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Characteristics of Shy and Socially Phobic Individuals

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Abstract

This study examines the relationship between shyness/social phobia and other personality traits, as manifested in college students. Very few studies have compared shyness and social phobia, and even fewer have contrasted them. However, we believe that there are several important differences between the two. Mainly, one hypothesis is that social phobics long to be more extroverted and, thus, are more conflicted in many aspects of their personalities. Moreover, very few studies have found a conclusive link between shyness or social phobia and self-esteem. One of our main hypotheses is that there is a link between shyness/social phobia and low social self-esteem, although not necessarily overall self-esteem. We sought support for these hypotheses and others in the analysis of data obtained through a survey, composed of several standard questionnaires, as well as original material covering areas of self-image, behaviors, emotions, and personality traits. The results did indicate substantial differences between shyness and social phobia, with social phobics having higher levels of extraversion and, overall, more conflict within themselves.

Introduction

Social phobia is a fairly prevalent psychological (Kessler, McGonagle, Zhao, Nelson et al., 1994) disorder in our society, with 13.3% of the population suffering from it at some point in their life (Kessler et al., 1994). It is defined by the American Psychiatric Association 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" (American Psychiatric Association Task Force on DSM-IV., 2000). Not surprisingly, individuals who suffer from social phobia are at a higher risk of suffering from alcohol abuse and dependence compared to those who suffer from other anxiety disorders (Amies, Gelder, & Shaw, 1983), as well as having a higher frequency of suicidal ideation than the general population (Amies et al., 1983; Schneier, Johnson, Hornig, Liebowitz, & Weissman, 1992).

While the lifetime prevalence of social phobia is as high as 13.3%, the prevalence reported in a 30-day period is between 3% and 4.5% (Kessler et al., 1994). This is a fairly high prevalence for a psychological disorder, exemplifying why it is important to study social phobia. Differences in interpretation of interpersonal interactions as well as temperament have been linked to social phobia. For example, shyness, behavioral inhibition, self-consciousness, selective attention, and embarrassment have been correlated with this disorder (D. C. Beidel & Morris, 1995; D. C. Beidel & Randall, 1994; Crozier & Russell, 1992; Heimberg, Hope, Dodge, & Becker, 1990; Leary & Kowalski, 1995; Rosenbaum, Biederman, Pollock, & Hirshfeld, 1994; Stemberger, Turner, Beidel, & Calhoun, 1995). However, heredity and biochemical predisposition have also been implicated (Greist, Kobak, Jefferson, Katzelnick, & Chene, 1995;

Heimberg et al., 1990; Johnson & Lydiard, 1995; Kendler, Karkowski, & Prescott, 1999; Kendler, Neale, Kessler, Heath, & Eaves, 1992).

Comorbidity, or the co-occurrence of two or more psychological disorders, is also fairly common with social phobia. As mentioned earlier, there is a high prevalence of alcohol abuse and dependence among social phobics, as well as suicide ideation. Other research also indicates that social phobics are have a higher frequency of suicide attempts (Amies et al., 1983; Schneier et al., 1992). Moreover, studies have shown that individuals with *generalized* social phobia--"a form of social phobia wherein the individual fears most social situations" (American Psychiatric Association Task Force on DSM-IV., 2000)--have a very high rate of comorbidity with avoidant personality disorder. Avoidant personality disorder is characterized by the avoidance of most social situations and fear of judgment in those situations. In fact, a number of studies have shown that between 50% and 89% of individuals with social phobia also meet diagnostic criteria for avoidant personality disorder (Chapter 11, "Specific Phobias and Social Phobia," in *Treatment of Specific Anxiety Disorders*). On the other hand, only 21% to 23% of individual with more discrete or specific forms of social phobia (such as fear of public speaking) meet avoidant personality disorder criteria (Herbert, Hope, & Bellack, 1992; Holt, Heimberg, & Hope, 1992; Schneier, Spitzer, Gibbon, Fyer, & Liebowitz, 1991). Avoidant personality disorder and generalized social phobia share one main quality--fear of negative evaluation (Holt et al., 1992; S. M. Turner, Beidel, & Townsley, 1992).

Unlike social phobia, shyness is not a "psychological disorder" listed in the DSM, but rather a common personality trait, that actually has several adaptive purposes. For

example, "by being somewhat shy, children can withdraw temporarily and gain a sense of control" (Hyson & Van Trieste, 1987). However, there are many cases in which shyness is a problem and has negative consequences, such as children with extreme shyness that is neither context-specific nor transient may be at some risk for psychiatric and/or behavior problems (Sarafino, 1986). Shy children also like themselves less and see themselves as more passive and less friendly than their non-shy peers (Philip G. Zimbardo & Radl, 1981). Unfortunately, this means that such children are judged similarly by their peers and, thus, neglected by their peers, giving them few chances to develop their social skills. If the shyness continues into adolescence and adulthood, these individuals consider themselves lonelier, having fewer close friends and relationships with members of the opposite sex than their non-shy peers (Hyson & Van Trieste, 1987). Furthermore, many shy people have been found to have comorbid anxiety and mood disorders. Cox, MacPherson, and Enns found that over half of women and 40% of men met criteria at some time in their life for at least one mood or anxiety disorder (Cox, Fleet, & Stein, 2004). Not surprisingly, the most common comorbid disorder with shyness was social phobia, although posttraumatic stress disorder was seen relatively frequently in women and major depressive disorder relatively frequently in men (Cox et al., 2004).

Prevalence of shyness is fairly high, especially in comparison to social phobia. One study found that 26% of women and 19% of men described themselves as "very shy" when they were growing up (Cox et al., 2004), while other studies have found that shyness rates range from 40% to 50% (Carducci & Zimbardo, 1995; P. G. Zimbardo, 1977). Moreover, a study by Zimbardo, Pilkonis, and Norwood found that at least 90%

of college students reported having been shy at some time in their life (P. G. Zimbardo, Pilkonis, & Norwood, 1975).

Similarities and Differences between Shyness and Social Phobia

One important topic of interest in psychological research is the study of similarities and differences between shyness and social phobia. The main similarity between the two is obviously that they are both marked by fear, anxiety, or feeling uncomfortable in social situations, which is often marked by heightened autonomic arousal, such as increased heart rate, blushing, and sweating (D.C. Beidel, Turner, & Dancu, 1985; Henderson, 1992; Pilkonis, 1977). Furthermore, both shyness and social phobia impart on their sufferers certain social skills defects (including limited eye contact and speech latencies), avoidance of social interactions/situations, and cognitions reflecting fear of negative evaluation (Heimberg et al., 1990; Herbert et al., 1992; P. G. Zimbardo, 1977).

Even in these aspects that are considered to be similar, many differences between shyness and social phobia can be seen. Several researchers have found that shyness differs from social phobia in severity of functional impairment (Chavira, Stein, & Malcarne, 2002; S. M. Turner, Beidel, & Townsley, 1990). In particular, shy individuals are less likely to exhibit avoidant behaviors, and the course of symptoms appear to be more transitory than social phobics (Pilkonis, 1977; Schneier et al., 1992; S. M. Turner, Beidel, & Larkin, 1986; J. C. Wells, Tien, Garrison, & Eaton, 1994).

In terms of comorbidity between shyness and social phobia, Chavira et al. (Chavira et al., 2002) performed a study to examine the similarities and differences

between shyness and social phobia. By comparing rates of social phobia among shy and normal populations, they demonstrated that social phobia was much more common in the highly shy group (49%) compared to the normal group (18%). They concluded that the results "suggest that shyness and social phobia (especially the generalized type) are related constructs but not completely synonymous; an individual can be extremely shy yet not have a social phobia diagnosis" (Chavira et al., 2002).

It is important to note that social phobia and sociability are not the same concept. That is, sociability is a concept that is distinct and distinguishable from shyness (L. A. Schmidt & Fox, 1995). Zimbardo (P. G. Zimbardo, 1977) noted that shyness can be subdivided into two subtypes—introverts who prefer to be alone and extraverts who desire social interaction but are distressed by it (Chavira et al., 2002). Thus, according to Chavira et al. it is possible that "certain shyness subgroups are more likely to manifest social phobia than others" (Chavira et al., 2002). We hypothesize that one difference that exists between shyness and social phobia is that shy individuals tend to be introverts, while social phobics may actually be extroverts, with a desire to be more sociable than they feel capable of being. Unfortunately, there has been very little research on this topic so it is a primary focus of our study.

Self-Consciousness, Interpersonal Interpretation, and Shyness or Social Phobia

As humans, we become conscious of ourselves as we reach middle childhood. In some cases this leads to higher levels of shyness and social phobia, due to a fear of negative evaluation by others. Related to the idea of self-consciousness and shyness/social phobia is the *sociometer theory*, which is a theory, proposed by Leary and

Downs in 1995, that links self-esteem and interpersonal appraisals (Leary & Downs, 1995). According to this theory, there is a link between self-esteem and interpersonal appraisals because self-esteem is actually a subjective monitor or gauge of social acceptance, inclusion, and opinion of the individual. This idea comes from the fact that such a definition of self-esteem would be an adaptive psychological mechanism, as human beings are social beings, with a fundamental need/motive for social connectiveness, or a "need to belong" (Ainsworth, 1989; R. F. Baumeister & Leary, 1995). According to Leary et al. (Leary, Haupt, Strausser, & Chokel, 1998), the *sociometer* acts as a gauge to measure and monitor the social cues that an individual receives from others. As such a gauge, it responds to the social cues and effects an individual's self-esteem or self-feeling. However, there are several different possibilities for how the sociometer changes self-feelings in regards to others' reactions of the individual. Three possibilities that have found support in previous studies are that the sociometer is calibrated such that: 1) there is a linear relationship between interpersonal evaluation and self-feelings (Leary et al., 1998); 2) there is an imperfect relationship that favors a positive bias to protect self-esteem, "registering more social approval than is actually present" ((Leary et al., 1998); data from (R. E. Baumeister, 1993; Taylor & Brown, 1988)); 3) a positive bias to protect self-esteem is stronger in the face of more negative evaluations than for positive interactions ((Leary et al., 1998); data from (Goffman, 1955)).

Social phobia is likely based on the interpretation, often catastrophic, of negative events, which is supported by findings of changes in social phobics during and after treatment focused on changing the interpretation of social cues. Wilson and Rapee

(Wilson & Rapee, 2005) found that "...treatment was associated with decreases in various types of maladaptive interpretations of negative social events, but that social phobia symptoms 3 months after treatment were independently predicted only by within-treatment reductions in the degree to which individuals personally believed that negative social events were indicative of unfavourable self-characteristics" (Wilson & Rapee, 2005).

Similarly, other theories about social phobia claim that the disorder is associated with a negative self-image in social situations. Interestingly, this negative self-image during social interactions is important in the continuation of social phobia. In a study where participants held either a control or a negative self-image, not only did the participants holding the negative self-image experience a higher level of social anxiety, but they also rated their anxiety symptoms as more evident and their social performance as poorer. Moreover, an objective "observer" similarly rated these participants' symptoms as more noticeable and their behavior less positively (Hirsch, Clark, Mathews, & Williams, 2003).

Other cognitive theorists have theorized that imagery plays a central role in social phobia and all anxiety disorders (Clark & Beck, 1988; Hackmann, Clark, & McManus, 2000). Several studies have supported this theory, such as one by Beck, Laude, and Bohnert (Beck, Laude, & Bohnert, 1974), in which patients with various anxiety disorders were interviewed. Common among these patients were spontaneous images of the patients in "physical or psychosocial danger" (Beck et al., 1974). In another study, patients with panic disorder also tended to experience images of physical and/or mental catastrophes (Ottaviani & Beck, 1987). Yet another study examined patients with

obsessive-compulsive disorder and found that, once again, spontaneous images were common, and that these images were similar to their obsessive thoughts, including “death, decay, illness, injury, violence, disaster, sex, and blasphemy” (de Silva, 1986). Wells and Hackmann (1993) investigated spontaneous images in individuals with health anxiety. Themes of these images included misinterpretation of symptoms and overestimates of the likelihood of illness and death (A. Wells & Hackman, 1993).

With regard to social phobia, Clark and Wells' (1995) model provides an excellent theoretical account of the role of imagery in social phobia (Clark & Wells, 1995). It suggests that a higher level of focus on the self and self-monitoring of one's own performance result in social anxiety. This hypervigilant focus on the self results in the internalization of “negative images that involve seeing one's self as if from an external observer's perspective.” Bogels and Mansell (Bogels & Mansell, 2004) argue that empirical evidence supports the use of “attentional strategies” as treatments for social phobia.

According to the Stanford Shyness Survey, self-consciousness was reported by 85% of subjects in relation to shyness (P. Zimbardo, Pilkonis, & Norwood, 1974). Moreover, in a more recent study, it was found that individuals with social phobia "are all too self-consciously aware of their own lack of verbal fluency, social presence and ambition and it is this self-awareness that inevitably leads to a fear of negative interpersonal evaluation, a major factor in trait social anxiety" (Creed & Funder, 1998). Thus, it is important to study and discuss the relationship between self-consciousness and both shyness and social phobia. In looking at self-consciousness, however, it is important

to note that it is "not that the self is the object of evaluation but that the perspective of another is taken upon the self" (INABIS '98, p. 1).

A rather complex question is raised about the relationship between shyness and self-consciousness when we consider that the ability for self-consciousness does not develop until a certain level of cognitive development has been reached--often between ages four to six years old. As Asendorpf states, "The ability to take others' perspective and, more generally, to represent the relation between two people's views, emerges between the ages of 4-6 years...and it is rather likely that looking at oneself from the perspective of others is an even more complex cognitive task that perhaps emerges even later" (Asendorpf, 1989). On the other hand, there are even infants who exhibit behavioral symptoms of shyness, so it is may not be reasonable to claim that shyness does not occur among very young children. Some theorists have addressed this issue, but perhaps the most notable was Buss in 1984. In looking at these two rather contradictory views of shyness, "he proposed two distinct types, fearful shyness and self-conscious shyness, distinguishing between these in terms of both causes and reactions. Fearful shyness is elicited by novelty and intrusion into a social situation; self-conscious shyness is elicited by formal situations and breaches of privacy and is also awareness of being scrutinized and the belief that one is uniquely different. The predominant affective components of these two types are, obviously, fear and self-consciousness" (INABIS '98, p. 2). Thus, it would follow that fearful shyness emerges early in life, as it does not require self-consciousness or self-awareness, while the self-conscious form emerges somewhat later in life and "is associated with heightened awareness of the self as a social object and the capacity to adopt another perspective toward the self" (INABIS '98).

