

Videotape Reconstruction of Emotions and Cognitions Related to Shyness

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This study tested predictions of the self-presentational approach to situational and dispositional shyness within a broader perspective. Forty subjects who were high in self-rated dispositional shyness and 30 subjects who were low in self-rated dispositional shyness watched videotapes of their interaction with a confederate of the experimenter in various situations, including apprehension of evaluation and positive feedback provided by the confederate. The subjects' free verbal responses to particular events during these situations were content-analyzed. Compared with the group lower in shyness, the shy subjects (a) recalled more fear of social evaluation (including fear of positive evaluation) but did not more often report other kinds of fear, (b) had more negatively biased thoughts about the impression made on their partner but not more impression-related thoughts in general, and (c) showed more negatively biased reactions to the positive feedback of their partner. These results support the self-presentational view that fear of being socially evaluated is pivotal to dispositional shyness. However, some unexpected findings suggest that social evaluative situations also arouse fears of having to evaluate others; this would limit self-presentational explanations of situational shyness in these situations.

Since Zimbardo (1977) directed the attention of psychologists to the folk notion of shyness, a substantial body of research has been dedicated to defining the construct of shyness more carefully and to relating it more closely to empirical data. Most of this research has been recently summarized by Jones, Cheek, and Briggs (1986). Although no widely shared conceptualization of shyness has been reached yet, many appear to agree on at least four clarifications of the lay concept of shyness.

First, the transient affective state of *situational shyness* should be clearly distinguished from the trait of *dispositional shyness*, that is, individual differences in situational shyness that are rather stable over time and across a wide variety of social situations (cf. Russell, Cutrona, & Jones, 1986, for evidence of traitlike characteristics of dispositional shyness). Second, situational shyness, similar to all affective states, should be conceived of as a syndrome encompassing experiential and overt-behavioral processes that are often, but not always, consistent with each other (cf. Leary, 1986a). Third, situational shyness occurs only in social situations and always involves an elevated level of anxiety that refers to certain aspects of current or future interactions; this anxiety component distinguishes situational shyness from simple noninvolvement in interaction and dispo-

sitional shyness from introversion (cf. Cheek & Buss, 1981; Jones, Briggs, & Smith, 1986; Leary, 1986a). Fourth, situational shyness often involves not only anxiety but also positive affect such as interest (cf. Izard & Hyson, 1986).

Asendorpf (1986) suggested that the mixed feelings often observed in shyness reflect an approach-avoidance conflict: Shyness arises when people are motivated to approach others but fear to do so; this motivational conflict leads to the feeling of being inhibited and often leads to inhibited behavior (see also Leary, 1986a, for the concept of inhibition).

Whereas most would agree on this description of shyness as anxious inhibition, the nature of the anxiety involved in shyness is not yet fully understood: What do shy people fear? In a study of a clinical sample of severely shy clients, Nichols (1974) observed a high sensitivity to scrutiny from others and a strong fear of disapproval and criticism. This fear of being evaluated negatively has also been found for dispositional shyness in non-clinical samples. Studies using the Fear of Negative Evaluation Scale of Watson and Friend (1969) found correlations in the range of $.45 \leq r \leq .52$, with various scales tapping dispositional shyness and related constructs (cf. Jones, Briggs, & Smith, 1986; Watson & Friend, 1969). Other fears that shy subjects reported refer to failures to respond in social interaction and awkward behavior (cf. Pilkonis, 1977). Because inappropriate behavior in public situations is also associated with a potentially negative impression evoked in others ("appearing foolish," cf. Efran & Korn, 1969), fear of negative social evaluation appears to be a pervasive fear that distinguishes high and low dispositional shyness.

Leary and Schlenker (1981) and Schlenker and Leary (1982) extended this view of dispositional shyness to situational shyness and fear of positive evaluation as well and integrated the study of shyness into the self-presentational approach to social

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interaction proposed by Schlenker (1980). According to this self-presentational view, situational shyness arises in real or imagined social situations in which people are motivated to make a particular impression on others but doubt that they will do so, because they expect unsatisfactory impression-relevant reactions from others. Thus, this approach focuses on anxiety that arises from the prospect or presence of self-presentational problems; the danger feared is an undesired social evaluation. Schlenker and Leary (1982) called this type of anxiety *social anxiety* and showed that most of the existing research on shyness and anxiety in social situations can be integrated into their self-presentational framework.

