THE ROLE OF SOCIAL STANDARDS,
SELF-EFFICACY, AND SOCIAL FEEDBACK
IN SOCIAL ANXIETY

By

SCOTT TAYLOR WALLACE

B.A. (Hons) University of Western Ontario, 1986

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS
in
THE FACULTY OF GRADUATE STUDIES
Department of Psychology

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA
July, 1988

© Scott Taylor Wallace, 1988
In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Psychology

The University of British Columbia
1956 Main Mall
Vancouver, Canada
V6T 1Y3

Date August 8, 1988
The present study was conducted to examine the self-reported social standards of socially efficacious and non-efficacious individuals. Converging evidence from different research domains, including studies on self-attentional processes and standard-setting in performance motivation, suggests that the socially anxious person may have standards for him or herself that are beyond that person's perceived abilities; alternatively, standards may be so high that they are beyond the reach of even the most socially confident person.

Ninety-six male undergraduate students were dichotomized into low and high social-efficacy groups on the basis of their response to a measure of self-efficacy and anxiety in social situations. The subjects were told they would be interacting with a female research assistant in order to practice before meeting another subject. The success of the practice interaction was manipulated by varying the assistant's behavior and feedback by the experimenter so that subjects believed they handled the conversation well or not well; a third condition was included with no feedback. Subjects were asked to rate their standards using a visual scale that displayed different levels of social interaction. The standards rated were: (1) the level of interaction that they consider successful, (2) the level of interaction that they would be happy with, (3) the level of interaction they think the experimenter wants, and (4) the level of a typical interaction. Additional measures were included to assess other aspects of standard and to determine the success of
the manipulations.

The results revealed that there is a consensus among high and low social-efficacy persons of what constitutes a successful interaction. The distinguishing feature appeared to be what level of interaction high and low efficacy persons are happy with and the level of interaction they felt capable of achieving. Low efficacy subjects had lower expectations and lower minimum goals of satisfaction whereas high efficacy subjects expected to achieve a level of interaction at least as high as their personal standard and beyond the level that they thought most others achieve. Further, when the interaction was successful, high efficacy subjects thought the situation demanded a lower level of interaction than they were capable of; low efficacy subjects, given the same successful experience, reported the demands of the situation to be higher than they felt capable of.

The results hint at a dysfunctional standard-setting process in socially anxious persons whereby success is interpreted in a manner that may maintain anxiety. The implications that these results have for the treatment of shyness, and future directions for research on standard-setting are discussed.
TABLE OF CONTENTS

Abstract
List of Tables
List of Figures
Acknowledgements

Introduction
The Theory of Objective Self-Awareness
The Theory of Self-Consciousness
The Theory of Behavioral Self-Regulation
Comparison of the Theories
Self-Efficacy and Social Anxiety
Efficacy
Standards
Feedback
The Present Study

Method
Subjects
Procedure
Social Interaction Task
Experimental Manipulations
Visual Rating Task
Assistant’s Behavior
Questionnaires
  Standard
  Factors Influencing Standard
  Manipulation Checks

Results
Preliminary Analyses
Subject Selection Measures
Reliability and Validity of the Efficacy Measure
Experimenter and Collaborator Checks
Manipulation Checks
LIST OF TABLES

Table 1. Means and standard deviations of selection measures .................................. 31
Table 2. Means and standard deviations of manipulation checks .................................. 36
Table 3. Means and standard deviations for measures of standard .................................. 38
Table 4. Means and standard deviations for measures of standard clarity ....................... 39
Table 5. Means and standard deviations for measures of confidence to meet standards ...... 40
Table 6. Means and standard deviations of efficacy expectations for the upcoming interaction and confidence to meet that level .............................................. 41
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Levels of standard collapsed across efficacy groups</td>
<td>44</td>
</tr>
<tr>
<td>2</td>
<td>Levels of standard reported by each efficacy group</td>
<td>46</td>
</tr>
<tr>
<td>3</td>
<td>Levels of standard relative to expectations for the next interaction</td>
<td>48</td>
</tr>
<tr>
<td>4</td>
<td>Levels of confidence to reach each standard</td>
<td>52</td>
</tr>
<tr>
<td>5</td>
<td>Levels of standard as a function of feedback relative to expectations for the next interaction</td>
<td>54</td>
</tr>
<tr>
<td>6</td>
<td>Levels of efficacy following feedback</td>
<td>55</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

There are a few people I feel indebted to for helping with this paper. My gratitude is extended to both Dimitri Papageorgis and Jerry Wiggins who served as committee members and were helpful in their own ways. Also, I would like to express more than just gratitude to Virginia Green for her patience with me as I struggled with F-tests and orthogonal contrasts. Finally, I am indebted to Lynn Alden who was instrumental in getting this research from "right brain" to pen and paper. She never failed to remind me that every single data point is a piece of a puzzle, in this case, shyness, and that it is all too easy to become distanced from the experience that we set out to understand.
Introductory Comments

Shy people often complain of a sense of painful self-consciousness—a sense that they are being watched and judged by others. Alden and Cappe (1986) commented that this concern may promote a continual process of self-observation and self-evaluation. Indeed, it seems that worrying whether or not one’s actions are appropriate may actually feed the anxiety that the shy person wants desperately to avoid. This thesis is directed at examining two aspects of self-evaluation, standards and self-efficacy, and outlining the implications that they may have for understanding and treating shyness.

The Theory of Objective Self-Awareness

One of the earliest theories of self-attention was Duval and Wicklund’s theory of objective self-awareness (1972). The main tenet of this theory is that conscious attention is bidirectional. This means that at any one moment attention can be directed toward the self (objective self-awareness) or the environment (subjective self-awareness). In addition, the authors suggest that attention directed toward the self elicits a process of self-evaluation.

The state of subjective self-awareness (environment-directed attention) is so named because events external to the individual are the focus of attention; hence, the person is the "subject" of the consciousness that is directed away from the self. Objective self-awareness, in contrast, has the self as the "object" of its own attention. This implies that any stimulus or situation that forces attention inward (e.g.,
mirrors, television cameras, the presence of an evaluative audience) will heighten objective self-awareness. As a consequence, any discrepancies that exist between one’s present actions and standards (i.e. the goals that one aspires to) become more salient. Assuming that one’s present state is short of these standards, the theory suggests that negative affect will be experienced and the individual will seek to reduce it. Furthermore, Duval and Wicklund theorized that the degree of negative affect experienced would be a function of the amount of attention focused on the discrepancy as well as the size of the discrepancy itself. In other words, the more objectively self-aware a person is, and the more discrepant the behavior is from ideals, the more that individual will experience negative affect and exert greater effort to reduce it.

Duval and Wicklund originally suggested that this affect could be reduced by avoiding the stimuli that induced the self-focused state or by changing one’s behavior to be more in line with the standard. However, Wicklund later specified (1975) that preference would be given to the easiest option—avoiding the stimulus that induces self-awareness. Indeed, in examining responses to self-focused attention, Duval, Wicklund, and Fine (1972) found that subjects seated in a waiting room with a mirror (heightened objective self-awareness) left the room sooner after they received negative feedback from a personality inventory than did subjects that were not exposed to the mirror. Presumably, subjects left the situation to avoid the self-focusing stimulus because they had been made aware that their personality traits were undesirable and traits are
something not readily changed. Conversely, when a self-focusing stimulus could not be easily avoided, Wicklund and Duval (1971, experiment three) found an increase in task performance (copying foreign prose) which reduced the discrepancy between behavior and aspirations.

Evidence for the validity of self-focusing manipulations was not directly examined by Duval and Wicklund. In fact, they have stated that "we can think of no easy way to ask a subject how self-aware he is without creating self-awareness" (1972, p. 221). Later researchers, though, found direct support for the validity of mirror, audience, and camera manipulations (e.g., Davis & Brock, 1975; Carver & Scheier, 1978; Geller & Shaver, 1976). In addition, when compared to non-self-aware counterparts, objectively self-aware persons demonstrate behavior that more closely corresponds to self-reports of aggression (Carver, 1975), sociability (Pryor, Gibbons, Wicklund, Fazio, & Hood, 1977), and attitudes toward pornography (Gibbons, 1978). They also attribute greater causality of a hypothetical event to themselves regardless of whether the event is favorable or not (Duval & Wicklund, 1973), and reduce attributions for negative events when engaged in a physical activity that distracts them from the self-awareness manipulation (Duval & Wicklund, 1972, pp. 193-205).

The Theory of Self-Consciousness

Buss's (1980) theory of self-consciousness emphasizes individual differences. He views self-focused attention as a manipulable and transient state of self-focus (termed
self-awareness) as well as an enduring dispositional tendency or trait of chronic self-attention (termed self-consciousness). Further, he suggests that there are two aspects of the self to consider—overt aspects that are observable and known by others (the public self), and covert aspects hidden from others but known to the experiencing person (the private self). Consequently, Buss asserts that it is important to clarify whether attention is directed toward private or public aspects of the self.

According to self-consciousness theory, the state of private self-awareness can be induced by a stimulus, such as a small mirror, or through self-reflective states, such as meditation and introspection. The result is a heightened awareness and intensification of internal states (e.g. motives, feelings, mood) and, depending on how closely linked the internal state is to behavior, action based on that awareness (e.g. a heightened awareness of angry mood may result in aggression). In contrast, public self-awareness can be induced by social feedback (e.g. being publicly scrutinized or stared at) or non-social feedback (e.g. large mirror, recordings of one’s own voice played back) with discomfort and concern for one’s appearance as a consequence.

The traits of public and private self-consciousness refer to chronic tendencies of self-awareness. Individual differences play a role in determining the extent to which a person engages in self-reflection (high versus low private self-consciousness) or is aware of oneself as a social object (high or low public self-consciousness). Specifically, Buss states that in the
presence of an inducer of public self-awareness persons high or low in the trait of public self-consciousness react differently—the former react more strongly to the inducer (as evidenced by more discomfort and concern with social appearance) than do the latter. Similarly, individual differences in the tendency to self-reflect (high and low private self-consciousness) only come into play during impersonal contexts.

To assess individual differences in self-consciousness, Fenigstein, Scheier, and Buss (1975) devised the Self-Consciousness Scale which distinguishes three factors—private self-consciousness (e.g. "I reflect about myself a lot"), public self-consciousness (e.g. "I’m concerned about what others think of me") and social anxiety ("I find it hard to talk to strangers" and "I am anxious in the presence of others"). The discriminant validity of the self-consciousness scale is supported by the low correlation between the two subscales of private and public self-consciousness (Carver & Glass, 1976; Fenigstein et al., 1975; Turner, Scheier, Carver, & Ickes, 1978), and low correlations with measures of social desirability (Turner et al., 1978). As well, self-consciousness as a trait has essentially the same behavioral consequence as does self-awareness that is induced situationally (e.g. Buss & Scheier, 1976; Carver & Scheier, 1978; Scheier, 1976; Scheier & Carver, 1977). In addition, persons high in private self-consciousness list more self-descriptive traits than do persons low in private self-consciousness (Turner, 1978b), are more responsive to their transient affective states (Scheier,
1976; Scheier & Carver, 1977), and make more accurate self-reports regarding their bodily sensations (Scheier, Carver, & Gibbons, 1979) and future behavior (Scheier, Buss, & Buss, 1978; Turner, 1978a). In all, the Self-Consciousness Scale appears theoretically, as well as empirically, valid.

The Theory of Behavioral Self-Regulation

Carver and Scheier (1981a) proposed a theory that suggests attentional focus is an important determinant of behavior. Specifically, they suggest that self-focused attention heightens attempts to match behavior with salient standards. In general, cybernetic or "control theory" specifies that if a discrepancy is perceived between one's present state or action and a reference value or standard, efforts will be made to reduce this discrepancy. Despite the similarity of self-focused attention to objective self-awareness, Carver and Scheier believe that attention directed toward the self is not necessarily an aversive state. As Carver (1979, p. 1268) comments, "self-directed attention leads to negative affect only when the person perceives that he or she cannot alter his or her present state in the direction of the standard". In retrospect, Carver indicates that most of the original research on self-awareness prevented subjects from altering their behavior to conform more closely with standards, hence negative affect was inevitable (e.g., Duval et al., 1972; Ickes, Wicklund, & Ferris, 1973).