Shyness and social phobia are not only associated with negative imagery of the self, but also with “abnormal” judgments of the self and others. One such aspect is self-esteem, particularly social self-esteem. Izgic et al. (Izgic, Akyuz, Dogan, & Kugu, 2004) examined the associations between social phobia and both self-esteem and body image in over 1000 college students. In this study, the socially phobic students had lower self-esteem and lower body image compared to non-socially phobic students. Smith and Betz (Smith & Betz, 2002) also found that self-efficacy, self-esteem, and depression were all associated. Schmidt and Fox (L. A. Schmidt & Fox, 1995) found that extreme shyness was associated with low self-esteem as well as loneliness, depression, neuroticism, and social anxiety. In one of the only longitudinal studies of this association, Asendorpf and van Aken (Asendorpf & van Aken, 1994) found that high inhibition in early childhood predicted social self-esteem up to 10 years of age.

Associations between Psychological Factors and Social Phobia/Shyness

It is our hypothesis that there are several factors that are correlated with both shyness and social phobia, although we are unsure as to the causal direction of the relationships. The personality traits that we are hypothesizing are correlated with shyness and social phobia are narcissism, empathy, introspectiveness (increased self-focus), introversion, temperament, personality type, and differences in life orientation. However, we do not believe that all of these factors are associated with both shyness and social phobia. Unfortunately, there have been few studies done on the correlation between these factors and either shyness or social phobia, particularly the independent effects of several of these factors considered at the same time.

Narcissism: Limited evidence suggests that social phobia or shyness is associated with narcissism. Schurman (Schurman, 2001) distinguished between two types of narcissism. The first is the more familiar, overt type “characterized by exhibitionism, extroversion, and self-centeredness.” The second type of narcissism is more covert, and characterized more by hypersensitive, shyness, and sensitivity to rejection. Social phobia and shyness are thought to be more associated with the second covert type of narcissism.

It is possible that shy and socially phobic individuals experience their social incompetencies partly due to the fact that they often focus too much on their selves and try to interpret their own behaviors and interactions. This, in turn, leads these individuals to be constantly analyzing their social interactions which likely increases their anxiety and inhibition during these interactions. It is clear that some individuals facing the same social cues in their interactions interpret them differently than others. It is possible that individuals differ in their hypersensitivity to the social cues, and it is this hypersensitivity and self-focus that we hypothesize leads to social phobia.

Introversion: There is little controversy about the fact that shy individuals are often introverted. However, we propose a more radical hypothesis about social phobia, suggesting the possibility that social phobics actually desire more social interaction and are thus more extraverted than they feel competent to be. Thus they feel conflicted, as opposed to those who are shy but not socially phobic, who tend to be introverted. As social phobia is an anxiety disorder, which often prohibit individuals from acting out their desires, we believe that most social phobics are actually extroverts, or would prefer to be extroverts, who are merely just too paralyzed by fear of social interactions to act out on their natural desires.

Judgments of self and others: Shyness and social phobia have also been found to be associated with “abnormal” judgments of both the self and others. These “abnormal” judgments would, we believe, be associated with social self-esteem, stability of self, attitudes toward the self, and social competence. Interestingly, most studies have not found a relationship between shyness or social phobia and self-esteem, and those that have were studies that measured social self-esteem, rather than overall self-esteem. Thus, it is our hypothesis that overall self-esteem is not correlated with shyness or social phobia, while social self-esteem is inversely correlated with both shyness and social phobia.

Negative evaluation related to social phobia and shyness can lead to other personality/emotional problems, including loneliness, attachment problems, dependence, aggression (inhibited frustration), differences in date choices, unwillingness to disclose emotions or feelings, avoidance of social interaction, and general anxiety. One of the most commonly complained about complications of shyness and, more so, social phobia, is loneliness. Children who have shyness that lasts into middle childhood is often correlated with concurrent problems/subsequent disorders (Fordham & Stevenson-Hinde, 1999). However, it is important to note that perceptions of and actual friendships, especially those of good quality, are useful in developing interpersonal confidence and buffering against loneliness in young individuals (Fordham & Stevenson-Hinde, 1999). Moreover, shyness is seen as a barrier to interpersonal confidence (W. H. Jones, Cheek, & Briggs, 1986), as well as being associated with fewer friendships (W. J. Jones & Carpenter, 1986) and less satisfying friendships, which leads to higher levels of loneliness (Cheek & Buss, 1981). Shy individuals have also been found to be less

competent in initiating friendships (R. E. Baumeister & Scher, 1988), as well as being less willing to self-disclose (W. H. Jones & Briggs, 1984; Meleshko & Alden, 1993).

Aggression: Not surprisingly, shyness and, more understandably, social phobia have often been found to be associated with high levels of aggression, probably due to the inhibited frustrations that are a result of these disorders. As Baumeister and Leary (R. F. Baumeister & Leary, 1995) point out, being with people/the need to belong are two fundamental human needs, which, oftentimes, shy and socially phobic individuals cannot accomplish, at least not to the extent that they would prefer (R. F. Baumeister & Leary, 1995). We suggest that there is an increased risk of aggression in socially phobic individuals because they are internally conflicted because they are too anxious to be the extroverts that they truly are, or would like to be.

However, it is not only social rejection that can lead to aggressive behaviors, but also social inhibition/inhibited temperament. In fact, it has been found that the second strongest predictor of aggression in children is “inhibited temperament or personality” (Potier, 2002). No other factors, including race, ethnicity, social class, or even sex, predict as well for aggression as does behavioral inhibition (Potier, 2002). As Fischer points out, “‘Inhibition stood alone as the one personality characteristic that predicted aggression, which suggests possible connections with the isolated, alienated children who have committed school attacks’” (Potier, 2002). This article also notes that the behavioral inhibition which it examines is not the same as shyness, thus leading us to hypothesize that social phobia is much more similar to behavioral inhibition and, therefore, likely to be correlated with higher levels of aggression than in shy, non-socially phobic or non-shy, non-socially phobic participants.

Consequences of Shyness and/or Social Phobia

Unfortunately, lack of belongingness/insufficient social connections can lead to negative emotions, including anxiety, depression, loneliness, feelings of isolation, and low self-esteem (R. E. Baumeister & Tice, 1990; R. F. Baumeister & Leary, 1995; Gardner, Pickett, & Brewer, 2000; Leary, 1990; Leary & Downs, 1995). It should be noted that the vast majority of school shootings that have occurred in this country were perpetrated by individuals who had been rejected, ostracized, and harassed by their peers (Leary, 2001). Furthermore, socially rejected individuals were much more likely to engage in risk-taking and self-defeating behaviors than were accepted individuals (Twenge & Baumeister, 2005), although social rejection was not found to be correlated with negative mood (Twenge & Baumeister, 2005).

Shy and socially phobic individuals are also less likely to self-disclose, especially in regards to their own emotions or feelings. For example, a study by Meleshko and Alden (Meleshko & Alden, 1993), found that socially anxious participants almost always disclosed at a moderate level of intimacy, whether their partner (a confederate) disclosed at a high or low level of intimacy (W. H. Jones & Briggs, 1984; Meleshko & Alden, 1993). Moreover, these socially anxious individuals did not reciprocate their partners' disclosures as well as non-anxious participants. The authors of this study have theorized that this unwillingness to disclose was due to the fact that socially anxious participants were "concerned with self-protection during the task" (Meleshko & Alden, 1993). Unfortunately, the unwillingness to disclose was "associated with less liking and more discomfort on the part of their partners....This suggests that the adoption of self-

protective strategies may elicit negative interpersonal reactions that maintain self-defeating interpersonal patterns in socially anxious” (Meleshko & Alden, 1993). Why are shy and socially anxious individuals less willing/unwilling to self-disclose? There are theories that, in social situations, social anxious individuals have the primary goal of avoiding negative evaluation, thus avoiding almost any disclosure or behaviors that could focus attention on them until they are quite certain that they will not be negatively evaluated (Arkin, Lake, & Baumgardner, 1986). Non-shy individuals, on the other hand, aim for positive evaluations by others, such that they will disclose information about themselves, as well as seek attention from those around them (Arkin et al., 1986; Schlenker & Leary, 1982). The distinctions between social phobia and shyness are unclear in many studies, such as the previously mentioned ones, but some, such as Millon (Millon, 1981) focus only on individuals with chronic social phobia. This study found similar results to those of Arkin’s 1981 study, although Millon came to the conclusion that such an unwillingness to self-disclose could be one cause of the formation of avoidant personality disorder among social phobics (Millon, 1981).

Mutual self-disclosure is an important of any intimate relationship (Cohen, Sherrod, & Clark, 1986), and, therefore, it has been theorized that shy and socially phobic individuals do not have as good quality/intimate relationships as non-shy individuals. However, there have been no major studies that have found an actual correlation between shy/socially phobics unwillingness to disclose and their lower-quality relationships. It is our hypothesis, in fact, that while shy individuals are always unwilling to self-disclose, social phobics, upon reaching a certain level of comfort with a partner/friend would be willing to disclose the same amount as a non-shy individual, if not at higher levels.

Shy and social phobic individuals have been found to have lower social competence than non-shy individuals. However, many theories blame this lower competence on these individuals' avoidance of social situations, which in turn lowers social competence and causes a vicious cycle. Many studies, such as Fordham and Stevenson-Hinde (Fordham & Stevenson-Hinde, 1999) have found that "shy children participate in verbal interaction relatively infrequently and exhibit poor communicative competency" (Fordham & Stevenson-Hinde, 1999). Unfortunately, this causes them to be seen as less approachable and less desirable social partners (Evans, 1993), thus limiting their social interactions even more, and giving them less experience in social situations, lowering their social competence. Due to the often early onset age of shyness—normally around age 2—it is not surprising that this could be viewed as a cause of interpersonal competence, as well as diminished emotion expression (Bruch, Berko, & Haase, 1998).

A final factor that is often associated with shyness and, more so, social phobia is anxiety, primarily generalized anxiety. The correlations between shyness and anxiety have been found to be quite high in numerous studies. For example, Prior, Smart, Sanson, and Oberklaid (2000) found that "forty-two percent of children who rated as shy on 6 or more occasions over 8 surveys in childhood had anxiety problems in adolescence, compared with 11% who were never shy (Prior, Smart, Sanson, & Oberklaid, 2000). *Persistence of shyness and its presence in middle childhood increased risk for anxiety*" (Prior et al., 2000). These correlations, however, are not extremely predictive, as "most shy children did not develop an anxiety disorder and most adolescents with anxiety disorders had not been especially shy" (Prior et al., 2000). Another study, by Biederman

et al (1990), found that 21 month old children who were inhibited had a non-significantly higher risk for anxiety disorders than uninhibited children (Biederman, Rosenbaum, Hirshfeld, & Faraone, 1990).

Prior et al. (2000) stated in their Introduction that, “It can be argued on the basis of the Kagan et al. work that it is perhaps shyness in combination with high reactivity, rather than shyness alone, which contributes to vulnerability for anxiety problems. Hence an additional focus of this study was on the contribution of reactivity and its association with shyness to later anxiety disorder” (Prior et al., 2000), p. 461. However, it was found that a highly reactive temperament added to shyness did not increase the risk for anxiety (Prior et al., 2000).

Study Objectives

Evaluations of our selves and others can affect and be affected by interpersonal interactions. Some people become more concerned about how others might judge them. Perceived negative evaluations and hypersensitivity to them can potentially lead to shyness and/or social phobia. However, the distinctions between shyness and social phobia remain unclear. The objectives of this study are to:

- Describe the psychological, personality and temperament factors among male and female college students
- Examine psychological, personality, and temperament correlates of social phobia and shyness in college students
- Examine similarities and differences between shy and socially phobic college students

Hypotheses

Based on previous literature on shyness and/or social phobia, we propose the following specific hypotheses:

1. We hypothesize that fear of negative evaluation by others can negatively affect self esteem, particularly social self-esteem.

Questions from The Fear of Negative Evaluation Scale

The survey in this study used questions from this scale (Leary 1983) in order to measure how much a student fears negative evaluations in social situations. The original scale is a 12-item scale with each item rated on a five-point scale. Cronbach alpha coefficients for internal reliability were found to be 0.91 (Gilbert and Meyer 2005). These questions are on a 5-point Likert Scale, from “Very Little” (A/1) to “Very Much” (E/5).

2. The following factors are predicted to be associated with increased fear of negative evaluations. More specifically, they are predicted to be associated with both shyness and social phobia. However, it is our hypothesis that the differences between shyness and social phobia will be apparent in the differing associations with these factors.
 - a. Narcissism—we hypothesize that there would not be a difference in classical narcissism between non-shy, non-socially phobic participants, shy (non-socially phobic), and socially phobic participants.

Narcissistic Personality Inventory (NPI)

This scale measures conventional, overt narcissism, as opposed to the hypersensitive narcissism that was measured with the Hypersensitive Narcissism Scale (HSNS). This inventory consists of forty (40) questions in which the participants have to choose between two options (Raskin & Hall, 1979, 1981).

- b. Introspectiveness/self-consciousness (hypersensitive narcissism)—despite a hypothesis against an association between social phobia with classical

narcissism, we hypothesize that social phobia would be associated with hypersensitive narcissism.

The Hypersensitive Narcissism Scale (HSNS)

This scale (Hendin & Cheek, 1997) is a 10-item scale measuring covert narcissism. The HSNS had an alpha coefficient of 0.72 to 0.75 among female students and 0.62 to 0.76 among male students. This scale was measured with a 5-point Likert Scale, from “Not at all characteristic” (A/1) to “Extremely Characteristic” (E/5).

- c. Empathy—We originally hypothesized that individuals with social phobia would be lower in empathy, due to the commonly social nature of empathy. However, this scale was rather removed from social situations, so we did not think there would be a significant difference in empathy between the three groups.

