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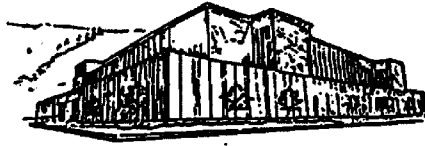
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Running Head: SFA, NTE, SM IN SOCIAL ANXIETY DISORDER

Focus of Attention, Need to Evaluate, and Self-Monitoring in Social Anxiety Disorder

Stephanie M. Paidas

B. A., University of Akron, 1999

Presented in partial fulfillment of the

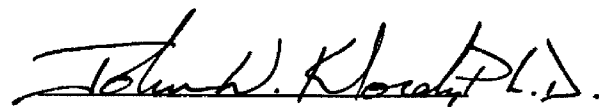
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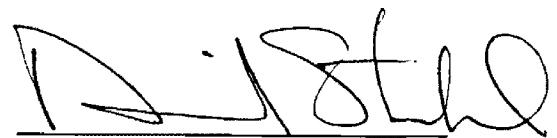
The University of Montana

May, 2002

Approved by:



John W. Klocek, Ph.D.
Committee Chairperson



David A. Strobel, Ph.D.
Dean, Graduate School

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Date

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Focus of Attention, Need to Evaluate, and Self-Monitoring in Social Anxiety Disorder

Chair: John W. Klocek, Ph.D. JK

Social Anxiety Disorder (SAD) is one of the most prevalent anxiety disorders and follows a chronic and unremitting course. Although several effective treatments for SAD have been documented, additional attention must be paid to the constructs involved with SAD in order to better understand and more effectively treat this illness. Because this disorder involves faulty cognitions, existing research was reviewed with regard to cognitive content and processes pertaining to SAD. Special emphasis was paid to self-focused attention as it relates to the disorder. It was argued that research in this area should begin to examine individual traits or other personality constructs to learn more about SAD. It was hypothesized that a relatively new construct, the Need to Evaluate, might relate to social anxiety. In addition, it was hypothesized that the personality trait Self-Monitoring might also play a role in social anxiety. All three variables were entered into a regression equation predicting level of social anxiety. Results indicated that focus of attention and Self-Monitoring did predict level of social anxiety. However, the relationship between Need to Evaluate and SAD needs further study.

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Focus of Attention, Need to Evaluate, and Self-Monitoring in Social Anxiety Disorder

Recent advances have been made in the study of Social Anxiety Disorder (SAD).

Although the disorder was deemed the “neglected anxiety disorder” in a review by Liebowitz and colleagues (1985), the past decade has produced research to more clearly define prevalence rates, symptoms, and cognitive processes underlying SAD. The field has made tremendous progress in terms of identifying symptomology, subtypes of the disorder, and the cognitive processes involved in SAD. However, many aspects of social anxiety remain unclear, including cognitive variables that may mediate and moderate the course of the illness, as well as personality constructs that may influence vulnerability to and course of the anxiety. New constructs and methodology must be examined to further the understanding of SAD, not only for theoretical purposes, but also for the refinement of existing treatment models.

Background Information

Kessler et al. (1994) found lifetime prevalence rates for SAD that exceeded many other psychological illnesses. Lifetime prevalence of SAD was determined as 11.1% for men and 15.5% for women. Estimates of gender distribution in SAD have produced ratios as high as 2:1 female to male (Schneier, Johnson, Hornig, Liebowitz, & Wesissman, 1992). However, these discrepancies have been examined with evidence that females have sought treatment for social anxiety more often and have biased the prevalence rates (Rapee, Sanderson, & Barlow, 1988). Data from the multi-site Epidemiologic Catchment Area (ECA) study yielded additional information demonstrating that SAD tended to afflict less educated populations, those who were single, and members of lower socioeconomic classes (Schneier et al., 1992). In addition,

SAD was most prevalent among first-degree relatives of out- and in-patients with SAD (Fyer, Mannuzza, Chapman, Liebowitz, & Klein, 1993).

Using retrospective recall, ECA data yielded information that SAD patients reported onset as having occurred during the mid- to late teens with a mean age of 15.5 years (Schneier et al., 1992). However, this distribution was skewed. Almost half of this sample (47%) described lifelong symptoms with onset occurring prior to age 10. Some have argued that this disorder requires the individual to possess an awareness of others and that such an awareness is rarely developed before age 8. However, research provides evidence that some socially fearful behavior can be found in infants as young as 12 months and that such behaviors are pervasive across the lifespan (Rapee, 1995). Further evidence for early development can be found in the rarity of onset after age 25 (Schneier et al., 1992). Early onset and pervasiveness across the lifespan suggest that personality constructs or dispositions may have more influence over social anxiety than previously thought, suggesting that existing treatment models may be improved by targeting such characteristics.

SAD tends to follow a chronic and unremitting course. In a survey of 21 SAD outpatients, the majority reported avoidance of social situations for most of their lives (mean number of years equal to 15.3). Even more chronic was the persistence of perceived distress in social situations, where the mean number of years of experienced distress was 20.9 (Turner, Beidel, Dancu, & Keys, 1986). Other studies have provided similar information, reporting symptom onset during adolescence and persistence throughout adulthood (Levy-Cushman, McBride, & Abeles, 1999; LePine & Lellouch, 1995). Although reported prevalence rates for SAD are highest in the 18-29 age bracket,

prevalence rates for older adults (65+ years) mirror those for other age ranges (Levy-Cushman, McBride, & Abeles, 1999). Clearly, SAD does not diminish if not treated, providing further support for the necessity of effective treatments.

The core feature of this disorder is the fear of negative evaluation (Butler, 1985; Turner, Beidel, & Townsley, 1992). The Diagnostic and Statistical Manual, Fourth Edition- T. R. (APA, 2000) described this as, “A marked and persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others. The individual fears that he or she will act in a way that will be humiliating or embarrassing,” (p. 416). Exposure to this type of situation must provoke anxiety, be recognized as unreasonable, be avoided, and cause significant distress and interference with functioning.

The DSM-IV-TR distinguishes between two subtypes of SAD. The “Generalized” subtype indicates that the individual shows social anxiety in most areas of his life. A “Nongeneralized” subtype, often referred to as “specific,” shows fear in only one type of social situation. Many researchers have explored the nature of subtypes, with several posited delineations. Rapee (1995) gave details to further describe “Generalized” and “Nongeneralized” subtypes. Generalized referred to social anxiety experienced in a broad range of social contexts, including performance situations and social interaction scenarios. According to a Turner, Beidel, and Townsley (1992) study of 89 inpatients diagnosed with SAD, the Generalized subtype resulted in increased interference with functioning and was associated with increased severity of the disorder when compared to the Nongeneralized subtype. In contrast, the Nongeneralized subtype referred to fears in one area, usually performance situations. The most common fear in this subtype was

public speaking. Decreased interference with daily activities was definitive of this subtype when compared to the Generalized subtype, as only one area of life was affected and thus was often a situation one could avoid. When compared to the Generalized subtype, this subtype was associated with decreased severity of symptoms as well.

Other delineations of subtype have been explored. Buss (1980) described “fearful” versus “self-conscious” subtypes. Fearful referred to situations perceived to be novel or intrusive, such as interactions with another person. Self-conscious subtype referred to the perception of being evaluated or scrutinized by others, such as performance situations. Eng, Heimberg, Liebowitz, and Schneier (1999) found evidence to suggest that three subtypes might exist in SAD. Utilizing a sample of 382 diagnosed SAD outpatients, responses to self-report measures were examined using cluster analysis. The distinctions that emerged included pervasive social anxiety, moderate social interaction anxiety, and dominant public speaking anxiety. Despite differences in the nature of subtypes, most researchers have posited a common distinction between interaction and performance situation fears.

Another issue surrounds the classification of SAD as a distinct entity from avoidant personality disorder (APD). Turner, Beidel, Borden, Stanley, and Jacob (1991) demonstrated that generalized SAD often carries concurrent diagnoses of avoidant personality disorder in both in- and out-patient samples. Rapee (1995) cited evidence that little difference exists between social phobics with and without APD. However, other studies have found that SAD with APD produces greater levels of depression (Turner, Beidel, and Townsley, 1992). While it has been suggested that APD may represent a potentially more severe subtype of SAD, other researchers have argued that

APD represents the extreme end of a continuum on which social anxiety falls in the middle. More research is necessary in this area to delineate categorical versus dimensional conceptualizations of this disorder.

SAD commonly occurs in concordance with other disorders. ECA data estimated comorbidity rates as high as 69% (Schneier et al., 1992). In a study of 71 SAD patients, the most common comorbid disorders involved other anxiety disorders, mood disorders, and substance abuse disorders (Turner et al., 1991). The most common comorbid anxiety disorders were panic disorder and specific phobia. Common mood disorders, depression and dysthymia, appeared to affect a large proportion of social phobics in the ECA study and this type of comorbidity likely played a role in the development of suicidal ideation (Schneier et al., 1992). Higher alcohol abuse rates were found in social phobics than in other anxiety disorders (Kushner, Sher, & Beitman, 1990) and formal substance abuse diagnoses could be found in approximately 13% of socially anxious individuals living in non-hospital settings (Schneier et al., 1992). According to Kushner and colleagues (1990), many patients in detoxification programs meet criteria for SAD. It has been hypothesized that tension reduction and self-medication contribute to these elevated rates. As previously discussed, avoidant personality disorder can be found frequently in the presence of SAD.

Finally, it should be noted that most comorbid disorders develop after the onset of SAD. Results from several large-scale data collections involving retrospective recall indicated that symptoms of SAD occurred prior to onset of comorbid symptoms, leading researchers to conclude that SAD usually precedes comorbid disorders (Kushner et al., 1990; Schneier et al., 1992; Turner et al., 1991). This suggests that SAD may present a

risk factor contributing to the development of other psychological problems.

