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# Interpersonal consequences of the pursuit of safety

Lynn E. Alden, Peter Bieling

*Department of Psychology, University of British Columbia, Vancouver, B.C., V6T 1Z4, Canada*

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## Abstract

Socially anxious ( $N = 41$ ) and non-anxious ( $N = 41$ ) individuals participated in a getting acquainted situation that was based on the reciprocity self-disclosure paradigm. Subjects' appraisals of the situation were manipulated to be either positive or negative by highlighting the likelihood of positive or negative social outcomes. Subjects' social goals and use of safety behaviors were assessed, as were others' reaction to the subjects. As predicted, socially anxious individuals elicited significantly more negative responses from others in the negative appraisal condition, where they employed safety behaviors, than in the positive appraisal condition, where they did not. The results supported a cognitive model of social anxiety, rather than alternative explanations. © 1998 Elsevier Science Ltd. All rights reserved.

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## 1. Introduction

According to cognitive theories, socially anxious individuals are concerned with protecting themselves from negative social outcomes and adopt safety behaviors to prevent the occurrence of the social catastrophes they fear (Arkin et al., 1986; Clark and Wells, 1995; Leary and Kowalski, 1995). Safety behaviors include such acts as avoiding eye contact, rehearsing sentences before speaking, talking only briefly, and not talking about oneself. Although these behaviors are intended to prevent the anxious person from doing something awkward that might attract attention and criticism, they are believed to inadvertently contribute to the person's problems because they prevent the disconfirmation of negative beliefs and catastrophic predictions (Wells et al., 1995).

Safety behaviors are said to arise from cognitive appraisals of social situations as potentially dangerous events (e.g. Clark and Wells, 1995). Presumably positive situational appraisals result in fewer safety behaviors and more socially effective performances. Overall then, the cognitive model specifies the following chain of events: (1) appraisal of a social situation as potentially dangerous, (2) concern with self-protection, and (3) strategic adoption of safety behaviors to ward off the impending danger. This perspective can be

contrasted with explanations that attribute ineffective social behaviors to deficient skill development. In the latter case, positive appraisals of social situations would be expected to have little effect because anxious individuals are assumed to lack the sophisticated skills necessary for effective social performances.

Cognitive writers hypothesize that self-protective behaviors have negative interpersonal consequences (Clark and Wells, 1995). To the extent that safety behaviors distract the person from the interaction or create the appearance of disinterest in others, they are believed to result in negative responses from others (Arkin et al., 1986; Meleshko and Alden, 1993). It is well known that socially anxious students and social phobic patients are liked less by their conversational partners in first meeting situations and are viewed as less likeable, less sympathetic, and less easy to talk to by their friends than are non-anxious individuals (e.g. Alden and Wallace, 1995; Jones and Carpenter, 1986). However, there are factors that might explain this quite apart from the use of safety behaviors. As noted above, some writers argue that socially anxious people have skill deficiencies that lead to inappropriate comments or behaviors, and these might put others off. Socially anxious people also display visible signs of anxiety, which, through a process of emotional contagion, might make others feel uncomfortable as well. This may make anxious people less appealing as friends. It remains to be determined whether the adoption of safety behaviors contributes to negative social outcomes above and beyond the effects of skill deficits or emotional contagion.

Some of the safety behaviors identified by Clark and Wells (1995) are verbal in nature, for example, talking only briefly and avoiding talking about oneself. These actions seem particularly likely to evoke negative interpersonal responses. Friendships and other intimate relationships are generally believed to develop through a process of mutual self-disclosure, and reciprocal self-disclosure has consistently and decisively been shown to elicit greater liking than non-reciprocal patterns of disclosure (e.g. Altman and Taylor, 1973; Jourard, 1971). If socially anxious individuals use talking less and avoiding self-disclosure as safety strategies, this might explain why others like them less than non-anxious people.