Carver and Scheier's theory has three important aspects: (1) when a standard is salient, self-focused attention induces an attempt to conform to that standard, (2) if attempts to match
the standard are interrupted (e.g., the individual feels anxious) the likelihood of doing so will be assessed (outcome expectancy), and (3) if the outcome expectancy is favourable (i.e. the person believes that he or she can match the standard) the result is a continued attempt at discrepancy reduction; if the assessment is negative (i.e. the person does not feel that the discrepancy can be reduced) then the person will withdraw from the situation (physically or mentally). Hence, the crux of Carver and Scheier's theorizing is the interaction of self-focus and expectancy. For example, Carver et al. (1979b) found that after failing on an initial problem-solving task (which created a large discrepancy between achievement and aspiration) subjects that were hopeful of completing a second task increased their persistence on it whereas doubtful subjects essentially gave up. These differences were only found under conditions of high self-focus.

Comparison of the Theories

The impact of self-focused attention upon behavior is described by each of these three theories. In addition to their similarities, there are important differences that reflect points of disagreement or elaborations upon some earlier finding. For example, Buss refined the concept of self to include both private and public aspects. In addition, he suggested that individual differences in self-focusing tendencies exist. Duval and Wicklund, however, regard individual differences as secondary to environmental determinants of focus of attention and do not explicitly
distinguish public and private aspects of the self. In reviewing their writings, though, it is clear that Duval and Wicklund considered the possibility that an individual might hold personal standards distinct from a social consensus. In fact, they designed their studies to reduce the possibility of conflicting influences on behavior—a particular standard was either instilled or it was insured that the subject's personal standard was in agreement with the social consensus. Similarly, Carver and Scheier design their studies to ensure that individual differences in both self-focused attention and standards are considered.

A major point of disagreement between the theories is the role played by negative affect. Duval and Wicklund propose to understand the motivational consequences of objective self-awareness and, as a result, consider discrepancy-induced affect a crucial determinant of behavior. However, negative discrepancies are regarded by Buss, and Carver and Scheier, as only one possibility of self-focused attention, the other being an increased salience of self-elements (e.g. moods, motives). As such, their theories consider situations in which standards do not exist. For example, Scheier (1976) found that a small mirror intensified male subjects' experience of anger as evidenced by increased aggression toward other males compared to a no-mirror control group. In this situation, men aggressing towards other men, Buss (1966) has suggested that there is no clear standard that behavior falls short of and so Duval and Wicklund's theory is at a loss to explain the findings. Instead, he suggests that the subjects became more aggressive
simply because they were directing attention toward their self.
In a similar manner, self-focused subjects reported feeling more
depressed or elated after these moods had been induced;
non-self-focused subjects did not report any increases in mood.

Although Buss (1980, p.100) states "standards, goals,
rules, and end-points are not an intrinsic part of my theory but
merely another determinant of behavior to be considered", he
offers a distinction between public and private standards that
is crucial when standards are relevant. Here, Buss's theory
makes specific predictions about the effects of
self-consciousness on behavior depending on whether a private or
public state is induced. In cases where attention is directed
toward the private aspects of consciousness, one's behavior
would more closely follow personally held standards; when public
aspects of consciousness are heightened, behavior would
presumably follow public or social standards. This distinction
is apparent in a study by Froming and Walker (cited in Carver &
Scheier, 1981). Subjects were selected that reported holding
opinions toward punishment that they themselves regarded as
different from the opinions of most others (subjects believed
that punishment was ineffective as a learning tool but felt that
others held the opposite opinion). Later, subjects were induced
to deliver shocks to a confederate under one of two
manipulations of self-awareness—public (presence of an
evaluative audience) or private (presence of a mirror). They
found that privately self-aware subjects delivered less shocks
than a control group (thereby conforming to their personal
standard) whereas subjects publicly self-aware delivered more
shocks than the control subjects (conforming to the perceived social standard). Froming, Lopyan, and Walker (cited in Carver & Scheier, 1981) replicated this study using subjects whose attitudes were opposite to those of subjects in the first study, but still regarded as different from the social consensus. Again, the results supported the public/private distinction. A similar effect was found in the domain of self-reinforcement (Diener & Skrull, 1979). Subjects were to reward themselves for performances on a perceptual judgment task. Publicly self-focused subjects rewarded themselves more if they surpassed the social standard than if they surpassed their own standard; subjects in a private self-focus manipulation rewarded themselves more for performances exceeding their personal standard.

The strength of Carver and Scheier’s theory is the addition of outcome expectancy as another variable in self-attention. In the domain of test anxiety, for example, a number of studies suggest that test-anxious persons are self-focused in evaluative situations thereby devoting less attention to their required task (e.g., Wine, 1980, 1982). Indeed, task-relevant cues are often ignored or misinterpreted by test-anxious persons (e.g., West, Lee, & Anderson, 1969). However, evaluative situations sometimes facilitate performance on a task (e.g., Wicklund & Duval, 1971). These effects can be reconciled if outcome expectancies are considered because self-directed attention presumably interacts with expectancy to determine persistence or withdrawal. Consistent with Carver and Scheier’s model, Carver, Peterson, Follansbee, and Scheier (1983) found that high
test-anxious subjects (doubtful of successfully completing the task) and low test-anxious subjects (confident of their performance) differed in their persistence on an anagram-solving task. Specifically, under conditions of self-focus, the performance of high anxiety subjects was impaired; the low anxiety subjects improved. Similarly, Brockner and Hulton (1978) found that self-focused attention impaired the performance of low self-esteem subjects relative to high self-esteem subjects on a task, but the latter performed better than high self-esteem subjects when instructed to focus completely on the task.

Fear-based anxiety may also lead to a divergence in behavior depending upon one's expectancies for successful coping. For example, Carver, Blaney, and Scheier (1979a) selected subjects with an equivalent self-rated fear of snakes but different expectancies of being able to approach and handle the snake. Consistent with the theory, expectancy interacted with self-focus in determining subsequent behavior—doubtful subjects withdrew earlier from their attempts to approach the snake; confident subjects increased their efforts. Furthermore, these differences were only found amongst subjects who performed in the presence of a mirror. Seeing the implications that attentional focus might have for the treatment of shyness, Alden and Cappe (1986) provided shy clients with a strategy for directing attention to their partner in a social interaction. Their efforts were successful at increasing clients' social activities and, although interpreted cautiously by the authors, provide evidence that shyness may be maintained by an
attentional focus directed to the self instead of upon the concrete aspects of interacting.

Self-Efficacy and Social Anxiety

Carver and Scheier’s model bears a resemblance to Bandura’s (1986) theory of self-regulation. Although there are conceptual differences between the two, it is interesting to consider their analysis of fear-based avoidance behavior. Both theories incorporate: (1) efficacy judgements that the behavior required to achieve an outcome can be executed, (2) judgements of actual skill levels achieved, and (3) standards or goals that are aspired to. In their discussions these theorists differ on which of two concepts, outcome expectancy or self-efficacy, determines whether coping behaviors will be initiated. This argument will not be taken up here except to acknowledge Carver’s comment that “in applying the two models to situations in which the likelihood of a positive outcome is entirely dependent on intrapersonal factors, which is the case in fear-based behavior, the two are functionally equivalent” (1979, p. 1275). In addition, both agree that people are not likely to persist in situations that exceed their perceived coping abilities and, if task demands are under- or over-estimated, there may be discrepancies between efficacy judgements and performance (Bandura, 1984; Carver, 1979). Assuming that shy persons are highly public self-conscious or self-focused when interacting, it would seem fruitful to determine if shy people show discrepancies between their efficacy expectations and their social performance. Specifically: (1) the shy person’s
Efficacy

Compared to people low in social anxiety, shy persons often underestimate their level of social skill, generate more negative self-statements both before and during social interaction, selectively attend to negative information about their performance in a social situation when both positive and negative information are equally available, and expect to perform more poorly in social situations (Cacioppo, Glass, & Merluzzi, 1979; Clark & Arkowitz, 1975; Mischel, Ebbesen, & Zeiss, 1973; Smith & Sarason, 1975; Watson & Friend, 1969). Most notably, the shy person's negative self-evaluations are limited to socially relevant attributes and are not part of other areas of competence such as athletics or intelligence (Efran & Korn, 1969) or of judgements of social skill in others (Clark & Arkowitz, 1975). Taken together, these findings suggest that shyness may involve low efficacy expectations for success in social interactions.

In a recent study of self-efficacy and social performance, Burgio, Merluzzi, and Pryor (1986) sought to determine the effects of expectancy and self-focus upon the persistence of socially anxious subjects in a phone conversation. A median split of scores on the Social Anxiety and Distress Inventory (Watson & Friend, 1969) determined the selection of two groups of subjects—high and low socially confident men. The subjects were given the telephone number of a female confederate and
spoke with her on the phone under conditions of self-focus (a mirror). Relative to a non self-focused group, the expectancies of self-focused subjects were enhanced—doubtful subjects spoke for shorter periods of time and spoke less during the conversation than did confident subjects. In addition, the confident and doubtful subjects were only perceived to differ in skill when self-focused. It was concluded that self-focused attention enhanced the comparison between actual performance and the conversational goal (to talk 4 to 5 minutes on the phone) which resulted in performances indicative of expectancies. Consistent with the literature reviewed here, these findings support the idea that low social-efficacy may play an important role in social anxiety.

Standards

In addition to low expectancies for successful interaction, the theories of attentional focus suggest that standards may play a role in social anxiety. Deffenbacher and Suinn (1982) maintain that anxious persons often expect of themselves such excessively high performance standards that they elicit self-criticism for virtually any feedback they receive. "Even when they have done or are doing well, [socially anxious people] tend to be preoccupied with the possibility that they will not meet the standard on another occasion. In extreme form, such individuals are anxious a great deal of the time because some aspect of their being or behavior might be evaluated negatively by someone else" (p. 403). Similarly, Bandura (1986) observes that "people who are prone to psychological distress often
exhibit quite unrealistic standard setting" (p. 348) and that "a sure way of inducing self-discouragement and a sense of personal inadequacy is to judge one's ongoing performances against lofty, global, or distal goals" (p. 359).

Shy people are known to desire to make good social impressions. In fact, people who are more concerned with the impressions that they are making on others experience social anxiety more acutely than do those who are less concerned (Leary & Schlenker, 1981; Zimbardo, 1977, 1981). Schlenker and Leary (1982) view social anxiety as arising when people are motivated to make an impression upon others but doubt that they will do so. They suggest that self-presentational standards reflect the images people would like others to have of them and that "the less likely people believe they are able to receive the preferred reaction from audiences, the more anxiety they will experience" (pp. 645-646). In other words, they believe that social anxiety arises when people seriously doubt their ability to come across to others in a way that will be admired.

There is very little literature on the role of standards in social anxiety. However, standard-setting by depressed people has received a moderate amount of attention in recent years. Self-reports of depression have been found to correlate with high expectations on an irrational beliefs measure (e.g. LaPointe & Crandell, 1980; Nelson, 1977), and some investigators have found that, compared to non-depressed subjects, depressed subjects set higher goals of performance on a laboratory task relative to their accomplishments (e.g. Golin & Terrell, 1977). However, the majority of the current literature supports the
hypothesis that depressed subjects set performance-related goals at a similar level to non-depressed subjects but have lower expectancies to achieve them. For example, Kanfer and Zeiss (1983) studied the relation of standards and expectancies in depression. Interestingly, they found that depressed and nondepressed subjects did not differ in the level of standard they set (number of activities needed to feel better and the level of performance needed to enjoy them) but depressed subjects felt their standards were higher than they could achieve. In a comparative sense, the standards set by the depressed subjects were overly stringent. This study, and others drawing similar conclusions (e.g. Lewinsohn & Hoberman, 1982; Nelson & Craighead, 1981) suggest that the critical factor relating standards to depression is not the absolute level of the standards but the level set relative to efficacy judgements of reaching that standard.

It is possible that shy persons may parallel the depressed in how standards of performance are set. Similarly, socially nonassertive individuals have been found to report irrational beliefs related to competency and approval by others (Alden & Safran, 1978). Hence, as found in depression, shy people may set excessively stringent standards of achievement in social interactions relative to their accomplishments, or standards that are not particularly high but exceed efficacy expectations. If standards are excessively high (e.g. "there should never be an awkward moment in a conversation") then anything less than perfection could be regarded as a failed attempt. Consequently, judging one's social skill in relation to this standard would
necessarily imply low efficacy and could elicit self-criticism. Alternatively, if an individual feels completely inefficacious at attaining even a minimal level of interaction, standards could appear beyond reach in a relative sense. Certainly, shy persons judge themselves as inefficacious at social interactions, but these judgements do not necessarily reflect an accurate appraisal of social deficits. As Schlenker and Leary (1982) point out, "individual differences in standards help to explain why people who are, as judged by outside observers, coming across well socially may still feel anxious. Given the same positive reactions from others, people with low standards may feel quite satisfied, whereas those with higher standards might feel dissatisfied and socially anxious" (p. 645).