Emotional Empathy Scale

This 30-item scale was developed by Caruso & Mayer (Caruso & Mayer, 2000). Principal components analysis was used to identify six distinct factors. The alpha reliability coefficient for the total scale was 0.88 (Caruso & Mayer 1998). The six factor scales were Empathetic Suffering, Positive Sharing, Responsive Crying, Emotional Attention, Feeling for Others, and Emotional Contagion. The questions on this scale are, once again, on a 5-point Likert Scale, from “Strongly Agree” (A/1) to “Strongly Disagree” (E/5).

- d. Introversion/Extroversion—We hypothesize that social phobics will be significantly more extroverted than shy (non-socially phobic) individuals, but will not differ significantly from “normal” (non-shy, non-socially phobic) individuals.

Questions from The Keirsey Temperament Sorter—Extroversion vs. Introversion

This is a personality instrument designed to distinguish subjects on their temperament (www.keirsey.com). The scale “sorts” subjects into Guardian, Artist, Idealist, or Rational temperaments. This study only used the questions from this scale that measured

introversion vs. extroversion. This section of “The Keirsey Temperament Sorter” consists of ten (10) questions in which participants have to choose between two options.

- e. Personality type (Agreeableness, Emotional Stability, Openness)—It was our hypothesis that socially phobic individuals would be significantly less emotionally stable and open than shy individuals. We also hypothesize that shy individuals would be significantly more conscientious than either socially phobic or non-shy, non-socially phobic individuals.

10-Item Measure of the Big-Five Personality Domains

Personality was assessed using a short 10-item inventory developed by Gosling, Rentfrow, & Swann (Gosling, Rentfrow, & Swann, 2003) as a measure of the Big-Five personality domains. While the psychometric properties are not as good as for the longer personality tests, psychometric properties are adequate for research in which personality is not the primary variable of interest. Convergent correlations between the TIPI and the larger Big-Five inventory for each of the five domains—Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience—ranged from 0.65 for Openness to 0.87 for Extraversion (Gosling, Rentfrow & Swann 2003). This scale also consists of questions on a 5-point Likert Scale, from “Strongly Agree” (A/1) to “Strongly Disagree” (E/5).

- f. Differences in life orientation (optimism versus pessimism)—We hypothesize that socially phobic participants will be significantly less optimistic than shy or “normal” participants.

Questions from The Life Orientation Test-Revised

This is a 10-item scale, of which 6 items are actually scored. This scale was developed by Scheier & Carver (1992) to assess optimism versus pessimism. However, the survey in this study only used 5 of the 6 scored items. This scale was measured on the same scale as the “Attitudes Toward Self Scale.”

3. Shyness and/or social anxiety are expected to be associated (separately and differently) with more negative judgments of self and more positive judgments of others, as measured by:

- a. Self-esteem, particularly social self-esteem—We hypothesize that both shyness and social phobia will be associated with lower social self-esteem. However, we do not believe that there will be an association with lower overall self-esteem for either shyness or social phobia.

Rosenberg Self-Esteem Scale

This scale (Rosenberg, 1965) is administered to assess self-esteem among study subjects. This scale was designed to be a unidimensional measure of global self-esteem. Rosenberg found reproducibility of 0.92 and scalability of 0.72 among more than 5000 high school students. This scale is measured on a 5-point Likhert Scale, from “Strongly Agree” (A/1) to “Strongly Disagree” (E/5). It is important to note that in this instance, lower scores indicate higher self-esteem.

Social Self-Esteem Scale—revised from Rosenberg Self-Esteem Scale

This scale was the way in which this study measured social self-esteem, rather than overall self-esteem. It is a revision of the original Rosenberg Self-esteem Scale, with the questions changed in order to measure social self-esteem (as well as several revised questions for other aspects of life, such as academics or athletics). This scale is also measured on a 5-point Likhert Scale, from “Strongly Agree” (A/1) to “Strongly Disagree” (E/5). It is important to note that this survey also is scored so that lower scores indicate higher self-esteem.

- b. Stability of self—It is our hypothesis that social phobics will be significantly less emotionally stable than shy (non-socially phobic) or non-shy, non-socially phobic individuals.

Stability of Self Scale

This scale, developed by Rosenberg, is used to measure an individual’s emotional stability, with higher scores indicating more emotional stability. Reproducibility of the scale is 94%; scalability

(items and individuals) is 77%. This scale consists of several multiple choice questions, some of which only consist of two choices (“Agree” or “Disagree”).

- c. Attitudes towards the self—It was our hypothesis that socially phobic individuals will be more likely to generalize from a single failure, but we do not believe that there will be significant differences between the other aspects of this scale.

Questions from The Attitudes Toward Self (ATS) Scale

This scale was developed by Carver to measure three dimensions of self-regulation, including holding overly high standards, having the “tendency to be self-critical at any failure to perform well,” and having the “tendency to generalize from a single failure to the broader sense of self-worth.” This scale consists of 10 items rated on a 5-point scale from “I agree a lot” (A/1) to “I DISagree a lot” (E/5), although our survey only used eight (8) of these questions.

- d. Social competence (use of technology to communicate in order to avoid face-to-face interaction)—It is our hypothesis that social phobics will use technology over face-to-face interaction significantly more than shy (non-socially phobic) or non-shy, non-socially phobic individuals.

Use of Technology to Communicate Scale

We also developed this scale in order to measure our participants’ use of technology to avoid face-to-face social interactions. There was also a question addressing the issue of avoiding social (phone) contact in general. This was also a 5-point Likert Scale, from “Not at all Like Me” (A/1) to “Very Much Like Me” (E/5).

- e. Ratings of self and partner attractiveness

Use of Technology to Communicate Scale

We also developed this scale in order to measure our participants’ use of technology to avoid face-to-face social interactions. There was also a question addressing the issue of avoiding social (phone) contact in general. This was also a 5-point Likert Scale, from “Not at all Like Me” (A/1) to “Very Much Like Me” (E/5).

4. Shyness and/or social phobia, and the associated negative self-evaluations, are hypothesized to be associated with the following, with much higher levels found in participants with social phobia:

- a. Loneliness—We hypothesize that social phobia will also be associated with loneliness.

Questions from The Differential Loneliness Scale

The short version (N. Schmidt & Sermat, 1983) is a 20-item scale assessing loneliness. It consists of twenty (20) “True” or “False” questions. There are different areas of loneliness addressed, including romantic relationships, friendships, family relationships and relationships with larger groups.

- b. Attachment problems—It is our hypothesis that social phobics will be more likely to “over attach” than either of the other two groups.

The Revised Hazan & Shaver (1987) Three-Category Romantic Attachment Measure

This scale can be used to measure attachment in all relationships, not just romantic relationships. It consists of descriptions of three different attachment types (normal attachment, under-attachment, and over-attachment), and the participant must choose which type best suits them. The participants must then rate on a scale of “Not at all Like Me” (A/1) to “Very Much Like Me” (E/5).

- c. More anxiety/fear/stress—It is predicted that social phobics will feel more perceived stress, as well as have more overall fear than shy or “normal” participants.

Questions from The Perceived Stress Scale (PSS)

This scale was designed as a global measure of perceived stress in the past week (Cohen, Kamarck, & Mermelstein, 1983). Alpha coefficients of reliability ranged from 0.84 to 0.86 among three samples of college students (Cohen et al 1983). The test-retest correlation was 0.85 for two days and 0.55 for six weeks. However, our survey only used four (4) questions from this scale. This scale was measured on a 5-point Likert Scale, from “Never” (A/1) to “Very Often” (E/5).

Revised “FEAR” Scale

Our survey did not include this entire scale, but rather used several questions from it, as well as adding our own questions relating to other common fears that participants may have. This was a 5-point Likert Scale, from “No Fear” (A/1) to “Extreme Fear” (E/5).

- d. Aggression (inhibited frustration)—We hypothesize that social phobics will be significantly more aggressive than shy (non-socially phobic) or non-shy, non-socially phobic individuals. This is due to their conflicted emotions in terms of desiring to be extroverts, but having too much fear to act on these desires.

Questions from Aggression Questionnaire

Our survey included fourteen (14) questions from this questionnaire, which was developed by Buss and Perry (1992). This scale has four subscales measuring four dimensions—Verbal aggression, Anger, Physical aggression, and Hostility. It is one of the most widely used scales in studies of aggression and violence. All of these dimensions have good internal consistency and validity over time (Gilbert and Miles 2000). Coefficient alphas for these subscales range from 0.74 to 0.84 (Gilbert and Miles 2000). This was a 5-point Likert Scale, from “Extremely Uncharacteristic of Me” (A/1) to “Extremely Characteristic of Me” (E/5).

- e. Unwillingness to disclose emotions or feelings—We hypothesize that social phobia will be associated with greater unwillingness to disclose emotions.

Questions from Emotional Self-Disclosure Scale

This scale was developed by Snell, Miller, and Belk (1988) to measure an individual’s willingness to disclose personal feelings to friends of the same and opposite sex, and to spouses/partners (Snell et al. 1988). We added parents as another potential target of disclosures. There are eight subscales in this instrument—depression, happiness, jealousy, anxiety, anger, calmness, apathy, and fear. Coefficients of internal reliability for each subscale ranged from 0.83 to 0.95. This is also measured on a 5-point

Likert Scale, from “Not at all Willing to Discuss” (A/1) to “Very Willing to Discuss” (E/5).

- f. More negative relationships with others—We also hypothesize that social phobics will have significantly more negative relationships with others than shy or “normal” individuals.
5. Because these factors can result in decreased confidence, they are also expected to be associated with students’ choices:
- a. Choice of professor to ask for recommendation—It is predicted that social phobics will be less likely to ask a more prestigious, less friendly professor for a recommendation than either of the other two groups.

Professor Recommendation Choices

The premise of this set of questions is very similar to the “Date Choices,” in that we believe social phobics, and perhaps shy individuals, would be less likely to ask a more intimidating professor for a recommendation. However, we also hypothesize that the results of these questions may be slightly different, in that they are academic rather than social. The questions in this set were a very similar format to those in the “Date Choices” section.

- b. Choice of date to homecoming dance were presented as hypothetical situations. In addition, we asked about the importance of certain characteristics in mates for casual dating and serious relationships. We hypothesize that social phobics are more likely to invite a more attractive individual on a date in a public situation (i.e., a dance) and that attractiveness is also significantly more important to socially phobic individuals.

Date Choices

This scale was developed specifically for this study because we believed that individuals’ date choices may be different, depending on if they were shy or socially phobic (or neither). We also

hypothesized that these choices would be different depending on whether the participant had to ask or was being asked. These questions included multiple choice questions in regard to which person a participant would ask out on a date, as well as how he or she would ask that person out. Furthermore, at the beginning of this section, participants also had to rate how important certain characteristics are to them (on a Likert Scale from “Not at all Important” [A/1] to “Extremely Important” [E/5]) for both casually and seriously dating a partner.

- c. Choice of paper that could affect grade—We do not believe that there will be a significant difference in the level of difficulty of the paper that will be chosen. However, we do hypothesize that socially phobic participants will choose less difficult presentations (same and different lengths) than either shy (non-socially phobic) or non-shy, non-socially phobic participants.

Papers and Presentations

This section, also developed for this study, was included to measure a baseline of participants’ willingness to work hard on a paper, and then compare this to the willingness to perform a more difficult presentation. As well as multiple choice questions on what difficulty level the participants would choose, there were several free response questions about why they would make certain choices.

6. We further hypothesize that shy and social phobic individuals will differ on several of these characteristics, with social phobics being, overall, much more conflicted than shy individuals. For example, we hypothesize that social phobics desire to be more socially interactive and are actually extraverts, while shy individuals have less desire to be socially interactive (introverts)

Methods

Participants

The participants of this study were undergraduate college students at Boston College, most of whom were enrolled in psychology classes and needed the research credit they received for participating in this experiment in order to get credit for these classes. Forty-five (45) students completed the survey in this study, although not all of these students were able to finish the survey in the hour-long time period that was allotted. Thus, there is some missing data, although not a significant amount.

Measures

We used many scales in this survey, most of which were pre-existing, validated psychological scales, used in many previous studies and have been described above. However, this survey also included numerous questions that we came up with, some of which were based on other psychological scales, such as the BIS-BAS scale, while others were based on many of our hypotheses that we had discussed and were trying to test.

Our primary factor of interest was a categorized variable dividing the subjects into socially phobic, shy but not socially phobic, or “normal” (not shy or socially phobic). The individuals in the top 50% of average shyness scores and were not found to have social phobia were categorized as shy but not socially phobic (n=11). Individuals in the top 25% of the social phobic scale were classified as socially phobic. Those who did not meet either the shyness or social phobia criteria were classified as “normal.”

Shyness was assessed using the Henderson/Zimbardo Shyness Questionnaire. This scale has excellent psychometric properties, including an internal consistency of 0.92 for six samples and a test-retest reliability for two weeks of 0.87. In two college student samples, criterion validity was 0.60 and 0.67 when measured by correlation with

the 20-item Revised Cheek and Buss Scale (Henderson & Zimbardo). This scale was measured with a 5-point Likert Scale, from “Not at all characteristic” (A/1) to “Extremely Characteristic” (E/5).

The 14-item Revised Cheek and Buss Scale also measures shyness and is a revised version of the original Cheek and Buss Shyness Scale. The revised 9-item version had the following psychometric properties, for college students: Mean = 33.3. for men and 32.4 for women, alpha coefficient = .90, 45-day retest reliability = .88, correlation with aggregated ratings of shyness by friends and family = .68, and correlation with original 9-item version = .96.

This scale is also measured on a 5-point Likhert Scale, from “Not at all characteristic” (A/1) to “Extremely Characteristic” (E/5).

Social Phobia/Anxiety Checklist/Scale

This is a clinical scale, which consisted of eighteen (18) “Yes” or “No” questions, was used to determine whether or not individuals suffered from social phobia. A score of 8 or more “Yes” responses was necessary in order to be “diagnosed” with social phobia for the purposes of this study. The questions on this scale are all “Yes” or “No” questions, with more “Yes” responses meaning more social phobia.