Their approach can be applied to dispositional shyness as well. Shy people are characterized by a strong motive to impress others in desirable ways, a chronically low expectancy to accomplish this, the tendency to reflect on undesired impressions they might evoke in others, and high fear of an undesired social evaluation by others (be it positive or negative). Thus, on the basis of assumptions about the motivational antecedents of shyness, the self-presentational approach provides testable predictions about cognitive and emotional concomitants of situational and dispositional shyness in social situations.

In the study presented here, I tested some of these predictions within a broader perspective on shyness (cf. Leary, 1986b, for another approach to testing the self-presentational view). Does social-evaluative anxiety really play the pivotal role in shyness that Leary and Schlenker (1981) postulated? Or do other kinds of anxiety also contribute to the anxious inhibition found in shyness? All available evidence for the central role of social-evaluative anxiety in shyness rests on findings that dispositionally shy subjects receive higher scores on scales measuring this type of anxiety. However, these findings may result from a general negative bias in thinking about one's social self (see, for example, Cacioppo, Glass, & Merluzzi, 1979, and Clark & Arkowitz, 1975, for such a negative bias); this bias may affect any scale tapping negative aspects of the social self.

The self-presentational approach would find more support if it could be shown that shy people experience more fear of social evaluation in evaluative social situations than do people low in shyness, but do not experience other kinds of fear more often. One way to do this is to analyze free verbal responses to evaluative social situations. If shy persons in these situations spontaneously report more fear of (positive or negative) social evaluation than do persons low in shyness but do not report other kinds of fear more often, then the self-presentational view would be strongly supported. Thus, the first objective of my study was to evaluate the explanatory power of the self-presentational approach to shyness along these lines.

A second goal was to test some predictions of the self-presentational approach to shyness that differ from assumptions or implications of alternative theoretical views. Contrary to approaches that stress the role of attentional processes in social anxiety (e.g., Buss, 1980), frequent self-attention and self-preoccupation are regarded by Schlenker and Leary (1982) as concomitants of anxiety but not as the pivotal process. It is not the tendency to think about one's (public) self per se that is crucial for high social anxiety, but the negative bias in such thinking, which at the emotional level appears as fear of an undesired social evaluation. Consistent with the model of attention and

self-regulation Carver (1979) proposed, it is assumed that people who are motivated to make a particular impression on others and who are quite sure that they can create this impression, will closely attend to this impression without becoming anxious (cf. Schlenker & Leary, 1982, Proposition 3, p. 656). Although Buss (1980) allows for instances in which "public self-awareness" does not necessarily lead to anxiety (pp. 36-37), he regards anxiety to be the most likely outcome of the state of public self-awareness. Given the different levels of importance the self-presentational and "attentional" approaches attach to self-attentional processes, empirical evidence is needed to show that it is not the preoccupation with one's public self that primarily distinguishes low from high shyness but the negative bias in such preoccupation. Up to now, this evidence is lacking.

This negative bias in attentional processes among shy individuals does not necessarily refer to a negative impression made on others. People sometimes may also fear making a positive impression. As Schlenker and Leary (1982) noted, one instance in which a positive impression may not be desired is overpraise. Unlike praise that is merited, overpraise can raise doubts about the motives of the evaluator (is the praise serious, ironic, or just polite?), create uncertainty about an appropriate response, and impel the praised person to live up to the positive impression communicated. Thus, consequences of overpraise might cause doubts about either the past or the future impressions of the evaluator and might thereby promote anxiety.

Additionally, overpraise is likely to arouse other negative emotions. People may react with embarrassment because they feel that they have failed to meet the standard of presenting themselves in a more modest way (cf. Edelman, 1985); also, they may experience distress because overpraise makes them aware of the discrepancy between what they aspire to be and what they feel they really are.

Because shy people are assumed to have lower expectancies of positive reactions from others, they will perceive praise as an instance of overpraise more often than will persons low in shyness. Thus, they should react with more negatively biased emotions to praise. This prediction sharply contrasts with the assertions of self-esteem theory (Jones, 1973), a notion that contends that the greater the self-esteem need a person has, the more positively this person will respond to praise. Thus, according to the self-esteem notion, shy persons should respond more positively to praise than do persons low in shyness. More elaborated views of the self-esteem notion postulate a self-enhancement effect of praise only for affective measures such as liking of the partner (cf. Shrauger, 1975; Swann, 1985). Thus, these views also predict more positive emotions among shy persons in response to praise.

The logic of testing outlined previously can be applied to these two further predictions of the self-presentational approach as well. Compared with persons low in shyness, shy people in evaluative social situations should spontaneously report more negatively biased thoughts about the impression they make on others but not necessarily more impression-related thoughts in general; moreover, shy people should spontaneously report more negatively biased thoughts in response to a favorable evaluation by an interaction partner but not necessarily more praise-related thoughts in general.