In order to reach a conclusion, however, several issues must be resolved. First, a relationship between social anxiety and the verbal safety behaviors identified by Clark and Wells would have to be established. The research literature to date is inconsistent. Although some studies found evidence that socially anxious individuals talk less and avoid talking about themselves (e.g. Meleshko and Alden, 1993), others have not (Jacobson and Anderson, 1982; Papsdorf and Alden, 1997). Moreover, even if socially anxious people do talk less or engage in less self-disclosure, this may be the result of skill deficiencies—they don't know the appropriate way to express themselves or what to talk about—or anxiety-mediated inhibition. To establish that these actions are used as safety behaviors as depicted in cognitive models, one would have to demonstrate that their use is: (a) flexible, i.e. covaries with situational appraisals, rather than stable as a skills deficit model would suggest; (b) functional, i.e. adopted as part of an interpersonal strategy to protect the individual from social threat; and (c) at least partially independent of anxiety, i.e. more than anxiety-related behavioral inhibition. Finally, a causal relationship between the adoption of safety behaviors and negative responses from others would have to be

demonstrated. If cognitive models are correct, other people should have more negative reactions to socially anxious individuals when they adopt safety behaviors than when they do not.

In this study, we examined whether altering situational appraisals leads to changes in self-protective social goals and safety behaviors in socially anxious individuals, as predicted by cognitive models, and, if so, whether this affects others' reactions to them. Socially anxious and non-anxious Ss participated in a getting acquainted situation with a confederate who talked openly about topics of personal importance. This situation is a variation on the classic self-disclosure paradigm commonly used to examine friendship formation (e.g. Jourard, 1971). Subjects' appraisals of the situation were manipulated to be either positive or negative by highlighting the likelihood of positive or negative social outcomes. We assessed the effects of the appraisal manipulation on Ss' social goals during the interaction (avoiding negative social outcomes vs garnering positive social outcomes) and their subsequent use of verbal safety behaviors (talking briefly, selecting non-revealing topics of conversation). Finally, we assessed their partners' reaction to them. We predicted that: (1) talking briefly and selecting non-revealing topics would be used as safety behaviors, i.e. they would meet the criteria of being flexible, functional, and distinguishable from anxiety as outlined above; and (2) the adoption of safety behaviors would be associated with negative interpersonal responses.

## 2. Method

### 2.1. Overview

The study used a  $2 \times 2$  between-groups design. The first factor (group) was *S* classification as either high or low social anxiety. The second factor (appraisal condition) was the randomly assigned instructional set delivered to *S*s prior to the disclosure task. Subjects participated in a 'getting acquainted' task in which they were required to take turns talking about themselves with a person they believed to be another 'student', but who was an experimental confederate trained to provide consistent behavior across Ss. Subject's verbal responses were rated on level of intimacy and duration. Subjects rated their social goals and their level of physiological arousal during the task. Finally, confederates and experimenters rated the appropriateness of the *S*'s behavior and their likeability.

### 2.2. Subjects

Subjects for the study were 82 undergraduate women (mean age = 18.8 yr) selected from a larger pool of volunteers. Potential participants completed a screening package which included the Social Avoidance and Distress Scale (SAD; Watson & Friend, 1969). Individuals who scored 7 or less on the SAD ( $N = 41$ ) were recruited for the low anxiety group. Those individuals who scored 11 or greater ( $N = 41$ ) were selected for the high anxiety group. Subjects received course credit for their participation in the study. Within

each group, *S*s were randomly assigned to the positive or negative situational appraisal conditions.

### 2.3. Procedure

Subjects were greeted by the experimenter and seated so that they faced the confederate across a small coffee table. Lighting and furniture were used to make the situation as comfortable as possible. To enhance the deception, the confederate arrived 3 min after the *S* and apologized for being late. In order to insure that confederates' were blind to the *S*s' instructional condition, the confederate was in a separate room when the instructions were provided. This was accomplished by informing *S*s that completing the pre-interaction measures required privacy and confidentiality for both of them. Upon completion of the pre-interaction arousal and affect measures, the experimenter read the following instructions:

We would like you to get to know each other, to talk about yourself and listen as your partner talks about herself so that you become better acquainted. We need to structure this somewhat, so what we would like you to do is to take turns talking and listening. I will give you a list of topics to talk about. The first person will choose one of the topics and talk briefly about it. The other person's task is to listen. Then the other person will choose a topic and talk about it and the person who spoke first now becomes the listener. Because we must structure this somewhat we ask that you do not ask questions when it is your turn to be the listener. You will continue to alternate back and forth until you have both chosen and spoken on four topics.