The shyness/social phobia factor was related to other scales described in detail in the Introduction. These scales include:

Rosenberg Self-Esteem Scale

Social Self-Esteem Scale—revised from Rosenberg Self-Esteem Scale

Stability of Self Scale

The Hypersensitive Narcissism Scale (HSNS)

Narcissistic Personality Inventory (NPI)

Questions from The Keirsey Temperament Sorter—Extroversion vs. Introversion

Questions from The Perceived Stress Scale (PSS)

Questions from The Differential Loneliness Scale

Emotional Empathy Scale

10-Item Measure of the Big-Five Personality Domains

Questions from The Fear of Negative Evaluation Scale

Revised “FEAR” Scale

Questions from The Attitudes Toward Self (ATS) Scale

Questions from The Life Orientation Test-Revised

The Revised Hazan & Shaver (1987) Three-Category Romantic Attachment Measure

Questions from Aggression Questionnaire

Questions from Emotional Self-Disclosure Scale

Use of Technology to Communicate Scale

Own Perception of Self vs. Others’ Perception

We developed this scale in order to measure how much participants felt they had certain traits/behaved certain ways, as well as how they felt others saw them in regard to these aspects of their personality. Moreover, this section of the questionnaire also served to examine the differences between how individual see themselves versus how [they think]

others see them. Once again, these questions are answered on a 5-point Likert Scale, from “Strongly Agree” (A/1) to “Strongly Disagree” (E/5).

Self and Partner Attractiveness Scale

For this section, the survey asked participants to rate both themselves and their partner in terms of several traits, including appearances, confidence, and personality, on a 10-point scale (“Not at all” [1] to “Extremely” [10]).

Questions from The Willingness to Communicate Scale

This scale (McCroskey 1992) is a 20-item scale, with 12 items actually scored. However, we only used 14 of the total 20 items. Three receiver group scores (friend, acquaintance, and stranger) and four context scores (public, meeting, group, dyad) are obtained from the instrument. Reliability estimates of the total score range from 0.86 to 0.95.

Reliability estimates for each of the subscores range from 0.60 to 0.83 for context subscores and from 0.70 to 0.91 for receiver subscores. In this scale, participants record the percentage of time (0% to 100%) that they would like to talk in certain situations, as well as the percentage of time they believe they would *actually* talk in such situations.

Choices in Hypothetical Situations

Date Choices

Professor Recommendation Choices

Papers and Presentations

Procedure

One hour time slots were set up in a lab in which the participants could fill out the survey, as well as sign a consent form and be debriefed after they completed the survey (or ran out of time to finish the survey). There were 9-10 study sessions in which between 4-12 participants filled out the survey in the aforementioned lab.

Data Analysis

The data from the survey were input into SPSS (a computer program to perform statistical analysis on data) and then analyzed by the investigator. Items for each scale were summed (after reverse scoring items as necessary), and were then averaged to give a mean score for each scale. These mean scores were correlated with each other. ANOVA analyses were used to test for differences in mean scores among three groups of individuals—those with social phobia (top 25% on social phobia scale), those with shyness (top 50% on Henderson Shyness scale) but not socially phobic, and “normal” individuals (those without shyness or social phobia). In addition, ANOVA models compared ratings of self and partners, willingness to disclose emotions, relationships with others, and choices in hypothetical situations among these three groups.

Results

There were a total of 45 participants in this study, with 21 males and 24 females. Table 1 displays the characteristics of the study population by gender. Neither mean shyness nor social phobia scores differ by gender. There were also no differences by gender on the Fear of Negative Evaluation scale or the Hypersensitive Narcissism scale.

Females had higher mean scores on the perceived stress scale ($p=0.09$). Males had higher scores on the empathy scale ($p=0.03$) and on the Keirsey Extraversion subscale ($p=0.07$).

Table 2 shows the differences between individuals with social phobia (top 25%) and those without. There are many differences in scores on the psychological scales. Mean shyness scores on both the Henderson and revised Buss & Cheek Shyness scales were higher among the socially phobic than non-socially phobic individuals ($p=0.000$). Mean Fear of Negative Evaluation Scale, Hypersensitive Narcissism Scale, and the FEAR Scale are all, as predicted, higher for socially phobic individuals. In addition, socially phobic individuals tend to have lower self esteem, both overall (excluding social) and social self-esteem, and lower narcissistic personality (NPI). These results were a bit different than expected in that, while we expected social phobics to have lower social self-esteem, we did not hypothesize that they would have significantly lower overall self-esteem or classical narcissism. Socially phobic individuals also had higher perceived stress, use of technology to communicate, and higher scores on the Attitudes Toward Self (ATS) Self-criticism Scale and Generalization Scale. Interestingly, they also had higher aggression scores and more negative life orientation. In terms of personality, socially phobic individuals did not differ on the TIPI Extraversion subscale or on the Agreeableness subscale, but were lower on the Conscientiousness, Emotional Stability, and Openness subscales. They also tended to have higher perceived stress, but did not differ from non-social phobics on loneliness or empathy.

Table 3 is one of the most interesting tables, with the participants split into three categories—non-shy, non-socially phobic ($N = 21$), shy but not socially phobic ($N = 11$),

and socially phobic (N = 13). Once again, the variables in which there are significant differences are highlighted.

Socially phobic individuals were different from both “normal” and shy individuals on a number of characteristics (Table 3). Socially phobic individuals had lower overall self-esteem (excluding social), lower stability of self, higher use of technology to communicate, lower TIPI Openness, and higher ATS Generalization Scale scores than the normal and shy/non-phobic individuals.

Socially phobic individuals differed from shy but not “normal” individuals on a few other characteristics (Table 3). They had lower TIPI Agreeableness scores, lower TIPI Conscientiousness scores, but higher FEAR Scale scores than the shy individuals, but their scores did not differ from the “normal individuals” on these characteristics.

Both social phobics and shy individuals differed from “normal” individuals on several factors, particularly those that relate to evaluation of interpersonal interactions (Table 3). Hypersensitive narcissism scores were higher for shy and socially phobic individuals than the normals, as were scores on the Fear of Negative Evaluation scale. The results for hypersensitive narcissism were slightly unexpected in that we expected social phobic individuals to be significantly higher in hypersensitive narcissism than shy (non-socially phobic) individuals. Shy and socially phobic individuals also had lower social self-esteem, more negative life orientation, and higher aggression than the “normal” individuals. These results also differed slightly from our hypotheses, in that we predicted that social phobics would be significantly more aggressive than shy individuals.

Social phobics had higher perceived stress, lower emotional stability, and higher ATS self-criticism than “normals”, but were not different from shy individuals on these

characteristics (Table 3). Shy individuals also had lower TIPI Extraversion scores than both normal and socially phobic individuals, but, as hypothesized, socially phobic individuals did not differ from “normals” on Extraversion.

Table 3a is a correlation table, which also shows the direction of association/correlation between variables. Positive correlations mean that a higher score on one variable leads to a higher score on the other variable, while negative correlations indicate that a higher score on one variable leads to a lower score on the other. There were quite a few positive correlations found in this study and shown in this table. Positive correlations were found between fear of negative evaluation and hypersensitive narcissism; extraversion and (classical) narcissism; openness and narcissism; openness and emotional stability; life orientation and narcissism (narcissists were more optimistic, as a higher score on “LOT” means more optimistic); life orientation and emotional stability (more optimism correlates with more emotional stability); life orientation and openness; shyness (on the Henderson scale) and fear of negative evaluation; shyness and hypersensitive narcissism; social phobia and fear of negative evaluation; social phobia and hypersensitive narcissism; and social phobia and shyness (Henderson scale). Negative correlations were found between empathy and extraversion; emotional stability and fear of negative evaluation (the less emotionally stable, the more one fears negative evaluation, or vice versa); emotional stability and hypersensitive narcissism (the more emotionally stable, the lower the hypersensitive narcissism score, or vice versa); life orientation and fear of negative evaluation (higher levels of optimism lead to less fear of negative evaluation, or vice versa); life orientation and hypersensitive narcissism (the more optimistic, the lower the score on hypersensitive narcissism, or vice versa); shyness

(Henderson scale) and classical narcissism (higher shyness scores correlate with lower narcissism scores on the NPI, or vice versa); shyness and emotional stability; shyness and openness; shyness and life orientation (higher levels of shyness are correlated with lower levels of optimism, or vice versa); social phobia and classical narcissism (higher social phobia scores correlated with lower levels of classical narcissism, or vice versa); social phobia and emotional stability (the more socially phobic, the less emotionally stable, or vice versa); social phobia and openness (higher social phobia scores indicate less openness, or vice versa); and social phobia and life orientation (higher levels of social phobia are associated with lower levels of optimism/higher levels of pessimism, or vice versa).

Table 4 shows the mean scores among the three groups on the “Willingness to Disclose Emotion” scale and is, actually, broken down by type of emotion. Thus, it can be seen that both shy and socially phobic individuals differ significantly from non-shy, non-socially phobic individuals in their willingness to disclose jealousy/suspicion and anger/hostility. Moreover, social phobics are significantly less likely than “normal” individuals to disclose emotions to male friends.

One portion of the survey asked participants to rank the percentage of time they would want to and would actually talk to people in various situations. The results, which are displayed in Table 5, came out to be rather significant. Interestingly, although perhaps not surprisingly, most of the differences between groups were in the percentage of time they would *actually* talk, with only one significant difference in percentage of time they would want to talk. Socially phobic participants were significantly less likely than non-shy, non-socially phobic participants to actually talk to acquaintances in large

groups, acquaintances in small groups, and strangers in large groups. Both shy and socially phobic participants were significantly less likely to actually talk to strangers in a small group and to service staff, as well as significantly less likely to want to talk to strangers in a small group. Finally, in regard to differences between the percentage of time participants would want to talk versus percentage of time that they would actually talk, the only significant difference was in situations with acquaintances, with both shy (non-socially phobic) and socially phobic participants having a significantly larger difference than non-shy, non-socially phobic (“normal”) participants.

Table 6 shows the mean scores and significance values of the same three groups, in regards to how they see themselves on certain characteristics. In terms of introversion/extraversion, the results are very interesting in that both shy (non-socially phobic) and socially phobic participants differ significantly from non-shy, non-socially phobic for extraversion scores but, unlike with the Keirsey Scale, not from each other. However, in terms of self-identified introversion, only shy individuals were found to differ significantly from non-shy, non-socially phobic individuals, while social phobics did not. Interestingly, there were many variables in which socially phobics differed significantly from non-shy, non-socially phobic, but no other groups differed significantly—high self-esteem (social phobics agreeing significantly less), low-self-esteem (social phobics agreeing significantly more), envious (social phobics agreeing significantly more), easily agitated (social phobics agreeing significantly more), very proud (social phobics agreeing significantly less), and “cool” (social phobics agreeing significantly less). Although these results did not show significant differences between shy (non-socially phobic) and socially phobic participants, one can assume a certain

difference in that shy (non-socially phobic) participants did not differ significantly from the non-shy, non-socially phobic group, while social phobics did. Moreover, “shy” and “fantasize about entering a public competition” were both significantly different between non-shy, non-socially phobic and both shy and socially phobic, with the latter agreeing significantly more to “shy” and significantly less to fantasizing about entering a public competition. Finally, the only variable that differed significantly between shy (non-socially phobic) and socially phobic individuals was “calm,” with shy participants agreeing significantly more than socially phobic participants. For this variable, social phobics also disagreed more than non-shy, non-socially phobic participants.

The results of “How Others See You” in relation to the three main categories (non-shy, non-socially phobic; shy but not socially-phobic; socially phobic) are shown in Table 7. These results are a bit surprising in that there are more discrepancies than one might expect in the results between this and those in which participants rated how they viewed themselves. Perhaps most importantly, only shy (non-socially phobic) and non-shy, non-socially phobic participants differed significantly in terms of “extraversion,” with the shy individuals agreeing significantly less. Once again, while there is no significant difference between shy and socially phobic individuals, there was also no significant difference between socially phobic participants and non-shy, non-socially phobic participants. Another very important, possibly more important, result in this table is the fact that shy individuals differ significantly (agree significantly more) from both non-shy, non-socially phobic participants and socially phobic participants in “introversion.” Once again, there were lots of variables in which the only significant difference was between social phobics and non-shy, non-socially phobic participants—

high self-esteem (social phobics agreed significantly less), low self-esteem (social phobics agreed significantly more); very proud (social phobics agreed significantly less); “cool” (social phobics agreed significantly less); and introspective (a weak significance, but social phobics agreed significantly more). Furthermore, in this table, socially phobics differed (agreed significantly less) from both non-shy, non-socially phobic and shy (non-socially phobic) participants in regards to the variable “calm.” Finally, the one variable in which only shyness (non-social phobia) and social phobia differed significantly was “easily agitated,” with social phobics agreeing, as hypothesized, significantly more.

Table 8 looks at the differences in relationship variables between, once again, non-shy, non-socially phobic participants (N = 21), shy but not socially phobic participants (N = 13), and shy participants (N = 11). In the first section of the table, differences in “Use of Technology to Communicate” are shown, with no significant differences between shy and socially phobic participants or shy and non-shy, non-socially phobic participants, but several between socially phobic and non-shy, non-socially phobic individuals. The conditions in which these two differed significantly, with social phobics always agreeing more/being more characteristic than non-shy, non socially phobic participants were text messaging to avoid calling, calling when the participant knew no one would be home, and using Instant Messenger as a means to contact acquaintances and friends. The next section of this table examines current relationships and quality of those relationships. Interestingly, and in contrast with our hypotheses, the only significant difference in these results was between shy (not socially phobic) and non-shy, non-socially phobic participants—quality of relationships with acquaintances, with shy

participants rating the quality of their relationships with acquaintances significantly lower than “normal” participants.

Table 9 summarizes the results of differences between the three main groups in terms of diagnoses of certain disorders—anxiety, depression, obsessive-compulsive disorder, social phobia, and a learning disorder. There were no significant differences in prevalence of these disorders, either as clinically diagnosed or what the participants thought they may have had. Most of these results are not surprising, except for the lack of a significant difference in either anxiety (general) or social phobia, especially in self-diagnoses.

