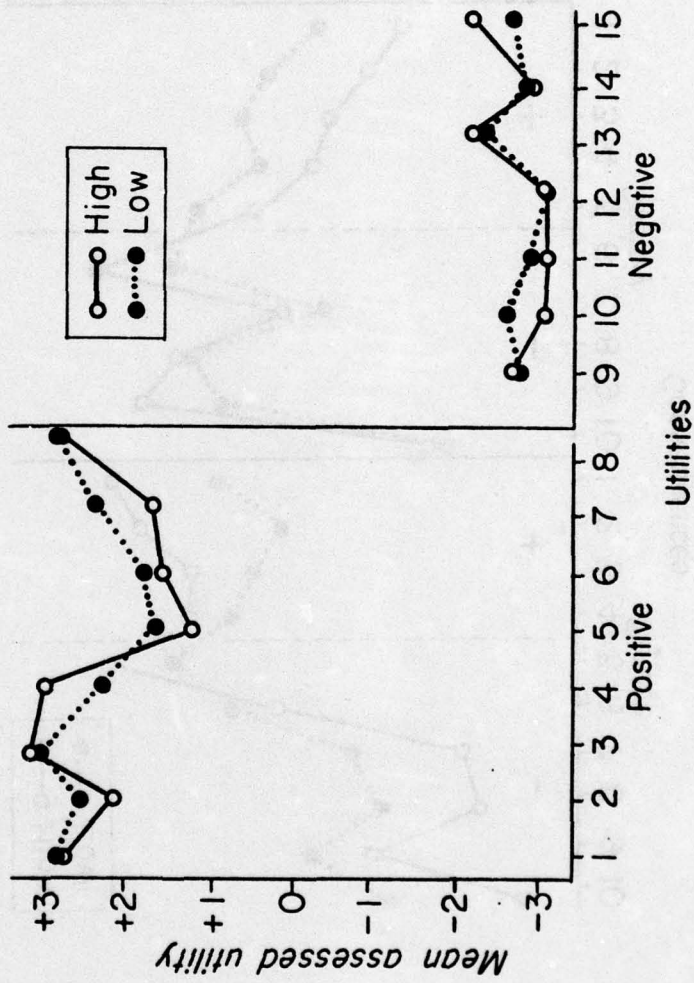


Figure 1

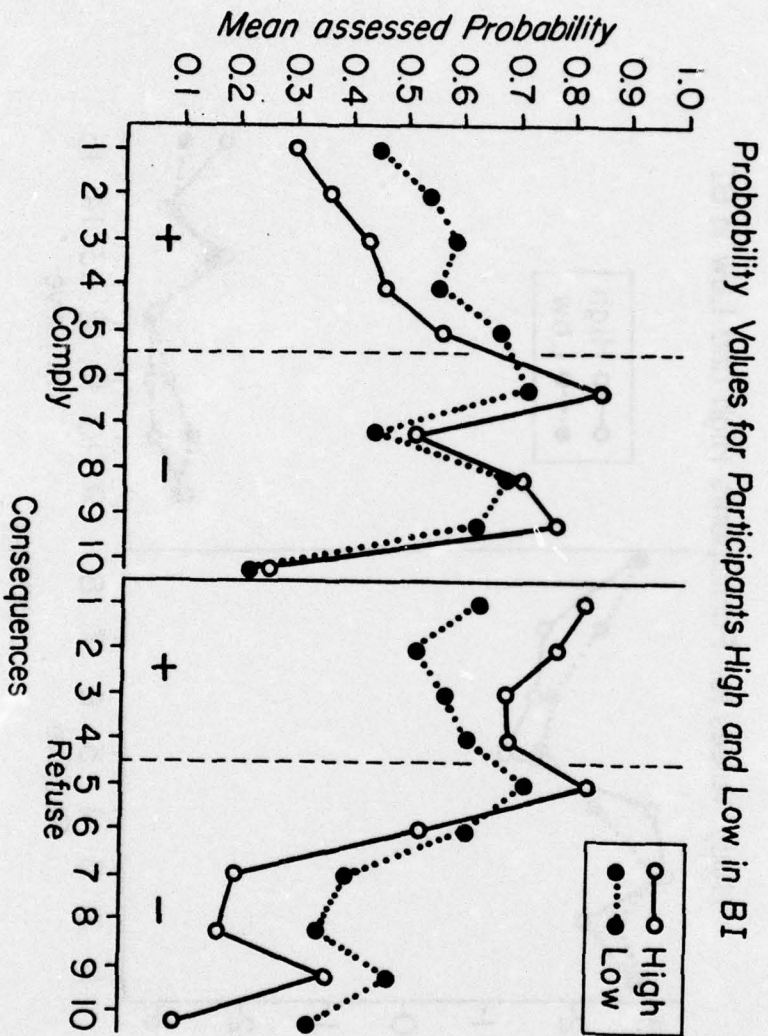


Figure 2

$p < .01$) than do the high BI participants. Differences between the negative consequences are not significantly different but just the opposite pattern is suggested. Similarly, if they refuse to comply the low BI participants see the positive consequences as less probable ($t = 8.33$, $df = 62$, $p < .01$) and the negative consequences as more probable ($t = 4.29$, $df = 62$, $p < .01$) than do the high BI participants. In short, the difference between high and low BI participants is not in their utilities for the positive and negative consequences but in their different perceptions of the probabilities of those positive and negative consequences occurring should they elect to comply or to refuse to comply.

DISCUSSION

Schools and presentations. Initial analyses revealed significant effects for the type of students and for the method of presentation of material. SEU's for the dental hygiene group were uniformly higher than SEU's for the psychology students. The hygienists may have been slightly older and were involved in a structured professional program. Their attitudes toward the requests in the scenes as suggested by their higher intent to refuse may have been mediated by their working experience in a highly authority oriented profession.

The effect of presentation was also significant. SEU's for the written scenes were higher for both sex and status, and across schools although the pattern of refusal to scenes did not differ. While the written scenes allowed participants to make greater use of their own experience in evaluating the scenes, the demand of the antagonist was less immediate. Participants

evaluated the consequences for refusal as more negative when the request was made via videotape. Videotape has been a successful adjunct to treatment in assertive training studies for modeling appropriate responses (Herson, Eisler, Alford & Pinkston, 1973; Galassi, Galassi & Litz, 1975), and for assessing change (Herson, Eisler & Miller, 1973). Although it has not been systematically tested in the literature, it is likely to be a better medium than audiotape or written instructions since the stimulus it presents apparently is experienced as "more real."

