STANDARD-SETTING, AFFECT, AND MOTIVATIONAL CONCERNS
FOLLOWING SOCIAL SUCCESS
IN SOCIAL PHOBIA
by
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We accept this thesis as conforming
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Abstract

This study examined the impact of positive or negative interpersonal feedback on standard-setting, affect, and motivational concerns, within the framework of self-regulation theories of social anxiety. Thirty-two individuals who met Diagnostic and Statistical Manual of Mental Disorders (rev. 3rd ed.; American Psychiatric Association, 1987) criteria for social phobia and 32 nonclinical controls participated in a successful or unsuccessful conversation with an assistant. Subjects rated two aspects of self-regulation (self-efficacy and standards), positive and negative affect, and motivational concerns. Consistent with predictions, socially phobic subjects displayed a discrepancy between what they believed they could achieve (efficacy) and what they believed others expected of them (standard) and the magnitude of this discrepancy increased when they had succeeded at the social task. In addition, anxious subjects reported higher levels of positive affect after experiencing social success than they did after experiencing social failure but they did not relinquish protective concerns. There was no evidence that socially phobic subjects were distressed by social success but the results illuminate dysfunctional standard-setting. Specifically, socially phobic individuals perceive larger discrepancies between their ability and expectations following success than they do following failure.
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Introduction

The focus of this research is on individuals with social phobia. These individuals have severe social fears, often report a disabling and unwelcome sense of self-consciousness in social situations, and are paralysed by the prospect of social failure or embarrassment. Despite these concerns, there are few empirical studies of how people with social fears evaluate their behaviour in social situations and the impact, if any, of others’ evaluations on these processes. One area of particular interest is social evaluation processes. Several theories have emerged in recent years that suggest the process of self-evaluation can operate to hinder comfort in social situations and may be the result of, or contribute to, the socially anxious individual’s negative social self-image. The purpose of the present study is to examine the response of a sample of socially phobic individuals to positive or negative interpersonal feedback within a social evaluative framework. Ultimately, this research will contribute to a conceptual framework for understanding and treating the concerns of these individuals.

Overview of social anxiety

Anxiety is an unpleasant affective state characterized by apprehension about an impending, potentially negative, event (Schlenker & Leary, 1985). For many individuals, social anxiety represents a passing lapse in confidence; for others, it reflects a disabling propensity to respond with apprehension to nearly all social situations (Buss, 1980; Zimbardo, 1977). Broadly speaking, social anxiety can be approached from three perspectives. These are outlined below.¹
Classical conditioning model

It is well established that some fears can be classically conditioned by pairing fear-producing stimuli with otherwise benign objects or events. A classic example of fear conditioning is John Watson’s demonstration of conditioning a young boy to fear a white rat by banging a steel bar with a hammer whenever the boy tried touching the animal. After three pairings of the rat and the loud noise, "Little Albert" evidenced fear whenever the rat, alone, was presented (Watson & Rayner, 1920). A similar demonstration of fear conditioning in social situations is, thankfully, prohibited by ethical considerations. Yet, there are reasons to believe that at least some social fears may be classically conditioned. Retrospective accounts by anxious patients sometimes allude to a traumatic event in which a faux pas elicited intense reaction from others. Also supportive is the demonstrated efficacy of interventions derived from conditioning theory such as systematic desensitization (Bandura, 1969; Curran & Gilbert, 1975; Meichenbaum, Gilmore & Fedoravicius, 1971; Paul, 1966).

Social skills model

A second approach to social anxiety maintains that people become anxious when they lack the skills needed to ensure smooth and pleasurable interactions (e.g., Bellack & Hersen, 1979). A principal tenet of the social skills model is that if an individual cannot interact in an appropriate, facilitative manner, conversations become awkward and uncomfortable. Thus, the individual may become progressively unlikely to initiate social encounters and eventually come to dread social interaction because anxiety will be experienced in almost all social overtures; the result is eventual isolation. Supporting evidence germane to the social skills model lies in others’ ratings of social skills of anxious subjects. Typically, anxious subjects are judged by their
nonanxious counterparts as lacking in social skill (e.g., Arkowitz, Lichtenstein, McGovern, & Hines, 1975; Bellack & Hersen, 1979; Curran, 1977). Yet, it is difficult to identify specific behavioral dimensions on which high and low socially anxious individuals differ. For example, there is some suggestion that anxious and nonanxious individuals differ in terms of the timing of turn-taking in conversations (Fischetti, Curran & Wessberg, 1977). Interventions that focus on identifying and remediating social skill deficits also provide support for the social skills model (Bellack & Hersen, 1979; Curran, 1977).

Cognitive self-evaluation model

A third approach stresses the role of cognitive factors in social anxiety. Almost universally, people who are socially anxious endorse cognitions that fall into several categories, including: (1) thoughts of general social inadequacy, (2) preoccupation with others’ awareness of their anxiety, (3) fear of negative evaluation and criticism, (4) overly negative evaluation of social performance, and (5) pathological patterns of attribution of the causes of social successes and failures (Arkowitz, 1977; Cacioppo, Glass, & Merluzzi, 1979; Glass, Merluzzi, Biever, & Larsen, 1982; Hartman, 1984; Heimberg, Acerra, & Holstein, 1985; Malkiewich & Merluzzi, 1980). Although these individuals may be aware of factors that accurately reflect the nature of their interpersonal relationships (e.g., criticism and rejection) some of these cognitions may be vulnerability or maintenance factors that require treatment in their own right.

Social anxiety and concern with others’ impressions

Several cognitive theories of social anxiety propose that people with social fears are extremely self-critical, are overly concerned with the impression that they convey to others, and evaluate their behavior in light of stringent standards. Yet few studies
have measured social evaluation concerns or cast light on the process by which these concerns influence the anxious individual's response to social stimuli. Three theories which discuss the link between social evaluation concerns and social anxiety are discussed below.

**Carver and Scheier: Self-regulation theory**

Michael Carver and Charles Scheier proposed a model of self-regulation derived from Duval and Wicklund's (1972) theory of objective self-awareness (Carver & Scheier, 1986). The issue of interest here is the process of self-appraisal that these authors suggest contributes to social anxiety and avoidance. Carver and Scheier conceptualize self-awareness as part of a self-regulatory process that helps guide individuals in pursuit of their goals. From this perspective, when individuals believe that others are directing their attention towards them, a process of self-appraisal begins by which they compare their performance to their standards for that performance. The theory has several important points: (1) focusing attention on the self promotes a tendency to conform to the standard; (2) if attempts to match the standard are impeded, the likelihood of matching the standard will be appraised; (3) this appraisal can lead to either positive or negative judgements about the likelihood of achieving the desired outcome; and (4) these judgements determine whether the individual will persevere or withdraw from the task. The central aspect of this theory is the interaction of self-focused attention and expectancies to match standards. Accordingly, shy individuals become anxious and withdraw when self-awareness increases because they expect negative outcomes in social situations.

Several authors believe that social situations make individuals aware of the public aspects of themselves and increase the salience of social standards, e.g.,
making a good impression on others (Carver & Scheier, 1981). Research demonstrates that individuals with social phobia are high in public self-consciousness, the dispositional counterpart of public self-awareness (Hope & Heimberg, 1988). As well, self-aware, socially anxious men were judged to be less skillful by their partner in a telephone conversation than men in whom self-awareness was not heightened (Burgio, Merluzzi, & Pryor, 1986). Research in our laboratory found that in a control (non self-aware) condition, high and low social-efficacy men displayed equal persistence in a face to face interaction. When public self-awareness was increased, though, low efficacy men were more likely to arrive at negative self-evaluations and to withdraw from the interaction than were high efficacy men (Alden, Teschuk, & Tee, 1991). Taken together, these findings support the basic tenets of the Carver-Scheier model.

**Schlenker & Leary: Self-presentation theory**

Barry Schlenker and Mark Leary suggest that social anxiety arises when an individuals are motivated to make a particular social impression but doubts that it can be achieved (Schlenker & Leary, 1982). This uncertainty may arise because individuals: (1) do not know how to accomplish the impression they desire to convey; (2) believe they lack the proficiency to achieve the impression; or (3) believe that something will befall them to disclaim the presentation. Thus, individuals approach social situations with the intent of accruing social approval. However, if doubtful that the desired impression will be conveyed, social anxiety arises and they will withdraw. These doubts can arise, at times, from standards being higher than people believe they can achieve (Schlenker & Leary, 1982).
Arkin: Self-protection theory

Robert Arkin’s theory of self-protection addresses the motivation that lies behind the anxious individual’s social evaluative concerns (Arkin, 1981; Arkin, Lake, & Baumgardner, 1986). Arkin proposes that people approach social situations with predominantly one of two presentational styles. Acquisitive self-presentation refers to instances in which individuals desire to present themselves favorably. The presentation of self is taken as a challenge and the individual approaches interpersonal situations with more regard for potential gain (e.g., social approval, praise) than social risks (e.g., embarrassment, rejection). This style stems from a desire to gain approval. Social conservatism characterizes protective self-presentation. Individuals who adopt the protective style of presentation strive to present themselves in a cautious, conservative, and self-effacing light. This style stems from a desire to avoid disapproval from others. The distinction between protective and acquisitive styles provides an intriguing and useful framework within which the results of research into the interpersonal style of individuals with social anxiety can be placed. Arkin states that socially anxious individuals desire to gain this approval but they adopt a protective style from the outset of an interaction because they fear incurring others’ disapproval. The acquisitive style, he proposes, will not emerge unless these individuals are assured that disapproval is not likely. By avoiding situations in which negative social evaluation may be incurred, opportunities for informative social feedback may be missed. Hence, avoidance may serve to feed the uncertainty that presumably motivated the protective style in the first place.

There has been little direct empirical examination of the protective self-presentation style. In part this may be due to lack of adequate assessment
procedures that distinguish between protective and acquisitive styles. Instead, support for the idea that socially anxious people adopt a predominantly protective, rather than acquisitive, presentational style must be derived from related studies. One prediction that stems from Arkin's theory is that shy people choose, modify, or create social contexts so that disapproval is unlikely to occur. Indeed, shy people choose structured over unstructured situations and are reluctant to interact unless prodded to do so (Jones & Russell, 1982; Phillips & Metzger, 1973). As well, subjects that score high on measures of shyness and social anxiety date less (Curran, 1977), prefer to work alone (McGovern, 1976), and choose to sit near the sides or rear of a classroom where they can better moderate their participation in classroom discussions (Dykman & Reis, 1979). Research also shows that socially anxious subjects employ conversational styles that will, if not make a particularly positive impression upon others, prevent making a bad one. Compared to low anxious subjects, high anxious subjects role-playing a social scenario asked more questions, used more acknowledgement responses such as murmuring "uh huh," agreed with their partner more, and avoided discussing factual topics that might have portrayed them as unknowledgeable (Leary, Knight, & Johnson, 1985). Shy people also tend to avoid initiating or structuring conversations. They speak less during conversations, take longer to respond to others' witty remarks, allow uncomfortable silences to occur unbroken, and are less likely to interrupt (Natale, Entin, & Jaffe, 1979). As well, shy people adopt neutral attitudinal positions, particularly if they expect confrontation from others with a different opinion (Natale et al., 1979; Turner, 1977) and tell stories that are less revealing, vivid, and shorter if they anticipate interpersonal evaluation than if they do not (DePaulo, Epstein, & LeMay, 1990). By remaining neutral, the shy
person can avoid disapproval initially and later adopt the attitude of others to gain approval (Cialdini & Mirels, 1976). Arkin suggests that these sorts of responses allow the anxious individual to interact in a passive but pleasant fashion while avoiding taking social risks.

**Summary of social evaluation theories**

This selective overview was intended to introduce concepts that will be used in this study. Each of these theories links social anxiety to social evaluative concerns, i.e., concern with others' impressions. They contain several shared elements, such as the idea of self-appraisal and the importance of negative expectancies concerning goal-attainment. Carver and Scheier as well as Schlenker and Leary highlight the central issues of social-evaluative theories--concern with impression management and doubts that one can convey the desired impression. These authors propose that anxious individuals may have high standards against which they evaluate their behavior. Arkin addresses the motivation lying behind the socially anxious individual's social evaluation concerns. He suggests that people with social fears are motivated by protective concerns when they initially approach social situations although they have acquisitive motives as well.

**Social Anxiety and Social Feedback**

The aim of this section is to illuminate issues that will be addressed in this study.

**Clinical observations**

Clinical observations illustrate the social evaluative concerns of anxious and avoidant individuals. These clients tend to be self-deprecating, wonder how well they are handling an interaction, and often complain of a painful sense of self-
consciousness—a sense that others are watching and evaluating them. They believe their anxiety and awkwardness are visible to others and prevent them from participating in satisfying social interactions. As well, they tend to attribute their social failures to a vague, undefined sense of inadequacy.

A very interesting feature of individuals with social fears is that they sometimes downplay or dismiss positive interpersonal feedback from others. According to the social evaluative theories discussed above, anxious clients should relish positive reactions from others because it indicates that they have satisfied others’ expectations and avoided their disapproval (cf. Ahrens & Abramson, 1991). Yet observations of anxious clients suggest that they often do not accept positive feedback without reservation. For example, a socially client presented for therapy with complaints that he had few friends and that no one liked him. At one point during therapy, he reported having spoken to several women after the previous therapy session, one of whom gave him her phone number. When asked about this event, he remarked "that doesn’t really count. She wouldn’t have given me her number if she really knew what I was like." Shortly after that he went to a nightclub where, over the course of the evening, several women asked him to dance. Again, he denied that this event reflected positively upon himself, saying "it doesn’t mean they liked me." Positive reactions from others seemed to arouse discomfort in him instead of a sense of accomplishment and pleasure.

