Effects of self-focused attention and fear of evaluation on anxiety and perception of speech performance

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Abstract

Few studies have examined the unique relationships among state fear of negative evaluation (FNE), self-focused attention (SFA), state anxiety, and perceptions of speech performance (PSP). Furthermore, to the author's knowledge, no study to date has assessed the role of state fear of positive evaluation (FPE) among these constructs. The present study examined these various relationships. Following participants' delivery of an impromptu speech, and in support of hypothesis, positive, significant relationships emerged among trait social anxiety, state anxiety, state SFA, state FPE, state FNE, and perception of poor speech performance. In addition, and consistent with hypotheses, both state SFA and state FNE predicted state anxiety experienced throughout the speech, as well as poorer PSP. Contrary to our hypotheses, state FPE was not a robust predictor of state anxiety or PSP when accounting for state SFA and state FNE. Lastly, in line with hypothesis, the strength of the association between state SFA and state anxiety was moderated by participants' level of trait social anxiety, such that these relations were stronger (and more positive) as trait social anxiety increased. Inconsistent with hypothesis, trait social anxiety did not moderate the relationship between state SFA and PSP. Findings provide support for the theoretical model (Clark & Wells, 1995) that SFA may have particularly impactful effects on distress for highly socially anxious, versus low socially anxious, individuals.

Effects of self-focused attention and fears of evaluation on anxiety and perception of speech performance

Although experiencing some level of anxiety during a public speech is normal for the general population (e.g., Pollard & Henderson, 1988), individuals who are highly socially anxious experience an abnormally high level of anxiety when faced with similar situations. Social anxiety disorder (SAD) is characterized by extreme concerns of evaluation from others and of potentially humiliating oneself (American Psychiatric Association [APA], 2013). SAD is a prevalent and debilitating disorder with a lifetime prevalence rate of 12.1% (Kessler et al., 2005). Symptoms of SAD can include hypersensitivity to criticism, low self-esteem, and physiological reactions (e.g., trembling; Clark, 2005).

Fear of Evaluation and Social Anxiety

Findings from several studies indicate that highly socially anxious individuals show hyper-vigilance for external social threat cues (e.g., Eysenck, 1997; Mogg & Bradley, 1998; Williams, Watts, MacLeod, & Matthews, 1997; Winton, Clark, & Edelmann, 1995). Based on a body of research and theory, Heimberg, Brozovich, and Rapee (2010) proposed that highly socially anxious individuals fear evaluation and thus allocate their attention to external threat cues. This biased attention may lead to catastrophized interpretations of these cues (e.g., "He yawned; he thinks I'm boring")—confirming negative self-images as believed to be seen by others.

It is well-accepted in the literature that fear of negative evaluation (FNE) is a central aspect of social anxiety and, until recently, has been identified as the only type of evaluative concern experienced by socially anxious individuals (e.g., see Weeks, Jakatdar, & Heimberg, 2010). FNE is the fear that one will be judged negatively. Even benign or ambiguous social cues from others can potentially be interpreted as signs of negative evaluation. Recently, Weeks and colleagues (Weeks, Heimberg, & Rodebaugh, 2008; Weeks, Heimberg, Rodebaugh, & Norton, 2008) have investigated the fear of evaluation *in general* (Weeks & Howell, 2012) in social anxiety. In contrast to FNE, fear of positive evaluation (FPE) is the fear that one may be evaluated positively. Weeks, Heimberg, and Rodebaugh (2008) propose that socially anxious individuals dread being evaluated favorably, particularly in public, because this is perceived as a direct social comparison to others—placing one in the spotlight and possibly in social competition with more socially dominant others. FNE and FPE are strongly and positively correlated with one another, and both relate strongly, yet distinctly, to social anxiety (Weeks, Heimberg, & Rodebaugh, 2008; Weeks, Heimberg, Rodebaugh, & Norton, 2008). It was an aim of the present study to extend previous research on FNE and FPE in social anxiety.

Self-Focused Attention and Social Anxiety

Clark and Wells (1995) also suggest that when highly socially anxious persons enter a feared social situation, they tend to develop a series of assumptions about themselves and their social world based on early experiences. These assumptions can include: excessively high standards held by others for one's social performance (e.g.,

"I'm not sounding interesting enough"), conditional beliefs concerning the consequences of performing in a certain way (e.g., "I'm blushing; they think I am awkward"), and unconditional negative beliefs about the self (e.g., "I'm always uninteresting"). Consequently, socially anxious individuals may perceive their own social performance more negatively than individuals low in social anxiety (Mellings & Alden, 2000). Clark and Wells further suggest that once the situation is appraised as threatening, a socially anxious individual's attentional resources are engaged in self-monitoring. Clark and Wells propose that a core feature of SAD is *self*-focused attention (SFA) toward internal cues that are related to assumptions of how one is seen by others. When highly socially anxious individuals perceive a social threat, they initially divert their attention away from actual external cues and predominantly focus upon themselves from an assumed observer-perspective. Due to attentional focus on self-monitoring and then scanning the environment for social cues to confirm self-focused assumptions (e.g., "He yawned, which means I'm definitely sounding boring"), disconfirmatory evidence of the feared evaluation (e.g., nods or smiles) may be overlooked. Clark and Wells' model emphasizes SFA and how the individual uses internal information to create a negatively biased image of the observable self, whereas the model by Heimberg and colleagues (2010) emphasizes biased interpretation of external social information.

Previous studies have found that there is a positive correlation between SFA and social anxiety (Fenigstein, Scheier, & Buss, 1975; Hope & Heimberg, 1988; Woody & Rodriguez, 2000). It has also been shown that socially anxious individuals

experience higher SFA than the general population (Bruch, Heimberg, Berger, & Collins, 1989; Bruch & Heimberg, 1994; Saboonchi, Lundh, & Öst, 1999). For example, one study (Woody, 1996) provided support for the anxiety-producing effects of SFA among SAD patients using an experimental manipulation of SFA during a speech task. Two participants completed the study at a time, one actively giving a speech and one passively standing next to the speech-giver. The speech-giver was instructed to either talk about his/her *own* anxiety or the anxiety of the *other participant.* The study found that SFA significantly increased anxiety for the speech giver (but not the passive participant) when the speech giver spoke about his/her own anxiety. In addition, anxiety was significantly increased for the passive participant (but not the speech giver) when his/her anxiety was the subject of the speech. These findings importantly informed the study of SFA, because it supported the theory that elevated SFA is a cognitive contributor to social anxiety.