The study of SAD is important for a variety of reasons, including the prevalence with which it occurs, its chronic course, and the risk factors it may present for the development of other disorders. However, perhaps the most important reason to learn more about it stems from the impairment it creates for its sufferers. SAD creates significant interference in all aspects of life. According to Turner, Beidel, Dancu, and Keys (1986), 92% of socially anxious inpatients reported occupational interference as a result of this disorder. Common complaints were inability to contribute ideas in meetings, inability to socially interact with business contacts, and lack of advancement due to these problems. Almost 85% described academic interference with SAD, the most common manifestation of this being inability to attend or participate in classes. Turner and colleagues also found that 69% attributed general social problems to the disorder, and 50% had trouble with heterosocial romantic relationships. In fact, Schneier and associates (1992) reported that individuals with SAD were less likely to marry than people with any other anxiety disorder.

It is clear that SAD creates significant impairment and distress. Based on previous research findings, it is also clear that the disorder will not subside without effective treatment, indicating the necessity of such treatments (LePine & Lellouch, 1995; Levy-Cushman, McBride, & Abeles, 1999; Turner, Beidel, Dancu, & Keys, 1986). In order to determine the most effective way to deal with SAD, researchers have sought to identify the behavioral and cognitive components that contribute to the anxiety. Examination of the thoughts, behaviors, processes, and possible traits of individuals with SAD can provide clinicians with areas to target in treatment that may allow treatments to

work more effectively.

Cognitive Content in SAD

A chief component of research on SAD has been the focus on cognitive content in social anxiety. Socially anxious individuals score higher than any other group on the Fear of Negative Evaluation Scale (FNE; Watson and Friend, 1969), and thus the central cognitive characteristic of SAD has been deemed the “fear of negative evaluation,” (Butler, 1985; Turner et al., 1992). Rapee (1995) described the core cognitive features of SAD as fear of negative evaluation, perceived lack of ability, and concerns about appearance. It has also been documented that socially anxious individuals experience more negative and fewer positive thoughts during social interactions than non-anxious samples (Beidel, 1985; Turner et al., 1986). Dodge (1988) surmised that the number of negative thoughts was closely related to the severity and level of experienced anxiety. Often, this type of cognitive content has been measured through self-report devices, self-examination diaries, and recording (Rapee, 1995).

In addition, several cognitive biases have been examined. Foa, Franklin, Perry, and Herbert (1996) discussed two faulty cognitions with regard to social interaction. First, individuals with SAD believed that negative social events were more likely to occur in their lives than in the lives of others. Second, participants with SAD exaggerated the costs, or negative consequences, of a negative social event. Those with SAD reported a belief that negative consequences resulting from perceived social failure would be catastrophic, including permanent exclusion from social interaction with other individuals.

Foa and colleagues (1996) also captured cognitive distortions regarding

experience. Whereas some aspects of the anxiety response pertained to the individual (e.g. autonomic arousal), the majority of the response was based on the perceived experiences of others (e.g. “He thinks I am stupid.”). Information about the perceptions and experiences of others is largely inaccessible to someone with SAD, which prevents those with SAD from disconfirming their own cognitive biases. According to this study, these cognitive biases may be extremely resistant to treatment or modification. A more detailed examination of these biases follows.

While fear of negative evaluation remains pervasive across situations, a number of more specific fears have been identified in the disorder. According to Rapee (1995), the most feared situation is public speaking, followed by parties, meetings, and interacting with authority. In terms of avoidance and distress, Turner et al. (1986) identified top-ranked fears as formal speaking, informal speaking, eating in public, and writing in public. Other specifically identified fears have included drinking in public, observation using office equipment, sports performance, and taking tests (Rapee, 1995). These fears have been classified into two groups: performance and social interaction (Rapee, 1995). However, the distinction between the two types of fears remains empirically unclear and points of rarity between the two have yet to be discovered.

The DSM-IV-TR (APA, 2000) states that most individuals with SAD fear only one situation. However, research has demonstrated that the majority of individuals with SAD have experienced fears related to at least two situations. Turner and associates (1986) found that less than 10% of their sample feared only one situation. Almost 43% feared two situations, 39% feared three situations, and almost 10% feared four or more situations. With regard to avoidance, more than 90% of this sample avoided two or more

types of social situations.

Rapee (1995) has identified several factors that moderate fear, the most important of which is believed to be the individual's perception of the audience. Such moderators include the size, gender, and social status of the audience. Larger audiences, opposite sex audiences, and audiences of higher social status all increase fear responses and anxiety. The formality of the situation also appears to moderate fear, with more formal situations provoking higher levels of anxiety.

To further clarify cognitive content involved in SAD, Hartman (1984) performed a factor analysis of 21 social concerns. Four factors were revealed, which Hartman named the "Social Evaluative Concerns." The first, social inadequacy, involved the extent to which the individual believed s/he lacked the skills necessary for successful social interaction. This factor also included general psychological distress. Others' awareness of distress marked the second factor. Individuals with SAD believed that others could sense their anxiety and that others would evaluate them negatively as a result (Leary & Kowalski, 1995). The third factor could be considered the hallmark characteristic of SAD and has been labeled "the fear of negative evaluation." Finally, autonomic arousal loaded as the fourth factor. Persons with SAD experienced high levels of autonomic arousal, exacerbated by self-focused attention.

Self-evaluation represents another domain of cognitive content within SAD. Rapee (1995) described pervasive negative evaluation in self-statements made by socially anxious participants. These self-statements have been reflected in diary sentiments such as, "Everyone thought I was acting inappropriately," or "No one there wanted to talk to me." Socially anxious people have also rated themselves as lacking necessary social

skills. Self-statements in this area might sound like “I just don’t know how to talk to people,” or “I always make a fool of myself because I never know what to say.”

Concerns about appearance abound in this disorder, and self-statements in this area reflect a negative bias: “Everyone else was dressed so nicely and I looked awful,” or “Everyone must have noticed that my shoes are out of style.” These types of self-evaluative statements reflect “public self-consciousness.” Fenigstein, Schneier, and Buss (1975) first described this process, by which socially anxious individuals viewed themselves and others as social objects, thereby focusing excessive attention to their outward appearances and external aspects of themselves.

While the cognitive content of SAD sheds light on the types of self-statements made by individuals with social anxiety, it is also important to examine the process by which these thoughts arise. This type of scrutiny may reveal the mechanisms by which self-statements and schemas are activated, thereby illuminating the way in which socially anxious individuals evaluate and respond to the environments around them.

Cognitive Process in SAD

The cognitive processes involved in SAD have been studied in several ways. The method of choice for the majority of researchers in this field has been self-report of perceptions during tasks, including the subject’s perceived attentional focus. Often, physiological measurements have been included in studies to determine the accuracy with which perceived responses have been identified. In contrast, several researchers have used experimental information processing tasks and more objective measures of cognitive process. Research using both methodologies has yielded relatively consistent results with regard to self-evaluation.

In a study of 36 individuals (12 inpatient, 12 outpatient, and 12 control participants), Stopa and Clark (1993) found that SAD in- and out-patients recorded more negative self-evaluative thoughts during experimental tasks than control participants. Notably, these researchers contended that the self-evaluations made by SAD participants were not data driven. More specifically, when SAD participants reported their thoughts about social interactions, most did not mention others or specific ways in which they were evaluated by others. Additionally, those with SAD consistently underestimated their performances when their responses were compared to objective observer responses, providing further evidence that SAD perceptions may not be completely accurate.

Alden and Wallace (1995) also found a negative cognitive bias in self-evaluation. This study paired 32 SAD outpatients and 32 community (control) participants with an experimental assistant on a “getting acquainted task.” The experimental assistant engaged in either positive or negative social behaviors, and the participants were asked to rate themselves and the assistant on social skills. Objective observers, blind to the experimental conditions, also rated the interactions. In the “getting acquainted” task, individuals with SAD demonstrated a bias toward negative appraisal in evaluation of their own performances. SAD participants rated themselves poorly and were particularly inaccurate regarding nonverbal aspects of behavior. Despite the fact that situations were manipulated to involve positive or negative interactions, SAD participants rated both situations equally, discounting their own social competence.

These results from the previous study have been supported by other research demonstrating that individuals with SAD inaccurately perceive their own performances (see Rapee, 1995). These results provide evidence for an inverse relationship between

SAD and the individual's ability to accurately perceive the external environment and his/her role in it. However, the direction of this relationship has not been established in SAD literature and may reflect the "chicken and the egg" conundrum. Researchers have yet to discern if SAD prevents accurate perception of the external environment, or if the individual's evaluative style influences the development or course of SAD.

In addition to inaccurate self-evaluation, those with SAD incorrectly evaluate the performance of others. However, this appraisal errs on the positive and demonstrates a bias toward perceiving the performance of others as superior. In the Alden and Wallace (1995) "getting acquainted" experiment, the experimental assistant engaged in either positive or negative social behaviors, which were rated by the participants in both conditions, as well as objective observers. The SAD participants rated the assistant as more successful and more socially skilled than the assistant actually was (according to objective observer ratings) in both positive and negative conditions, whereas the community sample accurately perceived both their own skills and the skills of the assistant. Some dissention exists in this area, though, as Rapee et al. (1988) demonstrated that a SAD group rated others similarly to community sample ratings.

Turner, Beidel, and Larkin (1986) compared in- and out-patient SAD samples to a nonclinical sample on several different situational tasks, including interacting with same and opposite sex confederates, as well as completing questionnaires. Physiological responses to different situations were measured and cognitive responses were gathered by self-report. The results indicated that cognitive biases occurred differentially across situations while physiological reactivity was influenced primarily by interaction with the confederate. This suggests that individuals with SAD did not evaluate all situations in

the same manner.