When faced with evidence that they are liked and accepted by others, anxious and avoidant clients may discount such information. They may believe the others’ judgement is faulty or that the other person has inadequate information to view them clearly (e.g., "He thinks I’m smart but I’ve just fooled him" and "if she really knew
me, she wouldn’t like me”). The result is dysfunctional in the sense that dismissing positive feedback precludes the possibility of changing a negative self image and may perpetuate anxiety and avoidance.

**Laboratory studies of social feedback**

i. Discounting/dismissing social feedback.

Research suggests that socially dysfunctional clients are more likely to assume responsibility for negative social outcomes and are less likely to accept credit for positive outcomes than nonanxious individuals (Alden, 1984; Anderson, Horowitz, & French, 1983; Arkin, Appelman, & Burger, 1980; Girodo, Dotzenroth, & Stein, 1981; Peplau, Russell, & Heim, 1979; Teglasi & Fagin, 1984; Teglasi & Hoffman, 1982; Zimbardo, 1977). Some research suggests that this style of responding to social events persists even in situations where socially anxious people handle an interaction adequately (e.g., Alden, 1984). They may deprive themselves of genuinely positive social feedback or blame themselves needlessly for what they perceive as negative interactions, responses that perpetuate social anxiety and avoidance (Alden & Cappe, 1981; Schwartz & Gottman, 1976).

ii. Emotional response to social feedback.

Few studies have systematically investigated the emotional response of people with social fears to positive or negative interpersonal evaluation. One study investigated the emotional response of high and low socially anxious individuals to written negative interpersonal feedback from an interaction partner. High anxious subjects indicated that the feedback was more negative, would evoke a more negative emotional response from them, and believed that they would be more likely to receive this feedback than did nonanxious subjects (Smith & Sarason, 1975). Review of this
literature also revealed one study in which anxious subjects reported unpleasant affect in response to a positive interpersonal evaluation (Arkin & Appleman, 1983). In that study, socially anxious college men were provided with written evaluative feedback concerning a social task that the subjects had performed. Both anxious and nonanxious men expressed more positive affect after receiving favorable than unfavorable evaluations. However, socially anxious men also reported more negative affect (distress) following the positive feedback than following the negative feedback. These subjects also expressed doubt concerning the accuracy of favorable feedback. This is an intriguing finding and may parallel the tendency of some socially anxious individuals to downplay or ignore positive interpersonal feedback. In a follow-up study, Lake and Arkin (1985) administered a written test to socially anxious individuals and provided positive or negative evaluative feedback concerning their performance on this test. Subjects high in social anxiety rated the favorable feedback as less accurate than did their nonanxious counterparts, and regarded the evaluators who provided them with positive feedback as less perceptive than did nonanxious subjects. The predicted differences in affect did not emerge. However, the authors stated that the measure of affect may not have been appropriate for use in the study. As well, the subjects completed the tasks in a situation that was designed to maximize privacy. Thus, these subjects may not have been as concerned, or aware of, interpersonal evaluation as were subjects in the Arkin and Appleman study.

Other differences between studies make conclusions regarding affect tentative. For example, these studies used different procedures. Lake and Arkin (1985) used a paper-and-pencil task that was of a social nature but did not involve a face-to-face interaction with another individual. Smith and Sarason (1975) asked subjects to
participate in a social task but they asked subjects to *imagine* they had received positive or negative feedback. Arkin and Appleman (1983), used a task that required anxious individuals to converse with another individual. However, in their procedure, all subjects believed they had failed the task. Manipulation of feedback took the form of manipulating subjects' perceptions of their responsibility for this failure. Therefore, none of these studies manipulated social feedback pertaining to subjects' *interpersonal performance* in an intimate person-to-person interaction. Additionally, each of these studies used college students with social fears that were not of clinical severity and used different criteria in selecting these subjects.

iii. Standard-setting and social feedback.

From past research we know that an important component of social evaluation is the goal or standard by which individuals judge the success or failure of the impression they convey. This research suggests that standard-setting and the self-evaluative process that accompanies it, can encourage sustained effort in a task or can produce discouragement and task withdrawal (e.g., Alden & Wallace, 1991). The path chosen depends, in part, on one's perceived capabilities to achieve the standard (i.e., sense of self-efficacy). The issue here is one of level of standard established relative to level of self-efficacy. Clinicians and researchers speculate that socially anxious individuals hold unrealistically high, or stringent, standards for judging their social behavior. Surprisingly, little systematic research actually focuses on social standards measured independently of perceived ability.

Many researchers view standards as static entities (Ahrens & Abramson, 1991). That is, they believe standards are fixed and not changeable. Wallace and Alden (1993) investigated the standards anxious students established on a social task
following positive and negative feedback. Socially anxious and nonanxious men received positive, negative, or no social feedback about a practice interaction they had with an assistant and made ratings of two standards for judging the adequacy of their performance in an upcoming interaction and their social self-efficacy. Nonanxious subjects believed others had high expectations for them following negative social feedback; anxious subjects believed others had high expectations for them following positive social feedback. Consequently, a discrepancy between efficacy and standard among socially anxious subjects remained despite feedback. This study indicated that it would be beneficial to systematically investigate the impact, if any, of positive social feedback on standard-setting among individuals with social fears of clinical severity. As outlined above, reactions to positive social feedback include distress and attempts to discount or dismiss praise. Standard-setting following feedback could account for or contribute to this discomfort.

iv. Self-presentation motivation and social feedback.

Research is needed pertaining to the impact of positive social feedback on self-presentation concerns. Changes in self-presentation motivation following positive feedback could explain standard-setting and emotional reactions of distress in social situations. One possibility is that praise serves as a catalyst that prompts anxious men to switch from a cost orientation to a reward orientation. In other words, disapproval may not concern anxious men when they are given positive feedback. Instead, they may desire to gain approval and establish standards that are higher than those set in response to negative or no feedback. Indeed, in the study by Wallace and Alden (1993), anxious men established higher goals for the subsequent interaction in the positive feedback condition. This explanation, however, does not account for
negative emotional reactions following positive feedback as was reported in the Arkin and Appleman (1983) study.

Another interpretation from this perspective is that expectations of future interaction lead socially anxious individuals to be more concerned about negative sanctions for failing to maintain an image (Schlenker & Leary, 1982). Consequently, socially anxious men given positive social feedback may be inhibited from claiming "risky" images since losing that approval concerns them. This would explain why the efficacy expectations of anxious men given positive social feedback do not increase (e.g., Wallace & Alden, 1993). This explanation, however, does not explain standard-setting following positive social feedback.

The Present Study

The above review attests to how little attention has been given to the cognitive processes associated with receiving positive interpersonal evaluation. Others' approval or praise has traditionally been viewed as a powerful social reinforcer that motivates behavior and contributes to the development and/or maintenance of a positive sense of self-worth (Kanouse, Gumpert, & Canavan-Gumpert, 1981). Yet, approval is a subtle and complex interpersonal event and these assumptions may be simplistic. Understanding this issue is essential considering that an integral component of many treatment approaches to socially dysfunctional behavior is provision of positive social experiences. The central objectives of this research are outlined below.

The main objective of this research is to investigate standard-setting following positive feedback. Curiously, positive interpersonal responses do not appear to affect efficacy expectations or persistence in social interactions predictably (e.g. Alden &
Wallace, 1991). One possibility is that standard-setting could undermine the strength of positive feedback to increase percepts of efficacy if the standards against which efficacy is compared are consistently out of reach. Thus, some individuals may establish standards in a dysfunctional way.

The second objective of this research is to investigate the affective response of people with pathological social fears to positive interpersonal evaluation. Observations from clinical settings suggest that socially anxious individuals may be more distressed by positive responses from others than are nonanxious individuals. Consistent with this is a study in which anxious subjects, given feedback that a standard had successfully been met, felt pressure to continue a conversation beyond the point when they would liked to have stopped (Alden & Wallace, 1991) and a study in which anxious subjects were more distressed by a positive evaluation than negative evaluation (Arkin & Appleman, 1983).

The third objective of this research is to examine the impact, if any, of positive social feedback on how people with social phobia construe the inherent risks and rewards in social situations. Socially anxious individuals may be more concerned with avoiding others' disapproval and criticism following positive social feedback than following negative social feedback. Alternatively, positive feedback may be a catalyst that serves to prompt anxious individuals to switch from a predominantly protective presentation style to a predominantly acquisitive one. Changes in self-presentation motivation may explain standard-setting following positive feedback and/or the emotional reactions of anxious individuals to such feedback.
Population of Interest

Individuals diagnosed with Social Phobia, Generalized Type (DSM-III-R; American Psychiatric Association, 1987) will be the focus of this research. These individuals are an appropriate clinical population in which to study the impact of positive interpersonal evaluations on affect and social evaluation processes because they express concern with others’ expectations, negative beliefs concerning their ability, and avoid many types of situations in which they may be exposed to scrutiny by others (e.g. parties, speaking to persons in authority, talking in a group). Social avoidance and withdrawal are significant problems for these individuals.

Overview of Social Phobia

Individuals with social phobia have great difficulty participating comfortably in social interactions because of their anxiety in social situations. Social phobia is somewhat unstudied relative to the attention given other anxiety disorders (Amies, Gelder, & Shaw, 1983; Liebowitz et al. 1985). This may, in part, be due to past and present clinical attitudes that social phobia is not much more than a bothersome fear rather than the disabling problem that it is. In fact, people with social phobia are often gravely impaired in social, emotional, and occupational areas (Liebowitz et al. 1985; Turner, Beidel, Dancu, & Keys, 1986). As well, clients with social phobia commonly report abuse of alcohol and other substances that may reduce anxiety (e.g., anxiolytics, beta-blockers, and antidepressants; Amies et al. 1983; Liebowitz, Gorman, Fyer, & Klein, 1985; Sanderson, Rapee, & Barlow, 1987).

History

The history of social phobia is a somewhat short one. Prior to 1970 the term "social phobia" was not in the diagnostic nomenclature. In fact, the Glossary of
Mental Disorders (1968) did not differentiate varieties of phobic disorders. The definition as we know it today dates from 1966 when Marks and Gelder described a condition in which an individual becomes very "anxious" in situations where they may be subject to scrutiny by others while performing a specific task, the most common being public speaking. Following this, Marks (1967) suggested breaking down phobic disorders into four categories based on varying patterns of differences among groups on several variables. These groups were agoraphobia, situational and animal phobias, and social anxieties. He noted that the people with social phobia formed a group of anxiety patients with more fears than animal phobics but fewer than agoraphobics. The term "social phobia" was coined in 1970 by Marks.

The concept "social phobia" was elaborated over the years and proved to be useful enough for the third edition of the Diagnostic and Statistical Manual of Mental Disorders (abbreviated DSM-III) to adopt it (American Psychiatric Association, 1980). The definition included in the revised version of the DSM (DSM-III-R; American Psychiatric Association, 1987) is essentially unchanged from DSM-III except the notation that individuals may well have more than one of these performance-related phobias simultaneously.

**Description**

The DSM-III-R defines social phobia as a "persistent fear of one or more situations . . . in which the person is exposed to possible scrutiny by others and fears that he or she may do something or act in way that will be humiliating or embarrassing" (p. 241). Although there are many possible labels for anxiety experienced in social situations (e.g., social anxiety, audience anxiety, speech anxiety, shyness) degree of impairment typically distinguishes social phobia from these. For
example, Barlow (1988) remarks that in a true "social phobia" patients report no
difficulty at all when the activity occurs in private (e.g., eating, writing, urinating) and
great difficulty when others are watching.

Nichols (1974) reviewed the clinical records of 35 individuals who presented
for treatment with complaints of anxiety in social situations. In at least 50% of
cases, one or more of the following characteristics was observed:

1. sensitivity to and fearfulness of disapproval and criticism;
2. tendency to perceive criticism and disapproval that are not actually present
   from others;
3. low self-evaluation (sense of being less capable than others);
4. rigid ideas of appropriate social behaviour;
5. anticipatory thoughts of disastrous social outcomes;
6. fear of "socially closed" situations (i.e., a fear of situations from which
   sudden social withdrawal would be unexpected and attract attention, e.g.,
   meals);
7. heightened sensitivity to sensory feedback relating to tension and
   embarrassment (e.g., heightened awareness of blushing and muscle
   twitching);
8. fear of being seen to be "ill" or losing control (i.e., fear of others noticing
   signs of panic);
9. progressive build-up in difficulties; and
10. unpredictability of anxiety response.
Incidence and prevalence

Social phobia, as a primary diagnosis, affects approximately 2% of the general population (Robins, et al. 1984). A National Institute of Mental Health multisite epidemiological study (cited in Myers et al. 1984) revealed that the six-month prevalence of social phobia ranged from 0.9 to 1.7% for men and 1.5 to 2.6% for women. Of patients seeking treatment for anxiety, anywhere from 8% (Marks, 1970; Sanderson et al. 1987) to 15% (Barlow, 1985) will meet criteria of social phobia. As well, social anxiety of clinical significance occurs in as many as one out of three psychiatric outpatients (Bryant, Trower, Yardley, Urbieta, & Letemendia, 1976) and 7% of inpatients (Curran, Miller, Zwick, Monti, & Stout, 1980). Precise estimates are difficult to obtain, of course, considering that many individuals do not come to the attention of health professionals. Although this "silent contingent" of people with social phobia suffer acute distress, they may not perceive that psychological or psychosocial interventions are relevant to their concerns. Some of these individuals may view their problem as characterological (e.g., "this is how I am") and from this conclude that treatment is of no use (e.g., "this is how I will always be") (Heimberg, Dodge, & Becker, 1987).