Another question that is raised by the literature on self-focused attention is whether shy persons have social standards at all. Buss notes that "the most frequent and important situational cause [of shyness] appears to be novelty" (p. 187) and Dibner (1958) and Leary (1982) found that self-reports of anxiety were correlated with situational novelty. Additionally, people low in self-esteem tend to model their co-workers when they are uncertain of appropriate role behaviors (Weiss, 1977, 1978), people search for information about task requirements more when they are uncertain of what is required (Crawford, 1984), the influence of models is most pronounced on unstructured tasks (Marlatt, 1971), and adults are more likely to adopt modeled standards when they have little experience at some activity (Rakestraw & Weiss, 1981). Not only might socially anxious persons model others because they are
uncertain of the standards operating in a situation, but the models they choose may be critical to self-evaluation (Bandura, 1986). Comparison with persons whose accomplishments far exceed one's own capabilities, or modeling stringent standards, can lead to an unfavourable self-evaluation. Alternatively, adhering to those standards without considering the circumstances under which they are performed may produce negative self-evaluation if those standards cannot be met. Taken together, these findings suggest that socially anxious people may be motivated to access information regarding appropriate behaviors in social situations but the standards they adopt may be unrealistic and anxiety-producing.

**Feedback**

Recent research into standard-setting and depression suggests that the relationship between performance effort and standards is not a linear one as early studies of performance motivation suggest (e.g. Locke, 1968). In other words, setting high standards does not ensure maximal effort. For example, Bandura and Cervone (1983) studied performance motivation on a strenuous activity. They found that performances falling far short of goals led to discouragement and abandonment of the goal whereas moderate discrepancies between goals and performance led to dissatisfaction and increases in effort. The critical factor here was a subject's sense of self-efficacy. Effort was greatest when subjects were dissatisfied with their performance but had a strong sense of self-efficacy. Hence, moderate discrepancies between goals and achievement mobilize effort to
achieve goals as long as individuals feel efficacious. If feedback is received that efforts to achieve a goal are being realized, this may lead people to raise their performance standards to create new "motivating discrepancies" (Bandura & Cervone, 1983). On the other hand, feedback about performance may be interpreted in a manner that maintains self-perceptions of social ineffectiveness. Alden (1986) observed that persons who doubted their ability to successfully interact (low efficacy) attributed positive feedback to external factors and negative feedback to internal factors. She concluded that this kind of attributional bias would likely perpetuate doubts about performance in the future.

The Present Study

In the present study we sought to extend Carver and Scheier's self-control model to a social context. The evaluative apprehension that shy persons report, and the evaluative reactions observed when self-awareness is heightened, suggest that socially anxious persons may be searching for, or be more aware of the social standards operating in a situation. Research on standard setting suggests three factors that could influence experiences of social anxiety—judgements of social skill, the quality or level of social standards aspired to, and expectancies to meet those standards. This study focuses on the latter two factors—social standards and self-percepts of efficacy.
The specific questions of interest are as follows:

1. Low and high efficacy subjects are expected to report similar social standards (i.e. beliefs about what level of interaction they should be able to accomplish).

2. Low efficacy subjects are expected to report higher social standards than efficacy expectations for the upcoming interaction; high efficacy subjects are expected to report social standards at the same level as efficacy expectations.

3. Consistent with the literature relating situational novelty to social anxiety, and Carver and Scheier's model of attentional focus, low efficacy subjects are expected to report a less clear sense of standard than do high efficacy subjects. If this is found, it is predicted that low efficacy subjects will view the rating scale more often than high efficacy subjects.

4. Low efficacy subjects are expected to report being less confident that they will achieve their standards than are high efficacy subjects.

5. In addition to the above hypotheses, a second objective is to examine how positive or negative social feedback modifies the levels of standard set for social interaction. Specific predictions will not be made because of the lack of research into social standard-setting and, hence, the exploratory nature of this research.
Method

Subjects

Ninety-six male undergraduate students were recruited to take part in a study of goal-setting in social interactions. The study was advertised through announcements made in classes and participation was on a voluntary basis for course credit. The subjects were selected on a 10-point scale assessing efficacy expectations for handling a first-meeting heterosocial interaction (Appendix A). A median split was used to establish two groups of 48 subjects, high and low social-efficacy, and, within each group, subjects were randomly assigned to one of three social feedback conditions—positive social feedback, negative social feedback, and no social feedback. Subjects also completed the Beck Depression Inventory and the Self-Consciousness Scale.

Procedure

Upon entering the laboratory, subjects were led to believe that they would be talking with a female subject whom they had never met before. It was explained that, in order to get used to this situation, a female research assistant would practice with them first. The success of the practice interaction was manipulated by varying the assistant’s behavior and the experimenter’s feedback so that subjects would believe they handled the conversation well or not well. Subjects were then asked to rate the following standards for the upcoming interaction: (1) the level of interaction that they consider
successful, (2) the level of interaction that they would be happy with, (3) the level of interaction they think the experimenter wants, and (4) the level of a typical interaction. Subjects also rated how clear an image they have of each standard and their expectancy for how well they would handle the interaction. Following these ratings, subjects completed a questionnaire that contained manipulation checks and a question asking about the factors that may have influenced their judgement of standard. Finally, the subjects were debriefed and thanked for their participation.

Social Interaction Task. Upon entering the laboratory, the following instructions were read:

"In this study we are looking at the kinds of goals that people set for themselves in social interactions, in other words, how well you would like it to go when you meet someone for the first time. So you will be meeting a female subject and asked to talk for a while to get to know each other as if you had met somewhere on campus for the first time. We just want you to talk to her as if you were meeting after class or in the SUB [Student Union Building], for example. What we are interested in finding out is the goal or standard that you set for yourself in judging how well that conversation goes.

From our research last year, we found that meeting in a lab is not a familiar situation for most people so we’d like you to have some practice in the situation before actually meeting your
partner. We have a research assistant, her name is [ ]. She'll practice with you before you meet your partner so you can get used to the room. Your partner will be doing the same thing. Do you have any questions about what you'll be doing then?"

Questions were answered by restating parts of the instructions. At this point, the assistant entered the room and the experimenter said:

"I'll leave you two to talk for about 5 minutes. Just spend some time talking and getting to know each other so that you can become more familiar with the situation. I'll be behind this one-way mirror and will stop the conversation after about 5 minutes. I'll tell you when to begin after I get back there."

The conversation continued until 5 minutes had passed. The assistant then left the room. At this point the experimental manipulations were introduced and the visual rating task was explained. Subjects completed questionnaires assessing the level of standard they expected to attain during the upcoming interaction. After completing the questionnaires, subjects were asked open-ended questions about the purpose of the study and any suspicions they had. Subjects correctly identifying the purpose of the social feedback were excluded from data analyses. All subjects were debriefed and thanked for their participation.
Experimental Manipulations. Positive and negative feedback was provided to subjects through comments made by the experimenter after the assistant had left the room. In the positive feedback condition, the experimenter commented "well that was really good. You seemed to handle the conversation quite well and made your partner feel comfortable". In the negative feedback condition, the experimenter said "well that was a little awkward. You seemed to have some difficulty in handling the conversation and making you partner feel comfortable." And in the no feedback condition, no comment was made by the experimenter.

Visual Rating Task. Following feedback manipulations the visual rating scale was explained. The scale demonstrates different levels of social interactions (Appendices B and C). The scale ranged from 0 (an extremely awkward interaction) to 10 (extremely smooth) with visual anchors corresponding to points 2, 5, and 8 on the scale. Each anchor was a two-minute videotaped interaction between a male and female undergraduate trained to demonstrate the corresponding level of performance. The interactions differed on two dimensions—verbal behavior (number of questions asked, length and frequency of pauses) and nonverbal behavior (eye contact, body posture, smiles and headnods).

In explaining the rating scale to subjects, the experimenter commented:
"Now that you’re familiar with this situation and the lab setting, we’re interested in your personal standard for the interaction. That is, we’re interested in what level of performance you would personally be happy with.

We have a scale that measures different levels of interactions. The scale goes from 0 to 10, where 0 is a fairly slow, perhaps a bit awkward interaction, and 10 is a smooth, animated interaction.

Here are examples of different levels of interactions.

[Show visual anchor 1]
This interaction went okay. It would be a level 2 on our scale.
[Show visual anchor 2]
This interaction is at a somewhat higher level. This would be a 5 on our scale.
[Show visual anchor 3]
This interaction is at a still higher level. This would be an 8 on our scale."

It was explained to subjects that the scale was to be used when answering the questionnaire and that they were free to review the scale when answering questions.

**Assistant’s Behavior.** Credible feedback involved manipulating both the experimenter’s comments and the assistant’s behavior because this was an unstructured task in which subjects may have
easily discerned how well the interaction actually went. Also, it was important that subjects were told they were interacting with a collaborator. Earlier research in this laboratory suggested that expectancies for an interaction are sometimes based on conclusions drawn about the person interacted with. Therefore, by interacting with a known collaborator, subjects were likely to be uncertain of how the conversation would go with a "real" subject. This, in turn, may heighten concerns about expected performance and standards of evaluation.

The assistant was one of two female undergraduate students trained to display consistent behavior across subjects within each condition. The assistants were randomly assigned to feedback conditions and each interacted with an equal number of subjects. Both assistants, and the experimenter, were blind to the subject's efficacy level.

The assistant's role was assumed upon entering the laboratory. She talked with the subject for 5 minutes, asking her first question during the first natural pause. The assistant's behavior in each condition was as follows:

No feedback condition: The assistant asked questions at 30-second intervals, talked in a neutral but pleasant voice, and displayed two distinct smiles and headnods per minute. The assistant's body posture was upright and neutral neither leaning forward or back.

Positive feedback condition: The assistant asked questions at 20-second intervals, talked in a warm and interested voice,
displayed four distinct smiles and headnods per minute. The assistant’s body posture was slightly forward displaying warmth and interest.

Negative feedback condition: The assistant asked questions at one-minute intervals, displayed one distinct smile and headnod per minute, answered questions with little elaboration, and adopted a cold body posture, leaning back.

**Questionnaires**

**Standard.** There are different operational definitions of "standard" in the literature reviewed. It may be that a person’s sense of personal standard (i.e. the minimum performance goal they desire for satisfaction) may differ from what they believe they should achieve (i.e. an external standard) or from what they believe most others achieve (i.e. a typical level of performance). Based on previous conceptualizations, the literature on self-awareness, and intuition, standards were defined in four ways:

1. the standard that subjects consider a successful interaction
2. the standard that subjects would personally be happy with
3. the standard that subjects think the experimenter demands of them, and
4. the standard that subjects expect others can do.

The visual rating questionnaire (Appendix C) had fourteen
questions assessing standards. Subjects rated the level of standard on a 10-point scale employing the videotapes as visual anchors from 0 (awkward) to 10 (smooth and flowing). As well, subjects rated how clearly they perceived each standard on a 10-point scale ranging from 0 (not at all clear) to 10 (very clear), and their confidence to reach each standard from 0 (not at all confident) to 10 (completely confident). During this task, the experimenter unobtrusively recorded the number of times subjects viewed each visual anchor.

**Factors influencing standard.** A second questionnaire (Appendix D) contained six items, one of which asked the extent to which certain factors were involved in the subject's judgement of how well their practice interaction went. These are: (1) past experience in social situations, (2) what the subject thought the experimenter expected, (3) how well the subject thought other people did, and (4) any other factors involved in their judgement. Subjects rated each factor on a 10-point scale from 0 (not involved in the judgement) to 10 (very much involved in the judgement).

**Manipulation Checks.** The remaining five questions (Appendix C) assessed the success of the feedback manipulation. Subjects were asked to rate, on 10-point scales, how well they thought they handled the interaction (ranging from "not at all well" to "very well"), how often they thought of being evaluated by the partner or experimenter ("not at all" to "constantly"), how often they evaluated themselves ("not at all" to "constantly"),
how self-conscious they felt during the interaction ("not at all self-conscious" to "very much self-conscious"), and how responsive they thought their partner was to them ("not at all responsive" to "very responsive").

Results

Preliminary Analyses

Subject selection measures, experimenter and collaborator checks, and manipulation checks, were each analysed by a $2 \times 3$ (efficacy group by feedback condition) multivariate analysis of variance (MANOVA). For each MANOVA, a check on assumptions of normality, homogeneity of variance-covariance matrices, and linearity was satisfactory. This ensures robustness of the MANOVA procedure and justifies retaining all variables in their original form. Wilks's lambda was used as the criterion of significance. Significant interactions were followed with simple effects analyses; significant main effects were followed with post hoc analyses (Student Newman Keuls) with the significance level considered as a function of the total number of comparisons made (Bonferonni adjusted alpha, $p<.05$).