Subsequent to these general instructions, *S*s were given different information according to their assigned appraisal conditions. The negative and positive appraisal instructions were designed to vary the likelihood of negative vs positive social outcomes.

#### 2.3.1. Negative appraisal condition

Clinical writers say that interactions like this go better if the participants are similar in how long they talk and in how open they are with each other. However, it can also be risky to open up and reveal oneself to another person because your partner might dislike or disapprove of something you say. People can even be critical of others. If one matches their partner's level of openness, one can't be certain whether one will be approved of or disapproved of and disliked. You have been paired with someone who is somewhat different than you on the screening measures. Your personality profiles suggest that you may be different types of people. Our experience suggests that it may take some effort for the two of you to understand and relate to each other.

#### 2.3.2. Positive appraisal condition

Clinical writers say that interactions like this go better if the participants are similar in how long they talk and how open they are with each other. Our research shows that this is a very strong effect and that this is why people really like each other and hit it off. We find that people like and approve of people who talk at the same level of intimacy that they do themselves. If one matches their partner's level of openness, one is pretty certain to be liked and approved of. You have been paired with someone who is similar to you on our screening measures. Your

personality profiles suggest that you are the same type of people. Our experience suggests that it will be easy for the two of you to understand and relate to each other.

### 2.3.3. *Interaction*

After the appraisal manipulation, the confederate was brought back into the room. The situation was arranged so that the confederate would always talk first. The *Ss* were told that the experimenter would be behind the one way mirror, ostensibly to monitor the conversation. At this point, the experimenter asked if there were any questions. To enhance the deception, the confederate asked a question related to topic selection. After an appropriate period of time to 'examine' the topics, the confederate began the interaction.

After the completion of the interaction, the experimenter returned and separated the *S* and confederate to complete the post-task dependent measures. After the *S* completed these questionnaires, the experimenter conducted a structured, funnel-type debriefing designed to probe for *S* suspicion. Five *Ss* expressed suspicions about their partner and were replaced by other *Ss*.

### 2.3.4. *Discussion topics*

The 19-item topic list was a modified one devised by Jourard (1971) and was comprised of an equal number of low, medium, and high intimacy topics. The confederates talked about intimate subjects (Jourard topics: 9, 6, 12 and 3), revealing information that was private, personal, and emotional. The disclosures used in the present study were also used in previous research and found to be rated as both intimate and revealing (Meleshko and Alden, 1993). All of the confederate's responses were timed by the experimenter and assessed for consistency. Their responses ranged between 197 and 251 words (mean = 224 words) and took an average of 83.92 sec to deliver. Checklists, which summarized 12–15 content areas of each disclosure, indicated that the first confederate included an average of 96.53% (range 92–100%) of the pre-arranged content, and the second confederate included an average of 97.88% (94–100%) of the pre-arranged content. Thus, *Ss* were presented with consistent confederate responses across the two confederates and two conditions.

## 2.4. *Confederates and observers*

Two undergraduate women served as confederates. These women memorized the scripts and were trained to provide natural, verbatim accounts. Both confederates interacted with the same number of *Ss* in each condition. An additional undergraduate research assistant served as an observer behind the one-way mirror. During the interaction, both the confederate and the observer rated each of the *Ss* disclosures for duration and for intimacy on a seven-point scale. The confederate's ratings were made surreptitiously while she pretended to number her next topic choice. Both the confederates and observer were blind to the *Ss*' status and the hypotheses of the experiment.