The scenes. Although many studies acknowledge the variation of task difficulty involved in assertion, no systematic investigation of the subject's evaluation of the risks involved exists in the literature. Typically authors deal with this issue by hierarchically ordering materials differing in risk or task difficulty (Wolpe & Lazarus, 1966; Piaget & Lazarus, 1969; Alberti & Emmons, 1970). Situations involving interactions with persons of the same sex, peers, or persons who have a distant relationship are presented prior to those involving persons of the opposite sex, spouse, or an authority figure (McFall & Lillisand, 1971). The rationale for this is to provide success in situations involving less risk of failure and emotional concomitants and to desensitize the anxious patient to difficult interactions. This pattern has become institutionalized but may not reflect the order of task difficulty for all participants.

Contrary to the implications of other studies, participants consistently evaluated the consequences (SEU's) for refusing a female peer as more negative than refusing a male authority, and they indicated a more frequent intent to refuse to comply with male authorities. It is possible, in this case, that there was an effect of social desirability--that the demand characteristics

of the experiment were such that refusing the requests of authority figures appeared to be the appropriate thing to do. But this does not explain why there was more intended compliance to requests by peers. It is also possible that the scenes themselves were less realistic for authority figures, and that the participants' responses to the attributes of the scene contaminated the implicit content. However, this finding may also reflect the characteristics of the population studied--being in school, these women are less likely to be employed presently by male bosses. They may be less willing to risk "negative" consequences in relationships with peers. A finding in this direction was reported by Nedelman (1976) suggesting that transfer of training occurred most reliably in the conditions involving females. The author suggests that for her participants, assertion to females was more difficult than to males.

In any event, a training program designed to teach assertion should take into account the participants' own evaluation of the salient perceived risks involved in her new behavior. It is likely that these may differ from participant to participant and from established training procedures.

Behavioral intent. The measure of intent to refuse (BI) was highly related to SEU for the content scenes. This attests to the situational specificity of assertion. It suggests that assertiveness is not a trait which applies equally across situations varying in sex and status of the antagonist and presumably varying also in the amount of risk they entail.