In the study presented here, I tested these predictions by ana-

lyzing the content of the free verbal responses of subjects high or low in dispositional shyness to real evaluative social situations. Because social interaction is incompatible with the concurrent verbalization of cognitions and emotions, the subjects' thoughts and feelings could be assessed only before or after the interaction. Cacioppo et al. (1979) applied a thought-listing technique to the anticipation of a (not really experienced) social encounter. However, predictions related to particular events during social interaction or the response to praise cannot be adequately tested in this way. Thus, retrospective reports have to be sampled. To counteract memory distortions as much as possible (cf. Ericsson & Simon, 1980), I applied the videotape reconstruction technique (Meichenbaum & Butler, 1980). Subjects watched their videotaped prior interaction and were asked to verbalize the emotions and cognitions they had experienced at particular points during the interaction.

After the study had been analyzed, I became aware of the similar approach of Ickes, Robertson, Tooke, and Teng (1986), who used the videotape reconstruction technique to assess the cognitions and emotions of subjects engaged in unstructured social interaction with a stranger and were able to demonstrate a substantial construct validity of the thought and feeling measures applied in their study. For dispositional shyness, the authors found a significant correlation of $r = .25$ between the Social Anxiety Scale of Fenigstein, Scheier, and Buss (1975) and the percentage of negative self-related thoughts and feelings among all spontaneously reported thoughts and feelings. The authors also analyzed thoughts and feelings related to the partner's impression about the subject but did not relate their incidence to social anxiety. Thus, the data Ickes et al. (1986) reported support the construct validity of measures obtained by the videotape reconstruction method but do not speak to the more specific predictions about shyness tested in the following study.¹

Method

Pretest

A self-selected sample of 307 students (149 female, 158 male) of the Universities of Munich (excluding psychology students) were pretested with a scale measuring dispositional shyness. Because no German shyness scale existed, a new version was developed following the deductive approach advocated by Burisch (1984). This strategy seemed to be a safe one because various existing English scales designed to measure shyness and related constructs such as social anxiety or social reticence correlate highly with each other (Jones, Briggs, & Smith, 1986, found a mean intercorrelation of $r = .77$ for five such scales). The following four shyness items were selected for assessing *feelings* of shyness and inhibition and opposite feelings of easiness in social interaction: (a) I feel shy in the presence of others, (b) I feel inhibited when I am with other people, (c) I easily approach others (—), and (d) it is easy for me to get in touch with strangers (—). Each item had to be rated on a 7-point scale ranging from *never* to *always*. The shyness items were mixed with 44 items tapping other dimensions of personality such as need for affiliation or frequency of close relationships (cf. Asendorpf, 1985a, for a detailed description).

The shyness scale had an internal consistency of $\alpha = .79$, and all corrected item-total correlations were above $r = .58$. A previous study supported the validity of the scale (cf. Asendorpf, 1985b). An unselected subsample of the pretest sample rated their likely reactions to hypotheti-

cal social situations inducing situational shyness to different degrees on various 7-point scales, one of which tapped shyness-inhibition. The correlation between the situation-specific shyness scores aggregated over all situations of the inventory and the shyness scale of the pretest was $r = .70$ ($n = 192$).

Subjects

About 2 months after the pretest, 30 subjects low in shyness and 40 shy subjects (half of each group were composed of female subjects) came to the laboratory to participate in a study on social perception. They received DM 10 (\$4) for participation and were assured that they could discuss their data with an experienced psychologist later. The scores of subjects low in shyness ranged from 6% to 32% and the shy subjects' scores ranged from 77% to 100% on the shyness scale in the pretest sample of $N = 307$. Subjects with extremely low scores in shyness were excluded because the validity of these scores might be questionable (cf. Asendorpf & Scherer, 1983).

Design

The design of the study included two major parts: (a) a sequence of social situations designed to induce fear of social evaluation and reactions to positive social evaluation and (b) the videotape reconstruction of these situations. A complete description of the study is given in Asendorpf (1985c).

Social situations. The subjects were invited to participate in a study on social perception (cover story). In a waiting room each subject met a same-sex confederate of the experimenter who played the role of another subject. All subjects of the same sex met the same confederate who was trained to respond in a friendly way to initiations of the subjects but to be otherwise rather reserved. After 3 min of conversation, the experimenter entered the room and asked both partners to answer a state questionnaire about their cognitions and emotions in the last 3 min; all subjects of the same sex met with a same-sex experimenter. One aim of this procedure was to get the two partners acquainted with each other.

