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**ATTENTIONAL FOCUS AND INTRINSIC VALUES
IN SOCIALLY ANXIOUS INDIVIDUALS**

A Thesis in

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by

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ABSTRACT

Self-focus during social interactions increases anxiety, whereas task-focus decreases anxiety in socially anxious individuals. Socially anxious individuals not only show heightened self-focus compared to non-anxious controls, but they also fear negative evaluation from others and are concerned about external outcomes of performance. Recent research indicates that instructions to focus on the external task rather than on oneself decreases the amount of anxiety experienced during a social interaction. The present study aimed to replicate the results for self-focus and task-focus, and to explore the effects of intrinsic values on social anxiety. Contrary to predictions, results indicated that attentional focus instructions did not affect participants' self-reported anxiety. Furthermore, the self-focus group (and to a limited degree, the task-focus group) reported feeling greater competence and engaging in more positive behaviors than the intrinsic focus group did during the interaction task. Exploration of the unanticipated findings and implications for future research were discussed.

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INTRODUCTION

Socially anxious and non-anxious individuals attend to the environment in characteristically different ways. Individuals with social anxiety experience increased self-focus relative to non-anxious controls when they are in social interactions (e.g., Hope, Gansler, & Heimberg, 1989). Socially anxious individuals have also been shown to have heightened fear of negative evaluation from others (Rapee & Heimberg, 1997), negative self-evaluative bias about performance in social situations (Ashbaugh, Antony, McCabe, Schmidt, & Swinson, 2005), and greater public self-consciousness (Bruch & Heimberg, 1994). Each of these characteristics reflects fears about the extrinsic outcome of their social performance.

The Maintenance Factors in Social Anxiety

Preliminary research on self-focus in anxiety stemmed from Eysenck's (1988) hypothesis that individuals high in anxiety have a greater propensity to be preoccupied with worries, and are therefore more likely to be distracted from the task at hand by internal anxiety-related activity when compared to non-anxious controls. Studies (e.g., Daly, Vangelisti, & Lawrence, 1989; Hope, Heimberg, & Klein, 1990) have found that socially anxious individuals indeed recalled less information with more errors and reported more negative self-focused thoughts than non-anxious controls during social interactions. Mellings and Alden (2000) extended such results when they found that recall was inferior in highly self-focused individuals. There is also evidence for an attentional bias in socially anxious individuals. When completing a modified dot-probe task with positive/negative/neutral faces and household objects, socially anxious individuals avoided emotional facial expressions (i.e., response times to probes in the

same location as an emotional face were slower than response times to probes in the same location as household objects) when a social evaluative component was present (i.e., participants were told that they would have to give a speech and be evaluated on performance after completing the dot-probe task; Mansell, Clark, Ehlers, and Chen, 1999).

Although the prior studies support the hypothesis of greater self-focus and less external focus in socially anxious individuals, Mansell, Clark, and Ehlers (2003) were able to measure internal and external attentional focus directly and concurrently using another probe detection task. Participants were asked to detect two types of probes (internal and external). The external probe (a dot) was superimposed on a computer picture of an object (emotional faces or household objects). The “internal” probe was a series of pulses to the participants’ finger, which participants believed represented physiological changes in their bodies. When social threat was present (i.e., half of the participants were instructed that they would have to give a speech and that their performance would be rated by judges, whose facial images would appear in the probe detection task), socially anxious individuals preferentially attended to internal cues rather than external cues, as shown by responding faster to “internal” probes when compared to external probes. Taken together, the results indicate that socially anxious individuals have an attentional bias that is self-focused in nature.

Given prior research on attentional focus in socially anxious individuals (for a review of the literature, refer to Spurr & Stopa, 2002), Clark and Wells (1995) theorized that increased self-focused attention—including hypervigilance of internal anxiety cues, apprehension about poor performance, preoccupation with negative evaluation, and

physiological agitation—is a maintenance factor in social anxiety. Studies have also found that social scrutiny increases self-focus in socially anxious samples (e.g., Buss, 1980; Woody, 1996), and that increased self-focus correlated with a greater awareness of negative emotions, increased negative affect and poorer social self-efficacy (Kashdan & Roberts, 2004).

The increased self-focus in socially anxious individuals (e.g., Hackman, Surawy, & Clark, 1998; Melchior & Cheek, 1990) implies that they are more likely attuned to their internal cues of anxiety, and perceive their external appearance and performance to be congruent with the apprehension and fear that they are experiencing internally (Clark & Wells, 1995). Furthermore, Hackmann, Surawy, and Clark (1998) found that a preoccupation with one's appearance and a fear of negative evaluation were correlated with increased awareness of oneself from an observer point-of-view, or as Carver and Scheier (1978) describe it, an increased sense of public self-consciousness. Integrating both Eysenck's (1988) and Clark and Well's (1995) predictions, several investigators have found that individuals with greater social anxiety have higher rates of public self-consciousness and a decreased ability to shift attention away from themselves (Mor and Winqvist, 2002; Muraven, 2005).

We can extrapolate from the above research that a focus on external outcomes (e.g., the desire to perform well, to be liked by others, or to not embarrass oneself) increases one's self-focus on internal anxiety cues. Because a person's interpretations of these internal cues are negatively biased (e.g., rating one's performance worst than ratings given by objective observers) and socially anxious individuals are attending more to those internal cues, they are also more likely to perceive social threat (e.g., others

judging them negatively) and therefore experience greater anxiety in the social environment (Horley, Williams, Gonsalvez, & Gordan, 2004). This process thereby decreases the probability of approach behaviors toward social situations, because self-focused attention heightens anxiety of future social interactions and thus leads to greater avoidance of such interactions (the vigilance-avoidance hypothesis; Beck and Clark, 1997).

Evidence for Decreased Self-focus in the Treatment of Social Anxiety

Working from a model which conceptualizes increased self-focus as a maintenance factor in social anxiety, several studies have explored whether treatment for social anxiety is effective in decreasing self-focused attention and thus reducing the fear of negative social evaluation. Woody, Chambless, and Glass (1997) found that cognitive-behavioral treatment (CBT) for social anxiety did indeed decrease self-focused attention over time. Treatment gains, including decreased negative self-judgment and lessened fear of social situations, were significantly correlated with decreased self-focus. Woody et al.'s correlational findings support Clark and Wells's (1995) theory in which anxiety about social situations is associated with heightened levels of self-focus.

Extending Woody, Chambless, and Glass's (1997) findings, Wells and Papageorgiou (1998) found that socially anxious individuals who engaged in exposures to social situations with external-focus instructions (i.e., "By focusing attention on what is happening around you, you will become more confident and discover that your fears are not true.") had more treatment gains (decreased anxiety) than individuals who had exposure only. Wells and Papageorgiou concluded that greater external focus was effective in reducing social anxiety, but specific conclusions regarding the causal nature

of self-focus in social anxiety are more difficult to make. Because participants were given instructions that manipulated the degree of external focus rather than self-focus, the results only indirectly implicate degree of self-focus as a causal agent in social anxiety.

Causative Effects of Self-Focus on Social Anxiety

As discussed in the above findings, several investigators (e.g., Hofmann, 2000; Woody, Chambless, & Glass, 1997) have shown an association between heightened self-focus and social anxiety (with self-focus presumably acting as a maintenance factor) by demonstrating correlations between decreased self-focus and lessened social anxiety. These studies were not, however, directly examining a possible causal relationship between the two. Woody (1996) did manipulate the degree of self-focus in socially anxious individuals, and Woody and Rodriguez (2000) replicated the study with groups of socially anxious and non-anxious participants. In both studies, participants were divided into dyads and completed a task twice where they alternatively self-focused and externally focused on the environment. One person in each dyad played the active role, while the other person played the passive role. The active role participants were asked to give a speech to an audience about their own current anxious internal state (self-focus) and to give a speech about how they perceived their partner (external focus), while the passive role participants were asked to stand in front of the audience during the speeches. The passive role participants were externally focused when the speech was about their partner and self-focused when the speech was about them.

Woody (1996) found that when self-focus was heightened for both the active and passive role, participants reported greater anticipatory anxiety and anxious appearance, but only the passive participants reported greater anxiety once the speech task began. In

the Woody and Rodriguez (2000) study, no differential effects were found between the active and passive roles. However, all participants (socially anxious individuals and controls) experienced more anticipatory anxiety and felt more anxious during the task when self-focus was heightened. Although the results from Woody (1996) and Woody and Rodriguez (2000) implicate a causal role of self-focus in increasing social anxiety, methodological limitations restrict the studies' conclusions. In the external focus condition, although participants were shown to focus more on the external task (when compared to the self-focus condition), self-focus still did occur at similar rates to the time spent externally focused (as assessed by the Focus of Attention Questionnaire). Also, task instructions explicitly asked participants to think about internal cues of anxiety in both the self-focus and external focus conditions, an instruction which may have further confounded the manipulation (Przeworski, 2002).

Przeworski (2002) attempted to resolve the methodological ambiguities in manipulating the degree of self-focus in low and high socially anxious individuals. In a conversation task, participants were instructed to either focus on their own internal cues (self-focus), on the conversant's facial reactions (external conversant focus), or on the present conversation (external task-focus). For both low and high anxious individuals, self-focus increased anxiety from baseline, whereas the conversant-focus condition increased anxiety for high anxious participants only. The differential results in the conversant-focus condition may be indicative of the negative interpretative biases shown in socially anxious individuals for socially ambiguous situations and facial cues (e.g., Franklin, Huppert, Langner, Leiberg, & Foa, 2005; Hirsh & Clark, 2004; Lundh & Ost, 1996), such that they are more likely to see another person's facial reactions as being

negatively-valenced and perceive themselves as performing poorly. In the task-focus condition, high-anxious participants did not show increased levels of anxiety, but low-anxious individuals did become more anxious. Focusing on the conversant's facial reactions (wherein low anxious participants did not become more anxious) may be a more normative way for low anxious individuals to interact with others compared to focusing on the task or focusing on oneself. For high anxious individuals, self-focus and focus on the conversant caused increased levels of anxiety, whereas focus on the task was effective in reducing anxiety. For high anxious individuals, present moment task-focus (e.g., Baer, 2003; Borkovec, Alcaine, Behar, 2004; Teasdale, 2003, Rapee & Heimburg, 1997) may be instrumental in reducing anxiety.