In this study BI is not to be taken as an actual indication of the participant's willingness to assert in a real life situation. However, a number of studies have found a high correlation between behavioral intent and actual behavior in a variety of situations (Reviewed in Fishbein and Ajzen,

1975). The latter authors assert that intent is the best indication of actual behavior but qualify its ability to predict behaviors in situations where there is a time interval between the intent and the behavior, and when the behavior in question depends on the actions of others. Additionally, where the stimuli are highly artificial, as in this experiment, intent may be no more than an indication of the subjects' desire to behave in the intended manner.

That there were no systematic differences in SEU for participants scoring high and low on the personality measures may have been a function of the tests used, but may also reflect the inadequacy of assigning a "trait" value to a situation specific task. A major issue in the literature has been the specificity of the assertiveness response and the expectations that can be made for generalization. Herson, Eisler and Miller (1973) and Wolpe and Lazarus (1966) argue that assertion is specific to the social context in which it occurs. Others have found some degree of transfer of training as a result of their intervention (McFall & Marston, 1970; McFall & Lillisand, 1971; Nedelman, 1976).

The utility and probability components. To parcel out components of the SEU's separate analyses were done for the utilities and probabilities which comprised the SEU's. Participants high and low in BI to refuse unreasonable requests did not differ in the way they valued the utilities of the consequences (Figure 1). However, participants differed significantly in their perception of the probabilities of the consequences occurring as a result of their behavior (Figure 2). Participants with high BI saw the positive consequences of compliance as less likely to occur and the negative consequences as slightly more likely to occur than did participants with low BI. For

refusal these trends were reversed; participants with high BI for refusal saw the positive consequences of refusal as more likely to occur and the negative consequences as less probable. For both events the probability endorsements of low BI participants were generally more constricted while high BI subjects gave more extreme probabilities.

This result is consistent with results reported by Mitchell and Knudsen (1973) who separated out the effects of utilities and probabilities. Comparing college students and business students, they found that while the students did not differ in their valuation of occupational goals, they held significantly different probabilities that a career in business would allow them to attain those goals.

Issues for training. Past studies (McFall & Marston, 1969; Eisler, Miller, Herson & Alford, 1974) have identified behavioral components of assertiveness which can be taught to nonassertive persons to be used in a variety of situations. In the present study it appears that participants scoring on all levels of an assertion inventory respond to situations differentially according to the sex and status of the antagonist and presumably according to the degree of risk they perceive to be a consequence of their behavior.

In designing a comprehensive assertiveness training program, these results suggest that the focus of training should be on changing the participant's cognitive expectations about the results of his or her behavior, rather than focusing on either values or on specific behaviors. This approach assumes that the average client has greater knowledge about appropriate interpersonal behaviors than might be found among the hospitalized schizophrenic male patients in the Eisler, Miller and Herson studies. In fact,

the thrust of training has not been directed toward this latter group but rather to women and college students who may have adequate skills but do not act assertively when they perhaps should. The Gottman and Schwartz study (1976) suggests that both assertive and nonassertive people know the appropriate behaviors. The present study suggests that both assertive and nonassertive people value the consequences of assertion in a similar manner. Therefore, perhaps the focus of training should be on changing the person's cognitive expectation of the consequences. This may involve a process of teaching the client a new set of expectancies about possible outcomes based on the characteristics of differing situations. In terms of an Expectancy/Decision model, information affects beliefs about consequences. These, in turn, affect attitude which affects intention and behavior. Active participation such as role playing, may be an effective strategy for change because it exposes the person to new information and allows for change in belief. Additionally, as suggested by Mitchell and Biglan (1973), exploring the components of his or her SEU with the client might change the perception of instrumental relations between behavior and outcomes, or to change evaluations of the probabilities of outcomes occurring.

This research also suggests that training programs might profit from a broader appreciation of the client's negative as well as positive evaluations of the consequences of assertion. The weighting of these consequences appears to differ from situation to situation and may determine the persons' willingness to respond. Assertive behavior may be realistically evaluated by the subject as counter-indicated in a given situation. It may be necessary, as Herson, Eisler and Miller (1973) suggest, to train for generalization of assertive behavior, in this case to teach clients appropriate expectations in

a variety of situations. It may also be important to teach relevant others to change their expectations as the client changes his or hers.