In addition, McEwan and Devins (1983) found that highly socially anxious individuals who reported typically experiencing intense somatic sensations (e.g., perspiration) in social situations tended to overestimate how anxious they appeared to others in comparison to the objective ratings of their peers. This supports the notion that socially anxious individuals can erroneously infer how they appear to others (e.g., speech performance) on the basis of internal self-focus. Both Clark and Wells' (1995) and Heimberg and colleagues' (2010) models illustrate that online attentional allocation is complex and involves the interaction of self-focused and others-focused attention. It was an aim of the present study to simultaneously assess the competing

roles of SFA and fears of evaluation from others and the degree to which they contribute to state anxiety and self-perception of social performance (PSP) while controlling for one another.

Depression and Social Anxiety

Among individuals with comorbid SAD and depression, up to 91% experienced SAD before experiencing the symptoms of depression (e.g., see Stein, Tancer, Gelernter, Vittone, & Uhde, 1990). Although there are symptoms which tend to distinguish social anxiety (e.g., panic attacks) from depression (e.g., anhedonia) (APA, 2013), there nevertheless exists much overlap in symptoms of depression and social anxiety (e.g., Grös, Antony, Simms, & McCabe, 2007). For example, avoidance of social situations is a key aspect of social anxiety; however, this also often occurs with depressed individuals (Ingram, Ramel, Chavira, & Scher, 2005). For this reason, we tested whether depressive symptoms significantly related with any main variables (i.e., trait anxiety, state anxiety, state FNE, state FPE, SFA, and PSP) to ensure greater specificity of our findings.

Implications and Hypotheses

Collectively, cognitive-behavioral models of social anxiety suggest that when faced with a social situation, highly socially anxious persons allocate a great deal of their attentional and interpretational resources to internal and external foci, in order to confirm negative self-images (e.g., Clark & Wells, 1995; Heimberg et al., 2010). This maladaptive allocation of attentional resources may minimize full experiences of social situations and actually impair social effectiveness (e.g., Clark, 2005). Few

studies to date (e.g., Jakymin & Harris, 2012) have assessed the competing roles of state FNE and SFA, and none to date have assessed the relationship between state FPE and SFA. The present study may provide further knowledge to the literature by comparing the unique relationships among state FPE, state FNE, state SFA, state anxiety, and PSP. Further investigation of the psychological processes underlying social anxiety is important for the general understanding of social anxiety and the potential improvement of psychotherapeutic strategies in the treatment of SAD. A major aim of the present study was to test whether state anxiety and self-rated PSP are robustly and uniquely related to state fears of evaluation (i.e., FNE and FPE) and SFA, when statistically controlling for one another. To do so, the study used methodological manipulation to simultaneously incite fear of evaluation (i.e., presence of the researcher during a speech) and SFA (i.e., presence of a freestanding mirror during a speech, following suggestions by Bögels & Mansell, 2004).

Several hypotheses were generated to compare the unique relationships between evaluative concerns versus SFA, social anxiety, and PSP. (1) It was hypothesized that trait social anxiety, state SFA, state FPE, state FNE, state anxiety, and degree of negative PSP would have positive, significant relationships with one another. (2) It was further hypothesized that state SFA, state FNE, and state FPE would each uniquely and significantly predict state anxiety experienced throughout the public speaking task. It was explored as to whether either of these proposed core aspects of social anxiety (i.e., state FNE, state FPE, or state SFA; e.g., see Clark & Wells, 1995; Heimberg et al., 2010; Weeks & Howell, 2012) predicted state anxiety

during the public speech more so than the other two aspects. (3) It was hypothesized that state SFA, state FNE, and state FPE would each uniquely and significantly predict poorer PSP. It was further explored whether one of these proposed core aspects of social anxiety (i.e., FNE, FPE, or SFA) predicted poorer self-evaluation of speech performance more so than the other two aspects. Lastly, (4) it was hypothesized that the strength of association between state SFA and both (4a) state anxiety and (4b) PSP would be moderated by participants' level of trait social anxiety, such that these positive relations would strengthen as trait social anxiety increased.

Methods

Participants

All participants were undergraduate students (there were no exclusion criteria with regard to social anxiety symptoms) recruited online via Ohio University SONA systems (n = 56). Participants were required to be 18 years of age or older and verbally fluent in the English language. Participants were compensated with partial course credit for completing procedures. One participant was excluded due to a lack of verbal fluency in the English language. One participant was excluded because deception (i.e., the purpose of the mirror) was detected. Additionally, two participants withdrew from the study during the speech task due to discomfort and were therefore excluded from analyses. The final sample (n = 52) was comprised of 15 males (28.8%) and 37 females (71.1%), ranging in age from 18 -35 years[1] (M = 19.33, SD = 2.57). The majority of participants were Caucasian (86.3%) and exclusively heterosexual (92.2%). Based on psychometrically supported (Mennin et al., 2002) cut-off scores

from the Liebowitz Social Anxiety Scale (see **Assessments and Measures**), the current sample (M = 39.16, SD = 22.80), had scores indicative of probable non-generalized SAD for 33 (63.4 %) participants and probable generalized SAD for 11 (21.2%) participants (per APA, 2000, criteria for SAD).

Assessments and Measures

See Appendix A for copies of all measures. Participants were asked to complete the following measures:

Demographics questionnaire (constructed by researcher). The demographics questionnaire asked participants to report their age, sex, religious preference, native language, race/ethnicity, and sexual orientation. Demographic features found to differentially relate to the dependent variables (see **Preliminary analyses**) were included as covariates in the main analyses.

Liebowitz Social Anxiety Scale (*LSAS; Liebowitz, 1987*) **self-report (SR) version**. The LSAS is a 24-item measure rated on two 4-point Likert-type scales. The LSAS assesses fear and avoidance in both social interaction (11 items; e.g., "going to a party") and performance situations (13 items; e.g., "giving a report to a group") over the past week. Scores ranging on the LSAS from 30-59 are indicative of probable non-generalized SAD. Scores greater than or equal to 60 are indicative of probable generalized SAD. Scores on the LSAS range from 0-144. The LSAS-SR has shown strong psychometric features (e.g., Fresco et al., 2001) that are comparable of the clinician-administered LSAS. The LSAS has demonstrated strong internal consistency (α = .96), convergent validity, and discriminant validity (e.g., Heimberg, Juster, Hope,

& Mattia, 1995). In the current sample, the LSAS demonstrated excellent internal consistency, α = .95.

State Trait Anxiety Inventory (*STAI*; *Spielberger1983*). The STAI is a 40-item self-report measure scored on a 4-point Likert-type scale. The STAI has two sections, which measure how the individual feels in the moment (i.e., state anxiety; e.g., "I feel tense") and how the individual generally feels (i.e., trait anxiety; e.g., "I worry too much over something that really doesn't matter"). Higher scores indicate higher levels of anxiety. Only the STAI-state (STAI-S) scale was administered in the study. Participants were asked to complete the measure based upon how they felt throughout the speech. The STAI-S has demonstrated strong internal consistency, Cronbach's αs ranging from .73-.86 (Spielberger, 1983). The STAI-S is correlated strongly with other measures of anxiety (e.g., Beck's Anxiety Inventory; Julian, 2011), supporting convergent validity of the measure. For the current study the STAI-S demonstrated excellent internal consistency, α = .95.