Intrinsic Values as a Source of Attentional Focus

Given that present moment task-focus decreases anxiety for socially anxious individuals, we would like to explore whether intrinsic motivation coupled with task-focus can further decrease anxiety. As conceptualized by Ryan and Deci (2000), intrinsic motivation is defined as a drive to perform some activity because it is inherently interesting and pleasurable, rather than for an external outcome/reward (extrinsic goal). We can extrapolate that intrinsic motivation may be derived from one's own personal values. Therefore, a focus on one's intrinsic values may be particularly useful for socially anxious individuals, because it may decrease the anxiety that these individuals have regarding external outcomes of performance.

There is also some indication that a focus on one's intrinsic values may further reduce social anxiety because it involves an approach response rather than an avoidant response. As discussed by Carver (2001), approach and avoidance goals are closely

related to Gray's (1982) Behavioral Activation System (BAS) and Behavioral Inhibition System (BIS), and have been correlated with promotion (i.e., approach motivation focusing on "ideal goals") and prevention (i.e., avoidance motivation focusing on "ought goals") attentional focuses (Amodio, Shah, Sigelman, Brazy, & Harmon-Jones, 2004; See Carver & Scheier, 1998 for more information on promotion and prevention focus). Because socially anxious individuals fear that they will make a negative impression and therefore engage in a number of behaviors to avoid looking anxious, they are more likely to become even more anxious (e.g., Clark & Wells, 1995) and less likely to formulate approach goals. Indeed, Rodebaugh (2007) found that socially anxious individuals generated more specific avoidance goals than approach goals for a speech task, and Dickson and MacLeod (2004) also found that high anxious adolescents generated more avoidance goals and plans than non-anxious adolescents. Rodebaugh suggested that approach goals may be particularly important, given that they may serve not only to restrict the BIS but also facilitate the BAS.

Several studies have identified how specific approach and avoidance goals affect intrinsic motivation. Elliot and Harackiewicz (1996) found that avoidance-performance goals (e.g., "I do not want to fail at the task") decreased intrinsic motivation, whereas approach-performance (e.g., "I want to succeed at the task.") and mastery goals (e.g., "I want to excel at the task.") yielded similar rates of greater intrinsic motivation. Cury, Elliot, Sarrazin, De Fonseca, and Rufo (2002) did a follow-up to Elliot & Harackiewicz's (1996) study and were able to replicate the results, demonstrating greater intrinsic motivation to continue a task when approach-performance goals were adapted rather than avoidance-performance goals.

In addition to goal-type, attentional focus has been linked to intrinsic motivation. Plant and Ryan (1985) manipulated attentional focus and evaluated how different types of attention affected intrinsic motivation. Participants first completed the Self-Consciousness Scale (measuring trait or dispositional self-consciousness; Fenigstein, Scheier, & Buss, 1975), and through factor analysis participants were classified into groups characterized by low/high private self-consciousness, public self-consciousness, and social anxiety. Participants were then asked to complete three hidden-figure puzzle activities, with half the participants receiving an ego-involving induction (i.e., the task is a measure of creative intelligence) and half receiving a task-involving induction (i.e., giving instructions about the activity without mention of creative intelligence). Within the two inductions, self-awareness was manipulated by having an equal number of participants complete the task in a mirror condition, a video camera condition, or control condition. The mirror and video camera was used because Carver and Scheier (1978) and Froming, Walker and Lopyan (1982) found that both increased self-focus. The use of a mirror increased private self-consciousness, while public self-consciousness was increased by video camera (Pittman, Davey, Alafat, Wetherill, and Kramer, 1980). After completing the puzzles, participants completed a free-choice task (a measure of intrinsic motivation) in another room, where they had a choice to do whatever they wanted, including some additional puzzles.

Plant and Ryan (1985) found that those with greater dispositional public self-consciousness or social anxiety were less intrinsically motivated in all conditions. Both self-focus conditions (i.e., mirror and video camera) decreased intrinsic motivation relative to the control condition. Ego involvement also decreased intrinsic motivation

across all conditions, but more so in the self-focus conditions. Again, such results provide evidence that self-focus leads to less intrinsic motivation, as demonstrated by a decreased desire to continue a particular task. As we have seen in previously reviewed research and theory, Plant and Ryan suggested that self-focus may heighten internal states of anxiety by drawing attention to the quality of one's performance and emphasizing outcome and consequence of behavior (i.e., an extrinsic rather than intrinsic focus). This conclusion is congruent with the concept of evaluative anxiety which can decrease the inherent interest and joy in completing a particular task (Plant & Ryan, 1985).

In the above study (Plant & Ryan, 1985) as well as other previous research, intrinsic motivation was used as an outcome measure rather than as a manipulated construct. The present study is interested in determining whether the effect of intrinsic motivators can also be found in the opposite direction. We are specifically interested in testing whether intrinsic motivators may be used as a type of attentional focus (in interpersonal interactions) to decrease social anxiety by its reduction of attention to self, its increased attention to the external task, its increased drive to behaviorally approach the other person in a social interaction, and its reduced attention to external outcome. In other words, intrinsic values combined with external focus may be particularly useful in stimulating the behavioral activation system (BAS) rather than only restricting the behavioral inhibition system (BIS; Gray, 1982; Gray & McNaughton, 2001), and thus contributing to the development and strengthening of (non-threat) associations to anxiety-provoking stimuli (Borkovec, 2005).

Objectives and Hypotheses

Socially anxious individuals experience greater self-focus, which can be described as a relatively disproportionate focus on internal anxiety cues in social and performance situations. This self-focus has been shown to increase anxiety about social situations, because internal cues are used as evidence of poor external performance. Focus on the external task, on the other hand, decreases anxiety elicitation. In the present study, we evaluated whether focusing on intrinsic values (what participants inherently believe, at cognitive and affective levels, is important and valuable related to other individuals within the framework of their own self concept and perception) rather than focusing on a particular extrinsic outcome (e.g., for others to like them, to make a good impression, to perform well) would reduce anxiety during a social interaction, hypothetically by reducing negative self-focus and promoting cognitive, affective, and behavioral approach as well.

In the present study, socially anxious individuals were randomly assigned to one of four conditions during a conversation task: a self-focus condition (focus on their internal cues), a task-focus condition (focus on the conversation), an intrinsic-focus condition (focus on values related to other human beings), and a combination of the task-focus plus intrinsic-focus condition. From previous results, it was hypothesized that self-focus during the interaction would increase anxiety, whereas task-focus would eliminate any increase in anxiety. The intrinsic-focus condition was hypothesized to decrease anxiety during the conversation task, because a focus on one's values toward others would simultaneously interfere with attentional capacity for negative self-focus, reduce preoccupation with external outcomes, and generate anxiety-incompatible approach

behaviors. In the combined condition, participants were asked to complete a dual task by concurrently focusing on intrinsic values about others as well as the task at hand. Because both types of focus were separately predicted to decrease anxiety, a combination of the two may be additive or interactive in effect, thus yielding the least anxiety in the social interaction task. Alternatively, attentional load may be too high for this dual task. In this rival case, although anxiety may be reduced in comparison to the self-focus condition due to the reduction in self-focus inherent in both elements of the combination, this condition may not yield results superior to either element alone.

METHOD

Participants

Over three academic semesters, sixty-four individuals who met the selection criteria participated in the study for course extra credit. Participants completed the Social Interaction Anxiety Scale (SIAS; Mattick & Clark, 1998) and the Social Phobia Diagnostic Questionnaire (SPDQ; Newman, Kachin, Zuellig, & Constantino, 1997). For each of the semesters the study was conducted, individuals who scored more than three-fourths a standard deviation above the sample mean ($M=20.33$, $SD=12.09$; $M=19.57$, $SD=12.48$; $M=19.95$, $SD=10.95$) on the Social Interaction Anxiety Scale (SIAS; Mattick & Clark, 1998) were contacted to participate in the study. The SIAS was used to insure that those individuals high in social anxiety specifically experienced anxiety in social interactions, and the SPDQ was used as a supplementary measure of social anxiety.

The SIAS is a self-report measure with 20-items which evaluated an individual's reactions (i.e., cognitive, behavioral, and emotional) to social interactions with one or more individuals. Responses are formatted on a Likert-type scale from 0 ("not at all characteristic of me") to 4 ("extremely characteristic of me"). Three reverse-score items were transformed, and scores were then summed to determine the degree of social anxiety. Mattick and Clarke (1998) and Mattick, Peters, & Clarke (1989) found that the SIAS was sensitive to treatment change and had good reliability (alphas from .88-.93 and test-retest reliability, $r > .90$).

The SPDQ (Newman, Kachin, Zuellig, & Constantino, 1997) was constructed to include the Diagnostic and Statistical Manual-IV (DSM-IV; American Psychiatric Association, 2001) criteria for Social Phobia. To meet the criteria for Social Phobia, the

DSM-IV states that an individual must have a fear of social or performance situations, a fear that (s)he will act in an embarrassing manner, recognize that those fears are excessive, experience anxiety, and be avoidant of social or performance situations. Also, the avoidance and anxiety associated with social/performance situations must be disruptive or distressing to the individual's life.

Questions on the SPDQ (Newman, Kachin, Zuellig, & Constantino, 1997) assessed for excessive fear in social and evaluative situations, fear of embarrassment and/or being criticized, avoidance of social situations, degree of fear and avoidance in different social situations, and when and how consistent the fears occur. It was shown to have good internal consistency ($\alpha = .95$), test-retest reliability ($r = .83$), and both convergent and discriminant validity. Diagnostic inter-rater reliability ($\kappa = .66$) was demonstrated with the Anxiety Disorders Interview Schedule (ADIS-IV; Brown, DiNardo, & Barlow, 1994). Scores can range from 0-27 (see Newman et al. for the scoring procedure), with a score of 10.13 used as the conservative cut-off point for meeting diagnostic criteria on the measure.

Procedure

As part of the group screening for students taking an Introductory Psychology course, all participants completed the SPDQ, the SIAS, and a modified version of the Portrait Values Questionnaire (PVQ; Schwartz, Melech, Lehman et al., 2001). The PVQ was used to identify values that were congruent with intrinsic values toward other human beings. The PVQ was shown to have good convergent validity with the Schwartz Value Scale (SVS; Schwartz, 1992) and good test-retest reliability ($r = .66-.88$). The PVQ was modified to retain items that were intrinsic in nature, to exclude values that were extrinsic

in nature (i.e., related to an external outcome), and to add additional intrinsic items (created by the investigator based on research and theory of intrinsic values). Participants had to respond to value statements by rating the degree to which each statement was representative of them (i.e., “very much like me” to “not like me at all”). Responses to the PVQ were scored (i.e., for each value category, items were summed and then averaged) before participants arrived for the experiment, and participant responses were included in task instructions for two of the four conditions (i.e., IF and TFIF). Several ($n=2$) participants rated two value categories as equally important to them, so both values were incorporated into the instructions.