Subject Selection Measures

Efficacy groups were formed from the top 30% of volunteers who completed the efficacy questionnaire (ratings of 7–10 on a 10-point scale) and bottom 30% of volunteers (ratings of 0–5). Three subjects were not included in the subject pool because of high BDI scores (above 19); the remaining subjects were randomly
assigned to feedback groups based on efficacy ratings (high or low). During the study, eight subjects expressed suspicion (six high efficacy; two low) and were replaced with randomly selected subjects from the remaining subject pool to maintain an equal number of subjects in each group.

The first MANOVA contained subject selection measures (intake questionnaires of efficacy, anxiety, depression, and self-consciousness). Table 1 presents the means and standard deviations of these measures. Using Wilks’s lambda as the criterion, a significant main effect for efficacy emerged, $P < .001$; no significant feedback or interaction effect was apparent. Univariate analyses revealed significant differences between low and high efficacy groups on ratings of efficacy, $F(1,90)=82.34$, $P < .001$, and anxiety, $F(1,90)=23.12$, $P < .001$. This indicates that two distinct groups were formed on the basis of efficacy ratings and that these groups also differed in anxiety. Ratings on the anxiety subscale of the Self-Consciousness Scale were also significantly higher for the low efficacy group, $F(1,90)=24.40$, $P < .001$, but no significant differences emerged between groups on public or private self-consciousness. When compared with Fenigstein et al.’s (1975) original sample of subjects, low efficacy subjects report more public self-consciousness, $t(225)=4.58$, $P < .001$, less private self-consciousness, $t(225)=9.73$, $P < .001$, and more social anxiety, $t(225)=18.91$, $P < .001$; high efficacy subjects, compared with the original sample, report a similar degree of public self-consciousness, $t(225)=1.35$, $P > .10$, less private self-consciousness, $t(225)=4.5$, $P < .001$, and less social anxiety.
Table 1
Means and standard deviations of selection measures

<table>
<thead>
<tr>
<th>Efficacy Group</th>
<th>n</th>
<th>Efficacy</th>
<th>Anxiety</th>
<th>BDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>48</td>
<td>3.81(1.07)</td>
<td>3.79(1.52)</td>
<td>8.06(4.33)</td>
</tr>
<tr>
<td>in class</td>
<td>8</td>
<td>4.25(.89)</td>
<td>3.75(.71)</td>
<td>-</td>
</tr>
<tr>
<td>in lab</td>
<td>8</td>
<td>4.00(1.31)</td>
<td>3.75(.93)</td>
<td>-</td>
</tr>
<tr>
<td>High</td>
<td>40</td>
<td>8.29(.58)</td>
<td>7.29(1.37)</td>
<td>6.40(4.39)</td>
</tr>
<tr>
<td>in class</td>
<td>30</td>
<td>8.17(.46)</td>
<td>7.13(1.41)</td>
<td>-</td>
</tr>
<tr>
<td>in lab</td>
<td>30</td>
<td>7.50(1.01)</td>
<td>6.60(1.35)</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Efficacy and anxiety measures range from 0 (low) to 10 (high)
### Selection Measures

<table>
<thead>
<tr>
<th>Efficacy Group</th>
<th>n</th>
<th>Self-Consciousness Subscales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Public&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Low</td>
<td>48</td>
<td>22.38 (6.68)</td>
</tr>
<tr>
<td>in class</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>in lab</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>High</td>
<td>48</td>
<td>18.02 (3.85)</td>
</tr>
<tr>
<td>in class</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>in lab</td>
<td>30</td>
<td>-</td>
</tr>
</tbody>
</table>

<sup>a</sup>normative mean for the public subscale is \( \bar{x} = 18.9 \)

<sup>b</sup>normative mean for the private subscale is \( \bar{x} = 25.9 \)

<sup>c</sup>normative mean for the social anxiety subscale is \( \bar{x} = 12.5 \)
t(225)=20.45, p<.001. Hence, low efficacy subjects report a high sense of social anxiety and a concern with how they appear to others as measured by the Self-Consciousness Scale. Finally, among scores on the BDI, no significant interaction or main effects were found, and thus depression was not considered as a potential covariate.

Reliability and Validity of the Efficacy Measure

The self-efficacy questionnaire has face validity as outlined by the criteria of efficacy measurement (Bandura, 1977) and has been employed in previous studies in this laboratory. For example, Wallace and Alden (1987) found that the questionnaire reliably distinguished between groups of subjects that behaved in accord with the predicted behavior of high and low efficacy subjects in Carver and Scheier’s (1986) theory. In addition, efficacy ratings correlate with ratings of anxiety from the efficacy questionnaire, r(96)=.81, p<.001, and low efficacy subjects also report a significant degree of social anxiety as measured by the Self-Consciousness Scale, whereas high efficacy subjects do not. These results suggest that efficacy ratings are associated with different levels of social anxiety suggesting that the results of this study may be extended to social anxiety. However, it may also be that the efficacy and anxiety question measured the same concept.

A subset of subjects (n=38) completed the efficacy questionnaire in class and in the lab to test reliability of the measure across time and setting. A repeated measures analysis revealed no significant differences between settings within each
efficacy group on efficacy and anxiety ratings \((p > .10)\) and significant differences were maintained between groups on these ratings, \(F(1, 33) = 11.98, p < .01\), for ratings of efficacy, and \(F(1, 33) = 13.75, p < .001\) for ratings of anxiety. All low efficacy subjects maintained low ratings across time and settings; two high efficacy subjects lowered their rating to the median value used for assigning subjects to groups (6 on the scale 0-10) and one rated his efficacy below this. Test-retest reliability coefficients were significant. Efficacy ratings in class and the laboratory correlated significantly, \(r(38) = .85, p < .001\), and anxiety ratings in class and the laboratory correlated significantly, \(r(38) = .75, p < .001\). These data support the reliability of the efficacy measure for selecting distinct efficacy groups across time (an interval of approximately one month) and setting.

Ratings were also made of subjects' interpersonal style by the collaborator. Two ratings were made on 10-point rating scales—whether the subject appeared outgoing and self-assured or timid and self-conscious, and whether he appeared warm and amiable or cold and aloof. Ratings revealed that low efficacy subjects were seen as more timid and aloof than high efficacy subjects, \(F(1, 78) = 9.99, p < .01\), and \(F(1, 78) = 14.34, p < .01\), respectively. This suggests that low efficacy subjects were seen as interpersonally distant and more timid than high efficacy subjects. However, caution must be exercised in interpreting these results. They were included to see if high and low efficacy subjects handled themselves differently in this situation but the ratings are prone to biased perception.
Although collaborators were not informed of the efficacy status of subjects, they were required to know the feedback condition in order to alter their response to the subjects. In addition, no operational definition of "timid" or "aloof" was provided and so these ratings are relatively informal and may simply reflect anxious behavior. Nevertheless, they do suggest that high and low efficacy subjects appeared to have unique interpersonal styles.

**Experimenter and Collaborator Checks**

The second and third MANOVAs, contained every measure that subjects completed, with the experimenter (two levels) and assistant (two levels) as additional factors to check for demand effects. The means and standard deviations of these measures are presented in Tables 2-6. Two MANOVA analyses were employed—one to examine effects on manipulation checks; the other to examine effects on dependent measures. No significant interaction or main effects were found, \( p > .05 \). These findings suggest that differences between experimenters and assistants did not systematically influence the results.

**Manipulation Checks**

The fourth MANOVA contained subjects' ratings of the interaction, self- and perceived partner-evaluation, self-consciousness, and partner's responsiveness (questionnaire two, see Table 2). A significant main effect emerged for efficacy and feedback, \( p < .001 \). Subsequent univariate ANOVAs revealed significant differences between efficacy groups on
Table 2
Means and standard deviations of manipulation checks

<table>
<thead>
<tr>
<th>Questions</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>how well you handled the conversation</td>
<td>6.06(1.61)</td>
</tr>
<tr>
<td>extent to which this rating is based on:</td>
<td></td>
</tr>
<tr>
<td>past experience</td>
<td>6.56(2.22)</td>
</tr>
<tr>
<td>what we expect</td>
<td>5.13(2.69)</td>
</tr>
<tr>
<td>how others do</td>
<td>4.19(2.69)</td>
</tr>
<tr>
<td>how often you thought of being evaluated</td>
<td>6.75(2.38)</td>
</tr>
<tr>
<td>how often you questioned your own performance</td>
<td>6.81(2.14)</td>
</tr>
<tr>
<td>how self-conscious you felt</td>
<td>7.38(1.67)</td>
</tr>
<tr>
<td>how responsive was your partner to you</td>
<td>7.75(1.65)</td>
</tr>
</tbody>
</table>

Note: All measures are reported on a scale ranging from 0 (low) to 10 (high).

\( n = 16 \) for each measure
<table>
<thead>
<tr>
<th>Questions</th>
<th>Feedback</th>
<th>Feedback</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>how well you handled the conversation</td>
<td>7.00(1.03)</td>
<td>5.44(1.63)</td>
<td>6.63(1.20)</td>
</tr>
<tr>
<td>extent to which this ratings is based on:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>past experience</td>
<td>7.94(1.48)</td>
<td>6.56(1.46)</td>
<td>7.44(1.55)</td>
</tr>
<tr>
<td>what we expect</td>
<td>4.94(2.52)</td>
<td>5.94(2.60)</td>
<td>5.44(2.85)</td>
</tr>
<tr>
<td>how others do</td>
<td>4.56(2.61)</td>
<td>4.56(2.50)</td>
<td>5.19(2.71)</td>
</tr>
<tr>
<td>how often you thought of being evaluated</td>
<td>5.31(2.06)</td>
<td>5.38(2.28)</td>
<td>5.94(2.08)</td>
</tr>
<tr>
<td>how often you questioned your own performance</td>
<td>6.25(1.98)</td>
<td>6.56(1.59)</td>
<td>6.63(1.89)</td>
</tr>
<tr>
<td>how self-conscious you felt</td>
<td>5.63(1.96)</td>
<td>5.75(2.05)</td>
<td>5.69(2.02)</td>
</tr>
<tr>
<td>how responsive was your partner to you</td>
<td>7.25(1.81)</td>
<td>4.63(2.00)</td>
<td>6.00(2.31)</td>
</tr>
</tbody>
</table>

Note: All measures are reported on a scale ranging from 0 (low) to 10 (high).

\( n=16 \) for each measure
Table 3

Means and standard deviations for measures of standard

<table>
<thead>
<tr>
<th>Standards</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Efficacy Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Success</td>
<td>7.25 (1.13)</td>
<td>6.56 (1.09)</td>
<td>6.88 (1.31)</td>
</tr>
<tr>
<td>Personal Success</td>
<td>6.38 (1.67)</td>
<td>5.75 (1.07)</td>
<td>5.81 (1.22)</td>
</tr>
<tr>
<td>Experimenter</td>
<td>7.00 (1.46)</td>
<td>6.19 (1.42)</td>
<td>6.44 (1.46)</td>
</tr>
<tr>
<td>Average Subject</td>
<td>5.31 (.95)</td>
<td>5.13 (.96)</td>
<td>5.13 (1.26)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standards</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Efficacy Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Success</td>
<td>6.94 (1.29)</td>
<td>7.00 (1.16)</td>
<td>7.38 (1.15)</td>
</tr>
<tr>
<td>Personal Success</td>
<td>7.31 (.79)</td>
<td>6.44 (1.15)</td>
<td>7.75 (.68)</td>
</tr>
<tr>
<td>Experimenter</td>
<td>6.56 (1.32)</td>
<td>6.75 (1.24)</td>
<td>6.38 (1.63)</td>
</tr>
<tr>
<td>Average Subject</td>
<td>5.69 (1.58)</td>
<td>5.06 (1.06)</td>
<td>5.75 (1.13)</td>
</tr>
</tbody>
</table>

Note: All measures of standard are reported on a scale ranging from 0 (awkward and slow) to 10 (smooth and interesting)
Table 4

Means and standard deviations for measures of standard clarity

<table>
<thead>
<tr>
<th>Standards</th>
<th>Feedback</th>
<th>Low Efficacy Group</th>
<th>High Efficacy Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
<td>Neutral</td>
</tr>
<tr>
<td>Global Success</td>
<td>7.69 (1.67)</td>
<td>7.31 (1.30)</td>
<td>7.88 (0.89)</td>
</tr>
<tr>
<td>Personal Success</td>
<td>7.69 (1.25)</td>
<td>7.31 (1.45)</td>
<td>7.75 (1.13)</td>
</tr>
<tr>
<td>Experimenter</td>
<td>5.31 (2.77)</td>
<td>6.94 (1.88)</td>
<td>6.19 (2.11)</td>
</tr>
<tr>
<td>Average Subject</td>
<td>6.50 (2.10)</td>
<td>6.63 (1.09)</td>
<td>6.13 (1.82)</td>
</tr>
</tbody>
</table>