Fear of Positive Evaluation Scale (*FPES*; *Weeks, Heimberg, & Rodebaugh, 2008*). The 10-item FPES uses a 10-point Likert-type rating scale from 1(*not at all true*) to 9 (*very true*) and assesses trait levels of FPE (e.g., "I generally feel uncomfortable when people give me compliments"). Two reverse-scored items are included (for the purpose of potentially detecting response biases), but are not utilized in the calculation of the FPES total score. The FPES has demonstrated strong internal consistency (all αs > .80) in undergraduate (Weeks, Heimberg, & Rodebaugh, 2008; Weeks, Heimberg, Rodebaugh, & Norton, 2008) and clinical (Fergus et al., 2009;

Weeks, Heimberg, Rodebaugh, Goldin, & Gross, 2012) samples. The FPES has also demonstrated strong convergent and discriminant (Weeks, Heimberg, Rodebaugh, Norton 2008; Fergus et al., 2009), as well as factorial validity (Weeks, Heimberg, Rodebaugh, Norton, 2008). The original trait version of the FPES was included to measure the convergent validity of the revised state measure of FPE. The original FPE demonstrated acceptable internal consistency in the present study's sample, $\alpha = .79$.

Fear of Positive Evaluation Scale-state version *(FPES-s).* The FPES (Weeks, Heimberg, & Rodebaugh, 2008) was modified for the purposes of the present study (hereafter, the FPES-s) in order to assess *state* FPE experienced during the speech task (e.g., "I felt uncomfortable exhibiting my talents during the speech, even if I thought they were impressive") as opposed to *trait* FPE. Assessing state FPE was necessary for the study in order to analyze the effects of state SFA and FPE on state anxiety and PSP. The FPES-s demonstrated acceptable internal consistency in the present study ($\alpha = .68$). The FPES and the FPES-s were significantly related ($r[49] = .57$, $p < .01$), providing support for sufficient convergent validity.

Brief Fear of Negative Evaluation Scale-Straightforward Items **(***BFNE-S***).** The original BFNE (Leary, 1983) is a 12-item self-report measure of fear and distress related to negative evaluation from others (e.g., "When I am talking to someone, I worry about what they may be thinking about me"*).* Items are rated on a 5-point Likert-type scale from 1 (*Not at all accurate)* to 5 (*Extremely accurate).* Rodebaugh et al. (2004) and Weeks et al. (2005) have reported that the 8 straightforwardly-worded items are more reliable and valid indicators of FNE than the reverse-scored items in

undergraduate and clinical samples, respectively. Consequently, Rodebaugh, Weeks, and colleagues have suggested utilizing only the 8 straightforward (-S) BFNE items to calculate the total score. The BFNE-S has demonstrated excellent internal consistency (all αs > .92), factorial validity, and construct validity in undergraduate (Rodebaugh et al., 2004) and clinical (Weeks et al., 2005) samples. The original, trait version of the BFNE-S was included to measure the convergent validity of the revised state measure of FNE. The BFNE-S demonstrated excellent internal consistency, α = .93.

Brief Fear of Negative Evaluation Scale-Straightforward Items-state version **(***BFNE-S-s***)**. The BFNE-S was modified for the purposes of the study (hereafter, BFNE-S-s) in order to assess *state* FNE experienced during the speech task (e.g., "When I was giving my speech, I worried about what was being thought of me") as opposed to *trait* FNE. The BFNE-S-s demonstrated excellent internal consistency in this study (α = .93). The BFNES and the BFNES-s were significantly related (r[49] = .70, p < .01), providing support for sufficient convergent validity.

Perception of Speech Performance scale (*PSP; Rapee & Lim, 1992*). The PSP is a 17-point item questionnaire that assesses global (5 items; e.g. "Appeared Nervous") and specific (5 items; e.g., "Voice Quivered") components of a participants' PSP. Participants were asked to rate the extent that they agree with the various PSP scale statements about their speech from 0 (*not at all*) to 4 (*very much).* All specific and global items were summed to represent the participants' overall PSP, with higher scores representing greater negative perceptions of how one performed. The PSP scale has very good internal consistency for self-ratings in undergraduate

samples (e.g., Cronbach's α = .86; Webb, Ononaiye, Sheeran, Reidy, & Lavda, 2010). Participants were asked to complete the PSP scale following the delivery of their speech, with respect to their PSP. The PSP demonstrated excellent internal consistency in the present study, α = .91.

Focus of Attention Questionnaire (*FAQ; Woody, Chambless, & Glass, 1997*). The FAQ was used to assess SFA among participants. The FAQ is a 10-item questionnaire with two 5-item subscales: a *self-focus* subscale that measures the extent to which individuals focused on themselves during a social situation (e.g., "I was focusing on my internal bodily reactions [for example, heart rate]"), and an *external-focus* subscale that measures the extent to which individuals focused on the environment during a social situation (e.g. "I was focusing on what the other person was saying or doing"). The full measure was administered, but only the self-focus subscale (FAQ_{self}) was used for study analyses, because the current study used only a self-focused condition. Items were scored on a 5-point Likert type, 0 (*not at all*) to 5 (*totally*). Higher scores on the *self-focus* subscale indicate higher SFA. The self-focus subscale has demonstrated acceptable internal consistency in undergraduate samples (Cronbach's α = .82; Makkar & Grisham, 2011). Immediately following the speech task, participants were asked to complete the FAQ with respect to their experience during the speech. The FAQ demonstrated acceptable internal consistency in the present study (α = .74).

Center for Epidemiological Studies Depression Scale **(**CES-D; Radloff, 1977). The CES-D is a 20-item self-report measure of symptoms associated with

depression experienced over the past week (e.g., "I thought my life had been a failure"; "I felt that I could not shake off the blues even with help from my family or friends"). The CES-D items are rated on a 0 (*Rarely or none of the time*) to 3 (*Most or all of the time)* Likert-typed scale. The CES-D has been shown to have good psychometric properties (e.g., Devins et al., 1988). Since previous research has found significant overlap between social anxiety and depression (e.g., see Grös et al., 2007), the present study utilized scores obtained on the CES-D to test for the possible confounding effects of co-occurring depressive symptoms, thereby increasing the specificity of our obtained effects. The CES-D demonstrated good internal consistency in the present study, $\alpha = .87$.