The experimenter then set up a camera directed to the two partners from a position obliquely behind the subject, sat down, and explained the cover story. In particular, the experimenter instructed them to get to know each other as closely as possible because they would have to evaluate each other's personality later (get-to-know instruction). After this instruction, the experimenter left the room for 3 min (get-to-know situation); this procedure was aimed at creating an evaluative social situation. The get-to-know instruction and the following situations were videotaped both by the camera the experimenter had set up and by a camera outside the room via a one-way mirror.

After returning, the experimenter again provided the state questionnaire. Then, the experimenter intensively looked at both partners and announced that they now had to evaluate each other's personality; therefore, they should quickly think about the impression they had gained about their partner. The experimenter then made a 5-s pause while still watching the two partners (evaluation instruction).

After the 5-s break, the experimenter provided both partners with a partner evaluation questionnaire consisting of bipolar scales such as *friendly-unfriendly*. The aim of this questionnaire was to strengthen the credibility of the cover story.

When both partners had answered this questionnaire, the experimenter announced that one subject (the confederate) now had to go to another room to participate in another part of the study. Looking

¹ However, the Ickes, Robertson, Tooke, and Teng (1986) data could be reanalyzed according to some of the hypotheses tested in the present study.

intensively at the (real) subject, the experimenter added, "I guess you won't see each other any more, would you therefore like to say something personal to your partner?" (request for personal feedback).

In most cases, the subject did not say anything in response to that question; if the subject did respond, the experimenter tried to stop the subject after a maximum of 1 min. In any case, the experimenter subsequently looked at the confederate and asked, "And you, would you like to say something (as well) to your partner?" The confederate shortly reflected on that question, smiled briefly at the subject, said "yes," and hesitated for a moment (announcement of feedback). Then the confederate said, "Well, I just wanted to say that you are a nice man (woman)" and smiled at the subject (positive evaluation). These last two situations were designed to create anticipation of social evaluation and to probe the subject's response to a positive social evaluation. Finally, the experimenter escorted the confederate out of the room and returned after a short time.

Videotape reconstruction. The five experimental situations were reconstructed immediately afterwards during a 30-min semistructured interview. Subject and experimenter watched the beginning of the tape that the experimenter had recorded for 1 min to get the subject used to the recordings. Then, the tape was stopped immediately after (a) the get-to-know instruction, (b) the evaluation instruction, (c) the request for personal feedback, (d) the announcement of feedback, and (e) the positive evaluation. At those times the subject was instructed to remember his or her thoughts and feelings at that particular event as accurately as possible and to verbalize them. After each free response the subject rated his or her feelings of unpleasantness at the event. All verbal reports of the subject were audiotaped.

Debriefing. After the subjects had finished the experiment, they were debriefed about the video recording made through the one-way mirror and were asked to give their consent for a scientific evaluation of the tapes. After all subjects had been tested, they received a letter debriefing the other aspects of the study.

Dependent Measures

Self-ratings of situational shyness and anxiety. The state questionnaire presented to the subjects after the get-to-know situation contained, among others, two 7-point scales of an intensity format (*not at all to very much*) labeled "During the last three minutes, I felt shy-inhibited" and ". . . I felt anxious."

Self-ratings of unpleasantness. For each of the five events selected for the videotape reconstruction session, the subjects rated their feelings of unpleasantness at that particular event on a 7-point scale of an intensity format (*not at all to very much*).

Other-ratings of situational shyness. The video recordings of the subjects' behavior during the get-to-know situation made through the one-way mirror were presented to three judges who were blind to the subjects' shyness scores. The judges rated the subjects' shyness after each minute of recording on a 7-point scale of an intensity format (*not at all to very much*) labeled "shy-inhibited." The mean of the three ratings of each judge served as the judge's shyness rating. The mean shyness ratings of the three judges were reliable (Cronbach's $\alpha = .86$); they served as the other-ratings of the subjects' situational shyness.

Content analysis of free responses. The audiotaped free responses of each subject were completely transcribed. Two independent coders then searched through the transcripts for the occurrence of (a) reports of anxiety as defined by the German words for anxiety, anxious, fear, or fearful; and (b) reports of cognitions related to the impression of the subject's partner about the subject. In both cases, the intercoder agreement was high (100% for anxiety, 91% for impression-related cognitions); disagreements were subsequently resolved by a consensus coding.