The sex ratio is different from other anxiety disorders in that men and women present to outpatient clinic settings in almost equal proportions (Amies et al. 1983; Marks, 1970; Sanderson et al. 1987). Other figures are likely discrepant due to differences in diagnosis. For example, Turner et al. (1986) found 29% of patients with social phobia were male but excluded patients meeting criteria for both social phobia and avoidant personality disorder. The mean age of individuals with social phobia seeking treatment is approximately 30 (e.g., Amies, et al. 1983; Liebowitz et
al. 1985; Sanderson et al. 1987; Turner et al. 1986). The mean age of onset of the disorder is typically in late adolescence (Amies et al. 1983; Liebowitz et al. 1985; Marks, 1970; Marks & Gelder, 1966; Turner et al. 1986). People with social phobia are less likely to be married than people with agoraphobia or simple phobias (Amies et al. 1983; Marks, 1970).

**Concomitant problems**

A problem associated with social phobia is substance, particularly alcohol, abuse. Mullaney and Trippett (1979) reported that one-third of an alcoholic population had disabling agoraphobia or social phobia. They also discovered that the onset of the phobias preceded alcohol problems in most subjects. Smail, Stockwell, Canter, and Hodgson (1984) attempted to replicate this research and found that 39% of 60 alcoholics had suffered from social phobia during their last typical drinking period. This group also believed that consuming alcohol would reduce tension. Amies et al. (1983) stated that 20% of subjects with social phobia consumed excessive amounts of alcohol. These data confirm the importance of addressing this issue in assessment and treatment. For example, people with social phobia may attribute the effects of treatment interventions to the substance, not themselves. Alternatively, an alcoholic with social phobia may find it hard to participate in specific forms of treatment for chemical dependency as these treatments carry heavy demands for social interaction (e.g., refusal of requests from friends to join them for a drink).

**Cognitive factors in Social Phobia**

Recent formulations of social phobia described in the clinical literature emphasize cognitive processes. The cognitive model of social phobia is based, in part, on Beck, Emery, and Greenberg (1985) who propose that there are two basic
distortions that characterize the anxious cognitions of socially phobic individuals: (1) negative social evaluative thoughts about their ability to cope in social situations, and (2) heightened perceptions of the likelihood of threatening social events. Thus, socially phobic individuals are purported to hold beliefs that they do not have the ability to successfully handle themselves in social situations, and they are hypervigilant to social threat cues in their environment.

There is a growing body of empirical literature which supports the cognitive model of social phobia. Regarding social phobic’s estimation of their ability to successfully cope with social situations, Rapee and Lim (1992) found that social phobics and nonphobic subjects rated their performance of a short speech more negatively than did observers of the speech but the discrepancy between self and observer ratings was greater for social phobics. Furthermore, these differences were restricted to social phobic subjects’ ratings of themselves. In other words, social phobic and nonphobic subjects rated others’ speeches similarly, but social phobic subjects believed that their performance was especially poor. In another study that has implications for socially phobic individuals’ expectations concerning their ability to participate in and influence the outcome of social interactions, Cloitre, Heimberg, Liebowitz, and Gitow (1992) assessed perceptions of control in panic disordered individuals, socially phobic individuals, and a nonclinical sample. These investigators found that both anxiety groups have a lower sense of internal control compared to a nonanxious group. Additionally, socially phobic subjects were distinguished from panic disordered patients by viewing events as controlled by powerful others. In other words, socially phobic individuals believe that others are powerful determinants of their social experience. Another study in this same vein examined the specificity of
social evaluative thoughts to social phobia by comparing social phobics with anxious controls as well as non-patient controls (Stopa & Clark, 1992). The procedure involved asking subjects to participate in a brief conversation with a neutral partner and their thoughts were assessed using a "think aloud" procedure as well as a structured paper-and-pencil measure. There were no differences between the groups in terms of the frequency of positive thoughts or negative thoughts that explicitly mentioned evaluation by an observer or interaction partner (e.g. "my partner thinks I’m boring") but social phobic subjects mentioned more negative evaluative thoughts that were self-referent (e.g. "I’m boring"). This provides further support for the cognitive model which argues that socially phobic individuals evaluate themselves negatively in social situations and that they are more preoccupied with these thoughts than are other individuals without social phobic concerns. As well, it suggests that these evaluations centre around the socially phobic individual’s belief that they are socially inadequate.

Support has also been garnered for the notion that socially phobic individuals are biased towards processing social threat cues. In one study, Lucock and Salkovskis (1988) found that socially phobic individuals, compared to their nonanxious counterparts, overestimated the probability that negative social events would occur and underestimated the probability that positive social events would occur. Interestingly, positive changes in therapy were associated with a reduction in this tendency to overestimate the probability of negative social outcomes. Another test of the threat notion revealed intriguing findings. Hope, Rapee, Heimberg, and Dombeck (1990) argued that social phobics’ self-schemata should facilitate processing aspects of social situations that are schema consistent and, therefore, social phobia
should be associated with extensive processing of social threat cues. Through the use of a modified Stroop task, socially phobic subjects were found to be hypervigilant to social threat cues as demonstrated by increased color-naming latencies for social-evaluative words (e.g. inadequate, inferior, failure) as compared to neutral words (e.g. insert, purely, specialized). Further, social phobics' schemata was found to be specific to social threat since they did not demonstrate latencies to other types of threat words, such as those signifying physical danger (e.g. illness, fatal, doctor).

Taken together, these clinical studies find support for a cognitive model of social phobia that emphasizes negative self-evaluations and heightened processing of social threat cues. The social-cognitive literature discussed earlier pertaining to standard-setting and motivational concerns has implications for understanding the nature of social phobia because it may help explain the observations revealed in the clinical literature, particularly those concerning negative perceptions of ability and beliefs of social inadequacy. For example, the observed tendency for socially phobic individuals to underestimate their social performance relative to others' evaluation of their performance (e.g. Rapee & Lim, 1992) may reflect these individuals' tendency to evaluate themselves against standards that they feel they cannot match. This would be illuminated by examining social phobic subjects' perceptions of efficacy on a social task as well as their perceptions of standards of evaluation for that task. Self-regulation theories of social anxiety, such as Carver and Scheier (1986), offer a framework in which to examine the operation of these factors in detail. As well, understanding how socially phobic individuals process different social outcomes, such as success or failure, may shed light upon how these individuals' beliefs of negative social ability are perpetuated.
**Predictions**

The predictions in this study stem from four questions.

**Question 1:** Do subjects with social phobia, given positive feedback, establish higher standards for themselves and what they believe is expected of them than if they are given negative feedback?

In keeping with the results of a previous study that examined standard-setting in anxious university men (Wallace & Alden, 1993) we expect that subjects with social phobia will have lower efficacy ratings in both feedback conditions than nonphobic subjects. Efficacy ratings will not differ between the conditions for socially phobic subjects, but nonphobic subjects will rate efficacy higher following positive feedback than following negative feedback. Subjects with social phobia will make lower ratings of personal standard than their nonanxious counterparts in both conditions of feedback and their rating of personal standard will increase following positive feedback, but they will not change following negative feedback. Nonphobic subjects, on the other hand, are expected to make higher ratings of personal standard following positive feedback and lower ratings of personal standard following negative feedback. The predictions in terms of others’ standard are different. Socially phobic and nonphobic subjects will rate others’ standard similarly before the interaction but socially phobic subjects will raise these standards following positive feedback. Nonphobic subjects will raise others’ standards following negative feedback.
Question 2: Does positive social feedback result in negative emotional reactions in individuals with social phobias?

The previously reviewed empirical literature revealed inconsistent findings. One study demonstrated that socially anxious subjects were pleased with positive feedback but were more distressed by it than if they were given negative feedback (Arkin & Appleman, 1983). This is consistent with clinical observations that anxious clients are often uncomfortable when others evaluate them positively. These researchers also reported that anxious and nonanxious subjects experienced heightened levels of positive affect after positive feedback relative to levels of positive affect after negative feedback, and that only anxious subjects experienced heightened levels of negative affect after positive feedback relative to levels of positive affect after negative feedback. However, a different study found no evidence of distress among socially anxious individuals who received positive feedback (Lake & Arkin, 1985). As well, these researchers reported that both groups, not just anxious subjects, reported heightened levels of positive affect after positive feedback relative to levels of positive affect after negative feedback. In the present study, it is expected that subjects with social phobia, when given positive social feedback regarding their performance in a face-to-face interaction, will report more negative affect than if they are given negative feedback. It is also expected that both groups will experience more positive affect after positive feedback than after negative feedback. No predictions are made regarding negative affect in each group following positive or negative feedback.
Question 3: Do subjects with social phobia given positive social feedback demonstrate greater acquisitive concerns than they do if they are given negative feedback?

It is difficult to make predictions concerning the presentation style of subjects with social phobia in the two feedback conditions because few empirical studies have addressed the issue in a social context. However, anxious individuals adopted a protective style of motivation during a social interaction (Meleshko & Alden, 1993) and positive feedback may have precipitated a switch from protective to acquisitive concerns (Wallace & Alden, 1991). As well, Arkin and Schumann (1983) suggested that anxious individuals should exhibit an acquisitive presentational style if conditions can be created where disapproval is not likely to occur. Therefore, it is expected that socially phobic individuals will demonstrate a predominantly protective presentational style when given negative feedback and a predominantly acquisitive style when given positive feedback. Nonphobic subjects are expected to demonstrate an acquisitive style in both conditions but should demonstrate some protective concerns following negative feedback.

Method

Overview of Procedure

Subjects in the study were individuals who met criteria for Generalized Social Phobia (hereafter termed "social phobic" subjects), and individuals who did not meet diagnostic criteria for an anxiety or mood disorder (hereafter termed "nonclinical" subjects). Each subject was told that they would participate in two conversations with a research assistant of the opposite sex and would be asked to answer questions about the conversation. This "first meeting" type task was selected because it is a common situation, a necessary first step in forming friendships, and one that socially
phobic individuals find problematic (Stravynski & Shahar, 1983). The interactions were presented to subjects as a means of evaluating their level of social skill but the actual purpose was to provide subjects with bogus social evaluative feedback. The success of the conversation was manipulated by varying the assistant’s behavior as well as comments made by the experimenter. The measures of interest were administered prior to, and following, the first interaction. The second interaction did not take place. Instead, subjects were asked a series of open-ended questions and debriefed.

Subject Recruitment

Recruitment of social phobic sample

A total of thirty-two subjects (16 men and 16 women) were recruited from the following sources: outpatient waiting list at Health Psychology Services, University Hospital, University of British Columbia, private practice clinicians, and media advertisements (see Table 1). Potential subjects were briefly interviewed by telephone during which time they were asked questions about their anxious concerns. Subjects whose primary complaints was depressed mood or who displayed signs of unusual thoughts were referred to treatment resources in the community. Individuals who appeared to be appropriate for the study were invited for a laboratory appointment and were mailed a questionnaire package that they completed prior to the interview.

The pre-assessment package contained a questionnaire concerning personal information (e.g., age, marital status, level of completed education) as well as the Social Avoidance and Distress Inventory (SAD; Watson & Friend, 1969) and the revised Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979). The
Table 1

Recruitment Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Total volunteers</th>
<th>Screened out by telephone</th>
<th>Cancel prior to interview</th>
<th>Screened out by interview</th>
<th>Total in study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Phobic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wait List¹</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Newspaper</td>
<td>37</td>
<td>23</td>
<td>2</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Radio</td>
<td>32</td>
<td>24</td>
<td>0</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Television</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Social</td>
<td>89</td>
<td>52</td>
<td>3</td>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td>Nonclinical Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posters</td>
<td>14</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Newspaper</td>
<td>41</td>
<td>24</td>
<td>1</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Radio</td>
<td>10</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Television</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total Nonclinical Control</td>
<td></td>
<td>68</td>
<td>33</td>
<td>2</td>
<td>32</td>
</tr>
</tbody>
</table>

¹Note: The source of wait-list referrals was the Health Psychology Clinic at University Hospital, UBC Site, and clinical psychologists in private practice.
SAD is a 28 item, true-false, measure of social anxiety and distress. Scores range from 0 to 28 with a mean of nine. Higher scores reflect a greater degree of social avoidance and distress. Watson and Friend (1969) reported a mean point-biserial item-total correlation of .77, KR-20 of .94, and one-month test-retest reliability of .68. Other investigators report a one-month test-retest correlation of .86 (Girodo, Dotzenroth, & Stein, 1981). The revised BDI (Beck et al., 1979) is a 21-item instrument designed to assess the severity of depression in adolescents and adults. Introduced at the Center for Cognitive Therapy of the University of Pennsylvania Medical School in 1971, the revised BDI replaces the original BDI (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Many reviews about its applications and psychometric properties have been conducted (e.g., Beck & Beamesderfer, 1974). In the present study, the following cut-off scores were employed: 0 to 9, normal range; 10 to 18, mild-moderate depression, 19 to 29, moderate-severe depression; 30 to 63 extremely severe depression (Beck & Beamesderfer, 1974).

The purpose of this pre-assessment packet was threefold. First, it was intended to provide an indication of social anxiety or depressive symptomatology in the phobic and nonclinical sample. Second, it served as a screening instrument for subjects in the nonclinical group who had significant anxious or depressive concerns. Third, it reduced the number of questions that subjects would be required to complete in one sitting. It was anticipated that BDI or SAD scores could change between the time that the packet was completed and the time that the individual was interviewed (approximately two weeks in each case). Therefore, the diagnostic interview included questions that assessed current anxious and/or depressed mood. No subjects
reported changes in depressed or anxious mood in the two-week period between completing the packet and being interviewed.

Criteria for inclusion in the Social Phobic sample

Individuals who described symptoms consistent with a diagnosis of Social Phobia (Generalized Type) (DSM-III-R; American Psychiatric Association, 1987) were interviewed using the revised Anxiety Disorder Interview Schedule (ADIS-R; DiNardo et al., 1985). The ADIS-R is a structured interview schedule based on DSM-III criteria and is designed to assist in differential diagnosis among anxiety disorders while ruling out psychosis, substance abuse, and major affective disorders. A kappa coefficient (interrater reliability) of 0.77 has been previously reported for an ADIS-R diagnosis of social phobia. The diagnostic interviews took place immediately preceding the laboratory session and were conducted by a trained experimenter. All interviews were tape-recorded and rated by the author. Social Phobic fear had to be the predominant disturbance on the ADIS-R. Social phobics had to show patterns of phobic avoidance that seriously disrupted their daily lives and met the DSM-III-R criteria for this disorder.