Speech Topic Ratings (constructed by researcher). A two item questionnaire was created that asked participants to rate how familiar they were with their speech topic from 0 (*not at all familiar/ or knowledgeable*) to 10 (*very knowledgeable*) and how interested they were in the speech topic from 0 (*not at all interested*) to 10 (*very interested*).

Procedure

Upon arriving, participants were asked to give informed consent after a brief description of the study and an opportunity to ask questions. Of note, this description did not review elements of study-related deception (i.e., use of mirrors to elicit self-focus), which were disclosed during debriefing. The order in which participants then completed the following tasks were counterbalanced to control for ordering effects: (1) the battery of trait self-report questionnaires (i.e., demographics; trait BFNES; trait

FPES; LSAS; and CES-D) and (2) the speech task and related post-task state questionnaires (i.e., STAI-S; FAQ; BFNES-S-s; FPES-s; and PSP).

Speech task.

Participants were asked to deliver a four minute speech while standing at a podium. The researcher informed the participants that they would be given three minutes to prepare for a speech on a topic of their choosing, but that they would not be able to use notes during the speech. Participants presented their speech to the researcher who was trained to maintain neutral facial expression and body posture. A free standing mirror was used to implicitly elicit SFA. Previous research (e.g., Bögels, Rijsemus, & De Jong, 2002) has demonstrated that mirrors are an effective method of increasing SFA. Attached to the mirror was a note that read, in large font, "Do not remove, mirror is for donation" (e.g., see Gordon, 1998), thus providing a pretense for the presence of the mirror to reduce suspicion of experimental deception. The mirror was positioned so that the participants had a clear view of both the researcher observing the speech and the mirror, per prior suggestions involving SFA induction (Bögels & Mansell, 2004). Immediately following the speech task, participants were asked to complete the FAQ, STAI-S, BFNE-S-s, FPES-s, and PSP. Participants were then asked to complete the Speech Topic Ratings questionnaire.

Debriefing.

The researcher debriefed the participants once the speech task and all self-report measures were completed. The researcher asked participants if they detected deception, and if so, to explain their suspicions. One participant accurately reported

detection of mirror-related deception and was subsequently excluded from all analyses[2]. The purpose of the study, as well as disclosure of the use, nature, and purpose of the study-related deception (i.e., placement of the mirror) were explained to participants. All questions or concerns raised by participants were addressed.

Results

Preliminary Analyses

Preliminary analyses were conducted in order to test whether any assumptions of the statistical analyses were violated and to test for confounding variable effects.

Tests of normality. Assumptions of normality for parametric testing were tested for all continuous variables (i.e., SFA, state FNE, state FPE, trait FNE, trait FPE, state anxiety, depression, and PSP). Results from the Shapiro-Wilk test of normality indicated that state and trait FNE, state and trait FPE, and depression violated the assumption of normality in the present sample (all Ws $\leq .95$, all ps $< .05$). Depression, state and trait FNE, and state and trait FPE were square-root transformed. Normality was tested again using the transformed variables. Results indicated that depression, trait FNE, and state and trait FPE were normally distributed. State FNE, however, was still not normally distributed ($W = .95$, $p = .04$), with slight negative skewness of -.08 ($SE = 0.33$) and kurtosis of -1.04 ($SE = 0.66$). It is possible that the lack of normality in the distribution of state FNE scores is due to the nature of the social task; participants giving a speech may have tended to experience elevated levels of state FNE.

Sex differences. To test whether differences in participant-identified sex

existed among independent (i.e., state FNE, state FPE, and state SFA) and dependent variables (i.e., state anxiety and PSP), a series of independent samples *t-tests* were conducted. Bonferonni alpha corrections of .01 (.05/5) were implemented. A significant difference was found for state FNE ($t[50] = -2.36$ $p < .01$. $d = .81$), indicating that female participants ($M = 4.64$, $SD = 1.02$) experienced significantly higher FNE during the speech task than did males ($M = 3.98$, $SD = 0.58$).

Effects of ethnicity, religion, or sexual orientation. Three one-way analyses of variance (ANOVAs) were also performed to test whether independent and dependent variables differed significantly among participant ethnicity, religion, or sexual orientation. No significant omnibus effects were found among these variables (all Fs ≤ 2.00, all ps $\geq .13$, all η^2s $\leq .07$).

Depression. Five bivariate correlational analyses were conducted in order to test the possible confounding effects of depression on independent and dependent variables. Bonferroni alpha corrections of .003 (.05/15) were implemented in order to control for familywise error rate. No significant relationships existed between any main variables and depression (all ps $\geq .02$ see Table 1).

Speech interest and familiarity. In order to test whether any differences existed between participant-reported interest in their chosen speech topic and how familiar they were with that topic and independent (i.e., state SFA, state FNE, and state FPE) and trait social anxiety, four bivariate correlational analyses were conducted for both self-reported speech interest and familiarity. In order to control for familywise error rate, Bonferroni alpha corrections of .008 (.05/6) were implemented.

Results indicated that neither self-reported speech topic interest (all *p*s > .05) nor familiarity (all *p*s > .05) were significantly related to any independent or dependent variables.

Hypothesis 1

Bivariate correlation analyses were conducted using Bonferroni adjusted alpha levels of .003 (.05/15) to test the hypothesis that the relationships among state SFA, state FPE, state FNE, state anxiety, and PSP would be positive and significant. Contrary to the hypothesis state FPE and state anxiety were not significantly related ($r = .39$, $p > .003$). Consistent with the hypothesis, all other variables were significantly and positively correlated (all *r*s[49] ≥ .69, all *p*s ≤ .003; see Table 1).

Hypothesis 2

A linear multiple regression analysis was conducted to test the hypothesis that state SFA, state FNE, and state FPE would uniquely and significantly predict state anxiety following an impromptu speech task (see Table 2). Participant sex was included as a statistical covariate due to sex differences found for state FNE in preliminary analyses. The overall model was significant ($F[4,47] = 19.23$, $p < .01$, $R^2 = .62$). Consistent with the hypothesis, both greater state SFA ($\beta = .33$, $p = .03$) and state FNE ($\beta = .57$, $p < .01$) positively and uniquely predicted higher state anxiety. Contrary to the hypothesis, state FPE did not significantly predict state anxiety ($\beta = -.09$, $p = .43$). Participant sex also did not significantly predict state anxiety ($\beta = -.07$, $p = .44$).

Hypothesis 3

A linear multiple regression analysis was conducted to test the hypothesis that state SFA, state FNE, and state FPE would uniquely and significantly predict PSP following an impromptu speech task (see Table 3). Participant sex was included as a statistical covariate due to a significant relationship with state FNE found in preliminary analyses. The overall model was significant (F[4,47] = 15.17, $p < .01$, $R^2 = .56$). Consistent with the hypothesis, both state SFA (β = .41, $p = .01$) and state FNE (β = .36, $p = .04$) uniquely and positively predicted negative PSP. Inconsistent with the hypothesis, state FPE (β = .04, $p = .72$) did not uniquely predict participant PSP. Participant sex was also not a significant predictor of participant PSP (β = -.001, $p = .95$).