One rather surprising and interesting table is Table 10, which exhibits the ratings that participants gave both themselves and their current/last partner in various categories. There were two categories in which social phobics differed significantly from both “normal” and shy (non-socially phobic) participants—facial attractiveness and overall physical attractiveness of the partner. In both of these categories, social phobics rated their partners significantly lower than either of the other two groups. Furthermore, in terms of personality of the partner, socially phobic participants also rated their partners significantly lower than non-shy, non-socially phobic or shy (non-socially phobic) participants. The only category in which shy (non-socially phobic) participants differed significantly from “normal” participants was in their own (self) personality. Social phobics also differed significantly from “normal” participants in this category, although shy (non-socially phobic) and socially phobic individuals did not differ from each other. One result that was slightly surprising was that socially phobic participants differed not only from non-shy, non-socially phobic participants, but also from shy (non-socially

phobic) participants in “poise/confidence” of the self, rating themselves significantly lower than either of the other two groups. Finally, social phobics also rated themselves significantly less intelligent and less able to succeed in life than either non-shy, non-socially phobic or shy but not socially phobic participants.

Table 11 refers to the importance of certain characteristics in casual and serious romantic relationships, and the differences in importance between the three main conditions. There were not many differences found, but those that were found were quite interesting. Perhaps predictable by the significantly lower facial and overall physical attractiveness ratings of their current/last partners, social phobics placed significantly less emphasis on importance of facial attractiveness in a serious relationship than did “normal” participants, and significantly less importance on body attractiveness than either non-shy, non-socially phobic (“normal”) participants or shy but not socially phobic participants. This was contrary to our hypothesis that social phobics would put more emphasis on attractiveness in partners than shy or “normal” individuals. Shy participants also rated one quality significantly more important for casual dating than did either of the other two conditions—honesty.

The final table, Table 12, deals with hypothetical situations, in which participants indicated which choices/behaviors they would make in certain (hypothetical) situations. For example, the participants were asked to choose between individuals of varying personalities and degrees of attractiveness to ask to a dance. The results of this section were not as significant as we hypothesized that they would be, yet they were somewhat revealing and enlightening. When participants were given a choice of a difficulty level (with a corresponding grade) for a presentation (all presentations were the same length in

this condition), there was a significant difference between socially phobic and “normal” participants. Socially phobic participants had a significantly lower mean “difficulty” than did the “normal” participants. However, there was no significant difference in difficulty choice when a more difficult presentation also meant a longer presentation, which was not in keeping with our hypothesis. Another hypothetical situation was one in which participants had to choose which professor they would ask for a recommendation, with the more prestigious professors being less approachable. Social phobic participants once again differed significantly from “normal” participants, being, as predicted, significantly more likely to ask a professor who was friendlier/more approachable, but less prestigious/affiliated with a lower-ranked school. In contrast with those results, however, socially phobic participants, overall, desired to ask the more prestigious professor than did shy (non-socially phobic) or non-shy, non-socially phobic participants.

Discussion

This study found that, as hypothesized, social phobics tend to be, overall, more conflicted than either shy or non-shy, non-socially phobic individuals. Thus, we can see that there are several important differences between shy individuals and individuals with social phobia.

Previous research on differences between shyness and social phobia has been rather scarce. Most of the previous literature has identified social phobia as extreme shyness, while very little has been shown about other differences between the two. Other differences that have been found include differences in the severity of functional impairment (Chavira et al., 2002; Turner et al., 1990) and the fact that shy individuals are less likely to exhibit avoidant behaviors, and the course of symptoms appear to be more

transitory than social phobics (Pilkonis, 1977; Schneier, Johnson, Hornig, Liebowitz, & Weissman, 1992; Turner, Beidel, & Larkin, 1986; Wells, Tien, Garrison, & Eaton, 1994).

The results of this study are very relevant, not only to aiding clinicians in recognizing the differences between shy and socially phobic patients, but also in understanding the side effects of social phobia. Understanding these side effects are useful, mainly in that clinicians would know other side effects that they should test for and, if necessary, treat.

We hypothesized that fear of negative evaluations can negatively affect self-esteem, particularly social self-esteem. This fear of negative evaluation is also associated with shyness and social phobia, which was associated with self-esteem. Shyness was associated with lower social self-esteem, while social phobia was associated with lower social and overall self-esteem.

Furthermore, we hypothesized that narcissism, empathy, introspectiveness/self-consciousness, introversion/extroversion, personality type (Agreeableness, Emotional Stability, Openness), and differences in life orientation were all associated with shyness and social phobia, as well as fear of negative evaluation. This study found that hypersensitive narcissism/self-consciousness, emotional stability, life orientation, shyness, and social phobia were all significantly correlated with fear of negative evaluation (*see Table 3a*). These factors were also hypothesized to be associated with increased shyness and/or social phobia. It was found that hypersensitive/self-conscious narcissism was significantly higher in socially phobic participants than in merely shy participants. However, there was no significant difference in general narcissism. Moreover, social phobics were significantly less emotionally stable than merely shy

participants (or non-shy, non-socially phobic participants). The most interesting, and perhaps explanatory, variable association was with extroversion. This study found that social phobics were significantly more extroverted than shy individuals, and not significantly different from non-shy, non-socially phobic individuals. There were also several variables from which no significant associations were found—introspectiveness, openness, and agreeableness.

Shyness and/or social anxiety were also hypothesized to be associated (separately and differently) with more negative judgments of self and more positive judgments of others, as measured by self-esteem, stability of self, attitudes toward self, social competence, ratings of self and partner attractiveness. Shyness was associated with lower social self-esteem, as well as lower ratings of one's own personality. Social phobics, on the other hand, were associated with lower social *and* overall self-esteem, less emotional stability, more self-criticism and generalization of own mistakes, and significantly lower partner (facial and overall physical attractiveness and personality) and self (poise/confidence, personality, intelligence, and ability to succeed in life) ratings.

Shyness and/or social phobia, and the associated negative self-evaluations, were hypothesized to be associated with the following, with much higher levels found in participants with social phobia: loneliness; attachment problems; dependence; more anxiety/fear/stress; aggression; unwillingness to disclose emotions or feelings; more negative relationships with others. Although significant associations were not found between all of these, several results were quite fitting with our hypotheses. Neither loneliness nor attachment problems/dependence were found to be associated with shyness or social phobia, but aggression was found to be associated with both shyness and social

phobia. While there was not a significant difference in aggression levels in socially phobic versus shy (non-socially phobic) participants, there was a more significant difference between socially phobic and “normal” participants than between shy (not socially phobic) and “normal” participants. Furthermore, social phobia was associated with higher scores on the Perceived Stress Scale, while shyness was not. Finally, both shy and socially phobic participants were significantly less likely than “normal” participants to disclose jealousy/suspicion and anger/hostility, and social phobics were significantly less likely than non-shy, non-socially phobic individuals to disclose to male friends. In terms of relationships with others, the only significant difference was that shy (non-socially phobic) participants rated their relationships with their acquaintances significantly lower than non-shy, non-socially phobic participants.

We further hypothesized that shyness and social phobia would be associated with students’ choices in dates, professor recommendations, and difficulty levels of papers and presentations, as well as the choices of factors that are important in mates for both casual dating and serious relationships. Social phobia was associated with a lower ranking of importance of facial and body attractiveness in serious relationships, and shyness was associated with higher emphasis on honesty in mates whom they will casually date. There were no significant associations in regard to date choices, but social phobics were more likely to choose a less difficult presentation than shy or “normal” participants. Furthermore, in terms of professor recommendations, social phobia was associated with asking a less prestigious, but friendlier, professor for a recommendation, while also being associated with having a higher desire to ask the more prestigious professor.

Finally, our main hypothesis was that shy and social phobic individuals will differ on several of these characteristics, with social phobics being, overall, much more conflicted than shy individuals. For example, we hypothesized that social phobics desire to be more socially interactive and are actually extraverts, while shy individuals have less desire to be socially interactive (introverts). This did in fact turn out to be true, with social phobics having significantly higher extroversion scores than shy (non socially-phobic) individuals. Overall, there was much evidence found in this study that supports the idea that social phobia and shyness are very different, and, in general, individuals with social phobia are much more conflicted than individuals that are merely shy.

Conclusion

This study found many interesting results on shyness and social phobia, especially the differences between them. The idea of social phobics being much more conflicted, due to higher levels of fear and extroversion, than shy individuals was also displayed in the results of this study. A limitation of the current study is that it is a correlational study. Future research should focus on a longitudinal analysis of these associations in order to distinguish cause from effect.

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Table 1. Gender differences in Various Characteristics of the Study Population

Scale	Male		Female		p-value
	mean	s.d.	mean	s.d.	
Henderson Shyness scale (avg.)	2.40	0.45	2.52	0.50	0.38
Social phobia scale (sum)	4.38	2.80	5.67	3.22	0.19
Rosenberg self-esteem scale (avg.)	2.16	0.54	2.40	0.70	0.22
Rosenberg social self-esteem subscale (avg.)	2.13	0.65	2.26	0.75	0.54
Stability of self scale (sum)	8.76	2.66	9.17	2.53	0.60
Hypersensitive Narcissism Scale (avg.)	2.77	0.42	2.84	0.54	0.61
Narcissistic Personality Inventory (sum)	15.52	6.83	14.88	7.96	0.77
Perceived stress scale (avg.)	2.89	0.50	3.22	0.76	0.09
Loneliness scale (avg.)	0.57	0.11	0.58	0.12	0.79
Empathy scale (avg.)	2.34	0.38	2.12	0.28	0.03
Use technology to communicate (avg)	2.51	0.46	2.55	0.56	0.83
Keirsey Temperament Sorter Extraversion (avg)	0.66	1.96	0.54	0.21	0.07
TIPI Extraversion subscale (avg.)	3.00	0.71	3.39	1.01	0.15
TIPI Agreeableness subscale (avg.)	3.58	0.43	3.65	0.71	0.70
TIPI Conscientiousness subscale (avg.)	3.36	0.85	3.57	0.84	0.45
TIPI Emotional Stability subscale (avg.)	3.53	0.81	3.22	0.80	0.23
TIPI Openness subscale (avg.)	3.92	0.55	3.61	0.71	0.14
Fear of Negative Evaluation (FNE) scale (avg.)	2.86	0.92	2.88	1.02	0.96
FEAR scale (avg.)	2.52	0.66	2.65	0.51	0.48
ATS High Standards scale (avg.)	3.86	0.78	3.84	0.92	0.94
ATS Self-criticism scale (avg.)	4.08	0.65	4.11	0.74	0.89
ATS Generalization scale (avg.)	3.15	0.96	3.30	1.03	0.66
Life Orientation Test (avg.)	3.77	0.60	3.44	0.72	0.13
Aggression scale (avg.)	2.33	0.61	2.20	0.71	0.55

Table 2. Differences in Characteristics of the Study Population by Social Phobia Scale Scores

Scale	Score <8.0		Score ≥8.0		<i>p</i> -value
	mean	s.d.	mean	s.d.	
Henderson Shyness scale (avg.)	2.31	0.43	2.86	0.32	0.00
Buss & Cheek Shyness scale (avg.)	2.41	0.58	3.10	0.53	0.00
Social phobia scale (sum)	n/a	n/a	n/a	n/a	n/a
Rosenberg self-esteem scale (avg.)	2.07	0.52	2.82	0.60	0.00
Rosenberg social self-esteem subscale (avg.)	2.02	0.67	2.65	0.57	0.00
Stability of self scale (sum)	9.69	2.39	7.23	2.20	0.00
Hypersensitive Narcissism Scale (avg.)	2.72	0.45	3.02	0.52	0.06
Narcissistic Personality Inventory (sum)	16.56	7.22	11.77	6.89	0.05
Perceived stress scale (avg.)	2.92	0.68	3.42	0.48	0.02
Loneliness scale (avg.)	0.56	0.12	0.61	0.10	0.22
Empathy scale (avg.)	2.27	0.37	2.12	0.26	0.14
Use technology to communicate (avg)	2.38	0.39	2.87	0.61	0.02
Keirseley Temperament Sorter Extraversion (avg)	0.66	0.19	0.44	0.17	0.00
TIPI Extraversion subscale (avg.)	3.18	0.92	3.31	0.90	0.68
TIPI Agreeableness subscale (avg.)	3.71	0.64	3.42	0.45	0.15
TIPI Conscientiousness subscale (avg.)	3.63	0.82	3.15	0.83	0.10
TIPI Emotional Stability subscale (avg.)	3.57	0.73	2.88	0.79	0.01
TIPI Openness subscale (avg.)	3.96	0.56	3.27	0.60	0.00
Fear of Negative Evaluation (FNE) scale (avg.)	2.63	0.89	3.42	0.94	0.02
FEAR scale (avg.)	2.48	0.60	2.85	0.45	0.07
ATS High Standards scale (avg.)	3.96	0.69	3.59	1.12	0.29
ATS Self-criticism scale (avg.)	3.96	0.67	4.42	0.67	0.06
ATS Generalization scale (avg.)	2.90	0.94	4.00	0.60	0.00
Life Orientation Test (avg.)	3.78	0.54	3.13	0.77	0.02
Aggression scale (avg.)	2.07	0.54	2.68	0.73	0.01

Table 3. Differences in Mean Values on Psychological Scales by Shyness/Phobia Group