Criteria for exclusion from the Social Phobic sample

In order to obtain a representative sample of social phobia, individuals were not excluded who reported depressive symptoms or were comorbid for another anxiety disorder as long as they met DSM-III-R criteria for Generalized Social Phobia and anxiety was judged to be their primary concern. Subjects were excluded if they were below age 18 and/or displayed signs or indicated the presence of thought disorder or serious personality disturbance. Subjects also completed the BDI and SAD. A description of the demographics of the Social Phobic sample is provided in Table 2.
### Table 2

*Descriptive Data for the Social Phobic and Nonclinical Groups*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Social Phobic</th>
<th>Nonclinical Control</th>
<th>(X^2)</th>
<th>(t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Years)</td>
<td>36.31 (7.89)</td>
<td>34.9 (6.8)</td>
<td>.78</td>
<td></td>
</tr>
<tr>
<td>Income (thousands of dollars)</td>
<td>31.6 (13.2)</td>
<td>31.6 (14.4)</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Marital Status (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>68.8</td>
<td>62.5</td>
<td>5.43</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>12.5</td>
<td>25.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>9.4</td>
<td>3.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>9.4</td>
<td>3.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohabiting</td>
<td>0.0</td>
<td>6.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (completed) (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>15.6</td>
<td>12.5</td>
<td>2.82</td>
<td></td>
</tr>
<tr>
<td>Post Secondary Training</td>
<td>31.3</td>
<td>25.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College/University</td>
<td>37.5</td>
<td>56.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate</td>
<td>15.6</td>
<td>6.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment Status (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>90.6</td>
<td>84.4</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>9.4</td>
<td>15.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADIS-R Diagnosis (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panic</td>
<td>3.1</td>
<td>0.0</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td>GAD(^b)</td>
<td>3.1</td>
<td>0.0</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td>PTSD(^b)</td>
<td>6.3</td>
<td>0.0</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td>Agoraphobia</td>
<td>25.0</td>
<td>0.0</td>
<td>9.14**</td>
<td></td>
</tr>
<tr>
<td>Simple Phobia</td>
<td>28.1</td>
<td>25.0</td>
<td>1.64</td>
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<tr>
<td>Social Phobia</td>
<td>100.0</td>
<td>0.0</td>
<td>64.0***</td>
<td></td>
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<tr>
<td>OCD(^b)</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>9.4</td>
<td>0.0</td>
<td>3.15</td>
<td></td>
</tr>
<tr>
<td>Dysthymia</td>
<td>3.1</td>
<td>0.0</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td>Psychiatric History (%)</td>
<td>18.8</td>
<td>3.1</td>
<td>4.01*</td>
<td></td>
</tr>
<tr>
<td>Family Psychiatric History (%)</td>
<td>18.8</td>
<td>15.6</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Medication Use (%)</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAD Scale Score</td>
<td>23.22(3.34)</td>
<td>2.0(2.71)</td>
<td>27.9***</td>
<td></td>
</tr>
<tr>
<td>BDI Scale Score</td>
<td>6.97(5.0)</td>
<td>5.41(3.8)</td>
<td>1.41</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Scores are means, with standard deviations in parentheses.

\(^{a}n=32 \text{ in each group.}\)

\(^{b}\text{GAD} = \text{Generalized Anxiety Disorder}; \text{PTSD} = \text{Post-Traumatic Stress Disorder}; \text{OCD} = \text{Obsessive Compulsive Disorder}.\)

\(^*p < .05 \quad **p < .01 \quad ***p < .001\)
Recruitment of the Nonclinical sample

The nonclinical group (n = 32) was composed of 16 men and 16 women who did not meet DSM-III-R criteria for an anxiety or affective disorder and who scored below the mean of the SAD (9) and who did not score above the normal range on the BDI (0 to 9, inclusive). Subjects were recruited from newspaper advertisements. Nonclinical subjects were matched to the social phobic subjects on gender, and matched as closely as possible for age, socio-economic status, and level of education. Demographic information regarding the nonclinical sample is presented in Table 2. Nonclinical subjects were informed that they were providing comparison data for a social phobic group and were told precisely the same information about the study. These subjects also participated in the diagnostic interview and completed the same screening measures.

Criteria for exclusion from the Nonclinical sample

Potential nonclinical subjects were excluded if they met criteria for any anxiety disorder or affective disorder. They were also excluded if they scored above the mean on the SAD or outside of the normal range on the BDI.

Personnel

Experimenter

The experimenter was a senior graduate student in the Clinical Psychology program at UBC with extensive clinical experience working with socially phobic individuals. His duties included: (1) administering the ADIS-R, (2) conducting the laboratory procedures, (3) providing social evaluative feedback to subjects, (4) rating the subject and assistant’s behavior, and (5) conducting the post-study interview and debriefing. The experimenter was not aware of the hypotheses of the study.
Assistants

Two senior level graduate students in the Clinical Psychology program (one man and one woman) served as assistants in the study. The assistants’ duties included: (1) interacting with subjects in a manner corresponding to the appropriate feedback condition, and (2) rating their interaction with the subject. The assistants were blind to the hypotheses of the study and to the clinical diagnosis of each subject.

Assistant training

The assistants were trained to converse in a consistent manner with each subject within the two feedback conditions. A pilot study (n = 40) was conducted in which each of the assistants practiced the positive or negative feedback role with an opposite sex undergraduate during a 5-minute one-to-one interaction. The subjects for the pilot study were recruited from the UBC Psychology Subject Pool and informed that they would be participating in a study of the topics of conversation discussed by people meeting for the first time. Potential pilot subjects completed the BDI and SAD and the 40 subjects who scored below the mean of the SAD and within the normal range of the BDI participated further. Both the pilot subject and the experimenter rated the assistant’s behavior using 10-point Likert-type rating scales that assessed the assistant’s warmth, friendliness, and self-disclosure (see Appendix A for the actual items rated by subjects). The intercorrelation of these three items was .71 to .93 for pilot subjects’ ratings (p < .001) and .87 to .93 for the experimenter’s ratings (p < .001). Thus, the three measures completed by pilot subjects were combined to provide an overall measure of their perception of the assistant. Similarly, the three measures completed by the experimenter were combined to provide an overall measure of the experimenter’s perception of the assistant. A 2 (assistant) by 2
A MANOVA was conducted on pilot subjects' and experimenter's ratings. A main effect for feedback emerged, \( F(1,39) = 259.73, \ p < .001 \), and no main effect for assistant or interaction emerged (\( p > .10 \)). Thus, pilot subjects and the experimenter perceived the positive and negative role as distinct and the two assistants were perceived similarly.

**Procedure**

**Explanation of study**

Following the interview, the experimenter provided the following instructions:

"After a social interaction, people have a sense of whether they handled the situation well or whether they handled the situation badly. We are interested in the types of standards people use to evaluate their behavior in social situations. That is, when people say they handled a situation well, what standard or benchmark are they using to make that evaluation. What do they base their self-evaluations on? How do they know they handled the situation well or poorly?

"We find that there are two general kinds of standards. First, when we socialize with other people we have expectations for ourselves and our own behavior, that is, we have a sense of how we would like to behave in the situation, or the level of performance that we would like from ourselves. For example, if you were to meet somebody for the first time you probably have some sense of what type of behavior on your part would make you feel pleased with how you handled the interaction. This is your **personal** standard. That is, the level or type of behavior that would make you feel that you had handled the situation well. This is the
behavior that you yourself would be satisfied with—that would make you think 'I handled that well.' Second, there is your sense of what other people expect from you. This is the other person’s standard for evaluating your behavior in the situation. This is how you would have to behave so that the other person would say that you had handled the social interaction well.

"We are interested in learning more about the standards you use to evaluate whether you handled a social interaction well and about the standards you feel other people use to evaluate whether you handled a social interaction well."

Questions were answered by restating parts of the instructions. The experimenter then explained the use of the Video Rating Scale (described below) which was used to complete the dependent measures. After this, the experimenter explained the first set of dependent measures and presented them to subjects. Once these were completed, the experimenter introduced the assistant who had been waiting outside the laboratory door. He explained:

"Now that you’ve had a chance to tell me about your standards, I want to get an idea of how you actually do handle a situation like this. I want you to talk with my research assistant for 5 minutes. Just visit with them for awhile so that you get to know each other. You can talk about anything you like. I’m going to be watching the conversation from behind this one-way mirror and I’ll come back in after 5 minutes have passed."
During the time that the experimenter walked to the area behind the one-way mirror, the assistant was instructed to remain silent unless the subject spoke to him/her. During the interaction, the experimenter rated the assistant and the subject's behavior. The experimenter returned to the room after five minutes had passed.

After returning to the room, the experimenter thanked the assistant and asked him/her to leave. The experimenter then provided comments that constituted part of the feedback manipulation (described below). Following this, the subject completed the second set of dependent measures, concerning the interaction he/she just had with the assistant and the upcoming interaction. Once the subject had completed all of the measures, the experimenter informed him/her that there would be no second interaction. He then administered the post-interaction interview and debriefed the subject. An overview of the procedure and the timing for administration of dependent variables is presented in Table 3.

**Feedback manipulation**

The apparent success of the interaction was manipulated by varying the assistant's behavior and comments made by the experimenter.

**Positive feedback condition:**

**Assistant Role.** The assistant conveyed a successful interaction by verbal and nonverbal behavior. Verbal behavior included: (1) encouraging comments (e.g., "uh huh", "tell me more about that"), (2) self-disclosure (e.g., expressing interests and opinions), (3) warm tone, (4) asking questions at approximately 15 second intervals, and (5) allowing no more than 5 seconds to pass after the subject's last comment before speaking. The role was conveyed nonverbally by: (1) upright and slightly
Table 3

Overview of the procedure

1. Telephone contact
2. Pre-assessment package (BDI, SAD)
3. One to two week interval
4. Laboratory session with diagnostic interview
5. Explanation of standards and Video Rating Scale
6. Dependent variables: Standards and efficacy
7. Explain first interaction and introduce opposite-sex assistant
8. Interact for 5 minutes
9. Experimenter's feedback comments
10. Dependent variables: Manipulation checks, affect, motivation concerns
11. Explain second interaction
12. Dependent variables: Standards and efficacy
13. Interview and debrief
forward posture, (2) relaxed appearance, (3) steady and comfortable eye contact, and (4) frequent head-nodding.

**Experimenter’s comments.** The experimenter made comments immediately following the interaction. He stated "you handled that better than average. I could clearly tell that your partner was comfortable, you both seemed to get along very well, and you made an excellent effort at getting to know them. Overall, I think that was very successful."

**Negative feedback condition:**

**Assistant role.** The assistant conveyed an unsuccessful interaction by verbal and nonverbal behavior. Verbal behavior included: (1) very few encouraging comments, (2) little self-disclosure, (3) a cool tone of voice, (4) questions asked at approximately 45 to 60 second intervals, and (5) a 15 second pause after a subject’s last comment before speaking. The role was conveyed nonverbally by: (1) backward leaning posture, (2) infrequent nodding, and (3) little direct eye contact.

**Experimenter’s comments.** The experimenter’s comments immediately following the interaction were: "most people handle this situation better than you did. I could clearly tell that you had trouble handling the conversation and you didn’t seem able to get to know your partner very well. Overall, I don’t think it was very successful."

**Measures**

**Manipulation Checks**

**Experimenter-rated** (Appendix A). A check on the assistant’s behavior was necessary to ensure that subtle differences did not emerge over the course of the study. The experimenter rated the assistant’s behavior on three 7-point Likert-type scales that assessed warmth, friendliness, and self-disclosure. Previous research shows that
these ratings provide a reliable check on the assistant’s behavior (Alden & Wallace, 1991; Wallace & Alden, 1991).

Subject-rated. The intent of feedback was to convey to subjects that they had or had not handled the interaction well. Two checks are necessary to confirm success of this manipulation. First, it was important to determine that the two assistants were perceived similarly by subjects within the feedback condition, and that the two feedback conditions were perceived as distinct. Hence, each subject rated the assistant’s warmth, friendliness, and self-disclosure (Appendix A). Second, it was important to determine that subjects believed the experimenter and partner had evaluated them positively (positive condition) or negatively (negative condition) and that subjects evaluated themselves in a similar fashion. Hence, subjects rated their belief of how the experimenter rated the interaction, their belief of the assistant’s evaluation of the interaction, as well as their own evaluation of the interaction (Appendix B). These ratings were made using 10-point Likert-type items. Three items assessed each of the three perspectives (rating of self, belief regarding experimenter’s evaluation, and belief regarding assistant’s evaluation).

Dependent Measures.

The dependent measures completed by subjects are in three categories: (1) ratings of efficacy and standards, (2) ratings of mood, and (3) ratings of protective and acquisitive motivation.

i. Standard-setting and efficacy ratings

Standard-setting. Two types of standards were rated: (1) the subjects’ "personal" standard, and (2) the subjects’ belief regarding others’ expectations for him or her ("other" standard). As well, standards were rated at two points in time: prior to and
following the interaction. These types of standards have been discussed by Carver and Scheier (1986) and, as reviewed above, previous research demonstrated that they distinguish socially anxious and nonanxious subjects. Because subtle and unintended variations in wording the questions about standards may occur, each standard was assessed by 4 measures (see Appendices C and D). In total, subjects rated eight items, both before and after the interaction, to assess the two types of standards. The items were presented in random order to minimize the possibility that rating one standard would influence another. The order of questions, however, was the same for each subject. The standards were rated using the 10-point visual scale (described below).