Hypothesis 4a

To test the hypothesis that trait social anxiety would moderate the relationship between SFA and state anxiety, such that the relationship would be stronger and more positive as trait social anxiety increased, a multiple regression analysis was utilized. Trait social anxiety and state SFA scores were mean-centered and were simultaneously entered into the equation, in addition to their interaction term. The overall model was significant (F [3,47] = 20.16, $p < .01$, $R^2 = .56$). There was a significant interaction effect for state SFA and trait social anxiety when predicting state anxiety (t[47] = -2.20, $p = .04$; see Table 4). Simple slopes analyses were conducted by testing interaction effects at the mean, and 1SD above and below the mean, of trait social anxiety. Consistent with the hypothesis, simple slopes analyses

revealed that at elevated levels of trait social anxiety (i.e., 1SD above mean levels of trait social anxiety), there was a positive and significant relationship between SFA and state anxiety, (β = .78 $p < .01$; see Figure 1). At mean levels of trait social anxiety, this relationship was weaker, but remained positive and significant (β = .55 $p < .01$). At lower-than-average levels of trait social anxiety (i.e., 1 SD below mean levels of trait social anxiety), the relationship was remained positive, but was weaker and no longer significant (β = .32 $p = .08$).

Hypothesis 4b

To test the hypothesis that trait social anxiety would moderate the relationship between SFA and PSP, such that the relationship would be stronger and more positive as trait social anxiety increased, a multiple regression analysis was utilized. Trait social anxiety and state SFA scores were mean-centered and were simultaneously entered into the equation, in addition to their interaction term. The overall model was significant (F [3,47] = 19.75, $p < .01$, $R^2 = .53$; see Table 5). Contrary to the hypothesis, there was no significant interaction effect between trait social anxiety and state SFA when predicting participant PSP (t[47] = -1.25, $p = .22$).The non-significant interaction term was removed to test whether trait social anxiety and/or state SFA uniquely and significantly predicted negative participant PSP. The overall model was statistically significant (F[2,48] = 28.50, $p < .01$, $R^2 = .54$). Results indicated that both state SFA (β = .60, $p < .01$) and trait social anxiety (β = .23, $p = .04$) uniquely and significantly predicted more negative PSP.

Discussion

The current study extended previous work on the effects of fears of evaluation versus SFA on both (a) state anxiety and (b) PSP among college students. The present study is the first to simultaneously evaluate the effects of state fears of evaluation (i.e., both FNE and FPE) and SFA on state anxiety and PSP. Results indicated that state FNE and SFA may be uniquely related to speech-related anxiety and PSP, and more robustly related to state anxiety and PSP than state FPE. Specifically, greater SFA and state FNE, but not state FPE, predicted greater anxiety experienced during the speech task. This finding is similar to those found by previous research, which has consistently found relationships between SFA and anxiety experienced during speeches (Woody, 1996; Woody & Rodriguez, 2000), as well as between FNE and state anxiety in interaction tasks (Jakymin & Harris, 2012).

It was hypothesized that SFA, state FNE, and state FPE would each uniquely predict PSP. Our results suggest that there are positive relationships between SFA and PSP, such that greater SFA predicted more negative PSP. These results suggest that SFA is a key contributor to how individuals perceive how they are performing in social situations. This finding is inconsistent with previous research (e.g., Woody 1996; Woody and Rodriguez, 2000), which alternatively found no relationship between SFA and PSP. This inconsistency may be due to differences in the nature of the speech tasks, such that Woody and colleagues (1996; 2000) asked participants to talk about their own anxiety or the anxiety of another participant. The present study asked participants to deliver an impromptu speech about a single topic of their

choosing. Being instructed to discuss the anxiety symptoms they are currently experiencing may be less performance-based, as well as less naturalistic, than a speech task that asked participants to choose and discuss a topic—thereby affecting perceived speech performance. Further, whereas the present study asked participants to rate their PSP using a well-established scale, the studies by Woody (1996) and Woody and Rodriguez (2000) used a 0-100 scale that asked participants to rate how well they performed. The current study used a measure of PSP that included both specific and global self-perceptions of speech performance.

Results also indicated that greater FNE experienced during the speech was related to poorer self-ratings of speech performance. This finding is in line with previous data (e.g., Rapee & Lim, 1992) that has demonstrated a positive relationship between *trait* FNE and negative PSP. This is the first study to the author's knowledge that has assessed the relationship between *state* FNE and PSP—providing further support for the idea that both state and trait aspects of FNE are important in individuals' PSP.

In addition, the present study is the first to examine the relationship between state FPE and both state anxiety and PSP. State FPE was significantly related to PSP; however, state FPE was not significantly related to neither state anxiety nor PSP when accounting for SFA and state FNE. Thus, results suggest that state FPE may not be a key contributor to anxiety experienced during public speeches and PSP when accounting for state FNE and SFA; however, further investigation is necessary. One possible explanation for this null finding could be that the FPES-s contained items

about hypothetical scenarios (e.g., "If I had received a compliment on my speech, I would not want others to overhear it."). By having participants rate conditional statements, rather than their actual experiences during the speech, the construct of state FPE may not have been adequately assessed. Further, the null findings with respect to state FPE may be due to the fact that the present study used an unselected sample with regard to social anxiety symptoms. Although FPE is not unique to individuals with SAD (Weeks & Howell, 2014), the anxiety-inducing effects of FPE may be particularly stronger in SAD patient samples. The present study did not specifically recruit individuals with SAD, and therefore state FPE may have not been as strong of a predictor of state anxiety or PSP in our sample.

In addition to the above findings, moderation analyses indicated that *trait* social anxiety moderated the relationship between SFA and state anxiety, but not SFA and perception of speech performance. Specifically, the positive relationship between SFA and state anxiety was stronger for individuals with higher trait social anxiety symptoms, but was weak and nonsignificant for individuals with low trait social anxiety. Thus, SFA may be a key contributor to anxiety experienced in social situations, particularly for highly socially anxious persons. This finding is inconsistent with the findings of several studies (e.g., Bögels and Lamers, 2002; George & Stopa, 2008; Jakymin & Harris, 2012; Woody, 1996; Woody & Rodriguez, 2000) that found that increased SFA was related to increased anxiety, but that this relationship was not stronger in highly socially anxious individuals. One possible explanation for this is the difference in the way in which SFA has been manipulated among these studies. For

example, Bögels and Mansell (2004) propose that studies that are assessing the effects of SFA on social anxiety must use methodology that does not directly elicit FNE. All of the studies referenced above used SFA manipulations that may have directly elicited FNE (e.g., video cameras) or with lower ecological validity (e.g., reading from a script). Therefore, it would be expected to find dissimilar results, given the way SFA was elicited in the present study (e.g., mirrors).