Two independent coders then coded (a) the preselected reports of anx-

ety for types of anxiety; (b) the preselected reports of impression-related cognitions (excluding those in response to the partner's praise) for impression-related emotions, that is, reports of emotions accompanying the thoughts about the impression of the subject's partner; and (c) the preselected reports of praise-related cognitions for praise-related emotions. In each case, one coder went through all of the material, developed theory-related mutually exclusive coding categories, and classified the transcripts accordingly; then, the second coder independently coded the transcripts according to these categories.

The coding categories were as follows: for types of anxiety, fear of negative evaluation, fear of positive evaluation, fear of having to evaluate others, fear of disclosing something personal about oneself, and other types of fear; for impression-related emotions, positive emotion, interest, neutral, ambivalent (both positive and negative emotion), and negative emotion; and for praise-related emotions, positive emotion, relief, neutral, ambivalent (both positive and negative emotion), and negative emotion.

Each coding system was applied by one male and one female coder. The second coder checking for reliability was blind to the hypotheses of the study, and all coders were blind to all information about the subjects not contained in the transcripts (e.g., to their shyness scores) during the coding process (including the definition of categories). All four coding systems were found to be highly reliable (in each case, percent agreement was greater than 95% and Cohen's $\kappa > .90$). Coder disagreements were subsequently resolved by consensus.

Results

Missing Data

Two subjects low in shyness and 1 shy subject had to be partially excluded from the analyses because of technical problems with either the video or the audio recordings.

Validity of the Selection for Dispositional Shyness

In addition to the validity data for the shyness scale reported in the Pretest section, the validity of the extreme group selection for dispositional shyness was investigated by comparing the subjects' self- and other-rated shyness scores for the get-to-know situation between the two groups. The shy group reported both more shyness-inhibition, $t(68) = 3.7, p < .0005$, and more anxiety, $t(65.3) = 4.5, p < .0001$, and the judges rated this group as more shy-inhibited, $t(67) = 3.0, p < .004$, than the low-shy group. Thus, the shy group appeared to be more shy during the get-to-know situation.

Content Analyses of Free Responses

Types of anxiety. The relative frequencies of the five types of anxiety coded for the two groups of subjects are shown in Table 1. Because only transcripts with explicit verbalizations of anxiety were coded, the frequencies of the coding categories were rather low. Therefore, fear of negative evaluation and fear of positive evaluation were combined to the new category termed *fear of social evaluation*; fear of having to evaluate others and fear of disclosing something personal were combined to form *fear of self-disclosure*, and all kinds of anxiety except fear of social evaluation were combined to form *nonevaluative fears*. Results of *t*-tests between shy and low-shy subjects showed that, as expected, the shy group spontaneously verbalized more fear of social evaluation than the low-shy group did, $t(65) = 1.7$,

Table 1
Relative Frequencies of Types of Anxiety Coded From All Free Responses of Shy Subjects and Subjects Low in Shyness

Type of anxiety	Low in shyness ^a	Shy ^b
Fear of negative evaluation	.18	.44
Fear of positive evaluation	.07	.15
Fear of having to evaluate others	.29	.28
Fear of disclosing something personal	.11	.18
Other fears	.14	.31
Total	.79	1.36

^a $n = 28$. ^b $n = 39$.

$p < .05$, one-tailed, whereas the groups did not differ in fear of self-disclosure, other fears, and the combined nonevaluative fears (in each case, $t < 1.5$, $p > .15$).

Impression-related cognitions and emotions. Excluding the praise-related cognitions, 75% of all impression-related cognitions occurred in the transcripts of responses to the announcement of feedback by the partner. To improve the clarity of interpretation, only these cognitions were analyzed. Table 2 contains the relative frequencies of the impression-related cognitions and emotions reported by the two groups.

A chi-square test did not reveal a significant difference in the overall frequency of impression-related cognitions between the two groups of subjects ($\chi^2 < 1$). To test the hypothesis that the shy subjects' impression-related cognitions were negatively biased, the coding categories were rank-ordered from positive to negative as indicated in Table 2. A Mann-Whitney U test with continuity correction for the accordingly scaled codings confirmed the hypothesis. The shy group had significantly higher negativity scores than the low-shy group did ($U = 2.2$, $p < .02$, one-tailed).

Reactions to praise. Table 3 contains the relative frequencies of praise-related cognitions and emotions for the two groups of subjects. Nearly all subjects of both groups reported some praise-related cognitions. To test the hypothesis that the shy subjects' responses were negatively biased, the coding categories

Table 2
Relative Frequencies of Impression-Related Cognitions and Emotions Coded From the Free Responses of Shy Subjects and Subjects Low in Shyness to the Announcement of Personal Feedback By the Partner

Coding category	Rank ^a	Low in shyness ^b	Shy ^c
Positive emotion	5	.11	.10
Interest	4	.46	.26
Neutral	3	.00	.03
Ambivalent	2	.04	.10
Negative emotion	1	.00	.18
All cognitions		.61	.67

^a The ranks are a priori assignments to the coding categories.