Rapee (1995) applied this idea to socially threatening situations and found that individuals with SAD allocated additional resources to the detection of social threat. In a study utilizing a Stroop color naming task with physical and social threat cues, SAD participants demonstrated greater interference with socially threatening cues than non-anxious controls (Hope, Rapee, Heimberg, and Dombek, 1990). This interference correlated with self-reported avoidance, leading these researchers to conclude that self-schemas promoted the processing of socially threatening cues.

Self-schemas represent cognitive frameworks that individuals use to process information. It has long been hypothesized that schemas provide a cognitive short cut to information processing. In the case of the socially anxious, schemas may provide a faulty or maladaptive framework. Several studies have documented that these cognitive short cuts prevent the socially anxious from accurately assessing or evaluating the environment (Coles, Turk, Heimberg, & Fresco, 2001; Heinrichs & Hoffman, 2001; Lundh & Oest, 2001). A study using facial expression identification found that those participants with high levels of social anxiety were less likely to accurately identify facial expressions. In fact, high levels of social anxiety were associated with participants' inability to identify which pictures they had already seen (Perez-Lopez, Raul, & Woody, 2001).

It is probable that self-schemas also contribute to the interpretation of ambiguous feedback. A study by Smith and Sarason (1975) found that socially anxious participants attached negative meaning to ambiguous feedback more often than participants with low levels of anxiety. Eysenck and colleagues reported that anxious participants were more likely to interpret an ambiguous sentence as threatening, supporting the Smith and

Sarason results (Eysenck, Mogg, May, Richards, & Mathews, 1991). Based on research of this nature, Hope, Rapee, Heimburg, and Dombek (1986) drew the conclusion that those with SAD are hypervigilant to cues of social threat. Rapee (1995) later provided evidence that social threat sensitivity remains stable across the lifespan, indicating a cognitive process that may prove resistant to treatment or change. Stopa and Clark (1993) supported the importance of social threat and added that another significant process complicating SAD involved the extent to which these individuals control their attentional resources.

The aforementioned findings indicate that SAD interferes with the process of evaluating the external environment. Not only do socially anxious individuals inaccurately perceive their own performance in social situations, but they also inaccurately perceive the performances of others in similar situations (Alden and Wallace, 1995). It has also been suggested that those with SAD are also more likely to construe ambiguous feedback as negative reflections of themselves. It seems researchers agree that it is unclear exactly what mechanism leads to these misperceptions. Examination of the extent to which someone with SAD evaluates specific factors in the environment and the amount of time s/he spends processing socially threatening cues might provide useful information for the refinement of treatments for SAD. It might also prove useful to evaluate behavioral traits, such as the extent to which socially anxious individuals base their behavior on specific cues from the environment. Finally, it has been documented that allocation of attentional resources plays a significant role in the way in which socially anxious persons construe their environments. This aspect includes two components: the way in which the socially anxious individual evaluates his/her

anxiety (self-focused attention), and the way in which the socially anxious individual evaluates him-/herself as a social object (public self-consciousness).

Self-Focused Attention (SFA)

Self-focused attention has been examined by many researchers over the past three decades. In a 1990 review, Ingram sought to integrate this research into a conceptual model. While he hypothesized that a reasonable level of self-focus might be adaptive, he stated that this construct could become dysfunctional. As such, Ingram outlined three dimensions with which to evaluate self-focused attention. The first dimension, *degree*, could be considered dysfunctional when “excessive” levels have been reached. Although not operationalized by Ingram, “excessive” levels might be indicated by a degree of self-focused attention that hinders information processing. *Duration*, the second dimension, found poor mental health at the “sustained” level (although specific criteria were not outlined). Finally, *flexibility* comprised the third dimension, where psychopathology was more likely to occur at the “inflexible” end of the flexibility continuum.

While Ingram (1990) contended that self-focused attention was related to a multitude of psychological abnormalities, his conceptual model provided a novel framework from which to examine SAD. Research in this area has provided an examination of Ingram’s first dimension, *degree*. Hope, Rapee, Heimberg, and Dombeck (1990) demonstrated that SAD outpatients displayed an increase of self-focused attention while performing tasks, providing evidence for the phenomenon in SAD. Hope and Heimberg (1988) showed that self-focused attention interfered with performance in individuals with SAD. While Ingram never operationalized “excessive” self-focused attention, the self-focus involved in the Hope and Heimberg study was significant enough

to interfere with recall for interaction details, suggesting that self-focused attention impaired the ability to process interaction details. This implies that socially anxious individuals with high levels of self-focused attention might self-focus to the extent that they ignore important situational cues in the environment.

Carver, Peterson, Follansbee, and Scheier (1983) demonstrated that self-focus paired with anxiety reduced test performance in participants who suffered from test anxiety. However, participants without test anxiety who self-focused experienced increased test performance. These results suggest an interaction between anxiety and self-focus. Hope, Heimberg, and Klein (1990) also found support for excessive self-focused attention in SAD. Non-anxious participants who self-focused had superior recall for interaction details, whereas socially anxious individuals with high levels of self-focused attention had poor recall for interaction details and more frequent omission errors.

Most research conducted over the past ten years has demonstrated high self-focused attention levels in SAD and many researchers agree that self-focused attention interferes with performance in SAD. Woody and Rodriguez (2000) found that self-focused attention interfered with performance in a socially anxious sample. Hope, Gansler, and Heimberg (1989) discussed this construct in detail:

Research suggests that excessive self-focused attention is increased by physiological arousal, interferes with task performance under some conditions, increases the probability of internal attributions, and intensifies emotional reactions (p. 49).

In the above instances, it seems clear that these studies illustrate the “excessive” nature of self-focused attention in SAD.

It may be important to note that not all researchers agree on the extent to which

self-focused attention affects performance. Woody (1996) induced high levels of self-focused attention in SAD participants by assigning speech tasks. Level of self-focused attention was strongly related to self-reported levels of anxiety. However, she found no evidence that high levels of self-focused attention affected performance for any of her participants. Burgio, Merluzzi, and Pryor (1986) also found that self-focused attention had a “limited effect” on performance. While these instances represent interesting and notable findings, they are inconsistent with the apparent consensus among SAD researchers that high levels of self-focused attention impair the performance of socially anxious individuals.

Limited evidence has also been found to support the two remaining components of Ingram’s model. In terms of *duration*, few researchers have examined the interval separating the onset and decline of self-focused attention within the context of SAD. Perhaps research on this topic might help to distinguish self-focused attention in SAD from self-focused attention in other psychological disorders. Since other constructs related to SAD remain pervasive throughout the lifespan, it seems reasonable to hypothesize that if left untreated, self-focused attention might always contribute to the processing of SAD. However, it has been demonstrated that this attentional style is *flexible* in that focus of attention can be altered by treatment. For example, it has been documented that levels of self-focused attention change with treatment designed to increase externally directed attention. Woody, Chambless, and Glass (1997) demonstrated that CBT helped to redirect self-focused attention to external factors. Decreases in self-focused attention were associated with positive therapeutic outcome in negative self-judgments and individual change. Wells and Papageorgiou (1998)

supported these results in their finding that exposure therapy that involved teaching participants to employ an external focus of attention was more effective in treating SAD than exposure therapy alone.

Several researchers have examined the relationship between self-focused attention and SAD but few have attempted to document differences between this construct and public self-consciousness. Drawing upon the works of Fenigstein and colleagues, Rapee (1995) described public self-consciousness as attending to the external aspects of the self. Ingram (1990) referred to self-focused attention as resources allocated to internal changes within the individual. Additional research is necessary to determine points of rarity between these two attending concepts. It seems clear, though, that self-focused attention plays a significant role in SAD and that research in this area should continue to examine this construct.

Variables in Existing Models of SAD

Most models describing socially anxious processing have incorporated the cognitive aspects previously reviewed. Clark and Wells (1995) generated a popular and plausible model which included a section deemed “processing of self as a social object,” which was almost indistinguishable from public self-consciousness. However, they described this as a processing bias preventing social phobics from learning from their environments. The model described the process in which a social situation activates schemas that detect social danger. The perceived social danger initiates behavioral, cognitive, and somatic symptoms, as well as the processing of self as a social object. The three types of symptoms contribute to the processing of self as a social object, which further exacerbates perceived social danger. Finally, the three symptom types feed into

and influence the original social situation, as the individual evaluates and responds not only to the environment, but also to his or her own behavioral, cognitive, and somatic symptoms and how they may appear to others.

A recent study examined specific components of the Clark and Wells (1995) model. Researchers employed a method of recall for words describing both positive and negative traits. Participants were asked to rate themselves and others on each trait, as well as rate how others would perceive them on the traits. The latter ratings attempted to capture “public self-referent” information, or what others have called “processing of self as a social object” or “public self-consciousness.” Half of the participants were then told they would have to give a speech, thereby activating a social threat. Physiological arousal was measured, after which the participants were asked to recall the trait words they had previously read. The results provided evidence that socially anxious individuals recalled significantly more negative trait words than those without social anxiety. In addition, high levels of social anxiety were associated with high participant ratings of observable anxiety. That is, those with high levels of anxiety overestimated the extent to which that anxiety was apparent to others. These researchers concluded that the results supported the Clark and Wells (1995) model, including the somatic and cognitive aspects of social anxiety as well as the public self-consciousness component of the model (Mansell & Clark, 1999).

In a similar model, Rapee and Heimberg (1997) outlined a more elaborate process. In this model, the perceived audience represented the initial factor. The perceived audience activates the “preferential allocation of attentional resources” and the “mental representation of self as seen by audience.” Again, this reflects the public self-

consciousness previously referenced. The preferential allocation of attentional resources contributes to the “external indicators of negative evaluation” as individuals become hypervigilant to socially threatening cues. The mental representation of self then influences a “comparison of mental representation of self as seen by audience with appraisal of audience’s expected standard.” This elicits a “judgment of probability and consequence of negative evaluation from audience.” The judgment results in behavioral, cognitive, and physical symptoms of anxiety, which combine to activate perceived internal cues that tie back in to the mental representation of self. Additionally, the behavioral symptoms cue “external indicators of negative evaluation” and also feed in to the mental representation of self. Several studies have examined and found support for specific components of this model (Heinrichs & Hoffman, 2001; Saboonchi & Lundh, 1997; Saboonchi, Lundh, & Oest, 1999).