At the start of the experiment, participants were instructed to complete general demographic information, the Spielberger State-Trait Anxiety Inventory-State Version (STAI; Spielberger, Gorsuch, & Lushene, 1970), and the Subjective Units of Distress Scale (SUDS; Heimberg & Becker, 2002). The STAI-State version is a widely used measure and has been shown to have good psychometric properties (e.g., internal consistency $\alpha = .91$). The SUDS required participants to rate on a scale of 1-100 how anxious they felt at the moment. The STAI-State and SUDS were given to participants before and after the interaction task, and were used as the primary outcome measures for testing the study’s hypotheses.

All participants were then told that they would be completing a 5-minute video-taped role-play that involved having a conversation with a stranger. Standardized instructions asked the participants to imagine arriving at a dinner party, but none of their friends were there yet (Przeworski, 2002). Then participants were instructed to try to maintain conversation with an individual who would also be present at the dinner party.

In the role-play, participants were allowed to speak about any topic except the role-play task and the ongoing experiment.

Participants were randomly assigned to one of four conditions (i.e., self-focus, task-focus, intrinsic value focus, and a combination of task-focus and intrinsic value focus). In the self-focus (SF) condition, participants were given specific instructions to focus on their internal cues of anxiety and to be aware of their performance in the conversation. In the task-focus (TF) condition, participants were asked to focus on the present conversation (Przeworski, 2002). In the intrinsic-focus condition (IF), participants were asked to focus on interpersonally related values that were important to them (i.e., values related to other human beings) while they were interacting with the stranger. In the task-focus plus intrinsic-focus (TFIF) condition, participants were instructed to not only focus on the conversation but to keep in mind the personal values they held about other human beings. The specific values in the latter two conditions were derived from participants' responses on the modified PVQ. Those participants who were randomly assigned to the intrinsic-focus condition or the task-focus plus intrinsic-focus condition had their responses to the modified PVQ included as part of the task instructions (see Appendix A).

Scripted and standardized instructions for each condition were provided to participants depending on condition. These instructions were adapted and modified from Wells and Papageorgiou (1998) and Przeworski (2002). Of particular note, portions of the self-focus and task focus instructions were removed (see Appendix B) to eliminate potential demand characteristics on participants, minimizing the probability of

introducing confounding variables to the experiment. Below, instructions for each of the conditions are provided:

Self-Focus

“When people enter a feared social situation, they tend to focus their attention on themselves. For example, if you have anxiety symptoms, it is common to focus on what you are saying, your anxiety cues, and the impression you are making. When you behave in ways that demonstrate that you are nervous, it is likely that others will perceive your anxiety. During the upcoming conversation, we would like you to **really** focus your attention **only** on your anxiety cues. Closely monitor what you are doing and saying. Notice if your heart is beating quickly, if you are sweating, or have clammy hands. Focus on every movement that you make. Notice the position of your hands and whether you are using them while you are speaking. Be conscious of how you must appear to others and the impression you are making. Notice how your voice sounds and the expression on your face. Focus on whether you are stammering, the loudness of your voice, and whether your voice is faltering. Think about how you must look and sound to others. By paying attention to your internal experience, you will be more aware of the cues your body is giving you.”

Task-Focus

“When people enter a feared social situation, they tend to focus their attention on themselves. For example, if you have anxiety symptoms,

these symptoms become the center of your attention, and because they feel bad, you think that you must look bad. Focusing on yourself prevents you from paying attention to the conversation you are having. During the upcoming conversation, we would like you to **really** focus your attention **only** on the conversation and the topic you are discussing. Listen closely to what the other person is saying and consider your own opinions on the matter. Try to share similar experiences that you have had. Think about what you would like to know about the topic and the other things you would like to discuss. Consider the things that you would like to tell the other person and what questions you would like to ask. Allow yourself to say whatever comes into your head. Do what comes naturally without second-guessing it. Focus on the moment and lose yourself in the conversation. By paying attention to the topic of conversation and what the other person is saying, you will be more aware of what the other person is communicating.”

Intrinsic-Focus

“When people enter a feared social situation, they tend to focus their attention on themselves. For example, if you have anxiety symptoms, these symptoms become the center of your attention, and because they feel bad, you think that you must look bad. Focusing on yourself prevents you from wanting to interact with other people around you. During the upcoming conversation, we would like you to **really** focus your attention **only** on the values that you hold near and dear to your heart about other

human beings. As you are interacting with the other person, pay attention to the values of *[list values that were identified by participant to be salient in his/her life]*. Allow yourself to say whatever comes into your head, but focus on these values which inspire you to engage in conversations with another person. By paying attention to these important values of *[list values that were identified by participant to be salient in his/her life]*, you will be more aware of what you value about the individual in this interaction.”

Task-Focus plus Intrinsic-Focus

“When people enter a feared social situation, they tend to focus their attention on themselves. For example, if you have anxiety symptoms, these symptoms become the center of your attention, and because they feel bad, you think that you must look bad. Focusing on yourself prevents you from paying attention to the conversation you are having. During the upcoming conversation, we would like you to **really** focus your attention **only** on the conversation (e.g., the topic you are discussing), and then **periodically** remind yourself of the values that you hold near and dear to your heart about other human beings. You should pay attention to the values of *[list values that were identified by participant to be salient in his/her life]*. Listen closely to what the other person is saying and consider your own opinions on the matter. Try to share similar experiences that you have had. Think about what you would like to know about the topic and the other things you would like to discuss. Consider the things that

you would like to tell the other person and what questions you would like to ask. Allow yourself to say whatever comes into your head, but then remember to frequently focus on the values which inspire you to engage in conversations with another person. Do what comes naturally without second-guessing it. By paying attention to the conversation and then periodically regenerating these important values of *[list values that were identified by participant to be salient in his/her life]*, you will be more aware of what the other person is communicating and what you value about the individual in this interaction.”

Participants were asked to informally practice the task by focusing on either themselves, the current conversation, those values they identified as important (see Appendix A for the different values used in the instructions), or a combination of the conversation and identified values, while the experimenter spoke about an innocuous topic (scripted) for 30-seconds. Participants who confirmed that they understood the task and were able to deploy their attention in the way they were instructed moved on to the next portion of the experiment, while those who did not understand practiced further thirty-second trials until they did succeed with their instructed attentional deployment (i.e., only one participant needed to practice a second time).

Participants were taken to another room (12 feet x 12 feet) with one video camera set up in the far-left corner. They were asked to once again complete the SUDS. The role-play instructions were briefly reiterated to the participants, and they were told that while they waited for the task to begin (two-minute anticipatory period), they should think about their attentional focus and role in the task. After two-minutes, participants were

told that the task would begin as soon as they completed another SUDs and STAI-state questionnaire.

After the experimenter left the room with the questionnaires in hand, an opposite-sex confederate entered the room and greeted the participant. Confederates were trained in a standard protocol for the task, and consistency in performance was assessed by the experimenter before confederates took part in the study. Confederates included 11 research assistants (6 male) who were trained to act in a neutral manner, to converse with the participant but not to initiate or lead the majority of the conversation. Confederates were also given a prompt to use if 30-seconds passed without the participant saying anything (e.g., “Tell me more about ____ [Insert last topic of conversation]”).

Confederates were instructed to answer any participant questions with a short response (about 8-10 words or less) for the duration of the conversation task (Przeworski, 2002). While participants engaged in the interaction task, the experimenter viewed live video-feedback of the participant and confederate to insure that the protocol was maintained.

After 5-minutes, the experimenter knocked on the door and signaled the end of the task. The experimenter thanked both the confederate and the participant and asked that both individuals complete measures in separate rooms. Participants again completed the STAI-state portion of the scale and the SUDs. As a manipulation check, participants also indicated the percent of time they spent focusing on themselves, the conversation, and intrinsic values during the task and in typical conversation (Przeworski, 2002). A social phobia anxiety questionnaire (SPAQ; Hirsch, personal communication, November, 29, 2005)—which included a modified version of Mansell and Clark’s (1999) behavior checklist and selected questions about the participant’s performance and anxiety during

the interaction (Hirsch, Mathews, Clark, Williams, & Morrison, 2006)—was used to assess participants' subjective experience of their performance on the task and how they thought others would rate them. Finally, the participants completed selected items from the Intrinsic Motivation Inventory (IMI; e.g., Plant & Ryan, 1985; Ryan, 1982) assessing interest in the conversation, perceived competence, value/usefulness, relatedness, and value/tension.

The behavior checklist (Mansell and Clark, 1999) was shown to have high internal consistency ($\alpha = .93$), which included items assessing global positive behaviors (e.g., confident, interesting), global negative behaviors (e.g., embarrassed, awkward) and specific negative behaviors (e.g., sweating, voice quivering). For the IMI, participants rated the degree to which they enjoyed the conversation task and whether they would like to interact with their conversation partner again (i.e., an indication of a desire to behaviorally approach the other). McAuley, Duncan, and Tammen (1987) reported good internal consistency for the overall scale ($\alpha = .85$), adequate consistency for each of the individual sub-scales, and good construct validity.

RESULTS

There were a total of 64 participants, but each focus condition did not have an equal number of individuals. The reason for the unequal distribution was due to several participants not showing up for the experiment and also because we attempted to balance the proportion of males and females across each condition. Overall, there were more females ($n=44$) than males and many of the participants were Caucasian ($n=55$). However, these rates were consistent with the total sample eligible for the study. Initial analyses of participant scores on the SIAS [$F(3, 60)=.98, p=.41$] and SPDQ [$F(3, 58)=.57, p=.64$] revealed no significant differences amongst participants randomly assigned to the four focus conditions. Participants' demographic information is provided along with the means and standard deviations for the SIAS and SPDQ (see Table 1).