^b $n = 28$.

^c $n = 39$.

Table 3
Relative Frequencies of Impression-Related Cognitions and Emotions Coded From the Free Responses of Shy Subjects and Subjects Low in Shyness to the Partner's Praise

Coding category	Rank ^a	Low in shyness ^b	Shy ^c
Positive emotion	5	.50	.31
Relief	4	.18	.13
Neutral	3	.11	.08
Ambivalent	2	.14	.28
Negative emotion	1	.04	.13
All cognitions		.96	.92

^a The ranks are a priori assignments to the coding categories.

^b $n = 28$.

^c $n = 39$.

were rank-ordered from positive to negative as indicated in Table 3 (the same procedure as in the analysis of the impression-related emotions; cf. Table 2). A Mann-Whitney U test with continuity correction for the accordingly scaled coding categories indicated that, as expected, the shy group had significantly higher negativity scores than the low-shy group did ($U = 2.0$, $p < .03$, one-tailed).

Self-Ratings of Unpleasantness

The group means of the unpleasantness ratings are presented in Figure 1. A 2 (group) \times 5 (event) mixed analysis of variance (ANOVA [between factor: group; within factor: event]) revealed highly significant main effects—for group, $F(1, 64) = 12.21$, $p < .001$; for event, $F(4, 243.4) = 3.8$, $p < .0001$, Greenhouse-Geisser adjusted—but no Group \times Event interaction, $F(4, 243.4) = 0.09$, $p = .98$, Greenhouse-Geisser adjusted. Thus, the shy group reported more overall unpleasantness than did the low-shy group, there were differences among the mean rated unpleasantness of the five events, and the shy and the low-shy group rated these between-event differences in the same way.

A subsequent Newman-Keuls test for pairwise between-event differences revealed that request for personal feedback and evaluation instruction were judged as most unpleasant, the get-to-know instruction received the second-highest scores, the partner's positive evaluation was assigned the third-highest scores, and the partner's announcement of personal feedback was rated as least unpleasant. These differences are consistent with the notion that the subjects perceived the events as the more unpleasant, the more they were required to evaluate the partner themselves.

Convergent and Discriminant Validity of Measures

Table 4 contains the correlations among the self-ratings of situational shyness, anxiety, and unpleasantness, and the negativity rankings of the subjects' spontaneously reported impression- and praise-related cognitions.

The pattern of correlations reported in Table 4 indicates a substantial convergent and discriminant validity of both self-ratings and free-response codings. The self-ratings of shyness