Note: All measures of clarity are reported on a scale ranging from 0 (not at all clear) to 10 (very clear)

\[ n = 16 \] for each measure
Table 5
Means and standard deviations for measures of confidence to meet standards

<table>
<thead>
<tr>
<th>Standards</th>
<th>Feedback</th>
<th>Low Efficacy Group</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Positive</td>
<td>Negative</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Global Success</td>
<td>5.13 (1.63)</td>
<td>5.25 (1.65)</td>
<td>5.38 (1.26)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Success</td>
<td>6.00 (1.75)</td>
<td>6.44 (1.32)</td>
<td>6.13 (1.36)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimenter</td>
<td>5.75 (2.02)</td>
<td>5.69 (1.78)</td>
<td>4.56 (1.67)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Subject</td>
<td>6.56 (1.90)</td>
<td>6.19 (1.56)</td>
<td>6.13 (2.13)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standards</th>
<th>Feedback</th>
<th>High Efficacy Group</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Positive</td>
<td>Negative</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Global Success</td>
<td>6.75 (1.20)</td>
<td>5.81 (1.33)</td>
<td>7.25 (1.13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Success</td>
<td>7.38 (1.31)</td>
<td>6.63 (1.20)</td>
<td>7.13 (1.03)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimenter</td>
<td>7.81 (1.52)</td>
<td>6.31 (1.96)</td>
<td>7.25 (1.69)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Subject</td>
<td>6.75 (2.70)</td>
<td>7.31 (1.79)</td>
<td>8.19 (1.98)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: All measures of confidence are reported on a scale ranging from 0 (not at all confident) to 10 (completely confident)

\(^{a}n=16\) for each measure
Table 6
Means and standard deviations of efficacy expectations for the upcoming interaction and confidence to meet that expected level

<table>
<thead>
<tr>
<th>Feedback</th>
<th>Efficacy</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Expected level</td>
<td>5.50 (1.37)</td>
<td>5.50 (1.03)</td>
<td>5.25 (1.29)</td>
</tr>
<tr>
<td></td>
<td>Confidence</td>
<td>7.00 (1.59)</td>
<td>6.75 (1.34)</td>
<td>7.13 (1.41)</td>
</tr>
<tr>
<td>High</td>
<td>Expected level</td>
<td>7.44 (.81)</td>
<td>6.50 (1.27)</td>
<td>7.13 (.96)</td>
</tr>
<tr>
<td></td>
<td>Confidence</td>
<td>7.69 (1.01)</td>
<td>6.88 (1.15)</td>
<td>7.63 (1.09)</td>
</tr>
</tbody>
</table>

\( n = 48 \) for each efficacy group

Expected level ranges from 0 (awkward) to 10 (smooth)

Confidence ratings range from 0 (not at all confident) to 10 (completely confident)
self-ratings of how the conversation was handled, $F(1, 90)=14.43$, $p<.001$, and self-consciousness during the interaction, $F(1, 90)=4.52$, $p<.05$. Thus low efficacy subjects reported that they handled the interaction less well and reported feeling more self-conscious than did high efficacy subjects. No differences were found between groups on the extent to which past experience, what they thought was expected of them, or how well they thought others do, influenced ratings of how well the conversation was handled.

The significant difference between feedback groups was due to differences in self-reports of how well the conversation was handled, $F(2, 90)=7.88$, $p<.001$, the extent to which this rating was based on past experience, $F(2, 90)=3.22$, $p<.05$, and how responsive the partner seemed, $F(2, 90)=17.35$, $p<.001$. Planned comparisons revealed that subjects given positive feedback reported handling the interaction better than subjects given no feedback ($p<.01$); similarly, subjects given negative feedback reported handling the conversation less well than both of these groups ($p<.001$). Post hoc analyses revealed that ratings were more likely based on comparisons with past experience for subjects given positive feedback than those given negative feedback. Finally, planned comparisons revealed that each feedback group perceived the assistant’s response differently ($p<.001$) with rank ordering from most responsive (positive feedback) to least (negative feedback). Taken together, these data confirm that the experimental feedback manipulation produced the desired effects—the more negative the feedback, the worse subjects felt they handled the conversation and the
more they perceived the collaborator as unresponsive. When feedback was positive, subjects reported that they came to the conclusion the conversation was handled well by comparing their performance here with previous social situations.

**Dependent Measures.**

**Preliminary Analyses.** A $2 \times 3 \times 4$ (efficacy group by feedback by standard) repeated measures analysis of variance was performed to check whether the four conceptualizations of standard (global success, personal success, experimenter’s, and average subject) were actually measuring the same concept. A significant main effect for standard emerged, $F(3,270)=48.18$, $p<.001$, indicating that subjects reported different levels of standard depending on how it was conceptualized. Post hoc analyses (Student Newman Keuls) indicated that the standard of global success (what you consider to be a successful interaction) was reported to be a significantly higher level of performance than both the standard of personal success (what you would be happy with) and the experimenter’s standard. These standards, in turn, were higher than the average subject standard (what you think the average subject does), $p<.05$ (see Figure 1). A significant interaction between efficacy and standard suggests that subjects’ reported level of standards also depend on self-efficacy, $F(3,270)=6.35$, $p<.001$. Post hoc analyses revealed that, amongst both low and high efficacy subjects, the levels of global success, personal success and experimenter’s standard are higher than their standard for the average subject. In addition, amongst low efficacy subjects
Figure 1. Levels of standard collapsed across efficacy groups.
only, the levels of global success and experimenter’s standard exceed the standard of personal success (see Figure 2). Hence, the four concepts of standard employed in this study are psychometrically distinct and reported levels of each standard are not equivalent but vary depending on subjects' efficacy. Therefore, all subsequent analyses that compare efficacy groups on standard will include each of the four conceptualizations.

Hypothesis 1: Differences between efficacy groups in reported levels of standard. The first hypothesis stated that no differences would be found between efficacy groups on the level of standard reported. From the preliminary analysis of standard, it is apparent that the level of standard reported is influenced by how standard is conceptualized. A one-way (efficacy group) MANOVA was employed with reported level of each standard as the dependent measures. Using Wilks’s lambda as the criterion, a main effect for efficacy emerged, $p < .001$. Univariate ANOVAs revealed this was due to differences between groups on the standard of personal success, $F(1,90)=25.91$, $p < .001$. The prediction that efficacy groups would not report different levels of standard was supported for standards of global success, experimenter’s standard, and the average subject standard. However, contrary to predictions, low efficacy subjects reported a lower standard of personal success than high efficacy subjects.
Figure 2. Levels of standard reported by each efficacy group.
Hypothesis 2: Discrepancies between standards and efficacy expectations. The second hypothesis stated that low efficacy subjects would show a greater discrepancy between their reported levels of standard and their efficacy expectations. Specifically, low efficacy subjects were expected to report standards higher than their efficacy expectations; high efficacy subjects were expected to report performance goals at the level of their efficacy expectations. A series of a priori orthogonal contrasts for repeated measures compared the level of each standard with efficacy expectations for the upcoming interaction, with standard and efficacy expectations as within-subject factors. If the predicted differences between efficacy and standards did not emerge, the one-way (efficacy group) repeated measures analyses of variance were examined for significant effects and then followed with post hoc comparisons (see Figure 3).

(a) Standard for global success (i.e. what is considered a successful level of interaction). The predicted discrepancy between the standard for global success and efficacy expectations was supported, F(1,47)=52.5, p<.001. Low efficacy subjects reported a higher standard of global success than their efficacy expectations. Additionally, the prediction that no significant differences would emerge between level of global success and efficacy for high efficacy subjects was supported, F(1,47)=.165, p>.10.
Figure 3. Levels of standard relative to expectations for the next interaction.

- **Global Success**
- **Personal Success**
- **Experimenter**
- **Average Subject**

**Efficacy**

- **Level of Standard (0 to 10)**

- **High Efficacy**
- **Low Efficacy**
(b) Standard of personal success (i.e. minimal acceptable level of performance). As predicted, low efficacy subjects reported a higher standard of personal success than their efficacy expectations, $F(1,47)=10.17, p<.01$. In addition, no significant differences emerged among high efficacy subjects, $F(1,47)=.69, p>.10$.

(c) Experimenter's standard (i.e. what performance you think the experimenter demands). As predicted, low efficacy subjects reported a higher experimenter's standard than their efficacy expectations, $F(1,47)=19.21, p<.001$. No significant differences emerged for high efficacy subjects, $F(1,47)=3.18, p>.05$.

(d) Average subject standard (i.e. what level of performance you think others achieve). Contrary to predictions, low efficacy subjects reported the average subject standard to be at about the same level as their efficacy expectations, $F(1,47)=1.44, p>.10$. However, a repeated measures analysis of these data revealed that there was a significant interaction between efficacy and standard, $F(1,94)=22.89, p<.001$. Interestingly, post hoc comparisons revealed that high efficacy subjects reported a higher level of efficacy expectation than what they consider to be the standard for the average subject, $p<.01$.

Overall, the predicted discrepancy between levels of standard reported and efficacy expectations was supported for three of the four conceptualizations of standard. Low efficacy
subjects reported higher standards of personal success, global success, and experimenter’s standard, than their efficacy expectations for the upcoming interaction. No differences emerged on these ratings amongst high efficacy groups as predicted. Further analysis revealed that high efficacy subjects reported higher efficacy expectations for the upcoming interaction than the standard they consider to be the average for subjects. Although this was not anticipated, the pattern of results is consistent with the expectation that high efficacy subjects would not have lower expectations than standards.

Hypothesis 3: Clarity of standards. A one-way (efficacy group) MANOVA was performed to examine how clear a sense of standard subjects had. Using Wilks’s lambda as the criterion, no significant differences emerged between efficacy groups, p>.10. The prediction that low efficacy subjects would have a less clear sense of standard than high efficacy subjects was not supported for any conceptualization of standard. An analysis of how often subjects viewed the videotaped rating scale was not performed because the predicted difference between efficacy groups on clarity of standard did not emerge, and only 4 of the 96 subjects viewed the videotapes after the first showing which is too small a number to warrant statistical investigation. All four of the subjects that reviewed the rating scale were in the low efficacy group--two in the group that received no feedback and two in the group that received negative feedback.
Hypothesis 4: Confidence to meet standards. A one-way (efficacy group) MANOVA was performed to examine ratings of confidence to meet each standard (i.e. how confident subjects are that their performance will achieve the level of standard reported). Wilks’s lambda revealed a significant effect for efficacy, $p<.001$. Univariate ANOVAs revealed that efficacy groups differed in confidence to meet the standard for global success, $F(1,90)=35.01$, $p<.001$, their standard of personal success, $F(1,90)=9.67$, $p<.01$, the experimenter’s standard, $F(1,90)=24.31$, $p<.001$, and the average subject standard, $F(1,90)=9.39$, $p<.01$. As predicted, low efficacy subjects were less confident that they could achieve their standard than were high efficacy subjects. This prediction was supported for all conceptualizations of standard (see Figure 4).

Supplementary Analyses: Effects of social feedback on ratings of standard

Because of the lack of research into standard-setting as a function of feedback, particularly in the area of social anxiety, these analyses are exploratory and no specific predictions were made.

The effect of feedback on ratings of standard. This analysis, a one-way (feedback) ANOVA, examined the effect of feedback on subjects’ ratings of standard. A significant main effect for feedback emerged on the standard of personal success, $F(2,93)=3.25$, $p<.05$. Post hoc analyses revealed that subjects given negative feedback reported a lower standard of personal...
Figure 4. Levels of confidence to reach each standard.
success than subjects given no feedback; the difference between negative and positive feedback was not significant.

The effect of feedback on level of standard for each efficacy group. A two-way (efficacy group by feedback) MANOVA was employed with the level of each standard as the dependent measure. Using Wilks’s lambda as the criterion, a significant main effect for efficacy emerged, $p<.001$. Univariate ANOVAs revealed that this was due to differences between groups on the standard of personal success, $F(1,90)=25.91$, $p<.001$. Post hoc analyses revealed that high efficacy subjects given positive or no feedback had a higher standard of personal success than high efficacy subjects given negative feedback and all low efficacy subjects (see Figure 5). No differences emerged between groups on the standards of global success, the experimenter’s standard, and the average subject standard, regardless of feedback.