Efficacy ratings. Subjects’ self-efficacy ratings were assessed at two points in time—prior to and following the interaction. The four questions that assessed efficacy were constructed in accordance with earlier measures of this construct (e.g. Bandura, 1977; Bandura & Cervone, 1986) and were randomly interspersed among the ratings of standards (Appendices C and D). A decision was made to mix the order of the standard and efficacy questions to avoid possible ordering effects and to reduce the possibility that ratings of standard would influence ratings of efficacy or vice versa.

Visual Scale

Ratings of standard and efficacy have no inherent metric. Therefore, in an attempt to objectify the referents for the standard rating task, subjects made their ratings on a series of 10-point scales that used videotape anchors instead of verbal labels. Three videotaped segments, which display different levels of social skill, were used to mark three points (corresponding to ratings of 2, 5, and 8) along the scale. Subjects were shown the videotapes by the experimenter prior to making their ratings.
In constructing the scale, ten two-and-one-half minute social interactions between a man and a woman were filmed. These interactions were scripted so as to reflect various levels of socially skillful behavior on the part of both participants. Both verbal behavior (e.g., number of questions asked, frequency of pauses) and nonverbal behavior (e.g., eye contact, body posture) were varied. A pilot study was conducted in which 20 male and 20 female undergraduate volunteers from the Psychology Subject Pool rated the tapes to determine which would represent a level 2, 5, and 8 on a scale of 0 to 10. The taped interactions were presented in five different random orderings to five different groups of students (approximately eight students per session). The students rated each of the taped segments on a 10-point paper-and-pencil scale of social skill. Subjects had access to all of their ratings at any one point in time in the event that they chose to make these ratings by comparing one tape relative to another. A one-factor (films) ANOVA revealed a significant between-films difference, \( F(9,390) = 505.99, \ p < .001 \). Post hoc Newman-Keuls analyses identified eight tapes that differed significantly. From these eight, three tapes which corresponded to rating points of 2, 5, and 8, were selected.

ii. Measurement of changes in affect following feedback

Positive and negative affect following the interaction was measured using the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). The PANAS consists of 20 mood descriptors comprising a 10-item positive affect (PA) and a 10-item negative affect (NA) scale. These descriptors were selected on the basis of several factor analyses and are considered good factor markers of either high PA or high NA. PA reflects the extent to which an individual feels enthusiastic and is in a state of pleasure. NA reflects subjective distress and unpleasantness, and
subsumes a variety of aversive mood states (e.g. anger, fear). The reliability and validity of these scales is adequate (e.g., Clark & Watson, 1991; Watson et al., 1988). For purposes of this study, the layout of the descriptors was slightly changed in order to make it easier for subjects to rate. This is justified by previous research which has shown the PANAS to be equally reliable and valid if the response format is varied (Watson et al., 1988).

iii. Measurement of protective/acquisitive concerns

Protective and acquisitive states during the interaction were assessed using the Social Self-Presentation Style Scale (S-SPSS) (Meleshko & Alden, 1993). This 8-item scale was devised by selecting items from the Concern for Appropriateness Scale (Lennox & Wolfe, 1984), the Self-Monitoring Scale (Lennox & Wolfe, 1984), and the Fear of Negative Evaluation Scale (FNE; Watson & Friend, 1969). The selected items were modified to reflect a situational, or state, perspective by including phrases such as "during the conversation" and "my partner." The actual items from the scale are listed in Appendix E. A principal components analysis of the scale revealed that the protective items loaded on a first factor accounting for 33.5% of the variance, and the acquisitive items loaded on a second factor accounting for 22.4% of the variance. This indicates that the S-SPSS should be scored as two subscales. Alpha coefficients for the protective and acquisitive scales were .73 and .70.
Results

Overview

In multivariate analyses, Wilks’ lambda was used as the criterion of statistical significance. In univariate and multivariate analyses, significant interactions were followed by simple effects analyses and significant main effects were followed by post hoc analyses (Student Newman Keuls). Each significance level of the post hoc analyses was considered as a function of the total number of comparisons made using the Bonferroni procedure to maintain a true alpha of $\alpha = .05$ (Keppel, 1982).

Preliminary Analyses

Demographic data

Demographic data and mean scores on the questionnaire measures are presented in Table 2. Of the 32 Social Phobic individuals, eight were comorbid for Agoraphobia, three met diagnostic criteria for Major Depressive Disorder and one met criteria for Dysthymia, and six had a history of psychiatric contact. The social phobic and nonclinical groups were compared on age, average yearly income, SAD, and BDI scores using t-tests with a liberal alpha of $\alpha > .10$. A chi-square analysis was used to analyze group differences on the remaining variables. Between-group differences emerged on diagnosis of Social Phobia (Generalized types), other anxiety diagnosis, and psychiatric history. Thus, the selection of groups was successful. Social phobic and nonclinical subjects were equivalent in terms of age, socioeconomic status, marital status, education, employment, history of psychiatric illness in the family, use of medication, and BDI scores. The groups differed, as expected, in terms of social phobia diagnosis, SAD scores, psychiatric history, and other concurrent anxiety disorder (Agoraphobia). The demographic characteristics of the social phobia sample
are also consistent with other research samples which report Social Phobia with comorbid Agoraphobia or Major Depression/Dysthymia in about 20 to 30% of samples (Barlow, DiNardo, Vermilyea, Vermilyea, & Blanchard, 1986; Liebowitz et al., 1985).

**Interrater diagnostic reliability**

Interrater reliability for the ADIS-R diagnosis was computed between the experimenter (who conducted the diagnostic interviews) and the author (who reviewed the taped interviews). The computed kappa coefficient was 0.92.

**Manipulation Checks**

**Assistant consistency checks**

Since two assistants were used in the study, all major multivariate analyses of variance (MANOVAs) were initially conducted with the assistant as a factor. The 2 (assistant) x 2 (group) x 2 (feedback condition) MANOVAs produced no main or interaction effects for the assistant variable indicating that the results obtained for the two assistants were equivalent. Therefore, data were combined across assistants for the remaining analyses.

**Ratings of assistant’s feedback**

The subject and experimenter rated the assistants on scales that assessed warmth, friendliness, and amount of disclosure. Pearson correlation coefficients were computed to determine whether the three ratings could be combined. The resulting correlations ranged from .87 to .91 for subjects’ ratings of the assistants, and from .60 to .99 for the experimenter’s ratings of the assistants (all correlations significant, p < .001). Considering the high intercorrelation, ratings were combined to provide a robust measure of subjects’ perceptions of the assistant’s feedback and the experimenter’s perception of the assistant’s feedback. Since the experimenter made
ratings of each assistant with both nonclinical and social phobic subjects, two separate means were computed. The means are presented in Table 4.

A 4 (rater) x 2 (assistant) x 2 (condition) ANOVA produced a significant main effect for rater, $E(3, 127) = 11.93, p < .001$, and for condition, $E(1, 127) = 463.04, p < .001$, and a rater by condition interaction, $E(3, 127) = 3.84, p < .025$. Post hoc analyses revealed that subjects and the experimenter rated the assistant more positively in the positive than negative condition. This confirms the success of each assistant's attempt to convey positive or negative feedback. Additionally, the social phobic subjects rated the assistant more positively than did the nonclinical subjects or the experimenter in the negative condition.

**Subject's perception of feedback**

A second manipulation check is the extent to which subjects perceived their interaction to have been successful as well as their belief that the partner and experimenter came to a similar conclusion. Thus, subjects rated the success of the interaction from their own perspective, that of the experimenter, and that of the assistant. Since each perspective was rated using four items, Pearson correlation coefficients were computed to determine whether the four ratings could be combined for each perspective. The resulting correlations ranged from .86 to .97 for the four ratings within each perspective ($p < .001$) and, consequently, the average of these ratings for each perspective was taken. This resulted in three measures: the subjects' perception of how well they handled the interaction, their perception of the assistant's evaluation of the interaction, and their perception of the experimenter's evaluation of the interaction. The means for these ratings are presented in Table 5.
### Table 4

**Means and Standard Deviations of Subjects’ and Experimenter’s Ratings of Assistant’s Behavior**

<table>
<thead>
<tr>
<th>Condition*</th>
<th>Social Phobic</th>
<th>NonClinical Control</th>
<th>Experimenter Rating of Assistant with Social Phobic</th>
<th>Experimenter Rating of Assistant with Nonclinical</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive Feedback</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Assistant</td>
<td>7.75(1.74)</td>
<td>6.71(.81)</td>
<td>7.17(.5)</td>
<td>7.17(.36)</td>
</tr>
<tr>
<td>Male Assistant</td>
<td>7.42(1.5)</td>
<td>6.67(.62)</td>
<td>7.21(.43)</td>
<td>7.17(.56)</td>
</tr>
<tr>
<td><strong>Negative Feedback</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Assistant</td>
<td>4.58(2.25)</td>
<td>2.83(.99)</td>
<td>2.75(.3)</td>
<td>2.50(.4)</td>
</tr>
<tr>
<td>Male Assistant</td>
<td>4.67(1.58)</td>
<td>2.54(1.01)</td>
<td>2.92(.43)</td>
<td>2.63(.55)</td>
</tr>
</tbody>
</table>

*Note: Ratings are means of 3 variables: assistant warmth, friendliness, and how well made self known. Ratings were made on 10-point Likert-type scales with anchors *not at all* to *very much*. Higher numbers indicate higher ratings. Standard deviations are in parentheses.*

*\(^n = 32\) in each cell.*
Table 5

Subjects' Ratings of Interaction from Three Perspectives

<table>
<thead>
<tr>
<th>Group</th>
<th>Rating of Self*</th>
<th>Partner's Perspective</th>
<th>Experimenter's Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Phobic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>5.48(1.76)</td>
<td>5.39(1.76)</td>
<td>5.66(1.62)</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td>3.00(1.29)</td>
<td>2.69(1.21)</td>
<td>2.71(1.18)</td>
</tr>
<tr>
<td>Nonclinical Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>7.83(1.21)</td>
<td>8.12(1.15)</td>
<td>7.88(1.12)</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td>5.36(2.01)</td>
<td>4.66(2.02)</td>
<td>4.63(1.67)</td>
</tr>
</tbody>
</table>

Note: Ratings are means of four items (see Appendix B) with standard deviations in parentheses. Ratings were made using the Video Rating Scale with higher numbers indicating a better interaction.

*n = 32 in each cell.
A 3 (perspective) x 2 (group) x 2 (condition) ANOVA produced a main effect for group, $F(1,173) = 89.51, p < .001$, and a main effect for feedback, $F(1,173) = 146.41, p < .001$. Thus, subjects perceived the interaction as intended and the manipulation can be considered successful. Additionally, the social phobic subjects believed that their interactions, from all perspectives, were less successful than did the nonclinical control subjects.

**Dependent Measures**

**Intercorrelations of standards and self-efficacy**

Pearson correlations among ratings of standards and self-efficacy, before and after the interaction, were examined and the results are presented in Table 6. For social phobic subjects, ratings of self-efficacy before the interaction displayed significant moderate correlations with ratings of others’ standard, $r(96) = .36, p < .05$, and a nonsignificant correlation with ratings of personal standard, $r(96) = - .21, p > .10$. Ratings of personal standard were not significantly correlated with others’ standard, $r(96) = .01, p > .10$. For nonclinical subjects, ratings of self-efficacy before the interaction displayed significant moderate correlations with ratings of personal standard, $r(96) = .41, p < .05$, and a nonsignificant correlation with ratings of others’ standard, $r(96) = .10, p > .10$. Ratings of personal standard displayed a significant moderate correlation with ratings of others’ standard, $r(96) = .38, p < .05$. After the interaction, social phobic subjects’ ratings of self-efficacy were not significantly correlated with personal standard, $r(96) = -.01, p > .10$, or others’ standard, $r(96) = - .11, p > .10$. Ratings of personal standard were significantly correlated with others’ standard, $r(96) = .44, p < .025$. For nonclinical control
Table 6

Intercorrelations of Ratings of Standards and Self-Efficacy

<table>
<thead>
<tr>
<th>Variable</th>
<th>SE&lt;sup&gt;a,b&lt;/sup&gt;</th>
<th>PS</th>
<th>OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards and Efficacy before the feedback manipulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Phobic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>-----</td>
<td>-.21</td>
<td>.36&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
<tr>
<td>Personal Standard</td>
<td>-----</td>
<td>-----</td>
<td>.01</td>
</tr>
<tr>
<td>Others’ Standard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonclinical Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>-----</td>
<td>.41&lt;sup&gt;*&lt;/sup&gt;</td>
<td>.10</td>
</tr>
<tr>
<td>Personal Standard</td>
<td>-----</td>
<td>-----</td>
<td>.38&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
<tr>
<td>Others’ Standard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standards and Efficacy after the feedback manipulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Phobic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>-----</td>
<td>-.01</td>
<td>-.11</td>
</tr>
<tr>
<td>Personal Standard</td>
<td>-----</td>
<td>-----</td>
<td>.44**</td>
</tr>
<tr>
<td>Others’ Standard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonclinical Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>-----</td>
<td>.77***</td>
<td>-.17</td>
</tr>
<tr>
<td>Personal Standard</td>
<td>-----</td>
<td>-----</td>
<td>-.09</td>
</tr>
<tr>
<td>Others’ Standard</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: All correlations are Pearson correlations. 
<sup>a</sup><sub>n = 32 in each cell. 
<sup>b</sup>SE = Self-efficacy, PS = Personal standard, OS = Others’ standard. 
<sup>*</sup>p < .05  
<sup>**</sup>p < .025  
<sup>***</sup>p < .001.
subjects, ratings of self-efficacy after the interaction displayed a significant correlation with personal standard, $r (96) = .77, p < .001$, but not with others' standard, $r (96) = -.17, p > .10$. Personal standard was not correlated with others' standard, $r (96) = -.09, p > .10$. The results suggest that there is some shared variance among the two types of standards, but the amount of this overlap is small. This indicates that the two standards are largely independent and should not be combined into a multi-item measure of social standards. This pattern is similar to that obtained in earlier studies (Wallace & Alden, 1993).