Psychological Scale	n	Total		Not shy or socially phobic (0)		Shy but not socially phobic (1)		Socially phobic (2)		overall Sig. (p-F value)	0 v. 1 2 1 v. 2			
		mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.		p-value	p-value	p-value	
Hypersensitive Narcissism scale	45	2.81	(0.48)	2.60	(0.41)	2.95	(0.44)	3.02	(0.52)	4.00	0.03	0.05	0.01	0.71
Fear of Negative Evaluation	40	2.87	(0.96)	2.21	(0.70)	3.40	(0.63)	3.42	(0.93)	12.09	0.00	0.00	0.00	0.96
Rosenberg self-esteem scale	45	2.29	(0.63)	2.03	(0.54)	2.16	(0.46)	2.82	(0.59)	8.95	0.00	0.52	0.00	0.01
Rev. Rosenberg social self-esteem	45	2.20	(0.70)	1.86	(0.66)	2.31	(0.60)	2.65	(0.56)	6.65	0.00	<i>0.06</i>	0.00	0.18
Stability of self scale	45	8.98	(2.57)	10.05	(2.35)	9.00	(2.40)	7.23	(2.20)	5.89	0.01	0.23	0.00	<i>0.07</i>
Narcissistic Personality Inventory	45	15.18	(7.38)	18.43	(7.14)	13.00	(6.18)	11.77	(6.89)	4.53	0.02	0.04	0.01	0.66
Perceived stress scale	44	3.07	(0.66)	2.85	(0.70)	3.08	(0.63)	3.42	(0.48)	3.33	0.05	0.35	0.01	0.20
Loneliness scale	44	0.58	(0.11)	0.57	(0.09)	0.55	(0.15)	0.61	(0.10)	0.93	0.40	0.59	0.34	0.20
Empathy scale	44	2.22	(0.34)	2.27	(0.41)	2.26	(0.26)	2.12	(0.25)	0.85	0.44	0.94	0.22	0.34
Use technology to communicate	39	2.53	(0.51)	2.30	(0.35)	2.53	(0.42)	2.87	(0.60)	5.31	0.01	0.22	0.00	<i>0.10</i>
TIPI Extraversion	41	3.22	(0.90)	3.50	(0.89)	2.60	(0.65)	3.31	(0.90)	3.74	0.03	0.01	0.54	0.05
TIPI Agreeableness	41	3.62	(0.59)	3.61	(0.67)	3.90	(0.56)	3.42	(0.44)	1.87	0.17	0.22	0.38	<i>0.06</i>
TIPI Conscientiousness	41	3.48	(0.84)	3.44	(0.70)	3.95	(0.95)	3.15	(0.82)	2.76	0.08	0.12	0.33	0.03
TIPI Emotional Stability	41	3.35	(0.80)	3.67	(0.70)	3.40	(0.77)	2.88	(0.79)	4.11	0.02	0.37	0.01	0.11
TIPI Openness	41	3.74	(0.65)	4.06	(0.59)	3.80	(0.48)	3.27	(0.59)	7.24	0.00	0.26	0.00	0.03
FEAR scale	40	2.59	(0.57)	2.58	(0.59)	2.30	(0.59)	2.85	(0.45)	2.64	0.08	0.21	0.21	0.03
ATS High Standards scale	40	3.85	(0.84)	4.00	(0.51)	3.90	(0.96)	3.58	(1.12)	0.89	0.42	0.77	0.20	0.39
ATS Self-Criticism scale	40	4.10	(0.69)	3.86	(0.74)	4.15	(0.47)	4.42	(0.66)	2.55	0.09	0.28	0.03	0.36
ATS Generalization	40	3.23	(0.98)	2.75	(0.97)	3.18	(0.87)	4.00	(0.60)	7.77	0.00	0.21	0.00	0.03
Life Orientation Test	40	3.59	(0.67)	3.96	(0.51)	3.46	(0.46)	3.13	(0.77)	7.25	0.00	0.04	0.00	0.21
Aggression scale	39	2.26	(0.66)	1.91	(0.49)	2.34	(0.52)	2.68	(0.72)	6.30	0.00	<i>0.07</i>	0.00	0.18

Note: Bold indicates $p < 0.05$; italics indicates $p < 0.10$

Table 3a. Correlations among Psychological Scales

	FNE	HSNS	NPI	Extra- version	Empathy	Agreeable	Conscient	Emot Stab	Openness	LOT	Henderson
FNE	1.000										
HSNS	0.583	1.000									
NPI	-0.225	-0.220	1.000								
Extraversion	-0.151	-0.164	0.508	1.000							
Empathy	-0.278	0.003	-0.028	-0.420	1.000						
Agreeable	-0.046	-0.187	-0.139	-0.236	-0.265	1.000					
Conscient	-0.061	0.149	0.088	-0.157	0.122	0.204	1.000				
EmotStab	-0.467	-0.546	0.297	0.037	0.050	0.257	0.132	1.000			
Openness	-0.225	-0.122	0.352	0.225	-0.237	0.257	0.113	0.389	1.000		
LOT	-0.509	-0.509	0.414	0.252	0.050	0.112	0.093	0.674	0.461	1.000	
Henderson	0.769	0.590	-0.453	-0.275	-0.198	-0.001	0.031	-0.378	-0.359	-0.635	1.000
Social Phobia	0.567	0.595	-0.366	-0.205	-0.072	-0.120	-0.112	-0.473	-0.488	-0.582	0.722

Note: **Bold** indicates $p < 0.05$; *italics* indicates $p < 0.10$

FNE=Fear of Negative Evaluation scale

HSNS=Hypersensitive Narcissism scale

NPI=Narcissistic Personality Inventory

Extraversion=TIPI Extraversion subscale

Empathy=Empathy Scale

Agreeable=TIPI Agreeableness subscale

Conscient=TIPI Conscientiousness subscale

EmotStab=TIPI Emotional Stability subscale

Openness=TIPI Openness subscale

LOT=Life Orientation Test

Henderson=Henderson Shyness Scale

Social Phobia=Social phobia scale

Table 4. Willingness to disclose emotions by Shyness//Phobia

	Total		Not shy or socially phobic (0)		Shy but not socially phobic (1)		Socially phobic (2)		overall Sig. (p-F value)	0 v. 1			2			1 v. 2		
	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.		p-value	p-value	p-value	p-value	p-value	p-value	p-value		
Willingness to disclose emotions:																		
Depression/sadness (avg.)	3.41	(0.87)	3.53	(1.01)	3.11	(0.87)	3.49	(0.66)	0.76	0.48	0.25	0.90	0.33					
Happiness/delight (avg.)	4.43	(0.51)	4.44	(0.57)	4.39	(0.58)	4.45	(0.37)	0.05	0.95	0.80	0.96	0.78					
Jealousy/suspicion (avg.)	3.04	(0.87)	3.38	(0.92)	2.79	(0.77)	2.76	(0.76)	2.51	0.10	0.09	0.06	0.94					
Anger/hostility (avg.)	3.52	(0.59)	3.79	(0.49)	3.36	(0.63)	3.27	(0.58)	3.46	0.04	0.07	0.02	0.71					
Fear/worry (avg.)	3.55	(0.86)	3.67	(1.04)	3.33	(0.62)	3.55	(0.77)	0.48	0.62	0.33	0.73	0.56					
Pessimism/discouragement (avg.)	3.52	(0.73)	3.67	(0.76)	3.38	(0.77)	3.43	(0.67)	0.63	0.54	0.32	0.40	0.87					
Envy/resentment (avg.)	2.93	(0.90)	3.18	(0.94)	2.85	(1.05)	2.64	(0.66)	1.36	0.27	0.36	0.12	0.58					
To parents (avg.)	3.30	(0.85)	3.39	(0.93)	3.09	(0.77)	3.36	(0.84)	0.42	0.66	0.39	0.93	0.47					
To male friends (avg.)	3.19	(0.71)	3.45	(0.85)	3.05	(0.48)	2.93	(0.58)	2.22	0.12	0.16	0.06	0.69					
To female friends (avg.)	3.68	(0.82)	3.89	(0.86)	3.39	(0.96)	3.62	(0.57)	1.28	0.29	0.13	0.38	0.50					
To partner/spouse (avg.)	3.73	(0.75)	3.87	(0.98)	3.74	(0.62)	3.49	(0.31)	0.85	0.44	0.65	0.20	0.47					

Note: Bold indicates $p < 0.05$; italics indicates $p < 0.10$

Table 5. Percent Want to v. Actually Talk to Friends, Acquaintances, and Strangers

	Total		Not shy or socially phobic (0)		Shy but not socially phobic (1)		Socially phobic (2)		overall Sig. (p-value)	0 v. 1 v. 2			
	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.		0 v. 1	1 v. 2	1 v. 2	
% Want to talk to Friends in large groups	77.00	(21.1)	79.06	(18.1)	78.61	(22.1)	71.72	(26.4)	0.37	0.70	0.96	0.42	0.50
% Actually talk to Friends in large groups	73.39	(21.3)	79.67	(14.7)	70.56	(26.3)	65.78	(24.5)	1.32	0.28	0.32	0.13	0.64
% Want to talk to Friends in small groups	92.85	(11.3)	90.59	(14.6)	95.00	(6.49)	94.72	(8.51)	0.58	0.57	0.37	0.40	0.96
% Actually talk to Friends in small groups	102.71	(66.1)	90.67	(14.1)	135.22	(123.)	90.28	(12.7)	1.55	0.23	0.12	0.99	0.15
% Want to talk to Acquaintances in large groups	59.85	(22.7)	61.09	(18.8)	64.44	(31.3)	53.06	(20.2)	0.59	0.56	0.73	0.41	0.30
% Actually talk to Acquaintances in large groups	57.42	(23.6)	66.83	(20.1)	55.72	(28.8)	43.44	(17.6)	3.14	0.06	0.25	0.02	0.25
% Want to talk to Acquaintances in small groups	71.91	(22.4)	73.59	(22.8)	75.28	(21.4)	65.56	(24.0)	0.49	0.62	0.86	0.40	0.37
% Actually talk to Acquaintances in small groups	69.07	(21.2)	76.72	(18.3)	66.22	(17.7)	58.33	(25.4)	2.48	0.10	0.22	0.04	0.42
% Want to talk to Strangers in large groups	42.26	(28.6)	45.38	(32.7)	44.83	(27.9)	34.17	(22.2)	0.47	0.63	0.97	0.36	0.44
% Actually talk to Strangers in large groups	38.22	(26.4)	47.91	(27.8)	35.61	(25.2)	23.61	(18.9)	2.75	0.08	0.25	0.03	0.32
% Want to talk to Strangers in small groups	50.51	(26.1)	62.66	(23.2)	41.39	(24.7)	38.06	(24.8)	3.88	0.03	0.04	0.02	0.77
% Actually talk to Strangers in small groups	41.18	(25.0)	58.83	(18.8)	28.33	(21.9)	24.61	(18.0)	11.34	0.00	0.00	0.00	0.69
% Want to talk to Service Staff	53.60	(23.9)	60.16	(24.4)	46.67	(19.6)	48.89	(26.4)	1.16	0.33	0.19	0.27	0.85
% Actually talk to Service Staff	49.35	(26.6)	61.50	(25.1)	39.17	(22.3)	39.28	(26.6)	3.28	0.05	0.04	0.04	0.99
Diff in % want to v. actually talk to Friends	-3.58	(33.3)	-1.35	(6.03)	-16.08	(63.9)	5.19	(6.22)	0.97	0.39	0.30	0.65	0.19
Diff in % want to v. actually talk to Acquaintances	2.60	(12.6)	-4.22	(11.9)	8.89	(13.2)	8.42	(6.25)	5.65	0.01	0.01	0.01	0.93
Diff in % want to v. actually talk to Strangers	7.55	(19.2)	4.16	(27.1)	9.93	(9.89)	11.20	(3.11)	0.46	0.63	0.49	0.40	0.89

Note: Bold indicates $p < 0.05$; italics indicates $p < 0.10$

Table 6. . Self Perceptions by Shyness//Phobia Group

	Total			Not shy or socially phobic (0)		Shy but not socially phobic (1)		Socially phobic (2)		overall F	Sig. (p-value)	0 v. 1	0 v. 2	1 v. 2
	n	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.			p-value	p-value	p-value
How see self?														
Extravert	37	2.46	0.96	1.94	0.85	3.00	0.82	2.73	0.90	5.46	0.01	0.00	0.03	0.47
Introvert	37	2.89	1.07	3.31	1.08	2.20	0.92	2.91	0.94	3.82	0.32	0.01	0.31	0.11
High self-esteem	37	2.59	1.04	2.12	0.81	2.60	0.70	3.27	1.27	4.81	0.01	0.22	0.00	0.11
Shy	37	2.86	1.13	3.62	1.09	2.10	0.74	2.45	0.82	9.81	0.00	0.00	0.00	0.39
Self-absorbed	37	3.30	1.13	3.25	0.86	3.60	1.26	3.09	1.38	0.55	0.59	0.45	0.72	0.32
Other-focused	37	2.76	0.89	2.88	0.96	2.70	1.06	2.64	0.67	0.25	0.78	0.64	0.51	0.87
Low self-esteem	37	3.32	1.23	3.81	1.11	3.28	1.03	2.73	1.35	2.90	0.07	0.20	0.02	0.36
Envious	37	3.11	1.13	3.62	1.02	3.00	1.25	2.45	0.82	4.24	0.02	0.14	0.01	0.24
Calm	37	2.19	0.84	2.00	0.52	1.80	0.42	2.82	1.17	5.69	0.01	0.51	0.01	0.00
Easily agitated	37	3.35	1.16	3.69	1.01	3.50	1.18	3.73	1.19	2.55	0.09	0.68	0.03	0.12
Very proud	37	2.97	0.93	2.56	0.89	3.00	0.82	3.55	0.82	4.35	0.02	0.21	0.01	0.15
Very organized	37	3.19	1.22	3.31	1.08	2.80	1.32	3.36	1.36	0.69	0.51	0.31	0.92	0.30
Perfectionist	37	2.84	1.28	3.25	1.06	2.40	1.26	2.64	1.50	1.60	0.22	0.10	0.22	0.67
"Cool"	37	2.68	0.94	2.25	0.86	2.70	0.82	3.27	0.90	4.59	0.02	0.20	0.01	0.14
Introspective	37	2.22	1.08	2.19	1.11	2.00	0.82	2.45	1.29	0.46	0.64	0.68	0.54	0.35
Fantasize re: entering competition	37	3.41	1.17	2.94	1.39	3.80	0.92	3.73	0.79	2.47	0.10	0.07	0.08	0.88
Would actually enter competition	37	3.59	1.17	3.31	1.35	3.90	1.20	3.73	0.79	0.88	0.43	0.22	0.37	0.74