The effect of feedback on efficacy ratings. A two-way ANOVA (efficacy group by feedback) was conducted on subjects’ ratings of efficacy. A significant main effect for efficacy emerged, $F(1,90)=47.64$, $p<.001$. Post hoc analyses ($p<.05$) revealed that high efficacy subjects given positive or no feedback had higher ratings of efficacy than all low efficacy subjects. However, when given negative feedback, the high efficacy group reported efficacy ratings that were not significantly greater than the low efficacy group. There were no differences in expectations among low efficacy subjects regardless of how well the interaction was handled (see Figure 6).
Figure 5. Levels of standard as a function of feedback relative to expectations for the next interaction.
Figure 6. Levels of efficacy following feedback.

- High Efficacy
- Low Efficacy
Taken together, these data reveal that, among high efficacy subjects, negative feedback was associated with lower standards of personal success. Similarly, negative feedback was associated with a low efficacy expectation among high efficacy subjects for how well they thought they would handle the next interaction. Low efficacy subjects, on the other hand, were not influenced by feedback and reported the same level of standard regardless of how well the interaction went. In addition, their efficacy ratings did not change when feedback was varied.

The effect of feedback on the standard-efficacy discrepancy. Here, 2 x 2 x 3 (efficacy by standard-expectation difference by feedback) repeated measures analyses compared the level of each standard with efficacy expectations, with feedback as an additional factor; significant differences were followed with post hoc comparisons for repeated measures (see Figure 5).

(a) Standard of global success. A discrepancy between global success and efficacy emerged among low efficacy subjects regardless of feedback, p<.05; high efficacy subjects reported a standard of global success that did not differ from their expectations.

(b) Standard for personal success. There were no differences between the standards of personal success and efficacy expectations for either efficacy group, p>.10. Both high and low efficacy subjects reported a standard of personal success
that was at the level of their expectations although the absolute level of personal success and efficacy was higher for the high efficacy subjects.

(c) The experimenter's standard. High efficacy subjects given positive or no feedback, expected to achieve a higher level of standard than they thought the experimenter demanded, p<.05; when given negative feedback, they reported a standard that was at the same level as their efficacy expectations. Low efficacy subjects rated the experimenter's standard higher than their expectations when given positive feedback, p<.05. The difference between ratings of experimenter standard and expectations was not significant when low efficacy subjects were given negative or no feedback.

(d) The average subject standard. High efficacy subjects rated the average subject standard lower than their efficacy expectations when they were given positive or no feedback, p<.01; when given negative feedback, their rating of efficacy was at the same level as their rating of this standard. There were no differences between efficacy expectations and average subject standard among low efficacy subjects, regardless of feedback.

Taken together, these data reveal that low efficacy subjects given positive feedback have higher expectations for what they think the experimenter demands than they believe themselves capable of. On ratings of this same standard, low efficacy subjects given negative or no feedback reported the
level of standard at the same level as their expectations for
the next interaction. On ratings of global success, personal
success, and average subject standard, low efficacy subjects
were not influenced by feedback—their ratings of global success
exceeded efficacy expectations; their ratings of personal and
average subject standard were at the same level as expectations.

Feedback influenced the standard-efficacy discrepancies of
high efficacy subjects. High efficacy subjects expected to
achieve a higher level of interaction than they thought the
experimenter demanded when given positive or no feedback and
higher than the average subjects' performance when given
positive feedback. Feedback had no apparent effect on ratings
of global or personal success in relation to efficacy
expectations.

Clarity of standards. A 2 x 3 (efficacy group by feedback)
MANOVA was performed to examine ratings of how clear an image of
standards each subject had under conditions of positive,
negative, or no feedback. Using Wilks's lambda as the
criterion, a significant interaction emerged, p<.05, accounted
for by how clear an image subjects had of the experimenter's
standard, F(2,90)=3.68, p<.05. A simple main effects analysis
revealed differences between high and low efficacy groups under
conditions of positive feedback, F(1,90)=4.77, p<.05; no
significant differences emerged between efficacy groups when
given negative or no feedback. The direction of the effect
indicates that low efficacy subjects, given feedback that they
are meeting the standard, had a less clear sense of the experimenter’s standard than did high efficacy subjects with similar feedback.

Confidence to meet standards. A $2 \times 3$ (efficacy group by feedback) MANOVA was employed to examine how confident subjects were to meet each standard after receiving feedback about their performance. No significant interaction effect emerged, $p>.10$. This indicates that providing high and low efficacy subjects with feedback about how they were handling the conversation did not systematically influence their ratings of confidence to meet standards. However, low efficacy subjects were less confident to meet each standard than were high efficacy subjects, $p<.001$, as reported earlier in this section.

Overall, varying the collaborator’s behavior and providing verbal feedback to subjects about how they were handling the conversation influenced ratings of standard and standard-efficacy discrepancies. Feedback also influenced how clear an image subjects had of what was demanded in the situation. Specifically, low efficacy subjects, after experiencing a responsive partner and being told the conversation was handled well, reported being less clear of what was expected of them than high efficacy subjects provided with the same feedback.
Standards of Social Interaction

The findings of this study support the prediction that high and low social-efficacy subjects have similar social interaction standards but differ in how confident they are to meet them. Specifically, low and high efficacy subjects reported similar standards when "standard" was defined as: (1) their idea of a successful interaction (global success), (2) the level of interaction they thought the experimenter demanded (the experimenter's standard), and (3) what they thought others are able to achieve (average subject standard). This suggests that high and low social-efficacy subjects have a common stereotype of social success.

Interestingly, the results are partly dependent upon how "standard" is conceived. When subjects were asked what level of interaction they would personally be happy with (personal success) a difference between high and low efficacy subjects emerged. Low efficacy subjects reported that they would be happy with a social interaction that was below the level that high efficacy subjects would be satisfied with. Thus when "standard" is conceived in terms of personal success, the prediction that low and high efficacy groups do not differ is not supported; when "standard" is conceived in terms of the goals others are thought to hold or achieve (the experimenter's standard and the average subject standard), or the goals that are held successful in everyone's eyes (global success), the prediction is supported.
Standards and Efficacy Expectations

When efficacy expectations are compared to the levels of standard that subjects reported, the predicted discrepancy between standards and expectations is found, but, again, the discrepancy depends on how standard is conceived. Low efficacy subjects reported expectations for handling the next interaction that were below the level they considered to be a good interaction, the level they thought the experimenter demanded, and the level they would be happy with. The only standard that was not below their expectations was how well they thought everyone else does. Hence, the predicted discrepancy between standards and efficacy expectations emerged for the standard of global success, the experimenter’s standard, and personal success. In contrast, high efficacy subjects reported standards that were at the same level as their efficacy expectations for these same standards. This pattern of results is consistent with the literature reviewed and provides empirical support for the theory that socially anxious people have lower expectancies that they can meet their goals than do non-anxious, more confident, people (e.g. Carver & Scheier, 1986; Schlenker & Leary, 1982).

High and low efficacy subjects in this study differentially reported feeling anxious in social situations, and a correlation was found between efficacy and a measure of social anxiety. Therefore, these subjects were also high and low in social anxiety, respectively. Relating these results to literature on social anxiety, it may be that socially anxious people have a
desire to create a particular social impression that is realistic to the extent there is consensus agreement of both anxious and non-anxious people, yet the socially anxious person may doubt his ability to accomplish this goal and to present himself in a desirable light. Consistent with self-consciousness theory (Carver and Scheier, 1986), and self-presentation theory (Schlenker and Leary, 1982), the results suggest that socially anxious people are conscious of the standards operating in a social situation and desire to meet those standards, yet doubt their ability to achieve them. There is also evidence that these doubts are mediated by cognitive processes whereby socially anxious people produce negative self-statements when anticipating an interaction with another person (e.g. Cacioppo et al., 1979).

The expectations of high efficacy subjects for how well they would handle the next interaction exceeded their ratings of the average level of performance. In other words, high efficacy subjects expected to achieve a better performance in the next interaction than they thought most people are capable of. A similar pattern of results was found by Ahrens et al., (1988). In that study, non-depressed subjects rated themselves as having higher interpersonal standards and efficacy expectations than their peers. This "self-enhancement" effect, which may maintain self-esteem, suggests that non-depressed persons see themselves as superior to others, and is contrasted by the self-deprecation that is sometimes thought to characterize the depressed. Ahrens et al., comment that "since others' goals provide one yardstick for measuring one's own goals...[then] having high goals
relative to others might provide a challenge...ultimately, this enhanced incentive might make it easier for non-depressed people to attain their goals, even though they are higher than those of dysphoric people" (p. 63). Perhaps the high efficacy subjects in this study found their goals challenging because they presumed that their goals exceeded what others could achieve.

It has been demonstrated in the empirical literature that depressed persons see themselves as ordinary relative to others while non-depressed sometimes show an illusory self-perception that they are superior to others (e.g. Alloy & Ahrens, 1987; Lewinsohn, Mischel, Chaplin, & Barton, 1980; Martin, Abramson, & Alloy, 1984; Wright & Mischel, 1982). It has also been suggested that this "warm glow" of positive affect (Wright & Mischel, 1982) may motivate people to selectively attend to information about themselves, (Mischel et al., 1973), decrease recall of personality weaknesses (Mischel et al., 1976), increase generosity toward others (Isen & Levin, 1972) and toward the self (Rosenhan et al., 1974). This effect or cognitive bias might be occurring in social anxiety as well. Low anxious subjects perceive the same social feedback as less negative than do high anxious subjects and say they are less likely to receive such feedback (e.g. Smith & Sarason, 1975), they rate themselves as more socially skilled than others rate them (e.g. Alden & Cappe, 1981; Clark & Arkowitz, 1975) and they generate more positive self-statements in anticipation of a social interaction than do highly anxious subjects (Cacioppo et al., 1979). Hence, in line with predictions from a mood-congruity account (Wright & Mischel, 1982), anticipating
that one can achieve self-presentations above what others can do may lead to more favorable self-assessments, recall of one’s strengths as opposed to weaknesses, and favorable expectations for future performance.

Clarity and Confidence to Meet Standards

Low and high efficacy subjects did not differ on clarity of standard, regardless of how it was conceptualized. These results are contrary to the prediction that low efficacy subjects would have a less clear sense of standards for social interaction and appear to be inconsistent with the empirical literature suggesting that shyness is related to not knowing what the demands of a social situation are (e.g., Buss, 1980; Schlenker & Leary, 1982). In fact, the results suggest that low efficacy subjects have as clear a sense of standard as do high efficacy subjects and that the standard they are imagining is in agreement with the consensus of high efficacy subjects. It is not surprising, then, that few subjects viewed the videotaped rating scale more than once. It appears that subjects took to the task of rating standards readily and that they had formed a clear idea of standard without needing a lengthy explanation. However, having a clear sense of standards did not necessarily imply that the subjects in this study would be confident to meet them. As predicted, low efficacy subjects were less confident that they would meet standards regardless of how they were defined. These results testify to the importance of distinguishing between knowing what is required in a social situation and feeling capable of achieving it.
Social Interaction Feedback

The feedback that subjects were given was a function of both the confederate's behavior and comments made by the experimenter on how well the subject handled the conversation. Manipulation checks indicated that subjects perceived their conversation as had been intended and accepted the feedback.

Because of the paucity of research into standard-setting in social anxiety, and in particular how standards are modified by social feedback, no specific predictions were made of what effect feedback might have on subjects' ratings of standard. However, there is considerable research into the effects of performance feedback on motivation (e.g. Locke, 1968; Locke, Cartledge, & Knerr, 1970) and research that examines the goals people set for themselves as a function of their pattern and level of progress (e.g. Campion & Lord, 1982). For example, Bandura and Cervone (1986) found that providing feedback to subjects about their accomplishments on a strenuous activity had varying effects on self-efficacy and goal-setting. The authors commented that "accomplishments are more complexly related to perceived self-efficacy and personal goal setting than might appear intuitively. Knowledge of having surpassed a demanding standard through laborious effort does not automatically strengthen perceived self-efficacy and raise aspiration" (p. 110). However, they did find that "when performance fell substantially short of the selected standard, most subjects continued to subscribe to that standard or a slightly lower one" (p. 111). These results point to the difficulty of predicting
how self-set standards will be affected by different performance feedback especially since there is so little research that examines standard-setting in social interaction.

**Effect of Feedback on Levels of Standard**

Manipulating the success of interactions and verbally reinforcing this with feedback differentially influenced subjects' ratings of what level of interaction they would personally be happy with. Low efficacy subjects had the same standard for personal success, regardless of feedback, whereas high efficacy subjects given negative feedback had a lower standard of personal success. High and low efficacy subjects reported the same standard of global success, experimenter, and average subject, regardless of the feedback they were given. Therefore, feedback had an impact on what high efficacy subjects were happy with, especially feedback that they were not doing well, whereas low efficacy subjects did not appear to be influenced by how well the interaction was going.