With regard to the nonsignificant interaction found between trait social anxiety symptoms and SFA when predicting perception of speech performance, it may be that greater SFA may contribute to more negative PSP regardless of social anxiety severity. In line with previous research (e.g., Rapee & Lim, 1992), trait social anxiety uniquely and significantly predicted how participants perceived their social performance after accounting for SFA.

These findings provide support for Clark and Wells' (1995) cognitive-behavioral model of social anxiety. Specifically, the present study provides support that SFA is a unique contributor to anxiety, especially in individuals who are highly socially anxious. Both Clark and Wells (1995) and Heimberg, Brozovich, and Rapee (2010) suggest that the psychotherapeutic strategies employed to treat SAD should be based on the cognitive biases involved in the maintenance of the disorder. Our finding that SFA contributes to state anxiety supports the notion that the treatment of SAD should include interventions aimed to decrease SFA to improve social anxiety symptoms (Woody, Chambless, & Glass, 1997).

The finding that state FNE is a robust predictor of state anxiety provides support for the Heimberg, Brozovich, and Rapee (2010) model that socially anxious individuals are also focused on scanning the environment for cues of evaluation in addition to focusing their attention inward (i.e. SFA).

There are also limitations and future directions that warrant consideration. First, participants were recruited irrespective of social anxiety status. Moderation analyses did reveal that the relationships between SFA and state anxiety were stronger for individuals with higher social anxiety traits. However, future work with clinical and healthy controls samples will help to delineate this relationship more clearly. Lastly, the vast majority of the participants were female, white, heterosexual, and between 18-22 years of age. Replication of results is needed among more diverse groups, in order to generalize the present study's findings to various genders, ethnicities, sexual orientations, and age groups.

In summary, this study addressed overlapping relationships among SFA, state FNE, state anxiety, self-rated PSP, and for the first time, state FPE. Moreover, this study addressed the inconsistent findings of previous research on the role of trait social anxiety in the relationship between SFA and state anxiety; specifically, trait social anxiety impacted the relationship between SFA and state anxiety in the present study. These findings provide further support that SFA may have particularly impactful effects on distress for highly socially anxious, versus low socially anxious, individuals. Understanding the cognitive-affective biases underlying SAD will lead to more effective prevention and treatment for this debilitating disorder.

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Table 1

Bivariate Correlations of Independent and Dependent Variables (n = 52)

Variable	1	2	3	4	5
1. Self-focused attention	-----				
2. State fear of negative evaluation	**.78**	------			
3. State fear of positive evaluation	**.49**	**.57**	------		
4. State anxiety	**.72**	**.76**	.39	------	
5. Speech performance perception	**.71**	**.70**	**.45**	**.86**	------
6. Depression	.24	.16	.23	.16	.18

Note. **Bold** = $p < .003$ (Bonferroni-corrected $\alpha = .05/15 = .003$); State fear of negative evaluation and state fear of positive evaluation were square-root transformed.

Table 2

Linear Regression Model of Self-focused Attention, Fear of Negative Evaluation, Fear of Positive Evaluation, and Participant-Identified Sex Predicting State Anxiety (n = 52)

Variable	F	R^2	β	t	P	sr^2
	19.23	**.62**			**.000**	
Participant sex [a]			-.07	-.79	.44	<.001
Self-focused attention			**.33**	**2.30**	**.03**	**.06**
State fear of negative evaluation			**.57**	**3.62**	**.001**	**.09**
State fear of positive evaluation			-.09	-.79	.43	<.001

Note. **Bold** = $p < .05$; [a] Males were coded as 1 and females as 2; State fear of negative evaluation and state fear of positive evaluation were square root transformed.

Table 3

Linear Regression Mode of Self-focused Attention, Fear of Negative Evaluation, Fear of Positive Evaluation, and Participant-Identified Sex Predicting Perception of Speech Performance (n = 52)

Variable	*F*	R^2	β	*t*	*P*	sr^2
	15.17	**.576**			**.000**	
Participant sex [a]			-.01	-.07	.95	<.001
Self-focused attention			**.41**	**2.66**	**.01**	**.09**
State fear of negative evaluation			**.36**	**2.13**	**.04**	**.03**
State fear of positive evaluation			-.04	.36	.72	<.001

Note. **Bold** = $p < .05$; [a] Males were coded as 1 and females as 2; State fear of negative evaluation and state fear of positive evaluation were square root transformed.

Table 4

Moderational Effects of Trait Social Anxiety on Self-focused Attention When Predicting State Anxiety (n = 52)

Variables	*F*	Δ*R2*	*t*	*β*	*SE*	*p*
	20.16	**.56**				**<.001**
Trait Social Anxiety			**2.20**	**.25**	**.07**	**.03**
Self-focused attention						
Low trait social anxiety			1.77	.32	.48	.08
Average trait social anxiety			**4.78**	**.55**	**.31**	**<.001**
High trait social anxiety			**6.00**	**.78**	**.35**	**<.001**
Trait social anxiety x self-focused attention			**-2.15**	**-.22**	**.01**	**.04**

Note: **Bold** = $p < .05$; Trait social anxiety is mean centered; Low and high levels of trait social anxiety is equal to one standard deviation above/below mean levels of trait social anxiety.

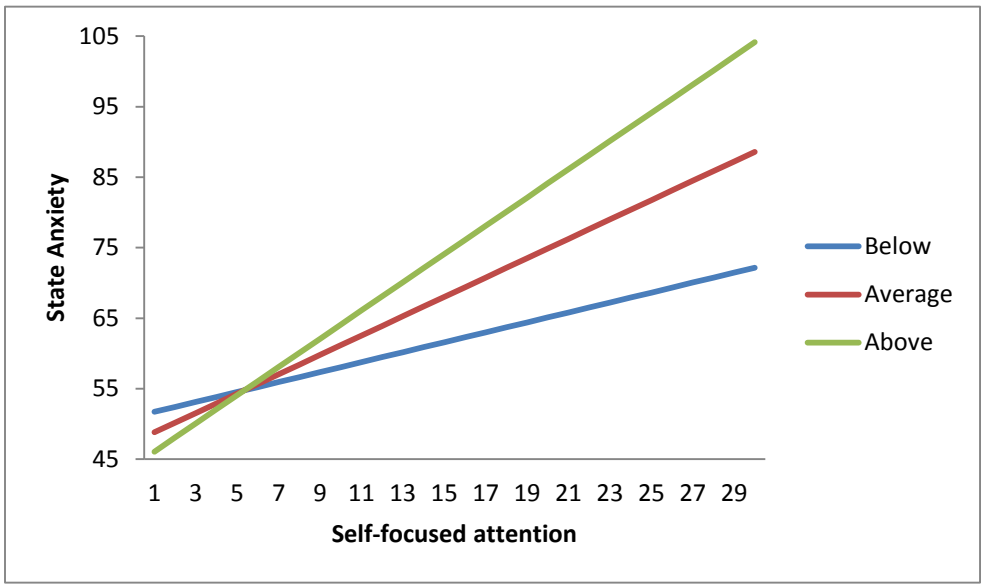
Table 5

Linear Regression Model of Self-focused Attention and Trait Social Anxiety Predicting Speech Performance Perception (n = 52)