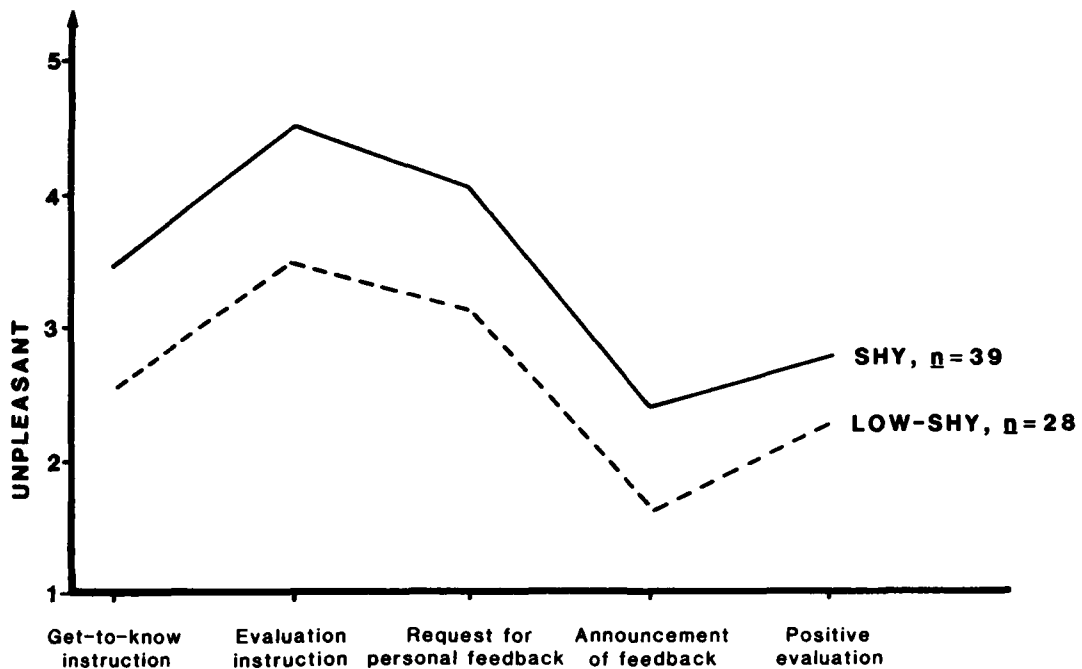


Figure 1. Mean unpleasantness ratings of all reconstructed events for shy subjects and subjects low in shyness.

and anxiety were highly correlated ($r = .75$) and showed higher correlations with the unpleasantness rating for this situation ($r = .51$ and $r = .45$) than with all other measures; the unpleasantness rating of the partner's announcement of feedback correlated more highly with the negativity ranking of the impression-related cognitions reported for this event ($r = .41$) than with all other measures, and vice versa, and the unpleasantness rating of the partner's praise showed a higher correlation with the negativity ranking of the praise-related cognitions ($r = .60$) than with all other measures, and vice versa.

Apart from these expected consistencies, the measures ob-

tained during videotape reconstruction were quite sensitive to situational variation (cf. the submatrix of the intercorrelations of the unpleasantness measures and the zero correlation between the two negativity rankings). These results support the construct validity of the measures obtained by the videotape reconstruction method.

Discussion

This study fully supports the self-presentational view of dispositional shyness but suggests some limitations of self-presen-

Table 4
Intercorrelations of Ratings and Codings of Emotional Quality for Various Events

Variable	AG	SG	UG	UE	UF	UA	UP	NA	NP
Self-ratings for the get-to-know situation									
Anxiety (AG)	—	.75***	.45***	.13	.16	.18	.00	.31*	.10
Shyness (SG)		—	.51***	.27*	.14	.08	.14	.25	.29*
Unpleasantness ratings for the									
Get-to-know instruction (UG)			—	.44***	.49***	.19	-.02	.18	.08
Evaluation instruction (UE)				—	.38**	.37**	.20	.27	.16
Request for feedback (UF)					—	.30*	.19	.27	.09
Announcement of feedback (UA)						—	.05	.41**	.11
Positive evaluation (UP)							—	-.14	.60***
Rankings of the negativity of the subjects' free verbal responses to									
Announcement of feedback (NA)								—	.04
Positive evaluation (NP)									—

Note. All correlations that refer to the convergent validity of measures are shown in boldface type. All correlations are Pearson correlations except for the correlations with the negativity rankings, which are Spearman rank-order correlations. $N = 67$ for the Pearson correlations, $n = 43$ for the correlations with NA, and $n = 63$ for the correlations with NP.
* $p < .05$. ** $p < .01$. *** $p < .001$.

tational explanations of situational shyness. Students selected for high or low self-rated dispositional shyness were videotaped in a sequence of dyadic interaction situations designed to induce situational shyness. Converging measures of self- and other-rated shyness indicated that the shy subjects reacted with more shyness and anxiety than their low-shy counterparts did during the apprehension of evaluation. The subjects' free recall of cognitions and emotions, when they watched their videotaped prior interaction, confirmed three distinctive predictions of the self-presentational approach.

First, the shy group spontaneously recalled more frequent fear of social evaluation but did not report other kinds of fear more often than the low-shy group did. This was not a trivial finding because both groups recalled nonevaluative fears more often than fear of evaluation, for example, fear of having to evaluate others. Consistent with the predictions of the self-presentational approach, those instances of anxiety that were explicitly related to being socially evaluated by the partner better discriminated the two groups of subjects than instances of anxiety that may or may not be related to being socially evaluated (e.g., fear of having to evaluate others). These data support the notion that fear of being socially evaluated is pivotal for differences between dispositionally shy and low-shy people in social-evaluative situations. This result is more specific than earlier findings that shy people engage more in negative self-thoughts (e.g., Cacioppo et al., 1979; Clark & Arkowitz, 1975; Ickes et al., 1986) or that they score higher on scales tapping fear of negative evaluation (e.g., Jones, Briggs, & Smith, 1986; Watson & Friend, 1969). Furthermore, the shy group tended to recall both more fear of negative and more fear of positive social evaluation. This result is in line with the predictions of the self-presentational approach because shy people are expected to perceive a favorable social evaluation often as an instance of overpraise.