**Effect of Feedback on Efficacy**

Telling low efficacy subjects that they were or were not handling the conversation well had no effect upon efficacy; high efficacy subjects, on the other hand, had lower expectancies when they were not doing well. Looking at Figure 5, it is apparent that high efficacy subjects were more efficacious than low efficacy subjects but this was statistically significant only with positive or no feedback. When the interaction did not go well, high efficacy subjects had lower expectations.
Effect of Feedback on the Standard-Efficacy Discrepancy

Low efficacy subjects had higher standards for what they thought the experimenter demanded of them when given positive feedback than they expected to do; they had lower expectations than standards for global success regardless of feedback. No differences were found on the standard of personal success or the average subject standard where expectations were at the same level as standards.

High efficacy subjects had expectations similar to the standards they held for global and personal success, and their expectancies were never significantly less than their standards. Yet, unexpectedly, when told nothing or that they were handling the interaction well, high efficacy subjects thought the experimenter demanded less than they felt capable of doing. Similarly, when told they were doing well, high efficacy subjects thought the average subject interacted at a lower level than they felt they could do.

Clarity of standards was a dimension on which low efficacy subjects were influenced by the feedback received. It seems that low efficacy subjects, given feedback that they handled the interaction well, were less clear about what the experimenter wanted than were high efficacy subjects given the same feedback; on the other hand, low efficacy subjects given negative feedback or none at all, did not differ from high efficacy subjects in how clearly they imagined this standard. Hence, providing low efficacy subjects with an interaction that was inconsistent with their expectations made them unsure of what they were expected
to do. Even though they report experimenter standards similar to low efficacy subjects that received negative or no feedback, they appear to be less certain of them.

Feedback also did not appear to affect the confidence that high and low efficacy subjects expressed about interacting at the level of each standard. It may be that subjects' confidence is not easily influenced by information specific to one situation, especially when it is contrasted with expectancies that have been based on a long history of social interaction. As Bandura (1977) observes, once established, the effects of occasional failures or accomplishments on self-efficacy is not likely to have much impact.

**Implications of Social Feedback**

These effects imply that the efficacy ratings of low efficacy subjects were not influenced by feedback. They consistently maintained that they could not handle the next interaction well regardless of the responsiveness of the collaborator or the experimenter's praise. High efficacy subjects, in contrast, always thought they would handle the next interaction well although the difference between their expectations and those of low efficacy subjects was not significant when negative feedback was given.

When told that they are doing well, low efficacy subjects report that the experimenter demands more than they feel capable of achieving. They even seem confused as to what exactly is demanded of them when given feedback inconsistent with their expectations (e.g. expressing less certainty about what the
experimenter wants after being told they are doing well). This
effect is counterintuitive in terms of a self-control model of
attention (Carver & Scheier, 1986) which suggests that positive
feedback raises expectations to meet standards; instead, the
pattern of standard-setting following positive feedback appears
dysfunctional and suggests a rigidly held expectation to do
poorly in social interactions. These data suggest that socially
anxious persons may have a cognitive rigidity and dysfunctional
standard-setting that serves to maintain an expectancy to do
poorly in social situations.

Dysfunctional standard-setting was alluded to in an
unpublished dissertation by Simon (reported in Bandura, 1986).
She studied standard-setting in depressed persons as a function
of performance feedback whereby subjects were given feedback
that they were doing well (succeeding) or not. She reported
that, when given information that their performance on a speech
task was declining, depressed subjects set higher goals for
themselves even though they were performing at the same level as
nondepressed subjects. Bandura (1986) commented that this
process of standard-setting, characterized by unrealistic
aspirations and belittling of accomplishments, may increase
vulnerability to depression. Here, feedback that the
interaction was not handled well did not influence the efficacy
ratings of low efficacy subjects. In contrast, telling these
subjects that they were doing well had the effect of raising
standards. When told that they had handled the conversation
well, low efficacy subjects thought the experimenter wanted more
than they could give, and were unclear of what was demanded of
them. This suggests a dysfunctional standard-setting process as well, but one that is distinct from that reported in depression. Taken together, these results testify to the cognitive rigidity of socially anxious persons and imply that treatment efforts directed at providing reinforcing feedback may increase the doubts they are intended to reduce.

Recent research completed in our laboratory (Wallace & Alden, 1987) may also shed some light on dysfunctional standard-setting. Low and high social-efficacy subjects were provided with a standard of interaction and then conversed with a confederate. By varying the confederate’s behavior, the standard could or could not be met. What we found was that high efficacy subjects persisted at conversing as long as the standard was being met, and they cut the conversation short when the standard could not be met. This pattern is consistent with Carver and Scheier’s theory of attentional self-focus (e.g. 1986) where persistence at meeting standards is expected as long as outcome expectancies are positive. However, low efficacy subjects did the opposite. When the standard was not being met and the interaction was awkward, they persisted in the conversation; when the interaction was smooth and they succeeded in meeting the standard, the conversation was cut short. Taken together, the results of these studies provide evidence that people low in social efficacy set standards in a manner that maintains their low expectations. They may even raise their expectations of what is demanded of them when told they are doing well.

It is interesting that positive feedback, i.e. telling low
efficacy subjects that they were successful and even varying how responsive the confederate was, did not influence efficacy expectations. It could be that subjects attributed the success of the interaction to the confederate because subjects that are low in social efficacy have been shown to attribute efficacy-consistent information to internal sources and efficacy-inconsistent information to external sources which serves to maintain expectancies (Alden, 1986). There was no measure in this study to examine this possibility, such as asking subjects "to what extent do you consider yourself responsible for how the interaction was handled" but it is an important question to ask in future research. However, even if low efficacy subjects do attribute the success of the interaction to the confederate, it is interesting that they question their part in the interaction. It may be that extralaboratory experiences have reinforced a low expectancy that cannot be manipulated by one reinforcing experience or that expectancies are based on a presumed deficit in social skill. If low efficacy subjects expected to do poorly simply because that has been their experience in the past, then they would probably base their rating of how well the conversation went on past experience, when the interaction was awkward; however, this was not the case. In fact, they based their rating of the conversation on past experience only when the interaction went well and they received positive feedback. These data argue against the suggestion that extralaboratory experience is so reinforcing that low efficacy subjects have difficulty accepting positive feedback. Furthermore, although it was apparent from
collaborator’s ratings that low efficacy subjects appeared uncomfortable and awkward regardless of how well the conversation was going, this does not necessarily mean they lacked the ability to handle the conversation, they just may not have felt confident in conversing and their interpersonal style reflected anxiety.

Treatment Implications

Considering all of this, it implies that isolated success experiences, even with direct feedback from a therapist, may have no effect on social anxiety and may even be counterproductive. These results, together with the theory of attentional self-focus (Carver & Scheier, 1986) suggest that there are two possibilities for reducing standard-efficacy discrepancies—lowering standards or raising efficacy expectations.

The first of these, reducing standards, does not seem realistic given that both low and high efficacy subjects had a similar consensus of what standards are. Instead, it may be important to focus upon low-level, short-term proximal goals, while maintaining higher-level, distal goals. This type of strategy, which maximizes the probability of attaining positive reinforcement, has proven effective at alleviating a number of psychological problems, including social anxiety. For example, Rehm and Marston (1968) outlined a treatment approach to social anxiety which included modifying standards and providing accurate self-reinforcement when standards were met. They found that anxious college students increased their attempts at
heterosexual contact, and reported feeling less anxious, after following the program. The approach focused on setting minimal behavioral goals of social interaction and encouraged subjects to attempt goals in a systematic fashion (i.e. hierarchically) being sure to reward themselves for all attempts, regardless of their success. The goals were "behavioral" to the extent that absence of anxiety was not used as a criterion for reinforcement, i.e. goals involved action and not eliciting positive reactions from others or feeling free of nervousness. The success of this treatment approach may very well have been due to reducing the discrepancy between efficacy and goals by lowering short-term goals to a level that subjects felt they could achieve.

The second possibility for reducing standard-efficacy discrepancies may be through raising efficacy expectations. A number of fear-based anxieties have been shown to respond favourably to mastery experiences with the feared object (e.g. Bandura, 1977). Presumably, anxiety is mediated by efficacy expectations so that successful attempts at coping in the feared situation will raise efficacy expectations and subsequently reduce anxiety. In this study, one successful experience at handling a social interaction had no impact upon efficacy expectations among socially anxious subjects. However, repeated experiences at successfully coping with social situations may function to increase a sense of interpersonal effectiveness and reinforce expectancies for handling social interactions well.

It may also be possible to reduce concern for standard-efficacy discrepancies by avoiding the process of
Self-evaluation altogether (Carver & Scheier, 1986). Self-evaluation involves attending to one’s actions and the standards that are operating in a situation. Perhaps by directing attention away from the self when interacting, the process of self-evaluation and attention to standards can be eliminated and anxiety subsequently reduced. For example, Alden and Cappe (1986) provided shy clients with a strategy for directing attention to their partner in a social interaction and found that their clients subsequently increased social activity. The authors speculated that this strategy served to reduce the process of self-evaluation; however, they also cautioned interpreting the results in this manner because the study was not specifically designed to test this. If self-directed attention cannot be eliminated, an alternative could be to direct attention to positive aspects of behavior. This strategy could benefit individuals with low social efficacy given the tendency of socially anxious people to focus on negative aspects of their social selves (Clark & Arkowitz, 1975).

From a treatment standpoint, it is interesting that low efficacy subjects are resistant to feedback. Cacioppo et al., (1976) found that socially anxious subjects reported more negative thoughts about themselves when they anticipated a social interaction than did non-socially anxious subjects. Of particular interest is the fact that both socially- and non-socially-anxious subjects rated their self-statements as favorable towards themselves. The authors suggest that both shy and non-shy people may have a unique frame of reference for what constitutes a favorable self-statement. This implies that
treatment should focus upon the cognitive structures that underlie social anxiety and not merely on the valence of self-directed thoughts. This may explain why feedback had no effect on the expectancies of low efficacy subjects in our study and it supports the idea that socially anxious persons have a rigid cognitive structure that is relatively impenetrable by success information. High efficacy subjects, on the other hand, appear less rigid in their expectations. When told that the interaction did not go well, they question what the experimenter demands and expect to do less well than if nothing had been said.
Design of the Study

The results of analysing the selection measures indicate that two distinct groups of subjects were selected on the basis of the efficacy questionnaire and that the subjects in each group reported similar levels of anxiety about interacting with another person. Low efficacy subjects said that they would have difficulty talking with another subject, they would handle the interaction awkwardly, and that they would experience an uncomfortable amount of anxiety when doing so. High efficacy subjects, on the other hand, said that talking with another subject would be easy for them, they expected to be able to handle the conversation smoothly, and that they would experience very little, if any, anxiety. Additional support for the validity of dividing the two groups on the measure of efficacy comes from the anxiety ratings of subjects on the efficacy questionnaire and their self-reported social anxiety on the Self-Consciousness Scale (Fenigstein et al., 1975). Specifically, low efficacy subjects reported a higher level of anxiety on both measures. Additionally, none of the subjects in the study reported a significant level of depression as measured by the Beck Depression Inventory so that depression was not considered an explanation of the findings. The results of analysing the efficacy measure provide empirical support for selecting subjects on the basis of the self-efficacy questionnaire and for extending the findings of this study to socially anxious (low efficacy) and non-socially anxious (high efficacy) persons.
The analysis of the manipulation checks revealed that subjects were not suspicious of the procedure, the confederate's interpersonal style was perceived as intended, and that the experimenter's comments about how they handled the interaction were considered accurate. These results testify to the success of the feedback manipulations.

Problems and Limitations of the Study

There are four cautions regarding the study to be noted. First, the efficacy measure used to select groups is not a standardized instrument and caution must be exercised before extending the results to the study of social anxiety. However, the findings can most likely be extended to social anxiety because: (1) the measure was stable over the time period that elapsed between selection and participation, indicating that scores on the efficacy measure were not transient phenomena, (2) scores on the efficacy measure correlated highly with the anxiety measure on the same questionnaire and a different measure of anxiety (the anxiety subscale of the self-consciousness measure), and (3) the measure also has face validity according to the criteria of efficacy measurement proposed by Bandura (1977) and has been used in previous research on social anxiety (e.g. Wallace & Alden, 1987).