Variable	*F*	R^2	β	*t*	*p*	sr^2
		.54			**.000**	
Self-focused attention			**.60**	**5.50**	**<.001**	**.29**
Trait Social Anxiety			**.23**	**2.10**	**.04**	**.04**

Note. **Bold** = $p < .05$.

Figure 1


105
95
85
75
65
55
45
State Anxiety
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29
Self-focused attention
Below
Average
Above

Footnotes

[1] One participant was 35 years of age. If removed from analyses, state FNE was no longer a robust contributor to PSP (hypothesis 3), SFA predicted state anxiety at low levels of trait social anxiety (hypothesis 4a), and trait social anxiety was not a significant predictor of PSP (hypothesis 4b).

[2]This participant was excluded from analyses due to detecting the mirror as being a part of the study. This participant, however, did not significantly affect results in analyses.

Appendix A

Demographics Questionnaire

Age: _____

Sex (Circle):

Female

Male

Intersex

Ethnicity/Race (circle):

White

Black or African American

Latino

_____

American Indian or Alaskan Native

Asian

Native Hawaiian or Pacific Islander

Other (specify) _____

Primary Language (circle)

English

Spanish

other (specify)

Sexual Orientation (circle):

Exclusively heterosexual

Bisexual

Exclusively homosexual

Unsure/Questioning

_____

Orientation not included above (please write): _____

Religion (circle)

Protestant

Catholic

Jewish

Other (specify)

LIEBOWITZ SOCIAL ANXIETY SCALE (LSAS)

FEAR OR ANXIETY	AVOIDANCE
0 = None	***0 = Never (0% of the time)***
1 = Mild/Tolerable	***1 = Occasionally (1-33% of the time)***
2 = Moderate/Distressing	***2 = Often (33-67% of the time)***
3 = Severe/Disruptive	***3 = Usually (67-100% of the time)***

	ANXIETY (S)	ANXIETY (P)	AVOID (S)	AVOID (P)
Telephoning in public (P)		1a)		1b)
Participating in small groups (P)		2a)		2b)
Eating in public places (P)		3a)		3b)
Drinking with others in public places (P)		4a)		4b)
Talking to people in authority (S)	5a)		**5b)**	
Acting, performing or giving a talk in front of an audience (P)		6a)		6b)
Going to a party (S)	7a)		**7b)**	
Working while being observed (P)		8a)		8b)
Writing while being observed (P)		9a)		9b)
Calling someone you don't know very well (S)	10a)		**10b)**	
Talking with people you don't know very well (S)	11a)		**11b)**	
Meeting strangers (S)	12a)		**12b)**	
Urinating in a public bathroom (P)		13a)		13b)

Entering a room when others are already seated (P)		14a)		14b)
Being the center of attention (S)	15a)		**15b)**	
Speaking up at a meeting (P)		16a)		16b)
Taking a test (P)		17a)		17b)
Expressing a disagreement or disapproval to people you don't know very well (S)	18a)		**18b)**	
Looking at people you don't know very well in the eyes (S)	19a)		**19b)**	
Giving a report to a group (P)		20a)		20b)
Trying to pick up someone (P)		21a)		21b)
Returning goods to a store (S)	22a)		**22b)**	
Giving a party (S)	23a)		**23b)**	
Resisting a high pressure salesperson (S)	24a)		**24b)**	
Total Performance (P) Subscore				
Total Social (S) Subscore				
TOTAL SCORE				

DIRECTIONS:

Imagine how you felt during the speech. Read each statement and then circle the appropriate number to the right of the statement to indicate how you felt **during the speech**. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best

	NOT AT ALL	SOMEWHAT	MODERATELY SO	VERY MUCH SO
1. I felt calm	1	2	3	4
2. I felt secure	1	2	3	4
3. I was tense	1	2	3	4
4. I felt strained	1	2	3	4
5. I felt at ease	1	2	3	4
6. I felt upset	1	2	3	4
7. I was presently worrying over possible misfortunes	1	2	3	4
8. I felt satisfied	1	2	3	4
9. I felt frightened	1	2	3	4
10. I felt comfortable	1	2	3	4
11. I felt self-confident	1	2	3	4
12. I felt nervous	1	2	3	4
13. I was jittery	1	2	3	4
14. I felt indecisive	1	2	3	4
15. I was relaxed	1	2	3	4
16. I felt content	1	2	3	4
17. I was worried	1	2	3	4
18. I felt confused	1	2	3	4
19. I felt steady	1	2	3	4
20. I felt pleasant	1	2	3	4

FPES-s

Read each of the following statements carefully and indicate the degree to which you feel the statement reflects how you felt **during the speech task.** Rate each item from 0 to 9.

0	1	2	3	4	5	6	7	8	9
Not at all True				**Somewhat true**					**Very True**

1. I felt uncomfortable exhibiting/describing my talents during the speech, even if I thought my talents would impress the audience. ___
2. It would have made me anxious to receive a compliment about my speech. ___
3. I would have felt uneasy if I had received praise from the researcher. ___
4. If I had something interesting to say during the speech, I said it. ___
5. If I had received a compliment on my speech, I would not want others to overhear it. ___
6. I wondered if I was doing “too well” during the speech. ___
7. I didn’t like being the center of attention during the speech, even if I felt like I was being admired. ___
8. I would have preferred to be complimented about the positive qualities of my speech. ___

Original FPES

Read each of the following statements carefully and select the appropriate numbered response on the scale provided to indicate the degree to which you feel the statement is characteristic of you. For each statement**, respond as though it involves people that you do not know very well.** Rate each situation from 0 to 9.