Table 1

Demographics of Sample

Variables	Group				Total (N=64)
	SF ($n=15$)	TF ($n=18$)	IF ($n=15$)	TFIF ($n=16$)	
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
% Male	33.3%	27.8%	33.3%	31.3%	31.3%
% Caucasian	80.0%	94.0%	86.7%	81.3%	87.3%
Age	18.69 (.75)	18.83 (.86)	18.73 (.88)	18.69 (.79)	18.74 (.81)
SIAS	37.27 (6.30)	36.22 (4.82)	40.40 (9.84)	39.31 (9.27)	38.22 (7.74)
SPDQ	13.27 (3.47)	11.43 (3.04)	11.82 (4.64)	12.22 (5.01)	12.12 (4.04)

For the participants randomly assigned to the intrinsic-focus and the combined task plus intrinsic focus conditions, results from the modified PVQ were analyzed. Items from each of the value categories were summed and then averaged. Scores could range from 1-6 (i.e., lower scores indicating that the value was more congruent with how the individual viewed him/herself). Participants across both conditions highly rated ($M=1.43$, $SD=.42$) the value category that they perceived as most important to them, and the mean ratings were not significantly different [$F(1,29)=3.05$, $p=.092$] between conditions. However, the intrinsic focus and the combined task plus intrinsic focus condition did differ in the particular values that they rated as most important. Of note, the majority of the participants in the intrinsic focus group chose hedonism ($n=9$), while most participants in the combined condition chose Universalism ($n=9$). See Table 2 for the frequency of each of the value categories used in the attentional focus instructions.

Table 2

Portraits Value Questionnaire

Variables	Group		
	IF ($n=15$)	TFIF ($n=16$)	Total
Benevolence	4	2	6
Universalism	1	9	10
Self-Direction	0	1	1
Stimulation	0	0	0
Hedonism	9	3	12
Stimulation & Hedonism	1	0	1
Self-direction & Universalism	0	1	1
PVQ (highest rated value)	$M=1.56$ ($SD=.50$)	$M=1.31$ ($SD=.31$)	$M=1.43$ ($SD=.42$)

All analyses pertaining to the outcome of the study were conducted after outliers were removed from the data (i.e., there were 0-3 outlying data points, depending on the measure).

Focus of Attention (%) Analysis

As a baseline measure, we examined the typical percentage (during an interaction) that participants across conditions spent focusing on themselves, the conversation (i.e., the task), and the values they had about others. There were no significant differences in the typical amount of time participants spent focusing on themselves [$F(3,56)=1.59$, $p=.201$], focusing on the conversation [$F(3,59)=1.06$, $p=.373$], or focusing on intrinsic values [$F(3, 59)=1.24$, $p=.304$]. Across focus conditions, participants typically focused on the conversation ($M=55.68$, $SD=18.62$) more than they focused on themselves ($M=24.75$, $SD=13.57$) or intrinsic values ($M=17.25$, $SD=11.30$).

We checked whether the manipulations were successful by examining participants' responses to the same attentional focus items used earlier (when inquiring about typical conversations), but asked them to think about the interaction task they had just completed (see Table 3). Each of the attentional focus items were analyzed separately using a one-way between subjects ANOVA. As expected, there was a significant main effect of focus condition [$F(3,57)=6.96$, $p<.001$] when we looked at the percentage of time spent self-focusing (including anxiety cues). Applying Tukey's HSD correction, post-hoc comparisons revealed that participants in the self-focus condition ($M=46$, $SD=21.81$) spent more time ($p\leq.01$) focusing on themselves than the participants in the task-focus ($M=26$, $SD=18.69$), intrinsic-focus ($M=19.23$, $SD=14.27$) and the combined task and intrinsic focus ($M=23.06$, $SD=12.68$) conditions.

Table 3

Percentage of Time Focusing on Self, Task, and Intrinsic Values

	Group			
	SF <i>M (SD)</i>	TF <i>M (SD)</i>	IF <i>M (SD)</i>	TFIF <i>M (SD)</i>
% Self-Focus	46 (21.81)	26 (18.79)	19.23 (14.27)	23.06 (12.68)
% Task-Focus	44.27 (22.16)	61.18 (21.18)	50.67 (26.18)	56.88 (16.82)
% Intrinsic-Focus	9.73 (10.54)	9.53 (5.89)	21.67 (14.72)	15.08 (12.35)

Then, we examined the percentage of time spent focusing on the task, but found that there were no significant differences amongst groups [$F(3,59)=1.82, p=.153$]. A planned comparison between the self-focus ($M=44.27, SD=22.16$) and the task-focus ($M=61.18, SD=21.18$) group, did however, reveal the expected difference [$t(30)=-2.21, p<.05$] between the two groups. As stated previously, participants indicated that they typically focused most of their attention on the conversation, and although the self-focus and task-focus instructions were robust enough to yield the expected difference between those conditions, the intrinsic focus instructions may have also promoted similar attention to the conversation along with intrinsic values, thereby not yielding a statistically significant difference (in regards to attending to the conversation) between the task-focus and intrinsic-focus groups (i.e., IF and TFIF focus conditions).

Finally, the percentage of time spent focusing on intrinsic values was analyzed. The homogeneity of variances assumption was violated (i.e., Levene's test was significant, $p<.05$), so a Kruskal-Wallis Test was used instead. Results indicated that there was a significant difference amongst conditions [$\chi^2(3)=11.76, p<.01$], with the self-focus ($M=9.73, SD=10.54$) and task-focus ($M=9.53, SD=5.89$) group attending less to

intrinsic values than the intrinsic-focus ($M= 21.67, SD=14.72$) and combined task and intrinsic focus condition ($M=15.08, SD=12.35$). With this additional check, we found that although the intrinsic group and task plus intrinsic focus groups did not differ on the amount of time spent focusing on the conversation when compared to the task-focus group, they did differ in how much time they spent focusing on intrinsic values, in the expected direction.

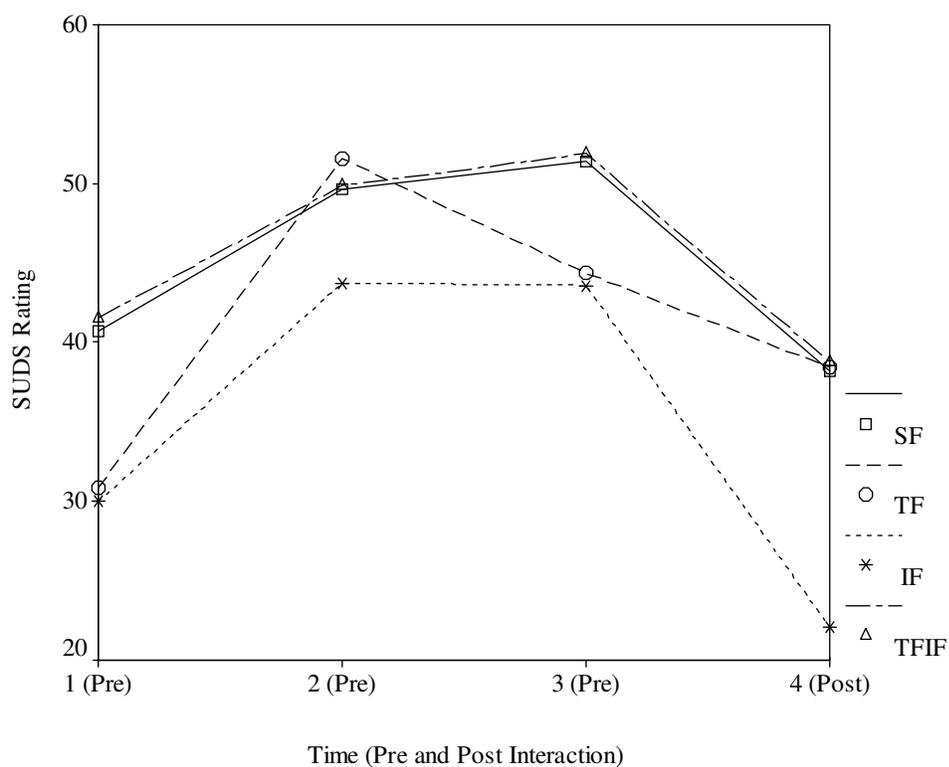
SUDS and STAI-State Analysis

Both the SUDS and the STAI-State were given to participants several times over the course of the experiment. To evaluate whether the attentional focus instructions had an effect on participants self-reported anxiety, a 4 (Condition: self-focus, task-focus, intrinsic focus, task plus intrinsic focus) x 4 (Time: time 1, time 2, time 3, time 4) repeated measures ANOVA was conducted for the SUDS, with focus condition as the between-groups measure, and time as the within-group repeated measure. Time 1-3 were pre-conversation task measures, and Time 4 was a post-conversation measure. Each SUDS asked participants to rate how anxious they felt in that moment.

Mauchly's Test of Sphericity was significant ($p<.05$) and therefore the Greenhouse-Geisser correction was used for the within-subjects measures. A main effect of Time [$F(2.15, 111.56)=20.35, p<.001$] was found. Repeated contrasts were examined to assess significant trends in the data, and the SUDS across Time 1-Time 4 followed a quadratic pattern [$F(1, 52)=59.10, p<.001$]. Additionally, an interaction of Time x Condition was found to have a cubic pattern [$F(3, 52)=3.31, p<.05$]. Multiple post-hoc comparisons using Tukey's HSD correction were not significant. Contrary to predictions, a main effect of Condition was not significant [$F(3,52)=1.02, p=.392$], nor was an overall

Time x Condition interaction significant [$F(6.44, 111.56)=1.14, p=.343$]. Results are illustrated in Figure 1. To obtain a purer comparison between pre-conversation levels of anxiety (Time 3) with post-conversation levels of anxiety (Time 4), an ANCOVA was conducted after controlling for the effect of anxiety during Time 1 and Time 2. With Time 1 [$F(1,51)=6.71, p<.05$] and Time 2 [$F(1,51)=15.56, p<.001$] as covariates, it was found that each significantly predicted subsequent SUDS ratings, but did not add anything else to the SUDS analysis.

Figure 1. Mean SUDS ratings across Time 1-Time 4 for each focus condition.



Analysis on the STAI-State measure were similar to the SUDS, except that a 4 (Condition: self-focus, task-focus, intrinsic focus, task plus intrinsic focus) x 3 (Time: time 1, time 2, time 3) repeated measures ANOVA was used. Time 1 and Time 2 were pre-conversation measures and Time 3 was a post-conversation measure. Once again, the

sphericity assumption was violated, and the Greenhouse-Geisser correction was used. Contrary to the findings from the SUDS, a main effect of Time [$F(1.73,96.69)=.697$, $p=.481$] was not found, nor was a main effect of Condition [$F(3,56)=1.29$, $p=.29$] and an interaction of Time x Condition [$F(5.18, 96.69)=1.07$, $p=.38$] significant. When Time 1 was used as a covariate, it was found to significantly predict [$F(1,55)=127.35$, $p<.001$] subsequent STAI-State scores, but did not add anything to the STAI-State analysis.