Both models suggest public self-consciousness when describing “processing of self as a social object” (Clark and Wells, 1995) and “mental representation of self as seen by audience,” (Rapee and Heimberg, 1997). However, public self-consciousness overlooks attention directed at the internal aspects of the self. Self-focused attention might better account for the process involved, whereby an individual focuses not only on the mental representation of the self, but also on the internal changes occurring as a result of the situation (ex. increased heart rate, shaking hands, sweating).

While both of these models address the complex process involved in SAD, they both refrain from examining the extent to which each situation is examined by the individual. That is, both models lack an individual differences approach to evaluation. The Clark and Wells (1995) model lists the “social situation” as the initial trigger for

SAD but neglects to examine the extent to which individuals evaluate this situation.

While Rapee and Heimberg (1997) incorporated perceived audience, external indicators of negative evaluation, and perceived internal cues into their model, they neglected to consider individual differences in the extent to which socially anxious individuals actually evaluate these components. Two constructs may influence this process: *the need to evaluate* and the personality construct *self-monitoring*.

The Need to Evaluate (NtE)

The Need to Evaluate is a relatively new construct defined by Jarvis and Petty (1996) by the statement, “Individuals differ in the extent to which they chronically engage in evaluative responding,” (p. 172). According to Jarvis and Petty, most areas of psychology have assumed that individuals engage in similar evaluative responses without regard for individual differences. Jarvis and Petty contended, however, that individual differences exist with respect to this construct. They first listed four assertions to provide evidence that evaluation presides over human decision. First, Jarvis and Petty cited the 1957 Osgood, Suci, and Tannenbaum study in which factor analysis of adjective ratings revealed a single factor describing evaluative dimensions, which Osgood termed “evaluative factor.” Second, a multitude of researchers have shown that attitudes can be automatically stimulated by memory and exposure to relevant stimuli (Bargh, 1994; Bargh, Chaiken, Gendler, & Pratto, 1992; Fazio, 1995; Fazio, Powell, & Herr, 1983), further indicating that evaluative responding is pervasive and relevant. A third line of evidence emerged from the general idea that most people seem to have formed opinions about a wide variety of topics and a fourth factor supporting evaluative responding stemmed from the functionality of attitudes (Jarvis and Petty, 1996).

Jarvis and Petty (1996) postulated that individual differences may be expected with regard to the need to evaluate. One contention revolved around life experiences, positing that different encountered situations might result in different evaluations. A second contribution to evaluative responding might emerge from family influence. Jarvis and Petty used the example of social learning to hypothesize that children may learn to evaluate based on evaluative responses modeled by their parents. Motivational aspects have been considered as well, such as enjoying evaluation or even responding to incentives to evaluate.

Regardless of the postulated causes for individual differences, the construct still warrants examination for several important reasons. Jarvis and Petty (1996) outlined potential reasons for the examination of individual differences in evaluative responding. At its most basic, the issue begs the question: Do these individual differences exist? If so, several other factors, such as why and how they develop, could be addressed. Second, research results might generalize better if participants have evaluated similar situations outside experimental conditions. Other reasons include possible implications for health, stress, and coping, as well as effective advertising mechanisms for persuasion based on evaluative responses.

Jarvis and Petty (1996) constructed a scale designed to assess individual differences in the need to evaluate. The Need to Evaluate Scale (NES) was developed using college students. During the initial studies for this measure, Jarvis and Petty noticed that those high in the need to evaluate had attitudes toward a variety of life situations and listed more evaluative thoughts in free listings describing paintings and typical days. Based on these initial findings, it seems there is support for measurable, differential

levels of evaluative responding.

Very few researchers have examined the relationship between the need to evaluate and SAD. However, this construct may constitute an integral component of cognitive processing in SAD. Incorporating the need to evaluate brings individual differences into the process for the first time. This may account for and explain inconsistent findings in the literature, such as why some participants do not perform as well when self-focusing and others are relatively unaffected (Carver et al., 1983; Woody, 1996). One preliminary study found a trend toward lower levels of Need to Evaluate in the socially anxious (Klocek, Carmin, Shertzer, & Paidas, 2000). However, small sample size prevented complete examination of these effects. In an effort to better understand the disorder and develop effective treatments, future research must examine the need to evaluate and its relevance to SAD.

Self-Monitoring (SM)

Self-monitoring was first outlined as a personality construct in the early 1970's. While the field of social psychology had been examining many dimensions of interpersonal interaction, several researchers had taken notice of individual differences in interpersonal functioning. They began to ask the question, "To what extent do individuals modify their behaviors based on the situations in which they find themselves?" Snyder (1974) noticed that individuals seemed to differ in the extent to which they evaluated external cues, as well as the extent to which individuals would modify their behaviors based on specific situations. Integrating previous research, Snyder began to examine the ways in which individuals monitored (observed and controlled) their self-presentation and expressive behaviors. He labeled this new

construct “self-monitoring.” While this construct may overlap with self-focused attention, a distinction may be drawn between self-focused attention and self-monitoring in that self-focused attention refers to the way in which an individual focuses on internal aspects of the self, whereas self-monitoring represents a personality characteristic that determines the extent to which the individual focuses outward to the external environment for indicators of appropriate behavior. (It should be noted that the term “self-monitoring” shall be used hereafter to refer to the personality construct as outlined by Snyder (1974), and shall not refer to self-observation methods of data collection or treatment intervention.)

Studies examining individual differences in self-monitoring delineated five goals or purposes of engaging in self-monitoring. The first was communication of a true emotion by exaggerating expression in order for that emotion to be detected by others. The second goal was communication of an arbitrary emotion that was incongruent with actual emotions, so that a “socially acceptable” feeling relevant to the situation was being expressed. The third goal involved properly concealing an inappropriate emotion and replacing it with apathy or indifference, whereas the fourth goal extended the concealing of an inappropriate emotion and replaced it with expression of an acceptable feeling. In this manner, socially inappropriate emotions have been hidden or replaced. The fifth and final goal of self-monitoring was conveyed emotional experience when no emotion was felt, thereby matching the emotions of those surrounding the individual. These characteristics of self-monitoring led Snyder to the conclusion:

“The self-monitoring individual is one who, out of a concern for social appropriateness, is particularly sensitive to the expression and self-presentation of others in social situations and uses these cues as guidelines for monitoring his own self-presentation,” (Snyder, 1974, p. 528).

Social psychology has produced large quantities of research examining self-monitoring and its effects on interpersonal functioning. Snyder (1983) determined that high levels of self-monitoring were indicative of someone whose behavior could be predicted by specific situations, whereas low levels of self-monitoring indicated an individual whose behavior could be predicted by traits and attitudes. Snyder and Kendzierski, (1982) also demonstrated that self-monitoring influenced the types of social situations participants were willing to enter. Those with low self-monitoring levels would only willingly enter into social situations where their beliefs and attitudes were congruent with a group's. Those with high levels of self-monitoring were willing to enter any situation, regardless of the dominant beliefs and attitudes in the group. These results were repeated in a similar study. Snyder and Gangestad (1982) found that high self-monitoring participants were willing to enter any situation as long as it was clearly defined, whereas low self-monitoring participants were again only willing to enter situations congruent with their own personalities. These studies indicate that high self-monitorers possess the freedom to interact in any situation, while low levels of self-monitoring indicate an individual who feels compelled to interact only in situations with which they are somewhat familiar.

Self-monitoring tendencies have been linked to psychological health, successful social interactions, greater numbers of friendships, and attainment of and advancement in careers (Snyder, 1995; Snyder and Simpson, 1987). High levels of this trait have also been linked to accurate descriptions of others, whereas low levels have been linked to poorer descriptions of others but better descriptions of people like themselves (Snyder and Cantor, 1980). Finally, it has been demonstrated that high levels of self-monitoring

allow the individual to separate attitudes from behavior to the extent that an unsuccessful social interaction would not be internalized. Those with low self-monitoring tendencies blamed their own discrepant behavior as the cause of the social failure (Snyder and Tanke, 1976).

Given the interpersonal nature of this personality construct, it seems surprising that no research has examined self-monitoring in relation to SAD. The characteristics of high levels of self-monitoring represent the inverse of SAD symptoms. Clark and Wells (1995) described a cognitive bias that prevented social phobics from learning from their environments. Perhaps this bias can be described as low levels of self-monitoring in the socially anxious. One purpose of this research includes examination of the nature of this trait as it relates to SAD.

Summary

Background literature on SAD has revealed that it is a chronic and unremitting disease affecting, on average, 13% of the population. The most pervasive anxiety disorder, it has been associated with interference in many areas of life. Social phobics tend to fear a number of situations, and thus they fall into the diagnostic subtype of "Generalized Social Anxiety," which has been associated with more severe anxiety and greater life interference. As such, effective treatments have become increasingly important.

Extensive research has been conducted as to the cognitive content and processes involved in the disorder. Existing models have sought to integrate this research but have neglected several important concepts, such as self-focused attention, self-monitoring, and individual differences in evaluative responding. A prospective model has incorporated

the three constructs as an explanation of SAD. However, these models will only take us so far. Models can be useful in hypothesizing relevant constructs; they will not serve to lessen the interference in the daily lives of social phobics until we can apply these constructs to useful and effective treatments. An individual differences approach may be useful in this respect, in that treatments can be tailored to the needs of individuals with SAD.