## 2.5. Dependent variables

### 2.5.1. Social goals

The *Social Self-Presentation Style Scale* (SPSS; Meleshko and Alden, 1993) is an eight-item scale that was developed to assess the two primary motivations believed to underlie social interactions: (1) self-protection, the desire to protect oneself from negative social outcomes; and (2) social acquisition, the desire to direct one's behavior to garner positive social outcomes (Arkin et al., 1986; Wolfe et al., 1986). The scale has previously been shown to have two underlying factors, and this was the case in the present study. A principal components analysis with varimax rotation demonstrated that two factors (eigenvalues 2.34 and 1.79, respectively) accounted for 51.5% of the variance. Items loading on the first factor corresponded to self-protective motivation (loadings ranged from 0.56 to 0.80; sample item: "I was careful about what I said because I was afraid I might say or do something wrong"). Items loading on the second factor corresponded to acquisitive motivation (loadings ranged from 0.45 to 0.79; sample item: "It was easy for me to regulate my behavior to my best advantage"). The four items for each scale were summed to yield measures of self-protective and acquisitive social motivation.

### 2.5.2. Safety behaviors

(1) *Duration*. Subjects' responses were timed by the experimenter. The mean time of the four responses (in seconds) was used as a measure of how much the *S* talked. (2) *Intimacy*. Subjects' responses were rated on a seven-point Likert type scale that reflected intimacy and was anchored by verbal descriptors derived from previous research (Meleshko and Alden, 1993). Both the confederate and the observer were trained in the use of the scale and made independent ratings of each of the *S*'s four responses, which were summed to yield a total score. The overall correlation between confederates and observers on intimacy ratings was 0.93. Therefore, the intimacy ratings of both raters were averaged to yield a final intimacy measure.

### 2.5.3. Arousal

A seven-item self-report scale designed to assess physiological arousal in social tasks was used to as the measure of anxiety. This scale was developed in previous research (Meleshko, and Alden, 1993), using items selected from the Body Sensations Questionnaire (Chambless et al. 1984; sample items: pressure in chest, tachycardia, shortness of breath, butterflies in stomach, lump in the throat). Subjects were instructed to rate the extent to which they experienced each symptom during the social task on seven-point Likert type scales. In the present study, a principal components analysis of the scale revealed that a single factor (eigenvalue 4.28) accounted for 61.1% of the variance. Therefore, the seven items were summed to yield a total arousal score. Coefficient alpha for the scale was 0.79 in the current sample. Subjects completed the arousal scale on two occasions: immediately prior to the interaction and immediately after its completion. Thus, the measure allowed an assessment of change in arousal during interaction.

#### 2.5.4. Confederates' ratings of subjects

Subjects were rated on two measures by their partner. *Liking* for *S*s was assessed on four seven-point scales with bi-polar adjectives serving as anchors. The confederates rated the *S*s on how likeable vs unlikeable they were, friendly vs unfriendly, interesting vs uninteresting, and attractive vs unattractive. These four items had an average intercorrelation of 0.77 and were summed to yield a single likeability rating.

The *appropriateness* of the *S*'s responses was assessed by six Likert type items. Confederates were asked to rate how appropriate the *S*'s disclosures were (e.g. "Given what you told her, how appropriate was the subject's response?") and whether *S*s synchronized their responses to those of the confederate (e.g. "Were the subject's responses similar to yours in terms of openness?"). The six items had an average intercorrelation of 0.95 and were summed to yield a total score.

### 3. Results

#### 3.1. Preliminary analyses

##### 3.1.1. Subject selection

To insure that groups of anxious and non-anxious individuals were properly selected, and distributed across conditions, a 2 (group)  $\times$  2 (appraisal condition) analysis of variance (ANOVA) was conducted on *S*s' SAD scores. As expected, a significant main effect emerged for group,  $F(1, 79) = 292.20$ ,  $P < 0.001$ . There were no other significant main or interaction effects. Results of this analysis indicated that *S*s had been accurately classified and had similar levels of social anxiety in the various conditions.