The SUDS and STAI analyses examined pre and post measures of anxiety, but did not account for self-reported anxiety during the conversation task. To further examine anxiety during the interaction, several other measures were analyzed.

SPAQ Analysis

Items 1 through 4 on the SPAQ were evaluated separately to assess degree of anxiety during the interaction and quality of performance. Then the behavior checklist was evaluated by looking at differences in focus condition on global positive behaviors, global negative behaviors, and specific negative behaviors during the interaction with the confederate.

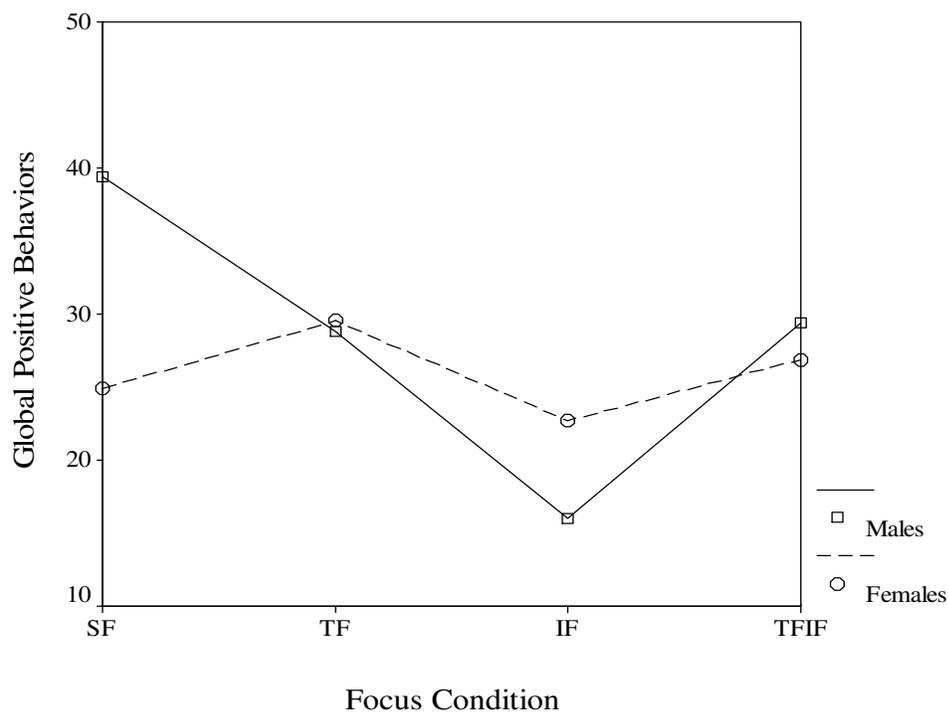
Consistent with the SUDS and STAI-State pre and post measures of anxiety, analyses on item 1 of the SPAQ (pertaining to how anxious a participant felt during the interaction) using a 4 (Condition) x 2 (Gender) between-subjects ANOVA yielded no significant main effect of Condition [$F(3,53)=.61$, $p=.61$], or Gender [$F(1,54)=2.11$, $p=.15$]. There was also no Condition x Gender interaction [$F(3,54)=.87$, $p=.46$]. Scores on item 2 of the SPAC (assessing how anxious participants thought they looked) needed to be transformed (using the power transformation) because the homogeneity of variances assumption was violated. After the transformation, Levene's Test [$F(7,54)=1.93$, $p=.08$]

was no longer significant and the results were interpreted. There were no significant main effects for Condition [$F(3,54)=.22, p=.882$] or Gender [$F(1,54)=2.98, p=.09$], and there was no interaction between Condition and Gender [$F(3,54)=.47, p=.70$].

The remaining items on the SPAQ assessed perception of performance in the interaction. Item 3 (i.e. overall quality of performance) was subsequently analyzed and there was a main effect of Condition [$F(3,51)=3.98, p<.05$], no main effect of Gender [$F(1,51)=.46, p=.50$], and no interaction of Condition x Gender [$F(3,51)=1.36, p=.27$]. Multiple post-hoc comparisons (with Tukey's HSD correction) were conducted to ascertain the nature of the main effect of Condition, and the self-focus group ($M=4.92, SD=1.38$) reported better quality of performance than the intrinsic focus group ($M=3.33, SD=2.23$), but only approaching statistical significance ($p=.051$). The analyses on Item 3 of the SPAQ was further assessed, because Levene's Test [$F(7,51)=2.08, P=.063$] approached significance (homogeneity of variance assumption) and a histogram of the data revealed a positive skew rather than a normal curve. Using a power transformation on the scores [which corrected the normality problem and increased the p-value ($p=.427$) on Levene's test], the analysis was re-run. In this case, there was no longer a main effect of condition [$F(3,51)=2.27, p=.09$]. With respect to the secondary analyses, the original finding (i.e., main effect of Condition) should be cautiously interpreted. Scores on Item 4 (i.e., how well did the participant come across to the other individual) violated the assumption of homogeneity of variances [$F(7,52)=2.83, p<.05$], and therefore analyses were conducted on scores after the power transformation was applied. There was no main effect of Condition [$F(3,52)=1.15, p=.337$], no main effect of Gender [$F(1,52)=.04, p=.84$], and no interaction of Condition x Gender [$F(3,52)=.70, p=.554$].

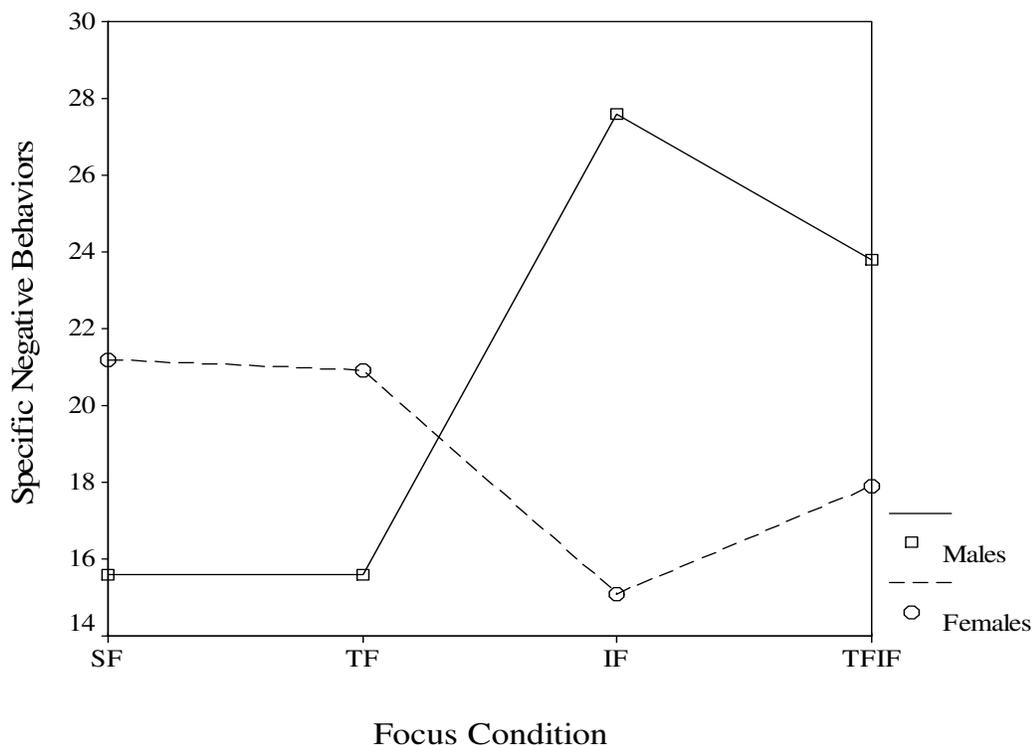
The behavioral checklist was divided into three sub-scales and analyses were conducted using a 4 (Condition) x 2 (Gender) between-subjects ANOVA. For the global positive behaviors subscale, there was a main effect of Condition [$F(3,53)=4.66, p<.01$]. After apply Tukey's HSD correction, post-hoc comparisons revealed that the self-focus group ($M=29.73, SD=11.14$) reported significantly more positive behaviors ($p<.05$) than the intrinsic-focus group ($M=20.47, SD=10.95$), and the task-focus group ($M=29.31, SD=7.29$) also reported more positive behaviors than the intrinsic-focus group, but only marginally significant ($p=.051$). There was also an interaction of Condition x Gender [$F(3,53)=3.06, p<.05$]. See Figure 2 for an illustration of the findings. To confirm the nature of the interaction, separate planned comparisons were run at specific levels of the Condition factor with Gender as the independent variable. In the self-focus condition males ($M=39.40, SD=7.37$) rated themselves more positively than females [$M=24.90, SD=9.55; t(13)=2.96, p<.05$], but that was not the case for the other conditions. The pattern of results is switched in the intrinsic focus condition, but the results were not significant [$t(13)=-1.128, p=.280$]. Further post-hoc comparisons (applying Tukey's HSD correction) on the cell means did not yield any other interpretable results.

Figure 2. Scores for the global positive behaviors subscale (focus condition by gender).



Consistent with the previous results on self-reported anxiety, there was no main effect of Condition [$F(3,55)=.25, p=.86$], no main effect Gender [$F(1,55)=.02, p=.88$], and no interaction effect [$F(3,55)=1.10, p=.36$] for the global negative items. Finally, an analysis of the specific negative items subscale yielded no main effect for Condition [$F(3,55)=.44, p=.72$] or Gender [$F(1,55)=.59, p=.45$], but there was a significant Condition x Gender interaction [$F(3,55)=3.32, p<.05$]. See Figure 3 for an illustration of the means. Planned comparisons were conducted to more specifically ascertain the nature of the interaction. Only including cases from the intrinsic focus condition, males ($M=27.60, SD=9.10$) reported more specific negative behaviors than females [$M=25.10, SD=8.88; t(13)=2.55, p<.05$], but that was not the case for the other conditions. Further post-hoc comparisons (applying Tukey's HSD correction) on the cell means did not yield any other interpretable results.

Figure 3. Scores for the specific negative behaviors subscale (focus condition by gender).