The current research project will attempt to address the extent to which these constructs, the need to evaluate, self-monitoring, and self-focused attention actually apply to SAD. It is hypothesized that a strong relationship will emerge between social anxiety and self-focused attention, as has been demonstrated in previous research. A second hypothesis posits that level of need to evaluate will relate to social anxiety, and, in concert with self-focused attention, may explain more variance in social anxiety than focus of attention alone. Finally, it has been hypothesized that self-monitoring will predict additional variance in social anxiety, above and beyond that predicted by the previous variables.

Method

Participants

Participants in this study were volunteers from the Introduction to Psychology courses at the University of Montana and were offered course credit for participation (N=129). Power analysis of this sample size yielded power of .90. These participants were mostly male (66%) and the mean age was 20 years old. They completed several questionnaires in large-scale classroom administrations of approximately 40 participants per session. Each participant reviewed and signed informed consent forms, and each was

provided a copy of this form to keep. In addition, a debriefing form was given to each participant upon completion of the measures.

Procedures

Sessions occurred in classroom-type settings on the University of Montana's Missoula campus. Informed consent was carefully discussed. The informed consent form made clear that participation was voluntary and that participants were free to leave at any time without penalty. The researcher allowed time for questions before participants signed the form. These forms were then collected and kept separate from the remaining data. No identifying information was directly associated with the remaining data. Participants then completed seven measures: the Fear of Negative Evaluation Scale- Revised (FNE-R), the Social Avoidance and Distress Scale- Revised (SAD-R), the Social Interaction Anxiety Scale (SIAS), the Social Phobia Scale (SPS), the Need to Evaluate Scale (NES), the Self-Consciousness Scale (SCS), and the Self-Monitoring Scale (self-monitoring). Upon completion, the participants handed in their measures and signed their names on sheets that were turned in for Psychology 100 credit. In the event that participants wished to leave without completion, their measures were collected and they received credit. Only one student wished to discontinue the study after reading through the measures.

Fear of Negative Evaluation Scale- Revised (FNE-R)

The FNE is a 30-item scale developed by Watson and Friend (1969). It was designed to assess the primary characteristic of SAD, the fear of negative evaluation. All items are statements against which agreement is measured by a 5 point Likert-type scale (e.g. "I am afraid that others will not approve of me."). Seventeen items are reverse-

scored and a sum of all items is calculated.

The original scale possessed sound psychometric properties. The scale strongly correlated with similar measures and did not correlate with measures of distinct constructs (Watson & Friend, 1969). This scale was recalibrated in 1999 from its original true-false format into a 5-point Likert-type scale. The revised version has demonstrated adequate validity and reliability (Gillock, Carmin, Klocek, and Raja, 1999). In the current study, the FNE-R correlated with other social anxiety measures (see Table 2), indicating construct validity. Cronbach's alpha for the sample in this study was .84, indicating adequate reliability for this sample.

Social Avoidance and Distress Scale (SAD-R)

This measure is a 28-item scale developed by Watson and Friend (1969) to assess anxiety in and avoidance of social interactions and performance situations. The recalibrated version measures agreement with 28 statements using a 5 point Likert-type scale. Fourteen items are reverse-scored and a sum of all items is calculated.). Sample items include, "I often find social occasions upsetting," and "When my superiors want to talk with me, I talk willingly."

The original scale possessed good psychometric properties, including adequate reliability coefficients for the original sample. The scale strongly correlated with similar measures and did not correlate with measures of distinct constructs, indicating good construct validity (Watson & Friend, 1969). This scale was recalibrated in 1999 from its original true-false format into a 5-point Likert-type scale. The revised version has demonstrated adequate validity and reliability (Gillock, Carmin, Klocek, and Raja, 1999). In the current study, the SAD-R correlated with other social anxiety measures (see Table

2), supporting construct validity. Cronbach's alpha for the sample in this study was .97, indicating superior reliability for these participants.

Social Interaction Anxiety Scale (SIAS)

The SIAS was designed to measure anxiety experienced during a broad range of social interactions and consists of 19 items (Mattick and Clarke, 1998). Participants rate agreement to the 19 statements using a 5 point Likert-type scale. Two items are reverse-scored and a sum of all items is calculated. This measure produced reliable scores (Cronbach's alpha = .88-.94) for previous samples reported in the literature (Mattick & Clarke, 1998). Adequate discriminant and construct validities have been demonstrated by the authors. In the current study, the SIAS correlated with other social anxiety measures, indicating adequate construct validity (see Table 2). Superior reliability was also obtained for the current sample (Cronbach's alpha was .92). Sample items include, "I have difficulty making eye-contact with others," and "I am unsure whether to greet someone I know only slightly."

Social Phobia Scale (SPS)

The SPS is a 20-item scale designed to measure anxiety over being scrutinized during common activities (Mattick and Clarke, 1998). Responses are assessed using a 5 point Likert-type scale. Sample items include, "I become anxious if I have to write in front of others," and "I fear I may blush when I am with others." A sum of all items is calculated.

The authors have shown the scale to possess adequate validity (construct and discriminant) and reliability (Cronbach's alpha = .89-.94) (Mattick and Clarke, 1998). In the current study, the SPS correlated with other measures of social anxiety (see Table 2),

indicating good construct validity. In addition, Cronbach's alpha for the current sample was .92, demonstrating superior reliability for this sample.

Need to Evaluate Scale (NtE)

This scale is a 16-item measure developed by Jarvis and Petty (1996). It is designed to assess the extent to which individuals engage in evaluative responding of their external environments. The scale measures agreement between statements and responses using a 5-point Likert-type scale. Ten items are reverse-scored and a sum of all items is calculated. The Need to Evaluate Scale has a high degree of internal consistency (Cronbach's $\alpha = .87$) (Jarvis & Petty, 1996). The scale yields one factor in factor analysis and possesses a high test-retest reliability (.84) (Jarvis & Petty, 1996). Sample items include, "I form opinions about everything," "I like to decide that new things are really good or really bad," and "I have many more opinions than the average person."

Self-Consciousness Scale (SCS)

This is a 16-item scale developed by Fenigstein, Scheier, and Buss (1975). Two subscales are included: a nine-item scale designed to measure private self-consciousness (self-focused attention) and a seven-item public self-consciousness scale. Items are statements against which agreement is measured by a 4 point Likert-type scale. A recent confirmatory factor analysis demonstrated that the scale measures three dimensions: rumination on the general self (self-focused attention), monitoring of specific aspects of self (self-focused attention), and public self-consciousness (Martin and Debus, 1999).

Self-Monitoring Scale (SM)

This measure is a revision of and replaces the original scale developed by Snyder

(1974). The scale was designed to reveal the extent to which individuals monitor (observe and control) their expressive behavior. The original 25-item scale was pared down to 18 True-False items (Snyder & Gangestad, 1986). One point is given for each response of “True,” and 10 items are reverse-scored. This scale has demonstrated internal consistency ($\alpha = .70$). Factor analysis reveals one factor accounting for 62% of the variance. Sample items include “I would probably make a good actor,” “I’m not always the person I appear to be,” and “I may deceive people by being friendly when I really dislike them.”

Hypotheses and Proposed Statistical Analyses

Hypothesis One: There will be positive relationships between self-focused attention and social anxiety and public self-consciousness and social anxiety, such that levels of self-focused attention and public self-consciousness may predict level of social anxiety.

Hypothesis Two: There will be a relationship between Need to Evaluate and SAD such that level of Need to Evaluate will predict level of social anxiety above and beyond that predicted by the focus of attention variables.

Hypothesis Three: There will be a relationship between self-monitoring and social anxiety, such that level of self-monitoring may predict the level of social anxiety above and beyond that predicted by focus of attention and Need to Evaluate.

Once data was collected, it was entered into an SPSS spreadsheet. Analyses included computation of descriptive statistics, correlations between all variables, including demographic information, reliability coefficients for all the measures used, and hierarchical regression. Hierarchical regression allowed the variables to be entered in a

particular sequence, rather than simultaneously. Scores on the Self-Consciousness, Need to Evaluate, and Self-Monitoring scales were entered as predictor variables (IV's), and scores on the social anxiety measures served as criterion variables (DV's). The focus of attention variables were entered first, as the relationships between self-focused attention, public self-consciousness, and SAD have been previously established. The second step incorporated the Need to Evaluate into the model. The overall R^2 was expected to increase, indicating that level of Need to Evaluate predicted explained variance in social anxiety scores above and beyond focus of attention. Finally, a third step added Self-Monitoring as a predictor to the equation. This variable was entered last due to lack of a previous established relationship in the literature. An increase in R^2 would indicate that degree of Self-monitoring did, in fact, predict level of social anxiety above and beyond focus of attention and Need to Evaluate.

Results

Descriptive statistics for each measure are presented in Table 1. Correlations between age, gender, and each variable were examined but no significant findings emerged.

Table 1

Descriptive Statistics for Social Anxiety, Focus of Attention, and Self-monitoring Measures

Measure	Mean	SD	α
SAD-R	42.09	24.32	.97
FNE-R	82.64	16.05	.84
SIAS	20.53	12.24	.92
SPS	18.16	12.82	.92
SFA- Private	16.58	5.01	.65
SFA- Public	12.55	4.60	.84
SFA- Full Scale			.77
NTE	44.84	10.20	.81
SM	7.47	3.46	.71

Note. **SAD-R** Social Anxiety and Distress Scale- Revised, **FNE-R** Fear of Negative Evaluation Scale- Revised, **SIAS** Social Interaction Anxiety Scale, **SPS** Social Phobia Scale, **SFA-Private** Self-focused Attention Private Self-consciousness Scale, **SFA-Public** Self-focused Attention Public Self-consciousness Scale, **NTE** Need to Evaluate Scale, **SM** Self-monitoring Scale.