**Ratings of standard and efficacy**

The means and standard deviations of the standard and efficacy ratings are presented in Tables 7 and 8. Ratings of efficacy, personal standard, and others' standard, were analyzed in a 2 (group) x 2 (condition) x 2 (time) Repeated Measures MANOVA design. A significant three-way interaction emerged, Wilks' $(3,118) = 9.37, p < .001$. Univariate analyses revealed that the interaction was significant for ratings of efficacy, $F(1,120) = 11.0, p < .001$, and others' standard, $F(1,120) = 10.77, p < .001$. The rating of personal standard was significant for the interaction of group with time, $F(1,120) = 7.16, p < .001$, and feedback with time, $F(1,120) = 14.21, p < .001$. The interaction effects justify simple effects analyses for ratings of efficacy, personal, and others' standard.

**Prior to the manipulation**

**Ratings of efficacy before the interaction.** Simple effects analyses on ratings of efficacy before the interaction revealed, as expected, that social phobic subjects had lower ratings of efficacy than nonclinical subjects, $F(1,126) = 80.44, p < .001$. Additionally, there were no differences in efficacy between conditions before the
Table 7

Means and Standard Deviations of Ratings of Standard and Self-Efficacy before the interaction

<table>
<thead>
<tr>
<th>Group</th>
<th>Self-Efficacy (EFF)</th>
<th>Personal Standard (P)</th>
<th>Others' Standard (O)</th>
<th>Within-group Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Phobic (SP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>3.53(1.08)</td>
<td>5.31(1.22)</td>
<td>6.67(1.20)</td>
<td>O &gt; P</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td>3.78(.82)</td>
<td>5.17(1.22)</td>
<td>6.38(1.36)</td>
<td>O &gt; P</td>
</tr>
<tr>
<td>NonClinical Control (NC)</td>
<td>7.52(1.0)</td>
<td>7.41(1.0)</td>
<td>7.0(.91)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>7.38(1.28)</td>
<td>7.45(.87)</td>
<td>6.86(.99)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td>7.38(1.28)</td>
<td>7.45(.87)</td>
<td>6.86(.99)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Between-group Differences</td>
<td>NC&gt;SP</td>
<td>NC&gt;SP</td>
<td>n.s.</td>
<td></td>
</tr>
</tbody>
</table>

Note: All measures were rated by subjects using the 10-point visual rating scale. All significant differences are p < .001. *n = 16 in each cell.*
Table 8

Means and Standard Deviations of Ratings of Standard and Self-Efficacy after the interaction

<table>
<thead>
<tr>
<th>Group</th>
<th>Rating*</th>
<th>Within-group Differencesb</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-Efficacy (EFF)</td>
<td>Personal Standard (P)</td>
</tr>
<tr>
<td>Social Phobic (SP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>3.94(1.06)</td>
<td>6.33(1.4)</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td>4.03(.96)</td>
<td>4.97(.72)</td>
</tr>
<tr>
<td>Nonclinical Control (NC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>8.56(.81)</td>
<td>8.05(1.08)</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td>5.78(1.34)</td>
<td>5.89(1.4)</td>
</tr>
<tr>
<td>Between-group Differencesb</td>
<td>NC &gt; SP</td>
<td>NC positive &gt; SP positive</td>
</tr>
</tbody>
</table>

Note: All measures were rated by subjects using the 10-point visual rating scale. All significant differences are p < .001.

n = 16 in each cell.
interaction for social phobic subjects, $F(1,126) = .11, p > .10$, or for nonclinical subjects, $F(1,126) = .03, p > .10$.

**Ratings of personal standard before the interaction.** Simple effects analyses on ratings of personal standard before the interaction revealed differences between social phobic and nonclinical subjects, $F(1,126) = 48.81, p < .001$, indicating that social phobic subjects had lower ratings of personal standard than did nonclinical subjects. However, there were no differences in ratings of personal standard between conditions for social phobic subjects, $F(1,126) = .93, p > .10$, or for nonclinical subjects, $F(1,126) = .01, p > .10$, as expected.

**Ratings of others’ standard before the interaction.** Simple effects analyses on ratings of others’ standard before the interaction revealed that there were no differences between the two groups, $F(1,126) = 1.88, p > .10$. Further, there were no significant differences between conditions for social phobic subjects, $F(1,126) = .50, p > .10$, or for nonclinical subjects, $F(1,126) = .11, p > .10$.

**After the manipulation**

**Ratings of efficacy after the interaction.** There was no change in efficacy for social phobic subjects following either positive, $F(1,126) = .28, p > .10$, or negative feedback, $F(1,126) = .11, p > .10$, and there was no change in efficacy among nonclinical subjects following positive feedback, $F(1,126) = 1.9, p > .10$. However, nonclinical subjects made significantly lower ratings of efficacy following negative feedback, $F(1,126) = 4.50, p < .05$. Additionally, simple effects analyses on ratings of efficacy after the interaction revealed that nonclinical subjects continued to have higher ratings of efficacy than social phobic subjects in both the positive
condition, \( F(1,126) = 51.53, p < .001 \), and the negative condition, \( F(1,126) = 5.46, p < .025 \).

**Ratings of personal standard after the interaction.** Simple effects analyses on ratings of personal standard after the interaction revealed that both social phobic and nonclinical subjects had higher ratings of personal standard after positive than negative feedback (for social phobic subjects, \( F(1,126) = 5.95, p < .025 \), for nonclinical subjects, \( F(1,126) = 16.14, p < .001 \)). For nonclinical subjects, this was due to significantly lower ratings of personal standard following negative feedback, \( F(1,126) = 7.99, p < .01 \). For social phobic subjects, this was due to slight, but not significant, increases in personal standard following positive feedback and slight, but not significant, decreases in personal standard after negative feedback (\( p > .10 \)). Between the two groups, nonclinical subjects given positive feedback continued to have higher ratings of personal standard than did social phobic subjects given positive feedback, \( F(1,126) = 9.8, p < .01 \). However, there were no significant differences between the two groups on ratings of personal standard after negative feedback, \( F(1,126) = 2.67, p > .10 \). This latter result was due to a slight, but not significant, decrease in the level of personal standard endorsed by nonclinical subjects.

**Ratings of others' standard after the interaction.** Simple effects analyses on ratings of others’ standard after the interaction revealed that social phobic subjects had higher ratings of standard after positive feedback than after negative feedback, \( F(1,126) = 20.74, p < .001 \). Indeed, social phobic subjects made ratings of others’ standard that were significantly higher following positive feedback than they had been prior to the feedback, \( F(1,126) = 5.50, p < .025 \). Nonclinical subjects, on the other
hand, made ratings of others' standard that were significantly higher following negative feedback than they had been prior to the feedback, $F(1, 126) = 11.02, p < .01$, but there were no significant differences between pre- and post- feedback ratings of others' standard following positive feedback, $F(1, 126) = 1.70, p > .10$.

Between the two groups, social phobic and nonclinical subjects did not differ in ratings of others' standard following positive feedback, $F(1, 126) = .05, p > .10$, but social phobic subjects made lower ratings of others' standard following negative feedback than did nonclinical subjects, $F(1, 126) = 40.82, p < .001$.

**Standard-standard discrepancies**

Discrepancies between standards were analyzed in a four-way between-within analysis. The between-subject factors were group and feedback and the within-subject factors were time (before and after feedback) and type of standard (personal and others'). A significant group by feedback by time by type of standard interaction emerged, $F(1, 255) = 9.93, p < .01$. Simple effects analyses revealed that ratings of others' standard were significantly higher than ratings of personal standard among social phobic subjects in positive and negative conditions before the interaction, $F(1, 255) = 7.60, p > .01$, and $F(1, 255) = 5.91, p < .025$, and ratings of others' standard continued to exceed ratings of personal standard after positive feedback, $F(1, 255) = 7.07, p < .01$, but not after negative feedback, $F(1, 255) = 3.21, p > .05$. For nonclinical subjects, ratings of personal and others' standard did not differ before the interaction in the positive condition, $F(1, 255) = .66, p > .10$, or the negative condition, $F(1, 255) = 1.41, p > .10$. After the interaction, ratings of others' standard exceeded ratings of personal standard following negative feedback,
E (1, 255) = 23.30, p < .001, but there was no significant difference between standards following positive feedback, E (1, 255) = .66, p > .10.

**Standard-efficacy discrepancies.** Discrepancies between standard and efficacy were analyzed in two four-way between-within analyses, one for the discrepancy between personal standard and efficacy and the other for the discrepancy between others' standard and efficacy. The between-subject factors were group and feedback, and the within-subject factors were time (before and after feedback) and standard-efficacy discrepancy. These discrepancies are illustrated in Figures 1 and 2.

**Personal standard-efficacy discrepancy.** A significant group by feedback by time interaction emerged on the discrepancy between personal standard and efficacy, E (1, 255) = 10.45, p < .001. Simple effects analyses revealed that social phobic subjects displayed a significant discrepancy between ratings of personal standard and ratings of efficacy before the interaction in both the positive condition, E (1,255) = 7.17, p < .01, and the negative condition, E (1, 255) = 4.32, p < .05, and this discrepancy remained significant following positive feedback, E (1,255) = 13.21, p < .001, but not following negative feedback, E (1,255) = 1.95, p > .10. For nonclinical subjects, no discrepancy emerged between personal standard and ratings of efficacy before the interaction or after, regardless of feedback, p > .10.

**Others’ standard-efficacy discrepancy.** A significant group by feedback by time interaction emerged on the discrepancy between others' standard and efficacy, E (1,255) = 21.75, p < .001. Simple effects analyses revealed that social phobic subjects made ratings of others’ standard that were significantly higher than their ratings of efficacy before the interaction in the positive condition, E(1,255) = 24.27, p < .001, and the negative condition, E (1,255) = 16.07, p < .001. This
Figure 1: Mean ratings of efficacy and standard for social phobic subjects, before and after feedback.
Figure 2: Mean ratings of efficacy and standard for nonclinical subjects, before and after feedback.
discrepancy remained significant following positive feedback, $F(1,255) = 35.05, p < .001$, and negative feedback, $F(1,255) = 7.74, p < .01$. For nonclinical subjects, there was no significant difference between ratings of standard and efficacy before the interaction in either the positive condition, $F(1, 255) = .60, p > .10$, or the negative condition, $F(1, 255) = .60, p > .10$, and there was no significant difference following positive feedback, $F(1,255) = 2.34, p > .10$. However, nonclinical subjects rated others’ standard significantly higher than they rated efficacy following negative feedback, $F(1,255) = 13.9, p < .001$.

**Changes in magnitude of personal standard-efficacy discrepancy.** Changes in the magnitude of the discrepancy between subjects’ ratings of personal standard and ratings of efficacy from before to after the interaction were examined by simple effects analysis. For social phobic subjects, there was a significant increase in this discrepancy following positive feedback, $F(1,255) = 20.68, p < .001$, and there was a significant decrease in this discrepancy following negative feedback, $F(1,255) = 6.10, p < .025$. Among nonclinical subjects, there was no discrepancy between these two ratings as indicated above, $p > .10$.

**Changes in magnitude of others’ standard-efficacy discrepancy.** Changes in the magnitude of the discrepancy between subjects’ ratings of others’ standard and ratings of efficacy from before to after the interaction were examined by simple effects analysis. For social phobic subjects, there was a significant increase in this discrepancy following positive feedback, $F(1,255) = 66.34, p < .001$, and a significant decrease in this discrepancy following negative feedback, $F(1,255) = 24.04, p < .001$. Among nonclinical subjects, there was no change in the magnitude of this discrepancy following positive feedback, $p > .10$, and there was a significant
increase in the magnitude of this discrepancy following negative feedback, \( F(1,255) = 4.15, p < .05. \)

**Ratings of Mood**

The means of the positive and negative affect ratings are presented in Table 9. The positive and negative mood ratings from the PANAS were analyzed by means of a 2 (group) x 2 (condition) x 2 (positive, negative mood) MANOVA. The three-way interaction was significant, \( F(1,27) = 5.26, p < .025. \) Between groups, post hoc analyses revealed that social phobic subjects reported less positive affect after negative feedback than nonclinical subjects (\( p < .01 \)) and more negative affect after positive and negative feedback than did nonclinical subjects (\( p < .01 \)). Between conditions, social phobic subjects reported more positive affect after positive feedback than after negative feedback (\( p < .01 \)), and more negative affect after negative feedback than after positive feedback (\( p < .025 \)). Nonclinical subjects reported levels of positive affect that did not differ between conditions and levels of negative affect that also did not differ between conditions (\( p > .10 \)). Within conditions, social phobic subjects experienced more negative than positive affect in the negative condition (\( p < .01 \)) but there were no differences in positive and negative affect in the positive condition (\( p > .10 \)). Nonclinical subjects reported more positive than negative affect in both conditions (\( p \)'s < .001).

**Ratings of Protective and Acquisitive Motivation**

The mean ratings of protective and acquisitive motivation from the S-SPSS are presented in Table 10. Ratings were analyzed by a 2 (group) x 2 (feedback) x 2 (protective, acquisitive) MANOVA. The three-way interaction was significant, \( F(1,127) = 7.48, p < .01. \) Between groups, post hoc analyses revealed that social
Table 9

PANAS Ratings of Positive and Negative Affect Following the Social Interaction

<table>
<thead>
<tr>
<th>Condition</th>
<th>Positive Affect</th>
<th>Negative Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Phobic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>2.54 (.68)</td>
<td>1.98 (.88)</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td>1.89 (.36)</td>
<td>2.65 (.58)</td>
</tr>
<tr>
<td>NonClinical Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>2.96 (.68)</td>
<td>1.18 (.28)</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td>2.86 (.60)</td>
<td>1.46 (.29)</td>
</tr>
</tbody>
</table>

Note: Ratings are means, with standard deviations in parentheses. Higher numbers indicate higher levels of affect.