IMI Analyses

The Intrinsic Motivation Inventory (Deci, Eghrari, Patrick, & Leone, 1994; Plant & Ryan, 1985; Ryan, 1982) included five different subscales and was used to assess several important components of the study (see Table 4). Each subscale was analyzed by conducting a 4 (Condition) x 2 (Gender) between-subjects ANOVA. The interest/enjoyment subscale measured intrinsic motivation, and analyses revealed a main effect for Condition [$F(3,54)=3.41, p<.05$]. A planned post-hoc comparison between the self-focus ($M=4.2, SD=1.04$) and intrinsic focus ($M=3.2, SD=1.09$) group yielded a significant difference [$t(27)=2.53, p<.05$], but in the opposite direction from predictions. A planned comparison between the self-focus and paired task plus intrinsic focus condition did not yield a significant difference [$t(28)=.34, p=.74$]. Other multiple pair-

wise comparisons (after applying Tukey's HSD correction) yielded no significant differences between groups. A main effect of Gender [$F(1,54)=.438, p=.511$] and a Condition x Gender interaction [$F(3,54)=1.14, p=.34$] were not significant.

Table 4

IMI Subscales Organized by Focus Condition

	Group			
	SF <i>M (SD)</i>	TF <i>M (SD)</i>	IF <i>M (SD)</i>	TFIF <i>M (SD)</i>
Interest/Enjoyment	4.20 (1.04)	3.29 (1.19)	3.20 (1.09)	4.03 (1.48)
Perceived Competence	4.86 (1.79)	4.47 (.92)	3.07 (1.91)	4.13 (1.50)
Pressure/Tension	4.53 (1.82)	4.98 (1.34)	5.20 (1.78)	4.67 (1.34)
Value/Usefulness	5.17 (1.18)	4.79 (1.24)	4.07 (1.05)	4.69 (.89)
Relatedness	4.13 (1.18)	3.58 (.85)	3.98 (1.08)	4.35 (1.41)

The perceived competence subscale (only 1 item was used) is a positive predictor of intrinsic motivation and the pressure/tension subscale is a negative predictor of intrinsic motivation (e.g., Ryan, 1982). Analyses revealed a main effect of Condition [$F(3,52)=4.49, p<.01$] for the perceived competence item. Multiple post-hoc comparisons (with Tukey's HSD correction) confirmed that the self-focus group ($M=4.86, SD= 1.79$) reported more satisfaction ($p<.05$) with their performance than the intrinsic focus group ($M=3.07, SD=1.91$). The task-focus group ($M=4.47, SD=.92$) also felt more competent than the intrinsic focus group, but this result was not quite significant ($p=.08$). The main effect of Gender [$F(1,52)=.04, p=.95$] and the interaction effect [$F(3,52)=1.50, p=.22$] were not significant. Consistent with prior measures of anxiety, the pressure/tension

subscale did not yield a main effect of Condition [$F(3,54)=.94, p=.43$], a main effect of Gender [$F(1,54)=.14, p=.71$], or a significant interaction [$F(3,54)=.92, p=.43$].

Finally, the value/usefulness and relatedness subscales were analyzed. The value/usefulness subscale did not yield any significant results [i.e., Gender [$F(1,55)=.74, p=.60$; Interaction [$F(3,55)=.60, p=.62$]], but a main effect for Condition [$F(3,55)=2.39, p=.08$] approached significance. The relatedness subscale was analyzed and there was a main effect of Gender [$F(1,53)=7.79, p<.01$], such that males ($M=4.63, SD=1.17$) felt more connected to their conversation partner than females ($M=3.74, SD=1.05$). Males indicated that they would like to interact with their conversation partner more and that they could become friends with the individual, if given a chance to interact over a number of occasions. The main effect for Condition [$F(3,53)=1.39, p=.26$] and the interaction [$F(1353)=.20, p=.90$] were not significant.

DISCUSSION

The findings are discussed with one caveat. The manipulation checks found mixed results (consistent with prior studies on attentional focus; Przeworski, 2002; Woody, 1995; Woody & Rodriguez, 2000). In the analyses on percent of time focused on the conversation, the task-focus (TF) group did not attend to the conversation significantly more than the intrinsic (IF) and paired task plus intrinsic focus (TFIF) conditions. However, we did find that both the IF and TFIF conditions did significantly differ from the self-focus (SF) and task-focus conditions in the amount of time they spent focusing on intrinsic values. Therefore, we can make preliminary interpretations of the results with an awareness that the manipulations did not entirely create attentional focuses intended.

The Effect of Attentional Focus on Anxiety

Contrary to the prior findings (e.g., Wells and Papageorgiou, 1998; Woody & Rodriguez, 2000; Zou, Hudson, & Rapee, 2007) and the study's hypotheses, the attentional focus instructions did not differentially affect participants' anxiety ratings (i.e., SUDS and STAI-State). As reported in Przeworski (2002), task-focus instructions for high socially anxious participants did not significantly increase anxiety (STAI-State) from pre-conversation to during-conversation ratings, while self-focus instructions did. It is important to note that the effect was not found for the SUDS ratings. Although the current study is more methodologically similar to Przeworski (2002) than other studies reviewed previously, there are several differences between the two studies which may help to explain the disparity in the findings.

First, Przeworski (2002) reported that the difference in anxiety ratings was between pre and during conversation anxiety levels (asked retrospectively after the completion of the interaction task). In our study, the repeated SUDS and STAI-State measures were purely pre and post measures of anxiety, not a measure of anxiety experienced during the conversation. Therefore, there is a mismatch of time between the two studies, because it is unknown how participants felt after the conversation in Przeworski's study, and in the current study, we do not have SUDS ratings or STAI-State scores for anxiety during the conversation. This methodological difference limits our ability to compare the findings, but because we did ask participants to rate their anxiety during the conversation with other outcome measures (e.g., SPAQ, specific negative behaviors subscale on the Behavioral Checklist, and the pressure/tension subscale on the IMI), we can still make several side by side comparisons of the results. Consistently, across different measures, we did not find an effect on anxiety ratings (pre and post conversation as well as during the conversation).

Once again, we have to question why our findings are so disparate when compared to other studies reviewed previously. Of particular note, we made a deliberate attempt to modify the manner in which we formulated the focus instructions that were given to participants. Przeworski (2002) and Wells and Papageorgiou (1998) provided instructions to participants which included demand characteristics that could have introduced confounds to the study (see Appendix B). Specifically, in their self-focus instructions, participants were led to believe that if they focused on themselves (including their anxiety cues), they would be able to better control their anxiety and appear less anxious. In the task-focus instructions, participants were told that if they focused on the

conversation, they would enjoy themselves and feel more self-confident. Both these instructions presented participants with certain expectations about how they should feel (or how the experimenter wanted them to feel), and that may have affected the outcome measures.

Now, one could argue that both sets of instructions introduced the expectation of a relatively positive outcome for both self-focus and task focus, and yet only the task-focus instructions inhibited an increase in anxiety (Przeworski, 2002). In looking at the SF and TF instructions though, the two sets (in Przeworski's study) are not comparable or equitable in the degree to which demand is placed on a participant to act/feel a certain way. The SF instructions make anxiety very salient to participants, while the TF instructions do not. Once the idea of anxiety comes online for participants, it may be very difficult to control or ignore those feelings. Therefore, although the demand on participants to control their anxiety and appear less anxious may exist in the SF instructions, it may not be as powerful or effective as the demand placed on participants in the TF instructions. Additionally, if the SF instructions introduce the expectation of being able to control anxiety cues, and yet participants find that they cannot change their behavior to meet the expectations of the experimenter, this may exponentially induce them to feel increasingly anxious. For the TF instructions, the demand on participants is clearly recognizable without making anxiety salient for participants and that may have made it easier for participants to meet the demands of the experimenter. In this study, we removed phrases which could have added confounding variables to the study, and only asked participants to focus on themselves, the task, and/or intrinsic values. The

modification in the instructions may have influenced the results, such that the effect on anxiety was negligible.

In addition to the change in the focus instructions, we also added a component to the procedure to help prepare participants for the interaction task. Because of the addition of two new focus conditions (IF and TFIF) that we believed would be more difficult for participants to grasp than the SF and TF instructions, we felt it necessary to add an informal practice component to insure that participants understood what they were supposed to do in the interaction. This of course allowed participants to interact and practice with the experimenter before engaging in a conversation with a stranger. The additional practice may have created an equalizing effect across all conditions, thereby negating the effect of the focus instructions on anxiety. It would be important to assess these conjectures, by experimentally testing whether changing the way the focus instructions are presented and whether an informal practice component does indeed make a difference in the outcome of the study.

There were several important methodological changes in this current study that may have contributed to the decisive differences in results. Beyond the manner in which attentional focus affects anxiety though, it is important to explore how attentional focus may have differentially affected positive behaviors and intrinsic motivation.

The Effect of Attentional Focus on Positive Behaviors and Intrinsic Motivation

In addition to the unexpected findings on anxiety, there were some unforeseen results on several of the other outcome measures as well. In several instances, the self-focus (SF) group reported a more positive outcome than the intrinsic focus (IF) group. For example, there is some indication that the SF group felt that the overall quality of

their performance was superior, they reported engaging in more global positive behaviors, and they felt that they were more competent than that the IF group. This is contradictory to findings in which self-focus has been linked to an increase in negative emotions and poorer self-confidence (Kashdan & Roberts, 2004). Furthermore, it appears that our manipulation of intrinsic values did not have the expected effect of increasing one's intrinsic motivation and by proxy one's approach response to another individual.

It is important to note that although the SF group reported a more positive experience engaging in the interaction task when compared to the IF group, the SF group did not report a more positive experience than the TF or the TFIF condition. We also found a marginally significant effect, whereby the TF group felt more competent than the IF group. Because intrinsic values and intrinsic motivation are conceptually linked, it is surprising that the IF condition did not yield a more positive result. Therefore, several questions have been raised about the effectiveness of the intrinsic focus manipulation.

Intrinsic values and intrinsic motivation were examined differently for this current study than it has been in the past. Research has often used intrinsic motivation as an outcome measure whereby increased intrinsic motivation is an indication of one's interest and pleasure in the task as opposed to completing a task for an extrinsic gain of some kind (Deci & Ryan, 2000). Therefore, we extrapolated that by invoking intrinsic values (identified by the participant as self-defining and important), we would increase approach behaviors, and ultimately make the experience of interacting with another individual more positive and pleasurable for socially anxious individuals. However, our induction of intrinsic values did not have the anticipated effect, which may be due to a number of factors. First, it may be important to also indicate to participants that for an interaction

task, they should also attend to the conversation in addition to intrinsic values (as executed in the TFIF condition). Noted previously, there were no differences in perceived performance or positive behaviors amongst the SF, TF, and TFIF conditions. Therefore, even though the IF and TFIF conditions were not significantly different from one another, the added task-focus instructions brought the TFIF group closer to the SF and TF groups.