Second, when interpreting the findings of the study it is important to consider the reliability of the questionnaires. Assessing standards and efficacy so close in time to the task that subjects thought they would be doing (i.e. interacting with another subject) has the advantage of allowing subjects to
accurately appraise the situation and what will be required of them. This may result in more accurate estimates of efficacy but at the same time may sensitize subjects to the levels of standard they feel are socially acceptable rather than the standards they personally subscribe to. However, some of the data argue against this problem because "standard" was defined in terms of both social and personal success, and the levels endorsed for each definition varied between groups. This would not be expected if subjects were presenting themselves in a socially desirable light.

Third, the use of mildly anxious university students calls into question the generalizability of the results to a clinical population. Selecting this sample implies that social anxiety is on a continuum of severity with mild social anxiety at the low end and clinically significant anxiety at the opposite end. Further, it is possible that the results obtained might vary depending on the severity of the anxiety. Yet the validity of a continuity hypothesis of social anxiety has not been empirically demonstrated and such hypotheses in other areas have been questioned, for example in depression (Coyne & Gotlib, 1983). However, the results argue for stability of anxiety across time and anxious subjects appeared to have considerable difficulty handling the conversation. Further, regardless of these considerations, most of the research to date in this area has employed similar subject populations and the study of social anxiety in these samples is, in itself, a legitimate topic of study.
Fourth, the procedure used in this study does not provide information as to the causal role that standards play in social anxiety. The results indicate that socially anxious people have low expectancies to meet social standards, yet whether expectancy plays a causal role in anxiety, maintains anxiety, or is a symptom of anxiety, remains to be investigated. Similarly, whether the relation between standards and expectancy is even a fundamental aspect of social anxiety is questionable. However, the research suggests that socially anxious people are concerned with self-presentations (Schlenker and Leary, 1982), generate negative self-statements when anticipating a conversation (Cacioppo et al., 1979), and act in accordance with their expectancies when self-focused (Burgio et al., 1986). Hence it appears that the process of self-evaluation and attention to standards is an important aspect of social anxiety.

**Future Research**

The next stage for research in this area is to examine whether standards are a fundamental causal aspect of social anxiety. We need to look at all levels of social anxiety, from mildly anxious to chronic and acute states, in order to identify the factors that potentiate and limit the severity of the problem and if these standard-expectancy differences appear in individuals susceptible to developing social anxiety. It is clearly too early to argue for a model of social anxiety that can specify the relation of goals and efficacy beyond the correlational relationship found here. However, the model of self-attention (Carver & Scheier, 1986) provides a useful
framework for analyzing social anxiety and many of the symptoms of social anxiety can easily be associated with some aspect of self-attention. It will be important to next determine whether efficacy-standard differences cause, maintain, or are merely symptomatic of social anxiety.

In addition, further research into standard-setting will require an examination of the concept "standard". Thus far, investigations into standard-setting, mainly in the sphere of depression, have employed different conceptualizations of standard and used achievement tasks for setting goals. This may account for the different results obtained by investigators into the levels of standard depressed persons set for themselves. Some researchers have found that depressed subjects set goals that are higher than non-depressed subjects (e.g. Rehm, 1977), some have found that the goals depressed subjects aspire to are not higher than for non-depressed subjects but are higher than their efficacy expectations (e.g. Carver & Ganellen, 1983; Kanfer & Zeiss, 1983; Laxer, 1964; Wright & Mischel, 1982), and one study found that depressed subjects set lower goals than non-depressed subjects (Ahrens et al., 1988). In this study, the particular definition of standard used was critical in determining whether discrepancies between standard and efficacy would emerge or whether feedback would have an impact on standard. Thus an important topic of future research is to determine the dimensions and conceptualizations of standard that contribute to the experience of social anxiety. Along these same lines, better methodology is required to measure the concept of standard which was here investigated by self-report.
This procedure is susceptible to the demand characteristics of the situation and is limited by the quality and variety of standards presented.

Similarly, it is important to examine the extent to which standard and efficacy expectations are unique to social anxiety and not aspects of psychopathology per se. Because research into standard-setting in depression and social anxiety has identified a dysfunctional standard-setting process, the question remains as to what determines the psychological response that people have to a discrepancy between standards and expectancies. The subjects in this study had low expectancies that they could perform at the level they thought was socially successful and yet they did not report being depressed. Better articulation of rival hypotheses is needed when examining the role of standards in social anxiety because the factors that distinguish a social goal from the types of goals found important in research on depression, are unclear. Conversely, ruling out the possibility that social anxiety may play a role in research on standard-setting in depression is important. Research of standard-efficacy discrepancies may, on the one hand, have application to specific psychological problems such as social anxiety or depression, or on the other, it may reveal something about psychopathology in general.

Concluding Comments

To the extent that low social-efficacy subjects were socially anxious and high social-efficacy subjects were not, the results of this study shed some light on the experience of
social anxiety. The results of this study are in line with a
cognitive self-evaluation model where social anxiety is seen to
arise from perceptions of personal inadequacy (Rehm & Marston,
1968) and doubts that one can present oneself in socially
desirable ways (Schlenker & Leary, 1982). This research
suggests that there is a consensus between socially efficacious
and non-efficacious people as to the level of interaction that
is socially desirable. Socially inefficacious people do not
appear to hold irrationally high goals for themselves but feel
that they cannot reach the level of standard that is considered
to be a success. In contrast, they report being happy with a
lower level of interaction but that does not necessarily mean
that they are not anxious about how they appear to others.
Additionally, participating in a successful interaction does not
appear to penetrate the rigidly held efficacy that such persons
appear to have.

Standards seem to play a role in judgements of how one has
handled a situation, whether or not these standards are
apparent. For example, when a shy client says that he or she
feels socially inadequate and evaluated by others, this would
seem to imply some kind of comparison value that the client
feels is not being met. That standard, and the role that
standards per se play in social anxiety, are important
directions for future research.


Appendix A

Efficacy Questionnaire

Note: Efficacy group (high or low) is determined by question 2 which is specific to the laboratory interaction.
1. Imagine that you have met an old friend, someone you haven’t seen in years, and you have forgotten her name. How confident are you that you could handle this interaction well (i.e. apologize that you have forgotten her name, find it out without hurting her feelings)?

Rate your degree of confidence by circling a number from 0 to 100 using the scale given below. Rate what you can do (i.e. how well you could handle the situation) not what you would like to be able to do.

0 10 20 30 40 50 60 70 80 90 100

completely uncertain  completely certain

In this situation, I would feel:

0 10 20 30 40 50 60 70 80 90 100

very uncomfortable  very comfortable
or anxious  or not at all

anxious

2. Imagine that you are meeting a female student for the first time. Perhaps you have met after class or in the library, for example. How confident are you that you could handle this interaction well (i.e. keep the conversation going smoothly, talk about things you might have in common, find out her interests, etc.)?

Rate your degree of confidence by circling a number from 0 to 100 using the scale given below. Rate what you can do (i.e. how well you could handle the situation) not what you would like to be able to do.

0 10 20 30 40 50 60 70 80 90 100

completely uncertain  completely certain

In this situation, I would feel:

0 10 20 30 40 50 60 70 80 90 100

very uncomfortable  very comfortable
or anxious  or not at all

anxious
3. Imagine that you are at a party and have brought a friend with you that wants to be introduced to everyone. How confident are you that you could handle this situation well (i.e. take responsibility for introducing her to others, etc.)?

Rate your degree of confidence by circling a number from 0 to 100 using the scale given below. Rate what you can do (i.e. how well you could handle the situation) not what you would like to be able to do.

0 10 20 30 40 50 60 70 80 90 100

In this situation, I would feel:

very comfortable
very uncomfortable
not at all anxious

or anxious

4. Imagine that you meet a friend who has just bought a jacket in the latest style and you think it looks awful. She asks "what do you think?". How confident are you that you could handle this situation well (i.e. make your opinion known without hurting her feelings)?

Rate your degree of confidence by circling a number from 0 to 100 using the scale given below. Rate what you can do (i.e. how well you could handle the situation) not what you would like to be able to do.

0 10 20 30 40 50 60 70 80 90 100

In this situation, I would feel:

very uncomfortable
very comfortable
not at all anxious

or anxious
Appendix B

Videotape Rating Scale

The video rating scale used for reporting standards had three anchor points, 2, 5, and 8, corresponding to an awkward interaction, an average interaction, and a smooth interaction. The scale was constructed by having a male and female confederate role-play the part of two subjects meeting in the laboratory for the first time. A series of 9 different meetings were enacted which varied along two dimensions—verbal and nonverbal. Verbally, the confederates role-played increasingly smooth interactions by speaking with increasing animation and less frequent and shorter pauses; nonverbally, the confederates displayed increasingly animated gestures and facial expressions, and leaned towards their partner to display interest.

The videotapes were shown to 30 undergraduate volunteers, 20 female and 10 male, who were asked to rate each meeting on a 10-point scale similar to the scale used by subjects in the study. The scale had two anchor points, 0 (extremely awkward) and 10 (extremely smooth). Raters were shown the tapes in a randomized order. The tapes were presented one following the other with no explanation as to the purpose of their task other than that outlined above, and no comment regarding whether tapes should be rated relative to one another.

A one-way ANOVA was conducted on ratings of the interactions with rating as the dependent measure. The interactions were rated significantly different from each other, F(8,261)=8.71, p<.001. Post hoc analyses (Student Newman Keuls)
revealed that 7 of the tapes were rated significantly different from each other ($p<.01$) and from these tapes, 3 meetings were selected that had a mean rating of approximately 2, 5, and 8. These meetings became the visual anchors used in the study for reporting standards.
Appendix C

Visual Rating Questionnaire

Please answer the following questions using the visual rating scale. To answer a question, circle the number from 0 to 10 that matches your rating scale. Feel free to view the scale as much as you want. If you don’t understand a question or how to use the scale, just ask the experimenter.

It is important that your answers reflect how you really feel so please consider each question carefully before choosing your answer.

1. In your mind, what level reflects a good interaction (i.e. what would be your standard for success in this setting)?

0 1 2 3 4 5 6 7 8 9 10

2. How clear is your sense of this standard?

0 1 2 3 4 5 6 7 8 9 10

not at all clear very

3. How confident are you that you will reach this standard?

0 1 2 3 4 5 6 7 8 9 10

not at all completely confident
4. In your mind, what level of interaction would you be happy with? (i.e. what is your personal standard for this interaction in this setting)?

0 1 2 3 4 5 6 7 8 9 10

5. How clear is your sense of this personal standard?

0 1 2 3 4 5 6 7 8 9 10

not at all clear

6. How confident are you that you will reach this standard?

0 1 2 3 4 5 6 7 8 9 10

not at all completely confident
7. What level of interaction do you think we would be happy with (i.e. in your mind, what level would we see as success)?

0 1 2 3 4 5 6 7 8 9 10

8. How clear a sense do you have of our standard?

0 1 2 3 4 5 6 7 8 9 10
not at all clear very clear

9. How confident are you that you can meet our standard?

0 1 2 3 4 5 6 7 8 9 10
not at all completely confident
10. How do you think the average interaction goes (i.e. what level reflects the typical interaction on this task)?

0 1 2 3 4 5 6 7 8 9 10

11. How clear a sense do you have of the typical interaction?

0 1 2 3 4 5 6 7 8 9 10

not at all clear

very clear

12. How confident are you that your interaction will be at this level?

0 1 2 3 4 5 6 7 8 9 10

not at all confident

completely confident

13. How do you actually expect to do (i.e. how do you expect to handle the task)?

0 1 2 3 4 5 6 7 8 9 10

not at all confident

very confident

14. How confident are you that you can do as you expect?

0 1 2 3 4 5 6 7 8 9 10

not at all confident

very confident
Appendix D

Factors Influencing Standard and Manipulation Checks

These questions are about the practice conversation you had with our assistant. You do not need to use the visual scale to answer these.

1. How well did you handle this interaction?

103

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>very well</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. We are interested in what you might be thinking about when you rate how well the conversation went. Please rate how much you think the following factors were involved in the rating you made.

a. your past experiences in social situations

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>very much involved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. what you thought we expected

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>very much involved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c. how well you thought other people did.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>very much involved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

d. please list anything else that you thought about in making your rating.
3. How often did you think about being evaluated by the partner or the experimenter?

0 1 2 3 4 5 6 7 8 9 10
not at all constantly

4. How often did you think about how well you were handling the conversation (i.e. how often did you evaluate yourself)?

0 1 2 3 4 5 6 7 8 9 10
not at all constantly

5. How self-conscious did you feel during the interaction?

0 1 2 3 4 5 6 7 8 9 10
not at all very self-conscious

6. During the interaction, how responsive was your partner to you?

0 1 2 3 4 5 6 7 8 9 10
not at all very responsive