0	1	2	3	4	5	6	7	8	9
Not at all True				**Somewhat true**					**Very True**

1. I am uncomfortable exhibiting my talents to others, even if I think my talents will impress them.
2. It would make me anxious to receive a compliment from someone that I am attracted to.
3. I try to choose clothes that will give people little impression of what I am like.
4. I feel uneasy when I receive praise from authority figures.
5. If I have something to say that I think a group will find interesting, I typically say it.
6. I would rather receive a compliment from someone when that person and I were alone than when in the presence of others.
7. If I was doing something well in front of others, I would wonder whether I was doing “too well”.
8. I generally feel uncomfortable when people give me compliments.
9. I don’t like to be noticed when I am in public places, even if I feel as though I am being admired.
10. I often feel under-appreciated, and wish people would comment more on my positive qualities.

Original BFNE

Read each of the following statements carefully and indicate how characteristic it is of you. Select the appropriate numbered response on the scale provided to indicate how characteristic the statement is of you.

1 = **Not at all** characteristic of me
2 = **Slightly** characteristic of me
3 = **Moderately** characteristic of me
4 = **Very** characteristic of me
5 = **Extremely** characteristic of me

1. I worry about what other people will think of me even when I know it doesn't make a difference.
2. I am unconcerned even if I know people are forming an unfavorable impression of me.
3. I am frequently afraid of other people noticing my shortcomings.
4. I rarely worry about what kind of impression I am making on someone.
5. I am afraid that others will not approve of me.
6. I am afraid that people will find fault with me.
7. Other people's opinions of me do not bother me.
8. When I am talking to someone, I worry about what they may be thinking about me.
9. I am usually worried about what kind of impression I make.
10. If I know someone is judging me, it has little effect on me.
11. Sometimes I think I am too concerned with what other people think of me.
12. I often worry that I will say or do the wrong things.

BFNE-S-s

Read each of the following statements and carefully indicate how you felt **during the speech** according to the following scale:

1 = **Not at all true**
2 = Slightly true
3 = Moderately true
4 = Very true
5 = Extremely true

____ 1. I worried about what was thought of me during the speech, even when I knew that there was no direct consequence.

_____ 2. I was unconcerned during the speech, even if I thought an unfavorable impression was being formed of me.

_____ 3. I was afraid my shortcomings were being noticed during the speech.

_____ 4. I wasn't worried about what kind of impression I was making during the speech.

_____ 5. I was afraid I would not be approved of as a result of my speech.

_____ 6. I was afraid that fault would be found with me as I delivered my speech.

_____ 7. The audience's opinion of me did not bother me.

_____ 8. I worried about what was being thought about me during the speech.

_____ 9. I was worried about the kind of impression I was making during the speech.

_____ 10. Even if I thought I was being judged as I delivered my speech, it had little effect on me.

_____ 11. I think I was too concerned with what was being thought of me as I delivered my speech.

_____ 12. I worried that I was going to say or do the wrong things during my speech.

PSP

We would like you to rate yourself on the features listed below. For each feature, fill in the circle for the appropriate number to indicate how you felt you actually performed during the speech. Your evaluation will remain confidential.

	not at all	slightly	moderately	much	very much
1. My statements were understandable	⓪	①	②	③	④
2. I kept eye contact with audience	⓪	①	②	③	④
3. I stuttered	⓪	①	②	③	④
4. I had long pauses of more than 5 seconds	⓪	①	②	③	④
5. I fidgeted	⓪	①	②	③	④
6. I "um"ed and "ah"ed	⓪	①	②	③	④
7. I had a clear voice	⓪	①	②	③	④
8. I seemed to tremble or shake	⓪	①	②	③	④
9. I sweated	⓪	①	②	③	④

10. I blushed	⓪	①	②	③	④
11. My face twitched	⓪	①	②	③	④
12. My voice quivered	⓪	①	②	③	④
13. I appeared confident	⓪	①	②	③	④
14. I appeared nervous	⓪	①	②	③	④
15. I kept audience interested	⓪	①	②	③	④
16. I generally spoke well	⓪	①	②	③	④
17. I made a good impression	⓪	①	②	③	④

Additional Concerns:

18. _____	⓪	①	②	③	④
19. _____	⓪	①	②	③	④

Now please go back and *circle* the number of the item or items that are of most importance to you (circle all that concern you).

FAQ

Please circle the number on the scale below *each* question that best corresponds to your experience during the preceding exercise.

1 = Not at all
2 = Somewhat
3 = To a moderate degree
4 = Mostly
5 = Totally

1. **I was focusing on the other person's appearance or dress.**

   ⓪ ① ② ③ ④ ⑤

2. **I was focusing on the features or conditions of the physical surroundings (e.g., appearance, temperature).**

   ⓪ ① ② ③ ④ ⑤

3. **I was focusing on what I would say or do next.**

   ⓪ ① ② ③ ④ ⑤

4. **I was focusing on the impression I was making on the other person.**

   ⓪ ① ② ③ ④ ⑤

5. I was focusing on how the other person might be feeling about himself/herself.

⓪ ① ② ③ ④ ⑤

6. I was focusing on what I thought of the other person.

⓪ ① ② ③ ④ ⑤

7. I was focusing on my level of anxiety.

⓪ ① ② ③ ④ ⑤

8. I was focusing on what the other person was saying or doing.

⓪ ① ② ③ ④ ⑤

9. I was focusing on my internal bodily reactions (for example, heart rate).

⓪ ① ② ③ ④ ⑤

10. I was focusing on past social failures.

⓪ ① ② ③ ④ ⑤

CES-D

Instructions: Below is a list of some of the ways you may have felt or behaved. Please indicate how often you have felt this way during the past week by checking the appropriate space.

During the past week	**Rarely or none of the time (less than 1 day)**	**Some or a little of the time (1–2 days)**	**Occasionally or a moderate amount of the time (3–4 days)**	**Most or all of the time (5–7 days)**
1. I was bothered by things that usually don't bother me.				
2. I did not feel like eating; my appetite was poor.				
3. I felt that I could not shake off the blues even with help from my family or friends.				
4. I felt that I was just as good as other people.				
5. I had trouble keeping my mind on what I was doing.				
6. I felt depressed.				

During the past week	**Rarely or none of the time (less than 1 day)**	**Some or a little of the time (1–2 days)**	**Occasionally or a moderate amount of the time (3–4 days)**	**Most or all of the time (5–7 days)**
7. I felt that everything I did was an effort.				
8. I felt hopeful about the future.				
9. I thought my life had been a failure.				
10. I felt fearful.				
11. My sleep was restless.				
12. I was happy.				
13. I talked less than usual.				
14. I felt lonely.				
15. People were unfriendly.				
16. I enjoyed life.				
17. I had crying spells.				

During the past week	**Rarely or none of the time (less than 1 day)**	**Some or a little of the time (1–2 days)**	**Occasionally or a moderate amount of the time (3–4 days)**	**Most or all of the time (5–7 days)**
18. I felt sad.				
19. I felt that people disliked me.				
20. I could not get "going."				
Total Score:				