Second, we considered the manner in which we asked participants to attend to their intrinsic values. Because we asked participants to explicitly attend to the values that they had toward other human beings while also giving them an interaction task to complete, it may have been difficult for them to appropriately balance those dual goals. Those two components may have seemed incompatible. As noted by several participants in the IF condition, they were confused about how they were to keep intrinsic values in mind while also trying to talk to another individual. In the TFIF condition, it was clearer that participants were to attend to the conversation, but then periodically regenerate those values that would prompt them to approach another individual. It may help to further explain to participants the manner in which they are to hold the intrinsic values in their mind as more of an attitudinal stance rather than as explicit thoughts about their values which might interfere with their ability to also engage with another individual. On a related note, there may have been some apprehension about how to approach the task in this novel manner and that uncertainty may have also reduced their perceived self-confidence.

Third, there was a difference between the intrinsic values that the IF group and the TFIF group identified as most important to them. Many participants in the IF group chose hedonism (as their intrinsic value) while many participants in the TFIF group chose

universalism. Although we were not able to conduct analyses on the separate value categories (given the small sample size) to determine whether they yielded different results, we can speculate about how they may have affected the way participants responded. The hedonism instructions asked participants to focus on having fun, enjoying their conversation, and sharing laughter. That may have been difficult for participants given that confederates acted neutrally across conditions and were able to reply to questions with only a short sentence or two. This may have created pressure and concern about participants' view of the quality of their performance if they felt that they were not able to focus on having fun, thereby altering the focus on intrinsic values to a focus on self-judgment about their performance on the task-at-hand. Ultimately, many participants in the IF condition may have felt that they were not successfully attending to the value of hedonism and therefore rated their performance more negatively. On the other hand, participants given the universalism instructions were asked to focus on being agreeable, listening, sharing things about themselves, and treating their conversation partner fairly. The value of universalism may have been comparatively easier to attend to than the hedonism instructions—given that participants could still focus on universalism without much interaction from the confederate—thereby potentially contributing to the different results found between the IF and the TFIF conditions. It may be that the manner in which we attempted to invoke intrinsic values yielded different outcomes across value categories, and also may not have been fully successful in facilitating an intrinsic response but rather created some concern (possibly dependent on the intrinsic value that was chosen) about extrinsic contingencies (e.g., concern about the degree to which the participant was successfully accomplishing the task).

Given that the IF instructions may be conceptually difficult for participants to understand, the instructions may need to be modified and the informal practice between the experimenter and participant may need to be further elaborated upon. Also, some consideration should be given to changing the format of the study, so that the IF instructions can be better integrated into the existing literature on intrinsic motivation. An additional component can be added to study in which extrinsic contingencies (e.g., receiving money, being rated more positively by the experimenter) are pitted against intrinsic factors. Furthermore, intrinsic motivation can be tested experimentally—by giving participants an opportunity to further interact with the stranger—rather than by self-report. We may also want to consider changing the task (e.g., giving a speech or presentation) or making task-type an additional variable, so that we can better evaluate the factors affecting participant's experience in a social and/or performance situation. Although we are uncertain whether these changes to the IF (and TFIF) instructions will have an effect on participants' anxiety, we still believe that if intrinsic values can be appropriately generated and retained during a social/performance situation, participants should feel more intrinsic motivation and pleasure in the task.

Broadening the discussion beyond differences that were found between focus conditions, there were several gender effects and condition x gender interactions which were also significant.

Significant Gender Differences

Exploring gender effects was not primary to the study's objectives, but there were several gender differences which can further illuminate the study of attentional focus in socially anxious individuals. The relatedness subscale is a part of the IMI and although

there were no main effects of condition, there was a main effect of gender. Overall, males felt closer (e.g., wanted to interact further with the confederate, felt that they could become friends in the future) to their interaction partner than females did. These were opposite-sex dyadic interactions, so that may have affected the outcome of the study. Males may be quick to feel close to a female, as opposed to the other way around. Proportionately, females with social anxiety may feel greater anxiety with males, than males do with females, when compared to same-sex interactions. In a classic study, Dutton and Aron (1974) found that males felt more attracted to a female interviewer during a fear-inducing situation than a non-threatening situation. Therefore, it may be that males in the study, to a greater extent than females, interpreted their arousal (including fear and anxiety) as indicative of interpersonal intimacy with their conversation partner.

Beyond the potential difference between participants, we can also not discount the possible differences between the male and female confederates. Although, all confederates were trained in a standardized protocol and followed it during the interactions, there may have been a gender difference in the degree of warmth and closeness that was exhibited from confederates upon meeting the participant. If the females confederates were consistently friendlier to participants (i.e., all males) than the male confederates, this could have altered the manner in which male and female participants perceived their interaction partner.

Not only were there main effects of gender, there were several condition x gender interactions as well. Related to our previous discussion about the main effect of condition found for the global positive items subscale (i.e., SF group reported more global positive behaviors than the IF group), we also found that males and females differed in the amount

of positive behaviors they engaged in, but only in the SF condition. Not only did the males in the SF condition score much higher than the females in the SF condition, but the mean scores for females were relatively equal across focus conditions, while the mean scores for males were more variable across focus conditions. Of note, males and females in the IF condition were similar in the amount of positive behaviors they engaged in. This interaction helps to explain the main effect of condition between the SF and IF group, whereby males (in the SF condition) were the driving force behind the main effect of condition.

Finally, we found that there was an interaction (condition x gender) for the specific negative items subscale. In the IF condition, males reported engaging in specific negative behaviors at a significantly higher rate than females. In fact, males in the IF condition reported the highest degree of negative behaviors when compared to other males and females in each focus condition. This indicates that males had more difficulty attending to intrinsic values while trying to interact with another individual. The two gender x condition interactions (i.e., the global positive items subscale and the specific negative items subscale) provide some evidence that the males in the SF and the IF conditions were significantly influencing the main effects between the SF and the IF group (i.e., the SF group was more satisfied with their performance than the IF group). Given these multiple gender effects/interactions, we further examined the other main effects of condition in which the SF group reported a more positive experience than the IF group (e.g., SPAQ3, and the interest/enjoyment and the perceived competence subscales on the IMI). Comparing males and females in the SF condition, we found that males ($M=4.92$, $SD=1.06$) reported more interest and enjoyment [$F(1,12)=4.03$, $p<.05$]

than females ($M=3.80$, $SD=.83$) during the interaction. This result is consistent with the other gender x condition interactions that we found, but should be interpreted cautiously given that the original result on the interest/enjoyment subscale did not yield a significant gender effect.

Overall though, it seems as though males were more comfortable with the self-focus instructions than they were with the intrinsic focus instructions (e.g., the values made salient for males in the IF condition may have led them to feel more negatively about their performance). It is difficult to provide a decisive explanation for why that may be the case, but it certainly brings to light possible considerations for future research. If anything, we may want to examine more closely whether these gender effects and interactions are consistent and if so, provide some clarity and explanation of these differences by mapping them onto existing theoretical models regarding socially anxious individuals.

Limitations and Considerations for Future Research

Many of the results were unexpected, and several limitations (e.g., no SUDS or STAI given to assess how participants felt during the interaction) and suggestions regarding how to modify and extend this current study have been provided (e.g., modifying IF instructions, changing the task, measuring intrinsic motivation differently). However, there are still other factors which should be explored in order to further evaluate the impact that attentional focus may have on individuals' anxiety.

There are limitations concerning the sample that was used for the study. Because we did not conduct diagnostic interviews, we were not able to sample individuals diagnosed with social anxiety, but rather only individuals scoring high on a measure of

social anxiety. The study also did not have an equal number of males and females. Epidemiologically, prevalence rates are higher for females than males (Wells, Katon, Rogers, & Camp, 1994), but because we also made conclusions about gender effects, it would be important to recruit more males in the future. Participants were also sampled from an undergraduate subject pool and many of the participants were first year students, thereby limiting the external validity of the study. Although our assumption is that we can, to a certain extent, make conclusions about not just socially anxious undergraduates, but socially anxious individuals in general, there may be some unique factors present for first year undergraduates (e.g., transitioning from living at home with parents to living independently, establishing new friendships, taking on more responsibilities) that may have affected the outcome of the study differently than if the sample included a broader age range.

Beyond limitations that are typical of many studies conducted in a university setting, there were other limitations that were particular to the study's methodology. First, the nature of the task implicitly suggested to participants that they should pay attention to the conversation given that they were to interact with the confederate. Therefore if we decide to not change the task-type, we need to consider how to elaborate upon the task-focus instructions, such that those participants in the TF condition are focusing more on the conversation compared to participants in the other conditions. Zou, Hudson, and Rapee (2007) manipulated self-focus and task-focus by telling participants that they would have to either recall information about themselves (self-focus) or about the conversation (task-focus), and that may be an element that we can add to our instructions in order to strengthen the experimental manipulations (especially for the TF condition).

Another method of strengthening task-focus in the TF condition would be to increase either self-focus or intrinsic focus manipulations in the other conditions, especially because we found that within each condition, focus on the conversation was greater and intrinsic focus was proportionately less (even in the IF condition). Procedurally, we did not explicitly ask participants to focus on themselves, the task, and/or intrinsic values over and above the other attentional focus elements. Therefore, although manipulations were mostly successful *across* conditions in the degree to which they focused on themselves, the conversation, or intrinsic values, we could not insure that *within* each focus condition participants were focusing maximally on themselves, the conversation, and/or intrinsic values. In future studies, we could add more specificity to the instructions if we would like to insure that participants in each focus condition not only focus on a particular internal or external factor more than the other groups, but that within each group, participants focus on that element more than focusing on any other factor (e.g., in the IF condition, participants would focus on intrinsic values more than the SF, TF, and TFIF conditions, as well as focusing on intrinsic values more than themselves or the conversation).

Second, we have to consider the instructions that were provided for the confederates. The confederates were trained in a standardized protocol to follow when speaking to participants, insuring that participants experienced a similar interaction task and thereby limiting other confounding variables that may have made the results difficult to interpret. However, by having the confederates follow a protocol in which they were to remain relatively neutral and only respond to questions with 8-10 words, this took away from the real-life applicability of the interaction. Many participants even commented

afterwards about the confederates' lack of interaction—since the participant had to ask many of the questions and confederates could only answer with a sentence or two—but it is unknown whether there were differences amongst conditions in regards to the degree that participants noticed the confederates presentation style. This factor can easily be empirically tested and measured in future studies, so that we are able to ascertain whether this may have affected the study's results.