Second, the shy subjects did not report more impression-related cognitions than the subjects low in shyness did when their partner announced that he or she would say something personal to them. This too, was not a trivial finding because about one third of the subjects in both groups did not report any impression-related cognitions in response to the announcement of feedback. But the emotional quality of the impression-related cognitions of the shy subjects was negatively biased: They recalled less interest in the feedback and more ambivalent and negative feelings. Thus, contrary to approaches stressing the direction of attention (e.g., Buss, 1980), a focus on the public self *per se* did not appear to be crucial for dispositional shyness but a focus on negative aspects of the public self did.

Third, this finding was corroborated by the results for praise-related emotions in general. Whereas nearly all subjects recalled some praise-related cognitions, the shy subjects appeared to react less positively and more negatively to the praise of their partner. Because they tended to report less positive emotion, the data are not consistent with self-esteem notions, which claim that shy people are particularly happy about praise because of their high self-esteem needs (cf. Jones, 1973; Shrauger, 1975; Swann, 1985). The results also do not provide strong evidence for the contention of Arkin and Appelman (1983) and Lake and Arkin (1985) that shy people are likely to react to praise with ambivalent feelings involving both positive and negative emotions. Although the rate of ambivalent reactions within the shy

group tended to be higher than both the rate of purely negative responses in this group and the rate of ambivalent reactions within the low-shy group, only 28% of the shy subjects recalled ambivalent feelings. This figure clearly is too low to assume mixed feelings as the typical response to praise among shy people. Rather, the data of my study are in line with the self-presentational notion, which assumes that praise creates self-presentational problems among shy people, problems that, in turn, evoke less positive and more negative feelings.

Whereas these results support the self-presentational approach to dispositional shyness, two unexpected findings point to a possible limitation of the self-presentational approach to situational shyness. First, both the shy and the low-shy subjects spontaneously recalled an equal, substantial amount of fear of having to evaluate their partner. Second, the more the subjects were assigned this role of an active evaluator, the more unpleasant they rated the event; this was true for both the shy and the low-shy group. These results call attention to the fear of evaluating others—a type of fear that apparently has not yet been recognized in research on shyness and social anxiety.

Fear of evaluating and fear of being evaluated probably are two distinct, yet sometimes related, kinds of anxiety. Having to evaluate others may primarily arouse fear of hurting the partner's feelings (in my study, some subjects explicitly recalled such a type of fear). This fear is not necessarily related to an undesired self-presentation. However, in certain situations, communicating an evaluation may secondarily also arouse fear of being evaluated because the evaluation may be expected to reveal undesired attributes of the evaluator. For example, if a person finds someone else's behavior really silly, he or she may nevertheless hesitate to say that even when urged to do so, because he or she may fear being considered as overbearing.

On the other hand, if fear of evaluating could be completely reduced to fear of being evaluated, the shy subjects should have recalled more fear of evaluating than did the subjects low in shyness. As this was not the case, the findings of this study suggest that fear of evaluating plays a role of its own in social-evaluative situations. More specifically, the data from this study are consistent with the hypothesis that fear of evaluating contributes to state anxiety independent of fear of being evaluated but is unrelated to dispositional shyness. This hypothesis needs further empirical support because it was an unexpected finding and rests on the assumption that the cross-situational differences in unpleasantness reflect differences in state anxiety. If the hypothesis could be confirmed by future studies, however, this result would limit the power of Schlenker and Leary's (1982) self-presentational approach to explain the origins of state anxiety and situational shyness in social-evaluative situations.

Last but not least, my study demonstrates how the videotape reconstruction method can be successfully applied to the study of covert processes occurring in social interaction. Measures derived from content analyses of the subjects' free verbal responses to critical events during interaction showed both convergent and discriminant validity when they were compared with classical postsituational ratings and ratings obtained during the reconstruction session. This result supports the construct validity of these measures and confirms the similar findings of Ickes et al. (1986).

Apparently, the videotape reconstruction technique to a great extent overcomes the long-standing problem that free responses are often found to be unreliable, diffuse, and even contradictory. Watching their own past behavior seems to provide important memory cues for the subjects and guides their sequencing of responses, thereby making free verbal responses more reliable, better to interpret, and consistent. Because free responses are less canalized by the convictions of the experimenter, they provide particularly powerful tests of theory-derived predictions and also offer unique opportunities for exploratory data analysis. Thus, the videotape reconstruction method appears to be quite useful both in testing specific predictions and in generating new hypotheses about the covert cognitive and emotional processes occurring in social interaction.

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