##### 3.1.2. Manipulation check

To insure that the instructional manipulation had been understood by *S*s, four Likert type items were developed. Items asked *S*s to rate how similar their partner was to them, the extent to which they had expected their partner to like them, the extent to which they were confident about how to respond to their partner, and to what extent they believed that being open was the best way to handle the conversation. The four items were summed to yield a total score for impact of the manipulation. The alpha coefficient for these items were 0.70. To assess the manipulation, a 2 (group)  $\times$  2 (condition) ANOVA was conducted. There was a main effect for group,  $F(1, 79) = 13.17$ ,  $P < 0.01$ , and for condition  $F(2, 79) = 24.96$ ,  $P < 0.001$ . Socially anxious individuals were lower overall on this measure, however, the manipulation was equally effective for the two groups.

##### 3.1.3. Confederate consistency checks

Because two confederates were used in the experiment, all major multivariate analyses of variance (MANOVAs) were initially conducted with the confederate as a factor. These MANOVAs produced no main or interaction effects for the confederate factor. Therefore, data gathered from both confederates was combined for the main analyses.

Table 1

Mean social motivation scores and mean duration and intimacy ratings of the socially-anxious and non-anxious groups in the positive and negative appraisal conditions

Group	Condition			
	Negative		Positive	
Socially anxious				
Self-protection	13.57	(4.03)	10.85	(2.60)
Social acquisition	13.81	(4.81)	15.20	(3.51)
Duration	69.57	(26.46)	98.81	(29.54)
Intimacy	2.71	(0.99)	4.03	(1.03)
Non-anxious				
Self-protection	10.55	(4.00)	8.77	(2.72)
Social acquisition	15.50	(3.59)	15.85	(4.39)
Duration	80.39	(34.58)	106.83	(40.24)
Intimacy rating	3.91	(1.17)	4.24	(1.36)

Note: Range for duration was 269.75, with a minimum of 24.75, and a maximum of 294.50. Intimacy ratings range was 5.50, with a minimum of 1 and a maximum of 6.5 (with 1 and 7 as anchors).

### 3.2. Dependent variables

#### 3.2.1. Overview

The dependent variables were analyzed using multivariate analyses of variance (MANOVAs) and univariate analyses of variance (ANOVAs). The Bartlett–Box  $F$  test was used to insure homogeneity of variance for all analyses. Wilks' lambda served as the criterion of overall statistical significance in the MANOVAs, and significant multivariate effects were followed by univariate  $F$ -tests.

#### 3.2.2. Social goals

To assess differences in  $S$ s' social goals, a 2 (group)  $\times$  2 (condition) between groups multivariate analysis of variance (MANOVA) was carried out with self-protective and social acquisitive motivation scores as dependent variables. An overall significant main effect emerged for condition,  $F(2, 78) = 4.57$ ,  $P < 0.05$  and group,  $F(1, 79) = 6.37$ ,  $P < 0.01$ .

Examination of the univariate effects for condition revealed a significant difference on self-protective motivation,  $F(1, 79) = 9.06$ ,  $P < 0.01$ . Subjects' self-protective motivation was higher in the negative appraisal condition than in the positive appraisal condition. Examination of the univariate effects for group revealed that socially anxious  $S$ s were more motivated by the goal of self-protection than were non-anxious  $S$ s,  $F(1, 79) = 11.63$ ,  $P < 0.01$ . No other significant effects emerged. Means and standard deviations are displayed in Table 1.

#### 3.2.3. Safety behaviors

(1) *Duration*. A 2 (group)  $\times$  2 (condition) ANOVA revealed a significant main effect for condition,  $F(1, 79) = 14.53$ ,  $P < 0.001$ . Subjects spent significantly less time talking in negative than in positive condition (Table 1). (2) *Intimacy*. A 2 (group)  $\times$  2 (condition) ANOVA revealed a significant main effect for group,  $F(1, 79) = 7.82$ ,  $P < 0.01$ . Socially



Table 2

Mean arousal ratings before and after interactions in the socially-anxious and non-anxious groups in the positive and negative appraisal conditions

Group	Condition			
	Pre	Negative Post	Pre	Positive Post
Socially anxious	12.71 (4.64)	15.00 (8.06)	12.75 (3.55)	17.74 (8.14)
Non-anxious	10.26 (2.83)	10.90 (4.78)	10.05 (4.19)	12.95 (7.50)

Note: Range for arousal is 7–49.

anxious individuals were less intimate in their disclosures than non-anxious individuals. A main effect also emerged for condition,  $F(1, 79) = 10.524$ ,  $P < 0.01$ . All *Ss* were more intimate in the positive condition than in the negative condition. Finally, there was a strong interaction trend for group and condition,  $F(1, 79) = 3.81$ ,  $P = 0.05$ . The pattern of means suggested that the intimacy ratings of socially anxious and non-anxious individuals were dissimilar in the negative condition, but nearly equivalent in the positive condition (Table 1).