For social interactions to be useful and sustainable, individuals need to take cues from their interaction partner and then respond accordingly. Research on person-perception (e.g., Christensen & Rosenthal, 1982; Snyder, Tanker, & Berscheid, 1977) has demonstrated that one's actions toward another have a significant impact on how the other will respond (e.g., as confirmation of the self-fulfilling prophecy, individuals holding a belief about another person will act in a manner that will increase the probability that the other person will behavioral confirm their perceptions/expectations). More generally, there is reciprocity between individuals in any given interaction (e.g., Bandura, 1977). For example, a positively-valenced behavior toward another will increase the likelihood of a corresponding positive response from the other individual. However, in our interaction, confederates had to act similar from conversation to conversation, despite very different approaches to the interaction from participants (driven by attentional focus instructions). It is possible that given the opportunity, confederates may have responded more warmly to participants in the TF, IF, and TFIF conditions than the SF condition, and that then may have allowed participants to feel less anxious and closer to their interaction partner. However, one could also argue that participants approaching the situation intrinsically would be less prone to be affected by

external outcomes, such as the confederate's responses (or perceived judgment). Given that humans learn to attend, process, and respond to social cues (on both a conscious and non-conscious level) though, it may be difficult and ultimately not very adaptive to ignore how others react and respond to you.

In addition, it has been reported that socially anxious individuals are concerned about how others are judging and perceiving them (e.g., Horley, Williams, Gonsalvez, & Gordan, 2004), and it was suggested that because they naturally experience heightened self-focus (when compared to low anxious individuals; Hope, Heimburg, & Klein, 1990) it creates a negative attentional bias and ultimately leads to a heightened perception of social threat in the environment. Therefore, if participants are asked to explicitly focus their attention not on their anxiety cues (similar to the SF instructions) but on other factors (as seen in the TF, IF, and TFIF instruction), then they would be more likely to attend to their conversation partner and thereby be more significantly affected by the lack of reciprocity and engagement from the confederate. In other words, participants in the SF condition are told explicitly to focus on themselves, and therefore may not be affected as much by how the confederate is responding to them. However, participants in the other conditions may be more sensitive to responses by the confederate and thereby feel more or less anxious as a function of the confederate's stance toward them. The confederate's reactions to participants were controlled by the task protocol in this current study, but in future studies, confederate reactions could be added as another variable (with several levels), or we may also make the task more externally valid by increasing confederates' flexibility to be able to respond more naturally to participants. We can also consider having participants interact with other participants rather than confederates, or change the

task altogether, whereby participants would have to make a speech/presentation rather than interact with another individual, in order to get some sense of whether the results would be similar or different to this current study's reported outcome.

Lastly, we have to consider the manner in which all the crucial variables are measured. There may be a better way of measuring the degree to which participants direct their focus of attention (e.g., measure with additional items related to components of each focus condition), and there is always the question of whether individuals are fully conscious of what factors they are attending to given a complex situation in which attentional resources have to be allocated in multiple directions. Beyond a manipulation check of attentional focus, we have to wonder about the anxiety measures. The SUDS and STAI-State were consistent in this current study (i.e., no main effect of condition), but Przeworski (2002) found inconsistent results using the SUDS and STAI-State. We may want to consider physiological measures and brain imaging in addition to self-report measures in order to get a better sense of participants' moment-to-moment experience.

There are a number of variables that have not been fully explored in terms of the effect that it may have on how socially anxious individuals interact with others and their experience of having to participate in social/performance situations. The greater understanding we have of the instrumental factors that may improve one's performance, and alter one's perception and experience of a threatening situation, the better able we are to devise treatments which can specifically and effectively target problematic behavioral, emotional, and cognitive patterns.

Clinical Implications

Several researchers (Woody, Chambless, and Glass, 1997) have found that cognitive-behavioral treatment (CBT) for socially anxious individuals also produced a decrease in self-focused attention over time. This was deemed promising given that self-focused attention is not only heightened in socially anxious individuals but it is also associated with negative thoughts, greater anxiety, and poor social skills (e.g., Cacioppo, Glass, & Merluzzi, 1979; Woody et al., 1997). Furthermore, Hofmann, Moscovitch, Kim, & Taylor (2004) found that CBT as well as exposure therapy alone resulted in socially anxious participants engaging in less negative self-focused cognitions (also refer to Hofmann, 2000). These results indicate that without having to add anything to empirically supported treatments of social anxiety, individuals became less self-focused with time.

However, Woody et al. (1997) reported that although self-focused attention decreased over the course of treatment, external focus did not change. Hofmann (2000) also found that only negative thoughts decreased as a result of exposure therapy, positive self-focused thoughts, neutral other-focused thoughts, and task-focused thoughts did not change from pre to post-treatment. It seems then that a model in which a decrease in self-focused attention implies an equivalent increase in external, other, or task-focused attention is not applicable or nuanced enough to capture the phenomena. There is also lack of knowledge about measurement specificity and questions regarding whether participants are able to effectively and accurately report the degree to which they are focusing and attending to stimuli.

Many questions remain about what is occurring when participants become less self-focused, especially if results are indicating that they may not be shifting their focus to the external environment. It is apparent that after treatment, socially anxious individuals perceive themselves less negatively. A decrease in negative self-focused attention can be explained as a more positive self-view, but positive emotions and thoughts have been theorized to be less distinct and undifferentiated (Fredrickson, 1998). If participants feel more positive and are less negatively self-focused, they may not be able to specify how much more positive they are feeling (or where their attention is now focused), given that positive emotions can act as a broadening of action tendencies and promote a more flexible way of approaching stimuli, rather than the very specific problem solving strategy that is activated with negative emotions (Fredrickson, 1998).

From a treatment standpoint though, without knowing conclusively what occurs to attentional resources when self-focused attention is reduced, we must consider whether it is sufficient to decrease self-focused attention without also promoting increased attentional focus elsewhere. Woody et al. (1997) and Hofmann's (2000) results indicated that only self-focused attention decreased in the course of treatment and that was correlated with other treatment gains, such as decreased social anxiety. Wells and Papageorgiou (1998) though, found that a brief exposure plus external focus instructions was more effective at reducing social anxiety than a brief exposure alone. Participants given the additional external focus instructions did report a greater shift toward external focus. However, the manipulation check was completed from participants' scores on a bipolar rating scale (with external-focus on one side and self-focus on the other). There is some doubt as to whether that was an adequate measure of attentional focus, given that

we are unsure whether external and self-focus should exist as opposites on one continuum, or whether they should be orthogonally organized. Also, the demand on participants was strong in the direction of a positive outcome for external focus and a negative outcome for self-focus, and therefore there is some uncertainty about whether participants were responding accurately or more because of demand characteristics present in the instructions.

In this present study, we did not find differences in the degree to which participants felt anxious across four different focus conditions. However, that is not to say that a reduction in self-focused attention—whether through deliberate facilitation of attentional focus elsewhere or not—will not promote better social performance, and a decrease in negative cognitions and emotions (as cited and discussed previously). It is important to continue to explore the specific mechanism at work and what combination of factors will yield the most beneficial results.

In the treatment of Generalized Anxiety Disorder (GAD), Borkovec and Sharpless (2004) have emphasized present-moment focus, in which one is attending to the sensations and perceptions of each given moment, and that includes paying attention to the task at hand rather than past failures or potentially catastrophic future consequences. The belief is that present-moment focus (including task-focus) allows one to be more flexible at any given moment and less burdened with fears of failure. We can help to cultivate present moment processing by letting go of extrinsic goals (future oriented outcomes) through a promotion of intrinsic goals. This creates what Borkovec et al. termed a *whole organism approach* to any given stimuli in the environment, in which we can cognitively (e.g., perception, attention, interpretation), behaviorally, and affectively

(through intrinsic goals) approach a situation. The same theoretical approach is taken with socially anxious individuals, but the challenge remains in being able to translate theory into empirical research, and ultimately being able to learn more about the treatment of social anxiety.

In the course of this current study, we learned that given our methodology, the focus conditions were equivalent in the degree to which they experienced anxiety, but not necessary in the manner in which they experienced intrinsic motivation or perceived their performance. Our results were unexpected, but go a long way in helping us understand under what conditions attentional focus may or may not be a factor in social anxiety and also add to our research on intrinsic goals and values. Intrinsically, we would like to see socially anxious individuals be able to approach a situation that they have considered threatening, in a manner that focuses on the present-moment (without extrinsic contingencies) and facilitate joy through intrinsic goals. Although we view task-focus and intrinsic focus as a means of facilitating a more positive experience for socially anxious individuals, it may be the case that one induction of task-focus and/or intrinsic focus is not adequate to combat the overwhelming anxiety and fear that is associated with interacting with a stranger. We also have to consider different ways of promoting task-focus and intrinsic-focus, to better ascertain whether that will yield differences in anxiety, satisfaction, competence, and intrinsic motivation.

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APPENDIX A

Values Categories

Value categories used in the IF and TFIF instructions, based on responses from the Portrait Values Questionnaire (Schwartz, Melech, Lehman et al., 2001):

Benevolence

“As you are interacting with the other person, pay attention to the value of being supportive, helping, caring, and responding to this person, while also considering this person’s positive qualities.”

Universalism

“As you are interacting with the other person, pay attention to the value of being agreeable, listening to this person, sharing things about yourself, and treating this person fairly.”

Self-Direction

“As you are interacting with the other person, pay attention to the value of being curious and interested in trying to understand this person, and being free to approach this person in your own way.”

Stimulation

“As you are interacting with the other person, pay attention to the value of doing something different, finding the excitement, surprise, and novelty in meeting this person.”

Hedonism

“As you are interacting with the other person, pay attention to the value of having fun, enjoying your interaction with this person, sharing laughter and having a good time.”

APPENDIX B

Sample Instructions

From Przeworski (2002), these portions were removed from the instructions:

Self-focus Instructions

“By focusing attention on these signs of anxiety during the conversation you will be more aware of the cues your body is giving you. This will increase your ability to successfully control your anxiety cues and appear less anxious.”

Task-focus Instructions

“By paying attention to the conversation, you will become more engaged in the conversation and enjoy yourself more. This will lead to increased self-confidence and assurance.”