*n = 16 in each cell.
Table 10

Ratings of Protective and Acquisitive Motivational States Following the Social Interaction

<table>
<thead>
<tr>
<th>Group</th>
<th>Acquisitive</th>
<th>Protective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Phobic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>4.08(.96)</td>
<td>3.88(1.43)</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td>2.34(.70)</td>
<td>5.11(.84)</td>
</tr>
<tr>
<td><strong>Nonclinical Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>4.86(1.12)</td>
<td>1.66(.48)</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td>4.55(1.20)</td>
<td>2.36(1.03)</td>
</tr>
</tbody>
</table>

**Note:** Ratings are means, with standard deviations in parentheses. Higher numbers indicate higher levels of the motivational state.

*n = 16 in each cell.*
phobic subjects were more concerned with self-protection after positive feedback than were nonclinical subjects (p < .001). After negative feedback, social phobic subjects were less concerned with acquisition and more concerned with self-protection than nonclinical subjects (p < .001). Between conditions, social phobic subjects were motivated more by acquisitive concerns when given positive feedback than negative feedback (p < .01) and, conversely, they reported greater concern with self-protection after negative than positive feedback (p < .025). There were no differences between conditions among ratings of nonclinical subjects (p > .10). Within conditions, social phobic subjects rated protective concerns higher than acquisitive concerns following negative feedback (p < .025) but rated protective and acquisitive concerns equally following positive feedback (p > .10). Nonclinical subjects rated acquisitive concerns higher than protective concerns regardless of feedback (p < .01).

Post-interaction interview responses: Descriptive data

In terms of changes in personal standard from before to after the interaction, social phobic subjects that made higher ratings following positive feedback could not offer explanations and indicated that this was not a conscious decision. Nonclinical subjects that made lower ratings of personal standard after negative feedback indicated that the standard reflected less concern about how they got along with this awkward partner.

In terms of changes in others’ standard from before to after the interaction, social phobic subjects given positive feedback explained that their ratings were higher following feedback because they believed others would expect more from them in the future. They did not elaborate upon this further and it appeared that for many of them
this may not have been a conscious decision. Social phobic subjects given negative feedback explained that they believed others would not expect more from them in the future because they had demonstrated that they could not handle the situation well. Among nonclinical subjects given negative feedback, most reported that they were surprised that they had been evaluated critically and, as a consequence, they rated others’ standard higher following the interaction to reflect what they believed were high expectations.

Discussion

Summary

In this study, socially phobic and nonphobic individuals participated in a successful or unsuccessful conversation with an assistant and received feedback from an experimenter consistent with the success or failure of that conversation. Subjects rated standards and efficacy before this interaction. After the interaction, subjects again rated standards and efficacy, this time in anticipation of a second interaction with the same assistant. Subjects also made ratings of their affective state and motivational concerns during the first conversation. The second conversation did not actually occur.

Consistent with self-evaluation theories of social anxiety (Carver & Scheier, 1986; Schlenker & Leary, 1982), socially phobic subjects displayed a discrepancy between efficacy expectations and others’ standard before the interaction whereas their nonanxious counterparts did not. After the successful conversation social phobic subjects believed that others’ expectations were even higher but they reported no change in their sense of efficacy. In contrast, nonphobic subjects believed that they could match others’ standards before the interaction and continued to believe so
following the successful conversation. However, they believed that others had higher standards after negative feedback.

In terms of affect, socially phobic individuals experienced more positive affect during the successful conversation relative to the unsuccessful conversation, and they experienced more negative affect during the unsuccessful conversation than the successful conversation. Nonphobic individuals experienced more positive than negative affect in both conditions. The results for socially phobic individuals are consistent with other research investigating the emotional impact of social feedback on socially anxious university students (e.g. Lake & Arkin, 1985) whereas the results for nonphobic individuals are consistent with only some of this research. No support was found for the prediction that socially anxious individuals find positive feedback more distressing than negative feedback (Arkin & Appleman, 1983).

In terms of motivational concerns, socially phobic subjects reported protective concerns that matched or exceeded their acquisitive concerns despite feedback. However, they were more acquisitive during the successful conversation than the unsuccessful conversation and they reported being more protective during the unsuccessful conversation than during the successful conversation. Nonphobic subjects reported being more acquisitive than protective during both conversations. These results support Arkin's theory of motivational concerns (1981).

These results will be discussed in more detail below.

Standards and efficacy before the interaction

Social phobic subjects made ratings of efficacy and personal standard that were below the ratings of nonphobic subjects, and made ratings of others' standard that were at a similar level as nonphobic subjects' ratings. These data are consistent with
the predictions of the study as well as earlier research (Wallace & Alden, 1991). The results are also consistent with reports that socially anxious and nonanxious individuals agree on the appropriateness of specific behaviors in different settings (Hill, 1989). Thus, socially anxious individuals do not establish stringent standards for their behavior in an absolute sense.

**Standard-efficacy discrepancies before the interaction**

Different patterns of standard-ability discrepancies emerged between social phobic and nonphobic subjects. Social phobic subjects rated others' standards significantly higher than their ratings of efficacy. Thus, a negative discrepancy emerged between socially phobic subjects' ratings of their own ability and what they believed others, in this case the experimenter and partner, expected of them. This is consistent with self-evaluation theories which emphasize discrepancies between perceived ability and standards of evaluation (Carver & Scheier, 1986; Schlenker & Leary, 1982) and previous research (Wallace & Alden, 1991). This negative discrepancy is also consistent with research indicating that socially phobic patients are distinguished by a perceived discrepancy between how they perceive themselves and what they believe they "ought to be" to please others (Strauman, 1989). It was also evident that socially phobic subjects perceive that they fall short of their own standards because they established personal standards that were significantly higher than their ratings of efficacy. This personal standard-efficacy discrepancy did not emerge in a previous study using socially anxious university men (Wallace & Alden, 1991). Comparison of the personal standards between the two studies reveal that socially phobic adults and socially anxious university men have similar personal standards but socially phobic adults have lower efficacy expectations. Thus,
differences in the results of the studies are due to differences in efficacy, not level of standards. In other words, socially phobic individuals believe that their abilities fall short of their own as well as others’ expectations due to their very low perceptions of their own ability.

Standard-efficacy discrepancies following feedback

A different pattern of standard-ability discrepancies emerged for social phobic than nonphobic subjects following the successful and unsuccessful conversations. After the successful conversation, socially phobic subjects continued to believe that their ability would not match others’ expectations. In fact, socially phobic subjects believed that their abilities fell even further short of expectations than they had before the conversation. This was because socially phobic subjects made higher ratings of others’ expectations following positive feedback than they had before the interaction, but they did not change their ratings of ability. This was consistent with the predictions of the study. Thus, social phobic subjects believed that others would expect more of them after a successful conversation than they had before the conversation, and these expectancies were greater than they felt capable of achieving. After the unsuccessful conversation, socially phobic subjects continued to believe that their ability fell short of others’ expectations but they perceived that they were not as far off from others’ expectations as they had been before the interaction. This was evident because of a slight, but not significant increase in efficacy expectations following the unsuccessful conversation, and a slight, but not significant, decrease in others’ standard following the unsuccessful conversation. Thus, socially phobic subjects display a negative discrepancy between what they believe they can achieve and what they believe others expect of them. Further, the magnitude of this
discrepancy *increases* following social success because social phobic subjects believe that others’ expectations for them are even higher, and the magnitude of this discrepancy *decreases* following social failure because of slight changes in efficacy and standards. These data suggest that socially phobic subjects consistently believe that they fall short of others’ expectations, but social success and social failure have a different impact upon these subjects’ perceptions of how far short of others’ expectations their abilities fall.

A similar pattern emerged among social phobic subjects’ ratings of personal standard and efficacy. Social phobic subjects believed they would not match their standards before the interaction because they established standards for themselves that were beyond their perceptions of their own ability. Following social success, this discrepancy increased because social phobic subjects expected more from themselves. This is consistent with the predictions of the study. Following social failure, there was a smaller discrepancy between personal standard and efficacy. However, this was not due to any statistically significant changes in standards. Instead, the discrepancy resulted from slight, but not significant, increases in efficacy and slight, but not significant, decreases, in personal standard.

The results of standard-setting among socially phobic subjects suggest that these individuals perceive that their social abilities fall short of others’ expectations as well as their own. The results also indicate that their perceptions of standards varies depending on whether they have experienced social success or failure. These subjects believe that others are evaluating them from even higher standards following social success than social failure. They also continue to establish high standards for themselves following social success whereas they don’t perceive a discrepancy
between their ability and personal standards following social failure. These patterns will be discussed in more detail following a discussion of standard-setting among nonphobic individuals.

Among nonphobic subjects, a different pattern of standard-ability discrepancies emerged following social success and failure. After positive feedback, nonphobic subjects displayed an increase in efficacy as predicted, but this difference was not statistically significant. Nonphobic subjects continued to endorse the same level of others’ standard as they had before the feedback, as predicted. Nonphobic subjects that received negative feedback from the experimenter believed that his standard would be higher for the next interaction than they believed it was for the first, also as predicted. This resulted in a negative discrepancy between nonphobic subjects’ perceptions of their ability and their perceptions of others’ expectations in the negative feedback condition.

In terms of their own (personal) standards, nonphobic subjects believed that their ability would match their personal standard after social success. These subjects’ ratings of personal standard increased after social success as predicted, but this did not reach statistical significance. After social failure, however, these subjects made lower ratings of their ability and lower ratings of personal standard than they had before the interaction as predicted. Thus, nonphobic subjects continued to believe that they could meet their personal standard because they lowered this standard along with their estimate of efficacy.

The results of standard-setting among nonphobic subjects suggest that these individuals establish standards for themselves that are at the same level as they believe they can achieve regardless of feedback because their assessment of personal
ability and their personal standards for success vary depending on the success or failure of a conversation. These subjects also believe that others are evaluating them by a higher standard than they had originally estimated when they receive feedback that they have not done well.

Explanation of standard-setting

A critical question is why socially phobic individuals developed perceptions of increased experimenter expectations following success. This is an intriguing finding but one that is difficult to explain. One possibility is that subjects given positive feedback believed that the experimenter would evaluate their social behavior more carefully during the second interaction. This is not a very satisfying explanation because it does not explain why the experimenter would have higher standards, rather than simply use the same standard but observe the subjects more closely. Another possibility is that socially phobic subjects may have been treated differently than nonphobic subjects who increased expectations after failure. However, this is unlikely to be the case because subjects in both groups judged the experimenter and assistant's evaluation of the interaction similarly. Furthermore, the experimenter did not perceive differences in the assistants' behavior across conditions or groups, other than the intended differences between the positive and negative roles. It is also important to note that these subjects truly believed that they had handled the interaction well as evidenced by self-report. Therefore, standard-setting was not influenced by differences between the two groups in their perception of how they handled the interaction and it was not influenced by differences in how subjects were treated by the experimenter or assistant. Thus, this is an intriguing finding and it invites further study.²
Affect

Socially phobic subjects who experienced the successful interaction reported more positive affect (e.g. interest, enthusiasm, inspiration) during that interaction than social phobic subjects who experienced the unsuccessful interaction. Conversely, social phobic subjects who experienced the unsuccessful interaction reported more negative affect (e.g. fear, shame, distress) during that interaction than social phobic subjects who experienced the successful interaction. The results for social phobic subjects are consistent with earlier research (Lake & Arkin, 1981). Nonphobic subjects, on the other hand, reported that they experienced positive affect during both the successful and unsuccessful conversations and they experienced relatively little negative affect during these conversations. This is inconsistent with Lake and Arkin (1981) who found that nonanxious subjects displayed a similar pattern to anxious subjects. It is difficult to explain this inconsistency because these studies employed different measures of affect which prevents direct comparison. However, the results of the present study are consistent with self-enhancement (Shrauger, 1975) notions that predict that individuals with negative expectancies regarding their competence at a task respond more positively to positive evaluations and more negatively to negative evaluations than individuals with positive expectancies. In this study, socially phobic individuals may have been particularly likely to respond positively to the successful conversation and feedback, and particularly likely to respond negatively to the unsuccessful conversation and feedback, because of their low sense of efficacy and their need for a positive image of themselves. Thus, nonphobic subjects may not have shown as much variability in affect as did socially phobic subjects because nonphobic subjects have more positive social expectancies (Shrauger, 1975).
There was no evidence in this study that socially phobic individuals were more distressed by positive feedback than negative feedback because their level of reported negative affect in the positive condition was lower than in the negative condition. Thus, the data are inconsistent with the predictions of this study and the findings reported by Arkin and Appleman (1983). One likely explanation that this prediction was not supported is because of differences between the studies in how subjects experienced social success and failure. In the present study, subjects participated in a face-to-face interaction and success was manipulated by varying the assistant's responsiveness to the subjects as well as comments made by the experimenter. Therefore, subjects convincingly experienced success or failure in a task that they typically fear. This was confirmed in subjects' self-ratings. In the Arkin and Appleman study, however, all subjects were informed that they had failed a social task and so there was no inherent sense of success. Instead, manipulations of success or failure were achieved by informing subjects that they had (positive condition) or had not (negative condition) been responsible for that failure. Hence, subjects in the positive condition may have been confused by their perception of having failed the task, on the one hand, and comments from the evaluator that they were not responsible for this failure on the other hand. Thus, subjects' ratings of distress may have reflected the effects of these mixed messages. In the present study, subjects' experience of success was consistent with the comments provided by the experimenter. This may explain why they did not report more negative than positive affect in the social success condition.
Motivational concerns

Socially phobic subjects displayed greater protective concerns than their nonanxious counterparts in both feedback conditions. Therefore, regardless of whether they believed that they handled the situation well, or whether they believed that they handled the situation poorly, social phobic subjects were more likely to adopt a strategy of protecting themselves during the interaction, and were more driven by fears of disapproval, than their nonanxious counterparts. This is consistent with Arkin’s proposal that socially anxious individuals are motivated by a desire to avoid negative social outcomes (Arkin, Lake, & Baumgardner, 1986).