#### 3.2.4. Arousal

A 2 (group)  $\times$  2 (condition)  $\times$  2 (time—pre-interaction, post-interaction) repeated measures ANOVA was performed on *Ss*' ratings of arousal. A significant main effect emerged for group,  $F(1, 79) = 10.49$ ,  $P < 0.01$ , and for time,  $F(1, 79) = 15.81$ ,  $P < 0.001$ . Socially anxious individuals reported significantly more physiological arousal than non-anxious *Ss*. Physiological arousal increased over the course of the interaction for *Ss* in both groups and both conditions (Table 2). No significant effects emerged for condition, which indicated that socially anxious *Ss*' level of arousal was the same in the two conditions despite differences in their behavior.

#### 3.2.5. Ratings of subjects

A 2 (group)  $\times$  2 (condition) between groups multivariate analysis of variance revealed significant main effects for both group,  $F(2, 78) = 12.22$ ,  $P < 0.001$ , and condition,  $F(2,$

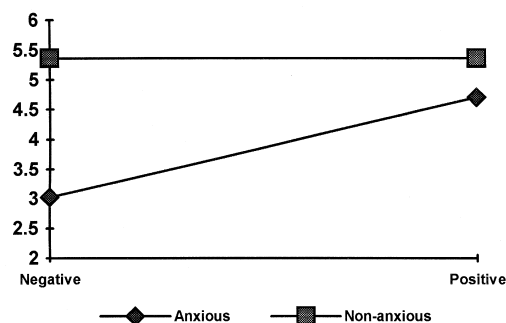


Fig. 1. Others' ratings of liking for socially anxious and non-anxious subjects in the negative and positive appraisal conditions.

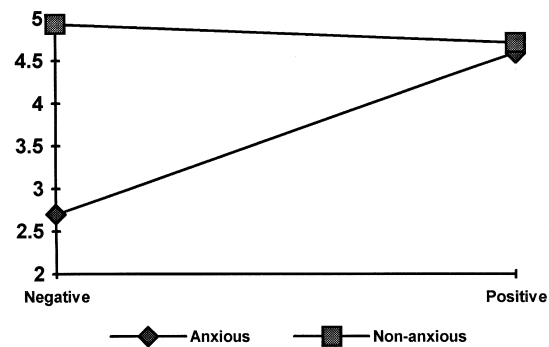


Fig. 2. Others' ratings of behavioral appropriateness for socially anxious and non-anxious subjects in the negative and positive conditions.

78) = 3.79,  $P < 0.05$ . These main effects were modified by a significant group by condition interaction,  $F(2, 78) = 4.24$ ,  $P < 0.05$ .

An examination of the univariate effects for the overall interaction revealed a significant effect for both liking,  $F(1, 79) = 7.62$ ,  $P < 0.01$ , and appropriateness,  $F(2, 79) = 6.90$ ,  $P < 0.05$ . Simple effects analyses revealed that in the negative appraisal condition, socially anxious Ss were rated as less appropriate and less likeable than were non-anxious individuals,  $F(1, 81) = 27.00$ ,  $P < 0.001$ , and  $F(1, 81) = 15.08$ ,  $P < 0.001$ . In the positive appraisal condition, there were no significant differences between the two groups on either appropriateness or likeability. Thus, in the positive condition, anxious and non-anxious Ss could not be discriminated in terms of others' reactions to them. The two interactions are displayed in Figs. 1 and 2.