Note: Bold indicates $p < 0.05$; italics indicates $p < 0.10$

Table 7. Perceptions of How Others See You by Shyness//Social Phobia Group

	Total			Not shy or socially phobic (0)		Shy but not socially phobic (1)		Socially phobic (2)		overall F	Sig. (p-value)	0 v. 1	0 v. 2	1 v. 2
	n	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.			p-value	p-value	p-value
How others see you?														
Extravert	37	2.54	1.07	2.31	1.14	3.10	0.88	2.36	1.03	1.99	0.15	0.07	0.90	0.12
Introvert	37	3.05	1.20	3.25	1.34	2.30	0.67	3.45	1.13	3.13	0.06	0.05	0.65	0.03
High self-esteem	37	2.08	0.80	1.81	0.75	2.00	0.67	2.54	0.82	3.19	0.05	0.54	0.02	0.11
Shy	37	3.41	1.23	3.80	1.37	3.30	1.06	3.00	1.10	1.45	0.25	0.32	0.11	0.58
Self-absorbed	37	3.38	1.11	3.25	1.29	3.50	0.84	3.45	1.13	0.18	0.83	0.59	0.65	0.93
Other-focused	37	2.70	0.88	2.56	0.89	2.80	0.92	2.82	0.87	0.35	0.71	0.51	0.47	0.96
Low self-esteem	37	3.62	0.89	4.00	0.82	3.60	0.70	3.09	0.94	3.93	0.03	0.24	0.01	0.17
Envious	37	3.59	0.90	3.75	1.00	3.70	0.67	3.27	0.90	1.02	0.37	0.89	0.18	0.28
Calm	37	2.22	0.98	1.94	0.68	1.80	0.79	3.00	1.10	6.74	0.00	0.69	0.00	0.00
Easily agitated	37	3.32	1.20	3.38	1.31	3.80	0.92	2.82	1.17	1.85	0.17	0.38	0.24	0.06
Very proud	37	2.89	1.13	2.38	1.09	3.10	1.29	3.45	0.69	3.73	0.03	0.10	0.01	0.44
Very organized	37	2.97	1.30	3.13	1.26	2.60	1.35	3.09	1.38	0.55	0.58	0.33	0.95	0.40
Perfectionist	37	2.95	1.13	3.19	1.05	2.70	1.16	2.82	1.25	0.66	0.52	0.30	0.41	0.81
"Cool"	37	2.38	1.01	1.94	0.93	2.50	0.85	2.91	1.04	3.56	0.04	0.15	0.01	0.33
Introspective	37	2.49	0.90	2.31	1.08	2.30	0.67	2.91	0.70	1.80	0.18	0.97	0.09	0.12
Fantasize re: entering competition	37	3.27	1.39	3.00	1.55	3.60	1.35	3.36	1.21	0.60	0.56	0.30	0.51	0.70
Would actually enter competition	37	3.32	1.31	3.00	1.41	3.60	1.51	3.55	0.93	0.86	0.43	0.27	0.30	0.93

Note: Bold indicates $p < 0.05$; italics indicates $p < 0.10$

Table 8. Relationships by Shyness//Phobia Group

	Total n=45			Not shy or socially phobic (0)		Shy but not socially phobic (1)		Socially phobic (2)		overall F	Sig. (p-value)	0 v. 1	0 v. 2	1 v. 2
	n	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.			p-value	p-value	p-value
Use of technology to communicate														
Text message more than friends	37	2.03	1.26	2.06	1.48	1.90	0.88	2.09	1.30	0.07	0.94	0.76	0.96	0.74
Text message to avoid calls	37	2.32	1.40	1.69	1.01	2.40	1.35	3.18	1.54	4.49	0.02	0.18	0.01	0.17
Call when no one home	37	2.16	1.26	1.69	1.14	2.20	1.03	2.82	1.40	2.92	0.07	0.30	0.02	0.25
IM to communicate with friends	37	2.73	1.37	2.38	1.50	3.00	1.25	3.00	1.26	0.95	0.40	0.27	0.25	1.00
IM to contact social contact	37	2.35	1.34	1.81	1.47	2.40	1.07	3.09	1.04	3.38	0.05	0.25	0.01	0.22
Told addicted to IM	37	1.78	1.13	1.88	1.36	1.60	0.84	1.82	1.08	0.18	0.84	0.56	0.90	0.67
Used Internet to meet people	37	1.57	1.09	1.69	1.25	1.70	1.06	1.27	0.90	0.56	0.58	0.98	0.35	0.38
Current relationships														
Currently in relationship (Y/N)	37	1.70	0.46	1.63	0.50	1.70	0.48	1.82	0.40	0.55	0.58	0.69	0.30	0.57
Unwilling to take steps to start relat	37	1.30	0.46	1.44	0.51	1.20	0.42	1.18	0.40	1.32	0.28	0.21	0.16	0.93
Quality of relationships														
Parents/guardians	37	4.30	0.78	4.44	0.73	4.10	0.88	4.27	0.79	0.58	0.57	0.29	0.60	0.62
Siblings	37	4.17	0.82	4.31	0.87	4.22	0.83	3.90	0.74	0.79	0.46	0.80	0.23	0.40
Close friends	37	4.51	0.56	4.50	0.63	4.60	0.52	4.45	0.52	0.18	0.84	0.67	0.84	0.56
Acquaintances	37	3.58	0.65	3.81	0.66	3.30	0.67	3.50	0.53	2.17	0.13	0.05	0.23	0.48

Note: Bold indicates $p < 0.05$; italics indicates $p < 0.10$

Table 9. Psychiatric Diagnoses by Shyness/Phobia Group

	Total			Not shy or socially phobic (0)		Shy but not socially phobic (1)		Socially phobic (2)		overall F	Sig. (p-value)	0 v. 1	0 v. 2	1 v. 2
	n	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.			p-value	p-value	p-value
Diagnosed with any of following:														
ADD	36	0.08	0.28	0.06	0.25	0.20	0.42	0.00	0.00	1.38	0.27	0.23	0.58	0.12
Depression	36	0.11	0.32	0.13	0.34	0.10	0.32	0.10	0.32	0.03	0.98	0.85	0.85	1.00
Anxiety	36	0.14	0.35	0.13	0.34	0.10	0.32	0.20	0.42	0.22	0.81	0.86	0.61	0.54
Social Phobia	35	0.00	--	0.00	--	0.00	--	0.00	--	--	--	--	--	--
Learning Disability	36	0.00	--	0.00	--	0.00	--	0.00	--	--	--	--	--	--
OCD	36	0.03	0.17	0.00	0.00	0.00	0.00	0.10	0.32	1.32	0.28	1.00	0.14	0.19
Believe you have:														
ADD	36	0.25	0.44	0.13	0.34	0.30	0.48	0.40	0.52	1.32	0.28	0.33	0.13	0.61
Depression	36	0.19	0.40	0.06	0.25	0.30	0.48	0.30	0.48	1.61	0.22	0.15	0.15	1.00
Anxiety	36	0.25	0.44	0.19	0.40	0.20	0.42	0.40	0.52	0.80	0.46	0.94	0.24	0.32
Social Phobia	36	0.03	0.17	0.06	0.25	0.00	0.00	0.00	0.00	0.61	0.55	0.36	0.36	1.00
Learning Disability	36	0.03	0.17	0.00	0.00	0.10	0.32	0.00	0.00	1.32	0.28	0.14	1.00	0.19
OCD	36	0.14	0.35	0.13	0.34	0.10	0.32	0.20	0.42	0.22	0.81	0.86	0.61	0.54

Note: Bold indicates $p < 0.05$; italics indicates $p < 0.10$

Table 10. Ratings of self and partner qualities by Shyness/Social Phobia group

	Total			Not shy or socially phobic (0)		Shy but not socially phobic (1)		Socially phobic (2)		overall F	Sig. (p-value)	0 v. 1	0 v. 2	1 v. 2
	n	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.			p-value	p-value	p-value
Ratings of self and partner qualities														
Facial attractiveness--self	34	6.59	1.83	6.88	1.59	6.56	2.01	6.11	2.15	0.49	0.62	0.68	0.33	0.62
Facial attractiveness--partner	31	7.55	1.26	7.73	1.33	8.25	0.71	6.50	0.93	5.39	0.01	0.30	0.02	0.00
Body attractiveness--self	34	6.44	1.65	6.81	1.47	6.44	1.81	5.78	1.79	1.14	0.33	0.60	0.14	0.40
Body attractiveness--partner	31	7.39	1.43	7.80	1.74	7.25	1.16	6.75	0.71	1.51	0.24	0.38	0.10	0.48
Physical attractiveness--self	34	6.82	1.60	7.25	1.29	6.67	1.80	6.22	1.86	1.26	0.30	0.39	0.13	0.56
Physical attractiveness--partner	31	7.64	1.17	7.87	1.25	8.00	1.07	6.88	0.83	2.63	0.09	0.79	0.05	0.05
Personality--self	34	8.24	1.18	8.75	1.00	7.78	0.97	7.78	1.39	3.26	0.05	0.04	0.04	1.00
Personality--partner	31	7.32	1.62	7.60	1.40	7.75	1.67	6.38	1.77	1.99	0.16	0.83	0.09	0.09
Poise--self	34	7.35	1.63	8.12	1.15	7.33	1.22	6.00	1.94	6.53	0.00	0.19	0.00	0.05
Poise--partner	31	7.45	1.79	7.73	1.03	7.88	2.03	6.50	2.45	1.61	0.22	0.86	0.12	0.13
Intelligence--self	34	8.29	1.40	8.69	1.14	8.33	1.00	7.56	1.94	1.99	0.15	0.54	0.06	0.24
Intelligence--partner	31	8.03	1.33	7.87	1.13	8.39	1.88	8.00	1.85	0.37	0.70	0.40	0.82	0.59
Ability to succeed--self	34	8.47	1.40	9.06	0.77	8.22	0.97	7.67	2.12	3.54	0.04	0.13	0.02	0.37
Ability to succeed--partner	31	8.39	1.48	8.53	1.41	8.63	1.41	7.88	1.73	0.64	0.53	0.89	0.32	0.32

Note: Bold indicates $p < 0.05$; italics indicates $p < 0.10$

Table 11. Importance of characteristics in casual and serious relationships by Shyness/Social Phobia group

Characteristic	Total			Not shy or socially phobic (0)		Shy but not socially phobic (1)		Socially phobic (2)		overall F	Sig. (p-value)	0 v. 1	0 v. 2	1 v. 2
	n	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.			p-value	p-value	p-value
Face--casual	33	3.33	0.74	3.40	0.74	3.44	0.73	3.11	0.78	0.56	0.58	0.89	0.37	0.35
Face--serious	34	3.26	0.99	3.56	1.09	3.22	0.83	2.78	0.83	1.90	0.41	0.41	0.06	0.34
Body--casual	33	3.24	0.90	3.27	0.80	3.56	1.01	2.89	0.93	1.26	0.45	0.45	0.33	0.13
Body--serious	33	3.18	0.98	3.40	0.99	3.44	0.73	2.56	1.01	2.80	0.91	0.91	0.04	0.05
Kindness--casual	34	3.88	0.98	3.88	1.15	3.67	0.71	4.11	0.93	0.45	0.62	0.62	0.57	0.35
Kindness--serious	34	4.65	0.65	4.69	0.79	4.67	0.50	4.56	0.51	0.12	0.74	0.94	0.64	0.73
Easy to talk to--casual	34	4.03	0.94	4.13	1.02	3.89	0.93	4	0.87	0.18	0.84	0.56	0.76	0.81
Easy to talk to--serious	34	4.76	0.65	4.75	0.77	4.89	0.33	4.67	0.71	0.26	0.78	0.62	0.77	0.49
Warm--casual	34	3.85	0.82	3.81	0.83	3.67	0.87	4.11	0.78	0.68	0.51	0.68	0.39	0.26
Warm--serious	34	4.56	0.70	4.50	0.82	4.67	0.50	4.56	0.73	0.15	0.86	0.58	0.86	0.75
Talkative--casual	34	3.38	1.07	3.31	1.30	3.22	0.83	3.67	0.87	0.43	0.65	0.84	0.44	0.40
Talkative--serious	34	3.68	1.09	3.44	1.21	3.67	1.12	4.11	0.78	1.10	0.35	0.62	0.15	0.39
Poise--casual	34	3.32	1.07	3.25	1.29	3.33	0.71	3.44	1.01	0.09	0.91	0.86	0.67	0.83
Poise--serious	34	3.65	1.04	3.63	1.15	3.56	0.73	3.78	1.20	0.10	0.90	0.88	0.73	0.66
Ability to succeed--casual	34	2.85	1.02	2.69	1.08	2.89	0.93	3.11	1.05	0.49	0.62	0.64	0.33	0.65
Ability to succeed--serious	34	3.85	1.13	3.88	1.31	3.67	0.87	4	1.12	0.19	0.83	0.67	0.80	0.55
Sense of humor--casual	34	3.97	0.94	4.19	0.91	3.67	1.00	3.89	0.93	0.93	0.40	0.19	0.45	0.62
Sense of humor--serious	34	4.41	0.74	4.56	0.63	4.44	0.88	4.11	0.78	1.08	0.35	0.71	0.15	0.35
Honesty--casual	34	3.97	0.97	4.19	0.91	3.44	0.73	4.11	1.17	1.93	0.16	0.07	0.85	0.14
Honesty--serious	34	4.88	0.33	4.81	0.40	4.89	0.33	5	0.00	0.95	0.40	0.58	0.18	0.48
Religion--casual	34	1.85	1.35	2.19	1.52	1.56	1.33	1.56	1.01	0.92	0.41	0.27	0.27	1.00
Religion--serious	34	2.38	1.50	2.43	1.59	2.22	1.30	2.44	1.67	0.07	0.94	0.74	0.99	0.76
Popularity with peers--casual	34	2.68	1.01	2.81	1.33	2.33	0.71	2.78	0.44	0.70	0.50	0.27	0.94	0.36
Popularity with peers--serious	34	2.68	0.98	2.63	1.15	2.67	1.00	2.78	0.67	0.07	0.94	0.92	0.72	0.82