Close examination of protective and acquisitive concerns among social phobic subjects between the two conditions reveals that type of feedback did have some impact on these individuals’ motivational styles. Specifically, following positive feedback, socially phobic subjects indicated stronger acquisitive concerns than if they were given negative feedback. Conversely, social phobic subjects expressed stronger protective concerns following negative feedback than if they had been given positive feedback. Despite this, social phobic subjects who experienced a successful conversation expressed nearly equivalent protective and acquisitive concerns. In other words, these subjects’ acquisitive concerns never outweighed or exceeded their protective concerns despite the successful experience. Instead, social phobic subjects always maintained protective concerns that were equal to (positive condition) or greater than (negative condition) their acquisitive concerns. These results, too, are consistent with Arkin’s suggestion that socially anxious individuals subscribe to both motive systems and they are also consistent with research that has examined
motivational concerns among socially anxious individuals in a social setting (Alden & Meleshko, 1993).

Earlier in this study it was predicted that social phobic subjects given positive feedback would demonstrate a predominately acquisitive motivational style relative to their protective concerns. In other words, socially phobic subjects provided with positive interpersonal feedback were expected to relinquish their protective concerns. This prediction was based on Arkin and Schumann’s empirical work (1983) in which they found that socially anxious subjects demonstrated a predominately acquisitive style on a writing task when they believed that disapproval would not occur. Partial support for this prediction was obtained. Specifically, social phobic subjects expressed greater acquisitive concerns in the positive condition relative to the negative condition. However, these subjects did not relinquish their protective concerns in the positive condition. The difference between the present results and the prediction from the Arkin and Schuman study can be reconciled by considering that social success in this study did not convey to the social phobic subjects that disapproval was not likely to occur in the future. Indeed, it is apparent from these subjects’ standard-setting that they expected standards to increase following social success. It follows that they would expect disapproval to occur in the successful condition because they did not believe that they were capable of meeting these standards.

General discussion

Several of the results of that were obtained in this study have important implications for understanding the nature of social phobia and they help provide a framework in which to understand the results of clinical research with social phobics.
In terms of perceptions of social ability (efficacy), nonphobic subjects were confident that they would meet others’ standards before the interaction whereas socially phobic subjects were not. These results are similar to the results of clinical research which finds that socially phobic individuals believe that they will perform more poorly at social tasks than nonphobic individuals (Rapee & Lim, 1992). The results of this study also illustrate how social phobics’ beliefs regarding negative abilities endure despite contrary evidence as a function of efficacy and standard-setting. In terms of efficacy, nonphobic individuals reevaluated their estimates of ability following negative feedback and made lower ratings of efficacy. Social phobic subjects’ ratings of efficacy, in contrast, were not influenced by the feedback. These subjects doubted that they could match others’ expectations in both conditions. It is not surprising that these subjects’ ratings of efficacy did not change following negative feedback, because they were already low. However, it is surprising that they did not change their ratings of efficacy following positive feedback despite knowing that their next conversation would be with the same individual who had responded well to them initially, and that it would be observed by the same experimenter, who had complimented them on their performance. One possible explanation why their social efficacy was not influenced by social success may have been that social phobic subjects did not believe that they had handled the conversation successfully. However, the manipulation checks rule this possibility out. Indeed, socially phobic subjects in the positive condition reported that they handled the interaction well and they perceived their partner as warm, friendly, and easy to get to know.

In terms of standard-setting, socially phobic subjects believed that others had higher expectations for them following a successful conversation and compliments
from an evaluator than they did when they experienced an unsuccessful conversation and criticism from an evaluator. Thus, standard-setting among social phobic individuals is dysfunctional because it serves to increase negative discrepancies between perceived ability and expectations following social success and, consequently, negative expectancies are maintained in the face of positive interpersonal evaluation. In contrast to dysfunctional standard-setting, standard-setting among nonanxious individuals may have been functional. These subjects raised their beliefs of others’ expectations after negative feedback. For nonphobic subjects, beliefs that one is judged by critical standards following negative feedback may have served as a self-protective function so that these subjects did not assume personal responsibility for failure. This interpretation is supported by the comments of nonphobic subjects in the interview which commonly placed blame on the assistant for the poor outcome of the unsuccessful conversation.

Turning to motivational concerns, the picture that emerged here also has implications for the perpetuation of this condition. The socially phobic individuals in this study were motivated by the desire to avoid negative social outcomes and they reported that they adopted self-protective strategies to accomplish this goal. As well, they did not relinquish these protective concerns despite social success. Protective concerns may deprive these individuals of information that might modify their negative views of themselves (Arkin et al., 1986) and they may be viewed by others as inept or evasive because of the inhibited behaviors that characterize this style (Davis & Holtgraves, 1984; Mancuso, Litchford, Wilson, Harrigan, & Lehrer, 1983). These protective concerns could also fuel an attentional bias towards threat cues that has
been noted among social phobics in the clinical literature (e.g. Hope, et al., 1990; Stopa & Clark, 1992). This relationships warrants further investigation.

The picture that emerged from ratings of affect during the conversation was a different one. Social phobic subjects responded favourably to social success and unfavourably to social failure. In fact, affect among social phobic subjects changed more following social success and social failure than did affect among nonphobic subjects. This may have occurred because social phobic subjects have a stronger need for favourable evaluations from others (Shraugher, 1975) and thus they respond more favourably to social success and more unfavourably to social failure than their nonanxious counterparts. These results suggest the need to more closely examine the relationship between affect and standard-efficacy discrepancies following feedback.

Finally, comment should be made regarding the different pattern of results that emerged for standard-setting and motivational concerns. Socially phobic subjects, given positive feedback, demonstrated increased perceptions of others' expectations. In terms of predictions from a self-appraisal framework (e.g. Carver & Scheier, 1981), this should lead to negative outcome expectancies among social phobic subjects. However, social phobic subjects given positive feedback experienced more positive affect and greater acquisitive concerns than they had following negative feedback. a result which would not be expected if these individuals had negative outcome expectancies. Thus, the results from the self-appraisal perspective (e.g. Carver & Scheier, 1981) and the results from the motivation perspective (Arkin, 1981) are not entirely consistent and this difference warrants further research.
Limitations of the study

A number of caveats should be noted regarding these results. First, this study examined two types of standards described by Carver and Scheier (1986). A different pattern of results may have occurred if subjects were asked to rate the level of performance that would "make a good impression on the experimenter" or to rate the level of performance that would "avoid the experimenter's disapproval," definitions suggested by self-presentation theories of social anxiety (Arkin et al., 1986; Schlenker & Leary, 1982). Second, this study examined standard-setting, affect, and motivational concerns in a first-meeting situation with a member of the opposite sex. It remains to be determined if socially phobic individuals respond in a similar fashion when in interactions with same-sex individuals or friends, and whether the conclusions presented here can be extended to other situations that these individuals find to be problematic (e.g. speaking to persons in authority, social gatherings). Another consideration concerns the standard-rating procedure. In this study, subjects rated their standards using a visual scale, a scale whose anchors were videotapes of other people interacting. Although it has been used successfully in other studies with socially anxious as well as dysphoric individuals (e.g. Alden, Bieling, & Wallace, 1993; Wallace & Alden, 1991), the procedure is innovative and would benefit from further validation. Finally, one of the strengths of the design of this study, namely the selection of socially phobic individuals without concomitant depression, also limits conclusions about specificity. Specifically, the subjects in this study were not depressed, and therefore the conclusions are not due to depression, per se. However, it cannot be concluded that the results are specific to social phobia because a nonclinical control group was used. Future research should address the specificity of
these findings to social anxiety by replicating these results with a sample of depressed individuals as well as individuals with anxiety disorders in which social anxiety is not commonly reported (e.g. Obsessive-Compulsive Disorder).

Concluding Comments

Many issues in this study were revealed that suggest further study within a self-regulation (Carver & Scheier, 1986) and motivational concern (Arkin, 1981) framework. According to these results, both standard-setting and motivational concerns distinguish socially phobic and nonphobic individuals. On the one hand, it is encouraging to see socially phobic individuals express positive affect after a successful, albeit brief, social exchange. On the other hand, these same exchanges appear to be painful for them because they conclude that they will have to perform even better in the future to satisfy others’ expectations but they doubt that they are capable of achieving more. As well, socially phobic individuals constantly guard themselves against possible disapproval. Both of these factors may deprive these individuals of participating comfortably in social situations and could contribute to the perpetuation of this condition. These are intriguing avenues for further research that invite further study.
Footnotes

1 The term social anxiety is used in this thesis to refer to an anxious or apprehensive state. The term shyness is used to refer to a disposition of social apprehension and avoidance. The term social phobia refers to a syndrome of which social anxiety is one symptom.

2 Another possibility is that social phobic subjects may have feared being successful and, consequently, may have experienced a heightened sense of responsibility for the upcoming (second) interaction. However, this does not explain why social phobic subjects had increased perceptions of others' expectations in anticipation of the second interaction.
References


Glossary of Mental Disorders (1968). *Studies on medical and population subjects*, no. 22. London.: H.M.S.O.


Appendix A

Manipulation checks on assistants’ behavior

Subjects’ Ratings:

1. How warm was your partner?
2. How friendly was your partner?
3. How well did your partner make themself known to you? (that is, self-disclose or reveal themself to you?)

Experimenter’s Ratings:

1. How warm was the assistant?
2. How friendly was the assistant?
3. How well did the assistant make themself known to the subject (that is, self-disclose or reveal themself)?

¹Note: All ratings made on 10-point Likert-type scale with anchors not at all to very much.
Appendix B

Questions to assess subjects’ perception of feedback manipulation¹

Subject’s evaluation of own performance:²

Rate your level of performance, i.e. how well did you handle the situation? (1)

What level on the scale reflects how well you handled this interaction? (4)

Where would you rate your performance? (7)

How well do you think you did, that is, how would you rate your own behavior in this situation? (10)

Subject’s perception of experimenter’s evaluation of their performance:

Where do you think I would rate your performance? (2)

What level on the scale do I think you achieved? (5)

How well do I think you did, that is, how would I rate your behavior in this situation? (8)

What level on the scale do I think you achieved? (12)

Subject’s perception of partner’s evaluation of their performance:

What level on the scale reflects how well your partner thinks you handled this interaction? (3)

What level on the scale does your partner think you achieved? (6)

How well does your partner think you did, that is, how would your partner rate your behavior in this situation? (9)

Where do you think your partner would rate your performance? (11)

¹Note: All ratings were made using the 10-point Visual Rating Scale procedure.

²Note: Number in parentheses is the order in which the question was presented to subjects.
Appendix C

Questions posed to subjects to assess standards and efficacy before the interaction

Social Self-Efficacy

What level of performance reflects your actual ability in first meeting situations (1)

What level of behavior are you certain you could match in a first meeting situation (6)

What point on the scale reflects what your behavior would be in this situation (7)

How well would you actually handle a first meeting situation of this type (12)

Personal Standard

What point on the scale represents your personal standard for your behavior in a first meeting situation (2)

At what point on the scale would you say to yourself "I really handled that interaction well?" (4)

What level on the scale would you personally consider to be a successful conversation? (8)

What level of performance from yourself would you personally feel pleased with (10)

Others’ standard

If a third person, let’s say I, were watching you interact in this situation, what level of behavior would I regard as successful for you? (3)

At what level of performance would the other person feel you had handled the interaction well? (5)

What level of performance represents my standard for you? that is, what level would it take for me to say that you had handled this first meeting situation well (9)

What level of behavior would your partner (i.e., the person you are meeting for the first time) expect from you? (11)

1Note: All ratings were made using the 10-point Visual Rating Scale.
2Note: Number in parentheses is the order in which the question was presented.
Appendix D

Questions posed to subjects to assess standards and efficacy after the interaction¹

Social Self-Efficacy²

In the next interaction, what level of performance reflects your actual ability (1)

What level of behavior are you certain you will match in the next conversation (6)

What point on the scale reflects what your behavior would be in the next conversation (7)

How well will you actually handle this next situation (12)

Personal Standard

What point on the scale represents your personal standard for your behavior in the next interaction (2)

In the next meeting with your partner, what point on the scale will you say to yourself "I really handled the interaction well?" (4)

In the next interaction, what level on the scale will you personally consider to be a successful conversation? (8)

In the upcoming interaction, what level of performance from yourself will you personally feel pleased with (10)

Others’ standard

If a third person, let’s say I, were watching you interact in the next situation, what level of behavior will I regard as successful for you? (3)

In the conversation to follow, at what level of performance will the other person feel you are handling the interaction well? (4)

What level of performance now represents my standard for you? That is, what level will it take for me to say that you have handled the situation well (9)

In the upcoming interaction, what level of behavior will I expect from you (11)

¹Note: All ratings were made using the 10-point Visual Rating Scale procedure.
²Note: Number in parentheses is the order in which the question was presented.
Appendix E

Items from the Social Self-Presentation Style Scale

Protective Motivation Items

I was careful about what I said because I was afraid that I might say or do something wrong. (2)

I talked about the same things my partner did because I didn’t want to appear foolish. (4)

During the conversation, I tried to behave in such a way that I wouldn’t draw attention to myself. (6)

I didn’t talk about the topics I wanted to because I was afraid my partner would disapprove of them. (8)

Acquisitive Motivation

Once I knew what the situation called for, it was easy for me to regulate my behaviour to my advantage. (1)

I was able to control the way I came across to my partner so that I gave the impression I wanted to give. (3)

If I felt that I wasn’t giving the impression I wanted to give, I could have easily changed it. (5)

I had no difficulty making a good impression during the conversation because I felt that it was to my advantage to do so. (7)

Note: Number in parentheses is the order in which the question was presented to subjects.