Cronbach's alpha reliability coefficients were examined in order to determine the internal consistency of the scores on all measures. These scores are also presented in Table 1. Although alpha coefficients for the four social anxiety measures indicate adequate reliability for this sample, it is notable that the Fear of Negative Evaluation Scale- Revised (FNE-R) coefficient is lower than the others. This is not consistent with past research (Mattick & Clarke, 1998; Watson & Friend, 1969), which indicates that the FNE-R produces scores comparable in reliability to other social anxiety measures used in this study. It is hypothesized that smaller sample size contributed to this finding. Despite the lower coefficient than other social anxiety measures, the alpha coefficient for the FNE-R was still within the acceptable range.

Relationships Between Social Anxiety, Focus of Attention, Need to Evaluate, and Self-monitoring

Correlations between study variables are presented in Table 2. Many significant correlations indicated strong relationships between several study variables.

Table 2

Correlations Between Research Measures

Measure	SAD-R	FNE-R	SIAS	SPS	SFA-Pr	SFA-Pu	NTE	SM
SAD-R	1.00							
FNE-R	.28**	1.00						
SIAS	.42**	.45**	1.00					
SPS	.38**	.40**	.74**	1.00				
SFA-Pr	.03	.13	.06	.03	1.00			
SFA-Pu	.07	.43**	.35**	.30**	.31**	1.00		
NTE	-.06	-.16	-.01	-.12	.35**	.22*	1.00	
SM	.27**	.07	.27**	.14	-.21**	-.19*	-.19*	1.00

*Correlation is statistically significant at the .05 α level (2 tailed).

** Correlation is statistically significant at the .01 α level (2 tailed).

Note. **SAD-R** Social Anxiety and Distress Scale- Revised, **FNE-R** Fear of Negative Evaluation Scale- Revised, **SIAS** Social Interaction Anxiety Scale, **SPS** Social Phobia Scale, **SFA-Pr** Self-focused Attention Private Self-consciousness Scale, **SFA-Pu** Self-focused Attention Public Self-consciousness Scale, **NTE** Need to Evaluate Scale, **SM** Self-monitoring Scale.

Relationships between all social anxiety measures were first investigated in order to determine validity of the study. As expected, each measure of social anxiety significantly correlated with the other measures of social anxiety. This is consistent with previous findings using these four measures. However, the correlations presented in Table 2 between social anxiety measures are significantly lower than those found in previous literature (Klocek et al., 2002; Mattick & Clarke, 1998).

The relationships between the focus of attention variables were examined next using the Self-consciousness Scale. Because the Self-consciousness Scale is comprised of two subscales, Public and Private, the relationship between subscales was scrutinized. A moderate relationship between the Public and Private Self-consciousness became evident ($r = .31, p < .01$). Given the internal consistency for the entire scale (.77), this was not unexpected. When examining the relationship between focus of attention and social anxiety, several moderate correlations were observed. Strong positive relationships emerged between scores on the Public Self-consciousness subscale and scores on the FNE-R ($r = .43, p < .01$), scores on the Public Self-consciousness subscale and scores on the SIAS ($r = .35, p < .01$), and scores on the Public Self-consciousness subscale and scores on the SPS ($r = .30, p < .01$). These findings were expected due to the previously established relationship between self-focused attention (public self-consciousness) and social anxiety level. As expected, there were no significant correlations between scores on the Private Self-consciousness subscale and social anxiety level.

The next step involved examining the relationships between Need to Evaluate Scale scores and study variables. The Need to Evaluate scores were not significantly

correlated with any of the four social anxiety measures, indicating that no direct relationship between Need to Evaluate scores and social anxiety level could be found in this sample. However, Need to Evaluate scores did correlate moderately with focus of attention variables. Moderate positive relationships were found between these scores and scores on both the Private Self-consciousness subscale ($r = .35, p < .01$) and the Public Self-consciousness subscale ($r = .22, p < .05$). These findings indicate the possibility of overlap between the two constructs, particularly where allocation of attentional resources is concerned. Conversely, a significant negative relationship was observed between Need to Evaluate scores and Self-monitoring Scale scores ($r = -.19, p < .05$), indicating a small inverse relationship between the two constructs.

Finally, the relationships between self-monitoring and study variables were explored. Significant positive relationships materialized between Self-monitoring Scale scores and scores on the SAD-R ($r = .27, p < .01$) and SIAS ($r = .27, p < .01$), indicating a relationship between self-monitoring and social anxiety. This relationship has not been found in previous literature. In addition, Self-monitoring scores were inversely related to Public Self-consciousness subscale scores ($r = -.19, p < .05$). This makes logical sense given that self-monitoring involves evaluation of the external environment while public self-consciousness involves attending to the internal aspects of the self. No significant relationship was found between Self-monitoring scores and Private Self-consciousness subscale scores. Finally, an inverse relationship occurred between Self-monitoring scores and Need to Evaluate scores ($r = -.19, p < .05$), possibly emphasizing the distinction between these two constructs. The specifics of potential distinction will be outlined in the discussion section that follows.

Accounting for Variance in Social Anxiety Level

In order to determine which study variables predicted social anxiety level, a regression analysis was conducted. Hierarchical regression was employed due to the previously established relationships between these variables and the theoretical overlap between the constructs. The criterion variable, social anxiety level, was operationalized as the sum of scores on four social anxiety measures divided by four. Because the relationship between focus of attention and social anxiety had been consistently reported, the Self-consciousness Scale scores were entered in the first step. The Need to Evaluate/social anxiety relationship was unclear in previous findings. Therefore, scores on the Need to Evaluate Scale were entered in the second step. Finally, self-monitoring, as measured by the Self-monitoring Scale, was entered in the third step in order to assess its unique contribution to social anxiety. Results of these analyses are presented in Table 3.

Table 3

Separating Variance in Social Anxiety Scores Accounted for by Focus of Attention Scores, Need to Evaluate Scores, and Self-monitoring Scores.

Model/ Predictor Variable	R ²	ΔR ²	t	p	β	Part	Partial
1. Focus of Attention	.115	.115	4.07	.00	.340	.340	.340
2. Focus of Attention Need to Evaluate	.152	.037	4.55 -2.35	.00 .02	.382 -.197	.373 -.193	.376 -.205
3. Focus of Attention Need to Evaluate Self-Monitoring	.245	.093	5.36 -1.85 3.93	.00 .07 .00	.432 -.149 .315	.417 -.143 .305	.433 -.163 .331

Note. Model 1 includes Self-focused Attention Private and Public Self-consciousness Subscales, Model 2 added the Need to Evaluate Scale, and Model 3 added the Self-monitoring Scale.

The focus of attention variables were entered first as predictors of social anxiety level. Model 1 was found to account for approximately 11.5% of the variance in social anxiety level ($F(1, 127) = 16.55, p < .00$). The strong correlation between public self-consciousness and social anxiety indicated that public self-consciousness was likely responsible for most of the variance among the two focus of attention variables.

The second step involved entering scores on the Need to Evaluate Scale into the regression equation with the focus of attention variables. This second model resulted in a significant change to the overall variance explained by the equation ($F(1, 126) = 5.52, p < .02$), accounting for an additional 3.7% ($p < .05$) of the variance in social anxiety level. This represents the unique contribution of Need to Evaluate scores to total variance in social anxiety level, where Need to Evaluate scores uniquely explained 3.7% of the variance and Public Self-consciousness scores uniquely contributed 13.91%.

The final step involved the addition of Self-monitoring scores to the regression equation. The addition of this variable contributed significantly to the overall variance in social anxiety, adding 9.3% more explained variance to the model ($p < .01$). This also represents the unique contribution of Self-monitoring scores to social anxiety level. In Model 3, Public Self-consciousness scores uniquely explained 17.39% of the variance while Need to Evaluate scores uniquely explained 2% of the total variance in social anxiety level. The change in variance from Model 2 to Model 3 was also significant ($F(3, 125) = 13.55, p < .00$). This brought the total explained variance in social anxiety level, as predicted by Focus of Attention scores, Need to Evaluate scores, and Self-monitoring scores, to 24.5%.

In addition to the above regression results, interactions between variables were examined after accounting for main effects. This was accomplished by multiplying scores on relevant measures (SFA X NTE, SFA X SM, NTE X SM) and entering the products into the regression equation using the same criterion variable (sum of four social anxiety measures divided by four). The addition of these interactions to the regression equation yielded no significant results.

These results illuminate the relationships between social anxiety, focus of attention, need to evaluate, and self-monitoring. They indicate that focus of attention (primarily public self-consciousness) and self-monitoring both significantly predict level of social anxiety. The Need to Evaluate also significantly predicts social anxiety level, although not nearly as well as the previous two variables.

Discussion

This study sought to examine the relationships between focus of attention, Need to Evaluate, Self-monitoring and social anxiety level. Specifically, it was predicted that each of these variables would account for unique variance in social anxiety level. Hypothesis One stated that there would be positive relationships between self-focused attention and social anxiety and public self-consciousness and social anxiety, such that levels of self-focused attention and public self-consciousness would predict level of social anxiety. Hypothesis Two stated that there would be a relationship between Need to Evaluate and social anxiety level, such that level of Need to Evaluate would predict level of social anxiety above and beyond that predicted by the focus of attention variables. Hypothesis Three stated that there would be a relationship between Self-monitoring and social anxiety, such that level of Self-monitoring would predict the level

of social anxiety above and beyond that predicted by focus of attention and Need to Evaluate.

Data was collected from 129 undergraduates at the University of Montana on 7 questionnaires in order to examine the hypothesized relationships. Power of .90 was obtained, indicating that the sample size was large enough to detect results. The sample was comprised of 66% male and 33% female participants, and the mean age was 20 years old. The demographic characteristics do not appear to have affected the results of the study.