A number of issues have been raised in this study which have not been dealt with in the literature of assertion and which seem worthy of further investigation. These include the issue of sensitivity to the client's perception of the risk involved. The traditional pattern of training female peer situations first because they involve less risk than authority situations, does not take into account the possible ascendance of peer and friendship values in a female college population. In an analogue study of this type, the use of self-report and self-ratings are limited in their ability to predict actual behavior. It appears, however, that the Decision/Expectancy Model has value as a research tool in specifying under what conditions a participant might choose to act in an assertive manner in a given situation. Future research might investigate the ability of this approach to predict and shape the responses of individuals in real life situations.

REFERENCES

- Alberti, R. E., & Emmons, M. L. Your perfect right - a guide to assertive behavior. San Luis Obispo: Impact, 1970
- Edwards, W. The theory of decision making. Psychological Bulletin, 1954, 51, 380-417.
- Fishbein, M., & Ajzen, I. Belief, attitude, intention and behavior. Reading: Addison-Wesley, 1975.
- Galassi, J., Galassi, M., & Litz, M. C. Assertive training in groups using video feedback. Unpublished manuscript, 1975.
- Gottman, J., & Schwartz, R. Toward a task analysis of assertive behavior. Unpublished manuscript, 1976.
- Gray, C. A. Factors in students' decisions to attempt academic tasks. Organizational Behavior and Human Performance, 1975, 13, 147-164.
- Hersen, M., Eisler, R., Alford, H., & Pinkston, S. Effects of practice, instructions and modeling on components of assertive behavior. Behavior Research and Therapy, 1973, 11, 443-451.
- Hersen, M., Eisler, R., & Miller, P. Development of assertive responses: Clinical measurement and research considerations. Behavior Research and Therapy, 1973, 11, 505-521.
- Holmstrom, V., & Beach, L. R. Subjective expected utility and career preferences. Organizational Behavior and Human Performance, 1973, 10, 201-207.
- Lazarus, A. A. Behavior therapy and beyond. New York: McGraw-Hill, 1971.
- McFall, R. M., & Lillisand, D. B. Behavior rehearsal with modeling and coaching in assertive training. Journal of Abnormal Psychology, 1971, 77, 313-323.

- McFall, R. M., & Marston, A. An experimental investigation of behavior rehearsal in assertive training. Journal of Abnormal Psychology, 1970, 76, 295-303.
- Mitchell, T. R., & Beach, L. R. Expectancy theory, decision theory, and occupational preference and choice. In M. F. Kaplan and S. Schwartz (Eds.) Coordination and control of group and organizational performance. In press.
- Mitchell, T. R., & Biglan, A. Instrumentality theories: Current uses in psychology. Psychological Bulletin, 1971, 76, 432-454.
- Mitchell, T. R., & Knudsen, B. Instrumentality theory predictions of students' attitudes toward business and their choice of business as an occupation. Academy of Management, 1973, 16, 41-52.
- Muchensky, P. M., & Fitch, M. K. Subjective expected ability and academic preferences. Organizational Behavior and Human Performance, 1975, 14, 217-226.
- Nedelman, D. An experimental analysis of the dimensions of generalization of assertive training. Unpublished doctoral dissertation, University of Washington, 1976.
- Percell, L., Berwick, P., & Beigel, A. The effects of assertive training on self-concept and anxiety, Archives of General Psychiatry, 1974, 31, 502-504.
- Piaget, G. W., & Lazarus, A. A. The use of rehearsal-desensitization. Psychotherapy: Theory, Research, and Practice, 1969, 6, 264-266.
- Raiffa, H. Decision analysis: Introductory lectures on choices under uncertainty. Philippines: Addison-Wesley, 1968.

Rathus, S. A 30-item schedule for assessing assertive behavior. Behavior Therapy, 1973, 4, 398-406.

Spielberger, C. Gorusuch, R., & Luschene, R. Trait-state anxiety scale. Consulting Psychologist Press, 1968.

Townes, B. D., Beach, L. R., Campbell, F. L., & Martin, D. C. Birth planning values and decisions: The prediction of fertility. Journal of Applied Social Psychology, In press.

Wolpe, J. Psychotherapy by reciprocal inhibition. Stanford, California: Stanford University Press, 1958.

Wolpe, J. The practice of behavior therapy. New York: Pergamon Press, 1969.

Wolpe, J., & Lazarus, A. A. Behavior therapy techniques: A guide to the treatment of neuroses. New York: Pergamon Press, 1966.

FOOTNOTES

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