#### 4. Discussion

The results revealed that socially anxious people used safety behaviors to protect themselves from negative social outcomes. Ironically, the very behavior they used to ward off negative outcomes led to negative reactions from others. The event that triggered this sequence of events was the person's cognitive appraisal of the social situation as a potentially risky event. All in all, these results support a cognitive model of social anxiety, rather than alternative explanations.

Talking briefly and selecting non-revealing conversational topics met the three criteria for a safety behavior outlined in the introduction. First, their use was flexible and covaried with the person's situational appraisal. Such flexibility is highly inconsistent with skill deficit models of social anxiety. The socially anxious Ss were clearly capable of appropriate verbal behavior but elected not to reveal themselves when they judged it risky to do so. Second, the use of these behaviors was functional. Negative situational appraisals led to self-protective social goals, particularly for the socially anxious Ss. These behaviors (talking less, topic selection) appeared to be strategically adopted to accomplish this goal. Finally, these behaviors reflected more than anxiety-mediated behavioral inhibition. Socially anxious Ss reported the same level of arousal in the positive appraisal condition as in the negative appraisal condition, yet displayed effective

verbal behavior when they anticipated that others would respond positively to them. Overall, the behavioral changes displayed by the socially anxious Ss were more consistent with cognitive models than with skills deficit or simple anxiety-inhibition models.

As predicted, socially anxious Ss evoked significantly more negative responses from their partners in the negative appraisal condition, where they employed verbal safety behaviors to avoid disapproval, than in the positive appraisal condition, where they did not. It is unlikely that social rejection of the anxious Ss in the negative condition was due to emotional contagion as their anxiety level did not differ from anxious Ss in the positive condition. It is notable that following positive situational appraisals, socially anxious Ss were found to be as appropriate and likeable as non-anxious Ss. Overall, for socially anxious individuals, greater use of safety behaviors did indeed have negative interpersonal consequences.

The picture that emerges from these data is that socially anxious individuals establish negative transactional cycles between themselves and others. Their attempts to protect themselves from social disapproval produce the very outcome they are trying to avoid. In particular, these results suggest that people who interact with socially anxious individuals may be less motivated to seek them out in the future if they engage in self-protective behavior. In turn, disengagement on the part of others would be expected to reinforce socially anxious people's negative views of themselves and negative predictions about future social events.

Compared to non-anxious individuals, socially anxious Ss were motivated more strongly by self-protective goals and were more likely to select non-revealing conversational topics. They did not differ on the duration of their comments. Thus, it was not how much the socially anxious people talked as much as what they talked about that appeared to be responsible for eliciting negative reactions from others. This suggests there is variability in the interpersonal impact of different safety behaviors. Further work is necessary to determine whether the other types of safety behaviors identified by Clark and Wells have adverse interpersonal effects.

In this study, a relatively straightforward manipulation resulted in significant improvement in the behavior of socially anxious individuals and positive changes in others' responses to them. These results are reminiscent of earlier work that concluded that anxious individuals have greater behavioral flexibility and capability than is often recognized but select introverted roles because of their interpersonal expectations (Vitkus & Horowitz, 1985). In terms of treatment implications, the current results indicate that the modification of negative predictions about social situations is central to altering the socially anxious person's behavior (e.g. Foa, Franklin, Perry & Herbert, 1996). These results also underscore earlier findings that reducing safety behaviors is an important element in changing negative social beliefs (Wells et al., 1995). In particular, a reduction in the use of safety behaviors may lead to positive social outcomes that can be used as information to modify anxious individuals' negative predictions about the likely outcome of future social events.

Some caveats apply to interpretations of these results. This study was done with socially anxious students. It remains to be determined whether the same pattern of results would be found with clinical populations of patients with social phobia, who would be expected to have higher levels of anxiety and perhaps more pervasive skills deficits. It is encouraging, however, that these results are consistent with earlier research on patients with social phobia (Wells et al., 1995). In addition, the interpersonal situation studied here is artificial in terms of its structure and setting. Further work is needed to establish that this pattern of results generalizes

to daily interactions and to other types of social situations. Finally, this research was conducted with women and further work would be required to determine if these results generalize to socially anxious men.

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