Results from the analyses supported all three hypotheses. The first hypothesis stated that focus of attention would predict level of social anxiety. This was supported by the first regression model, indicating that focus of attention does, in fact, account for a significant amount of variance in social anxiety level. The second hypothesis stated that the addition of Need to Evaluate level would account for variance above and beyond that predicted by focus of attention. Support for this hypothesis can be found in Model 2. Although the addition of Need to Evaluate did result in significant changes to the model, the changes were small. Finally, the third hypothesis stated that the addition of Self-monitoring would account for variance above and beyond that predicted by the previous 2 models. Again, this hypothesis was supported by Model 3, indicating that Self-monitoring accounts for variance in social anxiety not accounted for by the other variables.

Upon closer examination, results supporting the first hypothesis represent and are consistent with previous findings. It has been well documented that focus of attention is related to social anxiety level; specifically, self-focused attention is predictive of social

anxiety level (Hope & Heimberg, 1988; Hope, Heimberg, & Klein, 1990; Hope, Rapee, Heimberg, & Dombek, 1990; Hope, Gansburg, & Heimberg, 1989; Woody & Rodriguez, 2000). Findings from this study provide further support for that relationship, such that self-focused attention increases as social anxiety level increases. This supports existing models of social anxiety that draw a causal link between the action of self-focussing (e.g. focusing on the internal aspects of the self, such as racing heartbeat, shaking hands, etc.) and the exacerbation of anxiety symptoms.

Closer examination of the second hypothesis reveals interesting results. Although the addition of the Need to Evaluate did result in significant changes to the model, those changes were small. This indicates that, although Need to Evaluate does explain some variance in social anxiety level, the amount of variance it predicts is not as significant as other variables. It would seem that other variables have a greater impact on social anxiety level than this. There was a moderate inverse relationship between Need to Evaluate and social anxiety level, indicating that as social anxiety level increases, Need to Evaluate level decreases. This may be understood by examining the attentional focus of the socially anxious. Because self-focused attention predicted social anxiety level so strongly, it is likely that most attentional resources are allocated to self-focused attention. Therefore, there would not be adequate resources available to evaluate the external environment. For example, a social phobic who is forced to give a speech may spend so much energy focussing on his/her racing heartbeat, shaking hands and knees, sweating palms, etc., that s/he is unable to then evaluate the responses and cues being given by the audience. This would explain previous findings that social phobics inaccurately perceive feedback from those around them (Alden & Wallace, 1995).

The addition of self-monitoring to the social anxiety model deserves further comment as well. Self-monitoring predicted and accounted for a significant amount of the variance in social anxiety level, even after the other variables' variance had been partitioned out. That is, self-monitoring predicted social anxiety level above and beyond that predicted by the other variables. This indicates that this variable uniquely accounts for approximately 9.3% of the variance in social anxiety level.

A positive relationship was found between self-monitoring and social anxiety, indicating that as self-monitoring increases, so does social anxiety level. Initially, this might not make sense, given the external-focus aspect of self-monitoring and the previous results with Need to Evaluate that suggested that the socially anxious were not evaluating the external environment. These findings seem to diverge. However, this may make more sense when one considers the 2-step process involved in Self-monitoring. The first step represents evaluating the external environment for cues as to how to behave and the second step involves selecting an appropriate behavior based on those cues. The results from the need to evaluate suggest that socially anxious individuals are not engaging in external evaluation. However, this may be because they are overly focused on the second step of self-monitoring, selecting the appropriate behavior. This over-focus on selection of behavior may constitute a separate, previously un-examined aspect of self-focused attention.

There are several implications of these findings. First, previous research on the relationship between self-focused attention and social anxiety has received support from these results. Socially anxious individuals tend to focus their attention inward. Second, the inward focus of attention may impair the ability to focus outward, as demonstrated by

the inverse relationship between social anxiety and need to evaluate. Socially anxious individuals may then miss out on important cues presented by the situation or observer because their attention is occupied by the internal aspects of their anxiety. Third, the relationship between social anxiety and self-monitoring seems to confirm the previous two statements, as the socially anxious do engage in selection of appropriate behaviors but without evaluating the environment for cues. This may explain some past research indicating that, despite their own perceptions, socially anxious individuals engage in successful social interactions and demonstrate appropriate social behaviors (Alden & Wallace, 1995; Rapee, 1995; Stopa & Clark, 1993).

Implications of these results have both theoretical and clinical applications. The addition of the self-monitoring component to new or existing models of social anxiety may better account for the cognitive processes involved in the disorder, particularly where attentional focus is concerned. Modification of models to include this construct, or at least the behavioral selection aspect, may result in a more comprehensive understanding of the disorder. In terms of clinical application, it seems clear that socially anxious individuals are not evaluating their environments. In not doing so, they are likely missing important information that could not only allow them to observe appropriate behaviors for specific situations, but also information that might allow them to more accurately perceive their own behaviors. An external-focus component could be added to existing treatments for social anxiety, and might result in selection of more appropriate behaviors or being able to perceive when others have deemed the social phobic's behavior to be successful. Clinicians who have already incorporated an external-focus

aspect into CBT have noted the effectiveness of this cognitive redirection of attention (Wells & Papageorgiou, 1998).

Although these results are meaningful, they should be considered in context. Because this study was not experimental, one cannot say that any of the study variables caused social anxiety level. Although relationships have been established between these variables, one does not know the temporal order of the emergence of the variables. This may be considered a threat to the internal validity of the study. Additionally, there may be considerable overlap between the variables. If the questionnaires all measured aspects of the same construct (e.g. external focus), this might bias the results by demonstrating that these variables each uniquely contribute to social anxiety when, in fact, they are all measuring aspects of the same construct. Internal validity may have been threatened by other potential confounding variables as well. For example, there may be mediating and/or moderating variables which were not studied but could have affected those variables being studied. Because the study involved only one session, no treatment, and no assignment to different conditions, internal threats such as selection, history, maturation, regression artifacts, attrition, and instrumentation were not of concern.

External validity may have been threatened by the use of a limited sample ($N = 129$), a primarily male sample (66%), and a relatively young sample (mean age = 20 years old). This study only utilized Introduction to Psychology students at a medium-sized, Pacific-Northwestern university. It is very possible that this sample may not be representative of the larger population of university students and non-students. Also, the study was conducted during a specific time frame (fall semester). As such, these results might not generalize to the population as a whole.

Measurement issues may also be at play. While the social anxiety measures all purported to be assessing different dimensions of social anxiety, the correlations between them indicated that they were measuring similar or overlapping constructs. It is possible that these four measures do not assess specific aspects of social anxiety that might influence the results. Although each measure was selected for its demonstrated psychometric properties, it is possible that any of the measures could inaccurately assess the construct that it was designed to assess. However, authors of each measure have provided adequate validity information and the measures have all been used extensively within psychology literature. Finally, reliability always poses a potential threat to the external validity of a study. Cronbach's alpha coefficients, which assess reliability for a particular sample, were all within adequate range for the measures used in this study. Although the overall reliability of the Self-consciousness Scale was acceptable, one subscale (Private Self-consciousness) showed lower reliability than researchers would generally accept. Results from the use of that subscale have been interpreted accordingly.

The results from this study indicate that attentional focus plays a strong role in social anxiety. These results should be examined further in order to better understand the relationships between focus of attention variables and social anxiety level. Further research might address the need to evaluate and social anxiety, as a different relationship may emerge in a different context. Future research may also wish to incorporate these findings into a more complete model of social anxiety that might emphasize self-focused attention, as well as the process of selecting appropriate behaviors for specific situations.

Doing so might result in a better understanding of the disorder, not only for theoretical ideologies, but also for practical application as well.

References

Alden, L. E., & Wallace, S. T. (1995). Social phobia and social appraisal in successful and unsuccessful social interactions. Behaviour Research & Therapy, *33*, 497-505.

American Psychiatric Association (2000). Diagnostic and statistical manual of mental disorders, fourth edition, text revision. Washington, DC: American Psychiatric Association.

Bargh, J. A. (1994). The four horsemen of automaticity: Awareness intention, efficiency, and control in social cognition. In R. S. Wyer & T. K. Srull (Eds.), Handbook of Social Cognition (pp. 1-40). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Bargh, J. A., Chaiken, S., Govender, R., & Pratt, F. (1992). The generality of the automatic attitude activation effect. Journal of Personality & Social Psychology, *62*, 893-912.

Beidel, D. C., Turner, S. M., & Dancu, C. V. (1985). Physiological, cognitive and behavioral aspects of social anxiety. Behaviour Research & Therapy, *23*, 109-117.

Burgio, K. L., Merluzzi, T. V., & Pryor, J. B. (1986). Effects of performance expectancy and self-focused attention on social interaction. Journal of Personality & Social Psychology, *50*, 1216-1221.

Butler, G. (1985). Exposure as a treatment for social phobia: Some instructive difficulties. Behaviour Research & Therapy, *23*, 651-657.

Carver, C. S., Peterson, L. M., Follansbee, D. J., & Scheier, M. F. (1983). Effects of self-directed attention on performance and persistence among persons high and low in test anxiety. Cognitive Therapy & Research, *7*, 333-353.

Clark, D. M. & Wells, A. (1995). A cognitive model of social phobia. In R. G. Heimberg & M. R. Liebowitz (Eds.), Social phobia: Diagnosis, assessment, and treatment (pp. 69-93). New York: Guilford Press.

Coles, M. E., Turk, C. L., Heimberg, R. G., & Fresco, D. M. (2001). Effects of varying levels of anxiety within social situations: Relationship to memory perspective and attributions in social phobia. Behaviour Research & Therapy Special, *39*, 651-665.

Dodge, C. S., Hope, D. A., Heimberg, R. G., & Becker, R. E. (1988). Evaluation of the Social Interaction Self-Statement Test with a social phobic population. Cognitive Therapy & Research, *12*, 211-222.

Eng, W., Heimberg, R. G., Liebowitz, M. R., & Schneier, F. R. (1999, November). An empirical approach to subtype identification in individuals with social phobia. Poster session presented at the annual meeting of the Association for the Advancement of Behavior Therapy, Toronto.

Eysenck, M. W., Mogg, K., May, J. R. A., Richards, A., & Matthews, R. (1991). Bias in interpretation of ambiguous sentences related to threat in anxiety. Journal of Abnormal Psychology, *100*, 144-150.

Fazio, R. H. (1995). Attitudes as object-evaluation associations: Determinants, consequences, and correlates of attitude accessibility. In R. E. Petty & J. A. Krosnick (Eds.), Attitude Strength: Antecedents and Consequences (pp. 247-282). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Fazio, R. H., Powell, M. C., & Herr, P. M. (1983). Toward a process model of the attitude-behavior relation: Accessing one's attitude upon mere observation of the attitude object. Journal of Personality & Social Psychology, *44*, 723-735.

Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. Journal of Consulting & Clinical Psychology, *43*, 522-527.

Foa, E. B., Franklin, M. E., & Perry, K. J., & Herbert, J. D. (1996). Cognitive biases in generalized social phobia. Journal of Abnormal Psychology, *105*, 433-439.

Fyer, A. J., Mannuzza, S., Chapman, T. F., Liebowitz, M. R., & Klein, M. (1993). A direct interview family study of social phobia. Archives of General Psychiatry, *50*, 286-293.

Hartman, L. M. (1984). Cognitive components of social anxiety. Journal of Clinical Psychology, *40*, 137-139.

Heinrichs, N., & Hofman, S. G. (2001). Information processing in social phobia: A critical review. Clinical Psychology Review Special, *21*, 751-770.

Hope, D. A., Gansler, D. A., & Heimberg, R. G. (1989). Attentional focus and causal attributions in social phobia: Implications from social psychology. Clinical Psychology Review Special, *9*, 49-60.

Hope, D. A., & Heimberg, R. G. (1988). Public and private self-consciousness and social phobia. Journal of Personality Assessment, *52*, 626-639.

Hope, D. A., Heimberg, R. G., & Klein, J. F. (1990). Social anxiety and the recall of interpersonal information. Journal of Cognitive Psychotherapy, *4*, 185-195.

Hope, D. A., Rapee, R. M., Heimberg, R. G., & Dombeck, M. J. (1990). Representations of the self in social phobia: Vulnerability to social threat. Cognitive Therapy & Research Special, *14*, 177-189.

Ingram, R. E. (1990). Self-focused attention in clinical disorders: Review and a conceptual model. Psychological Bulletin, 107, 156-176.

Jarvis, W. B. G., & Petty, R. E. (1996). The need to evaluate. Journal of Personality & Social Psychology, 70, 172-194.

Kessler, R. C. (1994). The National Comorbidity Survey of the United States. International Review of Psychiatry, 6, 365-376.

Klocek, J. W., Carmin, C., Shertzer, E., & Paidas, S. M. (2000, November). The need to evaluate in the socially anxious. Poster presented at the annual meeting of the Association for the Advancement of Behavior Therapy, New Orleans.

Kushner, M. G., Sher, K. J., & Beitman, B. D. (1990). The relation between alcohol problems and the anxiety disorders. American Journal of Psychiatry, 147, 685-695.

Leary, M. R. & Kowalski, R. M. (1995). The self-presentation model of social phobia. In R. G. Heimberg & M. R. Liebowitz (Eds.), Social phobia: diagnosis, assessment, and treatment (pp. 94-112). New York: Guilford Press.

LePine, J. P., & Lellouch, J. (1995). Diagnosis and epidemiology of agoraphobia and social phobia. Clinical Neuropharmacology, 18, S15-S26.

LePine, J. P., & Lellouch, J. (1995). Classification and epidemiology of social phobia. European Archives of Psychiatry & Clinical Neuroscience Special, 244, 290-296.

Levy-Cushman, J., McBride, A., & Abeles, N. (1999). Anxiety and depression: Implications for older adults. Journal of Social Distress & the Homeless, 8, 139-156.

Liebowitz, M. R., Gorman, J. M., Fyer, A. J., & Klein, D. F. (1985). Social phobia: Review of a neglected anxiety disorder. Archives of General Psychiatry, *42*, 729-736.

Lundh, L. G., & Oest, L. G. (2001). Attentional bias, self-consciousness and perfectionism in social phobia before and after cognitive-behaviour therapy. Scandinavian Journal of Behaviour Therapy Special, *30*, 4-16.

Mansell, W., & Clark, D. M. (1999). How do I appear to others? Social anxiety and processing of the observable self. Behaviour Research & Therapy, *37*, 419-434.

Martin, A. J., & Debus, R. L. (1999). Alternative factor structure for the Revised Self-Consciousness Scale. Journal of Personality Assessment, *72*, 266-281.

Mattick, R. P., & Clarke, J. C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. Behaviour Research & Therapy, *36*, 455-470.

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). The measurement of meaning. Urbana, IL: University of Illinois Press.

Perez-Lopez, J. R., Raul, P., & Woody, S. R. (2001). Memory for facial expressions in social phobia. Behaviour Research & Therapy Special, *39*, 967-975.

Rapee, R. M. (1995). Descriptive psychopathology of social phobia. In R. G. Heimberg & M. R. Liebowitz (Eds.), Social phobia: Diagnosis, assessment, and treatment (pp. 41-66). New York: Guilford Press.

Rapee, R. M., & Heimberg, R. G. (1997). A cognitive-behavioral model of anxiety in social phobia. Behaviour Research & Therapy, *35*, 741-756.

Rapee, R. M., Sanderson, W. C., & Barlow, D. H. (1988). Social phobia features across the DSM-III--R anxiety disorders. Journal of Psychopathology & Behavioral Assessment, 10, 287-299.

Saboonchi, F., & Lundh, L. G. (1997). Perfectionism, self-consciousness and anxiety. Personality & Individual Differences, 22, 921-928.

Saboonchi, F., Lundh, L. G., & Oest, L. G. (1999). Perfectionism and self-consciousness in social phobia and panic disorder with agoraphobia. Behaviour Research & Therapy, 37, 799-808.

Schneier, F. R., Johnson, J., Hornig, C. D., & Liebowitz, M. R., & Weissman, W. (1992). Social phobia: Comorbidity and morbidity in an epidemiologic sample. Archives of General Psychiatry, 49, 282-288.

Smith, R. E., & Sarason, I. G. (1975). Social anxiety and the evaluation of negative interpersonal feedback. Journal of Consulting & Clinical Psychology, 43, 429.

Snyder, M. (1974). Self-monitoring of expressive behavior. Journal of Personality & Social Psychology, 30, 526-537.

Snyder, M. (1983). The influence of individuals on situations: Implications for understanding the links between personality and social behavior. Journal of Personality, 51, 497-516.

Snyder, M. (1995). Self-monitoring: Public appearances versus private realities. In G. G. Brannigan & M. R. Merrens (Eds.), The social psychologists: Research adventures (pp. 35-50). New York: McGraw-Hill Book Company.

Snyder, M., & Cantor, N. (1980). Thinking about ourselves and others: Self-monitoring and social knowledge. Journal of Personality & Social Psychology, 39, 222-234.

Snyder, M., & Gangestad, S. (1982). Choosing social situations: Two investigations of self-monitoring processes. Journal of Personality & Social Psychology, 43, 123-135.

Snyder, M., & Kendzierski, D. (1982). Choosing social situations: Investigating the origins of correspondence between attitudes and behavior. Journal of Personality, 50, 280-295.

Snyder, M. & Simpson, J. A. (1987). Orientations toward romantic relationships. In D. Perlman & S. Duck (Eds.), Intimate relationships: Development, dynamics, and deterioration (pp. 45-62). Thousand Oaks, CA: Sage Publications, Inc. Snyder, M., & Tanke, E. D. (1976). Behavior and attitude: Some people are more consistent than others. Journal of Personality, 44, 501-517.

Stopa, L., & Clark, D. M. (1993). Cognitive processes in social phobia. Behaviour Research & Therapy, 31, 255-267.

Turner, S. M., Beidel, D. C., Borden, J. W., & Stanley, M. A. (1991). Social phobia: Axis I and II correlates. Journal of Abnormal Psychology, 100, 102-106.

Turner, S. M., Beidel, D. C., Dancu, C. V., & Keys, D. J. (1986). Psychopathology of social phobia and comparison to avoidant personality disorder. Journal of Abnormal Psychology, 95, 389-394.

Turner, S. M., Beidel, D. C., & Larkin, K. T. (1986). Situational determinants of social anxiety in clinic and nonclinic samples: Physiological and cognitive correlates.

Journal of Consulting & Clinical Psychology, 54, 523-527.

Turner, S. M., Beidel, D. C., & Townsley, R. M. (1992). Social phobia: A comparison of specific and generalized subtypes and avoidant personality disorder.

Journal of Abnormal Psychology, 101, 326-331.

Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety.

Journal of Consulting & Clinical Psychology, 33, 448-457.

Wells, A., & Papageorgiou, C. (1998). Social phobia: Effects of external attention on anxiety, negative beliefs, and perspective taking. Behavior Therapy, 29, 357-370.

Woody, S. R. (1996). Effects of focus of attention on anxiety levels and social performance of individuals with social phobia. Journal of Abnormal Psychology, 105, 61-69.

Woody, S. R., Chambless, D. L., & Glass, C. R. (1997). Self-focused attention in the treatment of social phobia. Behaviour Research & Therapy, 35, 117-129.

Woody, S. R., & Rodriguez, B. F. (2000). Self-focused attention and social anxiety in social phobics and normal controls. Cognitive Therapy & Research, 24, 473-488.