Note: Bold indicates $p < 0.05$; italics indicates $p < 0.10$

Table 12. Hypothetical Situation Choices by Shyness/Social Phobia Group

	Total			Not shy or socially phobic (0)		Shy but not socially phobic (1)		Socially phobic (2)		overall F	Sig. (p-value)	0 v. 1	0 v. 2	1 v. 2
	n	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.			p-value	p-value	p-value
Hypothetical homecoming dance choice														
Situation 1	41	2.17	0.63	2.10	0.72	2.40	0.52	2.09	0.54	0.88	0.43	0.23	0.97	0.27
Situation 2	41	3.44	0.71	3.50	0.89	3.40	0.52	3.36	0.50	0.15	0.87	0.72	0.62	0.91
Situation 1 go	41	2.29	0.70	2.40	0.82	2.10	0.32	2.27	0.65	0.64	0.53	0.27	0.62	0.57
Situation 2 go	42	3.55	0.77	3.45	0.94	3.70	0.67	3.58	0.51	0.36	0.70	0.42	0.64	0.73
Hypothetical paper choice														
Paper 1	42	1.57	0.70	1.50	0.61	1.90	0.99	1.41	0.51	1.52	0.23	0.15	0.74	0.11
Paper 2	41	1.51	0.71	1.30	0.47	1.67	0.71	1.75	0.97	1.85	0.17	0.20	0.09	0.79
Paper 3	42	1.90	0.88	1.85	0.81	2.00	0.94	1.92	1.00	0.09	0.91	0.67	0.84	0.83
Hypothetical professor recommendation choice														
Professor--ask	42	1.67	0.75	1.45	0.69	1.80	0.92	1.92	0.67	1.70	0.20	0.23	0.09	0.72
Professor--like to ask	42	1.55	0.80	1.55	0.83	1.90	0.99	1.25	0.45	1.87	0.17	0.26	0.30	0.06
Professor--when ask	40	1.65	0.70	1.58	0.69	1.90	0.74	1.55	0.69	0.85	0.44	0.25	0.90	0.26

Note: Bold indicates $p < 0.05$; italics indicates $p < 0.10$

PLEASE ANSWER THE FOLLOWING QUESTIONS ON THE SCANTRON SHEETS THAT HAVE BEEN PROVIDED

ID #		

- Are you:
A Male B Female
- Year in college:
A Freshman B Sophomore C Junior D Senior

Henderson/Zimbardo Shyness Questionnaire (Henderson and Zimbardo 2000, 2002; Bortnik et al. 2002)

This scale has excellent psychometric properties, including an internal consistency of 0.92 for six samples and a test-retest reliability for two weeks of 0.87.

Please indicate in the box to the right how characteristic each statement is of you:

A	B	C	D	E
Not at all	Somewhat	Often	Very	Extremely
Characteristic	Characteristic	Characteristic	Characteristic	Characteristic

- I am afraid of looking foolish in social situations.
- I often feel insecure in social situations.
- Other people appear to have more fun in social situations than I do.
- If someone rejects me I assume that I have done something wrong.
- It is hard for me to approach people who are having a conversation.
- I feel lonely a good deal of the time.
- I tend to be more critical of other people than I appear to be.
- It is hard for me to say "no" to unreasonable requests.
- I do more than my share on projects because I can't say no.
- 12. I find it easy to ask for what I want from other people.***
- I do not let others know I am frustrated or angry.
- I find it hard to ask someone for a date.
- It is hard for me to express my real feelings to others.
- I tend to be suspicious of other people's intentions toward me.
- I am bothered when others make demands on me.

18. It is easy for me to sit back in a group discussion and observe rather than participate.
19. I find myself unable to enter new social situations without fearing rejection or not being noticed.
20. I worry about being a burden on others.
21. Personal questions from others make me feel anxious.
22. I let others take advantage of me.
23. I judge myself negatively when I think others have negative reactions to me.
24. I try to figure out what is expected in a given situation and then act that way.
25. I feel embarrassed when I look or seem different from other people.
26. I am disappointed in myself.
27. I blame myself when things do not go the way I want them to.
28. I sometimes feel ashamed after social situations.
29. I am usually aware of my feelings, even if I do not know what prompted them.
30. I am frequently concerned about others' approval.
- 31. *I like taking risks in social situations.***
- 32. *If someone is critical of me I am likely to assume that they are having a bad day.***
33. If I let people know too much about me they will gossip about me.
34. I think it is important to please others.
35. People feel superior when someone is socially anxious.
36. I spend a lot of time thinking about my social performance after I spend time with people.
- 37. *I am satisfied with my level of social support.***

The 14-item Revised Cheek and Buss Scale (Crozier 2005)

The alpha coefficient is 0.86 for the scale.

Please fill in the letter corresponding to how characteristic each statement is of you:

A	B	C	D	E
Very Uncharacteristic, Strongly Disagree	Uncharacteristic	Neutral	Characteristic	Extremely Characteristic, Strongly Agree

38. I feel tense when I'm with people I don't know well.

39. I am socially somewhat awkward

40. I do not find it difficult to ask other people for information.

41. I am often uncomfortable at parties and other social gatherings.

42. When in a group of people, I have trouble thinking of the right things to talk about.

43. It does not take me long to overcome my shyness in a new situation.

44. It is hard for me to act natural when I am meeting new people.

45. I feel nervous when speaking to someone in authority.

46. I have no doubts about my social competence.

47. I have trouble looking someone right in the eye.

48. I feel inhibited in social situations.

49. I do not find it hard to talk to strangers.

50. I am more shy with members of the opposite sex.

51. During conversations with new acquaintances, I worry about saying something foolish.

Next, please mark **A** for “Yes” or **B** for “No” to indicate whether each of the following items pertains to you:

	A=Yes	B=No
52. I am afraid of people in authority.	A	B
53. I am bothered by blushing in front of people.	A	B
54. Parties and social events scare me.	A	B
55. I avoid talking to people I don't know.	A	B
56. Being criticized scares me a lot.	A	B
57. Fear of embarrassment causes me to avoid doing things or speaking to people.	A	B
58. Sweating in front of people causes me distress.	A	B
59. I avoid going to parties.	A	B
60. I avoid activities in which I am the center of attention.	A	B
61. Talking to strangers scares me.	A	B
62. I avoid having to give speeches.	A	B
63. I would do anything to avoid being criticized.	A	B
64. Heart palpitations bother me when I am around people.	A	B
65. I am afraid of doing things when people might be watching.	A	B
66. Being embarrassed or looking stupid are my worst fears.	A	B
67. I avoid speaking to anyone in authority.	A	B
68. Trembling or shaking in front of others is distressing to me.	A	B
69. I have used alcohol or tranquilizers to calm my nerves before interacting with others.	A	B

The Rosenberg Self-Esteem Scale (Rosenberg 1965)

Rosenberg found reproducibility of 0.92 and scalability of 0.72 among more than 5,000 high school students.

On a scale from **A (Strongly Agree)** to **E (Strongly Disagree)**, please indicate whether you agree or disagree with each of the following statements: (*Please note change in direction of scale*)

A Strongly Agree	B Agree	C Neither agree nor disagree	D Disagree	E Strongly Disagree
---	--------------------------	---	-----------------------------	--

70. On the whole, I am satisfied with myself.

71. At times I think I am no good at all.

72. I feel that I have a number of good qualities.

73. I am able to do things as well as most other people.

74. I feel I do not have much to be proud of.

75. I certainly feel useless at times.

76. I feel that I'm a person of worth, at least on an equal plane with others.

77. I wish I could have more respect for myself.

78. All in all, I am inclined to feel that I am a failure.

79. I take a positive attitude toward myself.

Respond to the following questions in regard to specific abilities::

80. I am satisfied with my athletic ability.

81. I am satisfied with my academic achievements.

82. I am satisfied with my intelligence.

Respond to the following questions in terms of your social life:

83. I am satisfied with my social life.

84. At times I think I have no friends at all.

85. I feel that I have a number of good social skills.

86. I have just as good of a social life as most other people.

87. I feel that I have a worthwhile social life, at least on an equal plane with others.

88. I wish I could have more respect for myself/my social abilities.

89. All in all, I am inclined to feel that I am a failure in my social life.

90. I take a positive attitude toward my social life/abilities

Stability of Self Scale

Reproducibility: 94%; Scalability (items): 77%; Scalability (individuals): 77%

91. Does your opinion of yourself tend to change a good deal, or does it always continue to remain the same?

- A. Changes a great deal.
- B. Changes somewhat.
- C. Changes very little.
- D. Does not change at all.

92. Do you ever find that on one day you have one opinion of yourself and on another day you have a different opinion?

- A. Yes, this happens often.
- B. Yes, this happens sometimes.
- C. Yes, this happens rarely.
- D. No, this never happens.

93. I have noticed that my ideas about myself seem to change very quickly.

- A. Agree
- B. Disagree

94. Some days I have a very good opinion of myself; other days I have a very poor opinion of myself.

- A. Agree
- B. Disagree

95. *I feel that nothing, or almost nothing, can change the opinion I currently hold of myself.*

- A. *Agree***
- B. *Disagree***

The Hypersensitive Narcissism Scale (HSNS) (Hendin and Cheek 1997)

The HSNS had an alpha coefficient of 0.72 to 0.75 among female students and 0.62 to 0.76 among male students.

Please answer the following questions by deciding to what extent each item is characteristic of your feelings or behavior.

- | | | | | |
|--|-------------------------|----------------|-----------------------|---|
| A | B | C | D | E |
| Very | Uncharacteristic | Neutral | Characteristic | Extremely |
| Uncharacteristic,
Strongly Disagree | | | | Characteristic,
Strongly Agree |

96. I can become entirely absorbed in thinking about my personal affairs, my health, my cares or my relations to others.

97. My feelings are easily hurt by ridicule or the slighting remarks of others.

98. When I enter a room I often become self-conscious and feel that the eyes of others are upon me.

99. I dislike sharing the credit of an achievement with others.
100. I feel that I have enough on my hands without worrying about other people's troubles
101. I feel that I am temperamentally different from most people.
102. I often interpret the remarks of others in a personal way.
103. I easily become wrapped up in my own interests and forget the existence of others.
104. I dislike being with a group unless I know that I am appreciated by at least one of those present.
105. I am secretly "put out" or annoyed when other people come to me with their troubles, asking for my time and sympathy.

NPI

Instructions: In each of the following pairs of attitudes, choose the one with which you MOST AGREE. Mark your answer by marking **EITHER A or B** on the answer sheet. Mark only ONE ANSWER for each attitude pair, and please DO NOT skip any items.

106.	A	I have a natural talent for influencing people.
	B	I am not good at influencing people.
107.	A	Modesty doesn't become me.
	B	I am essentially a modest person.
108.	A	I would do almost anything on a dare.
	B	I tend to be a fairly cautious person.
109.	A	<i>When people compliment me I sometimes get embarrassed.</i>
	B	<i>I know that I am good because everybody keeps telling me so.</i>
110.	A	<i>The thought of ruling the world frightens the hell out of me.</i>
	B	<i>If I ruled the world it would be a better place.</i>
111.	A	I can usually talk my way out of anything.
	B	I try to accept the consequences of my behavior.
112.	A	<i>I prefer to blend in with the crowd.</i>
	B	<i>I like to be the center of attention.</i>
113.	A	I will be a success.
	B	I am not too concerned about success.
114.	A	<i>I am no better or no worse than most people.</i>
	B	<i>I think I am a special person.</i>
115.	A	<i>I am not sure if I would make a good leader.</i>
	B	<i>I see myself as a good leader.</i>
116.	A	I am assertive.
	B	I wish I were more assertive.
117.	A	I like having authority over other people.
	B	I don't mind following orders.
118.	A	I find it easy to manipulate people.
	B	I don't like it when I find myself manipulating people.
119.	A	I insist upon getting the respect that is due me.
	B	I usually get the respect that I deserve.

120. A *I don't particularly like to show off my body.*
B *I like to show off my body.*
-
121. A I can read people like a book.
B People are sometimes hard to understand.
-
122. A *If I feel competent I am willing to take responsibility for making decisions.*
B *I like to take responsibility for making decisions.*
-
123. A *I just want to be reasonably happy.*
B *I want to amount to something in the eyes of the world.*
-
124. A *My body is nothing special.*
B *I like to look at my body.*
-
125. A *I try not to be a show off.*
B *I will usually show off if I get the chance.*
-
126. A I always know what I am doing.
B Sometimes I am not sure of what I am doing.
-
127. A *I sometimes depend on people to get things done.*
B *I rarely depend on anyone else to get things done.*
-
128. A *Sometimes I tell good stories.*
B *Everybody likes to hear my stories.*
-
129. A I expect a great deal from other people.
B I like to do things for other people.
-
130. A I will never be satisfied until I get all that I deserve.
B I take my satisfactions as they come.
-
131. A *Compliments embarrass me.*
B *I like to be complimented.*
-
132. A I have a strong will to power.
B Power for its own sake doesn't interest me.
-
133. A *I don't care about new fads and fashions.*
B *I like to start new fads and fashions.*
-
134. A I like to look at myself in the mirror.
B I am not particularly interested in looking at myself in the mirror.
-
135. A I really like to be the center of attention.
B It makes me uncomfortable to be the center of attention.
-
136. A I can live my life in anyway I want to.
B People can't always live their lives in terms of what they want.
-
137. A *Being an authority doesn't mean that much to me.*
B *People always seem to recognize my authority.*
-
138. A I would prefer to be a leader.
B It makes little difference to me whether I am a leader or not.
-
139. A I am going to be a great person.
B I hope I am going to be successful.
-
140. A *People sometimes believe what I tell them.*
B *I can make anybody believe anything I want them to.*
-
141. A I am a born leader.
B Leadership is a quality that takes a long time to develop.
-
142. A I wish someone would someday write my biography.
B I don't like people to pry into my life for any reason.
-
143. A I get upset when people don't notice how I look when I go out in public.
B I don't mind blending into the crowd when I go out in public.
-

144. A I am more capable than other people.
B There is a lot that I can learn from other people.

-
145. A *I am much like everybody else.*
B *I am an extraordinary person.*
-

The Keirseley Temperament Sorter

The scale "sorts" subjects into Guardian, Artist, Idealist, or Rational temperaments. **WE INCLUDE ONLY THE EXTRAVERSION/INTROVERSION SECTION OF THE SORTER.**

146. At a party do you: A. Interact with many, including strangers B. Interact with a few, known to you
147. At parties do you: A. Stay late, with increasing energy B. Leave early, with decreased energy
148. In your social groups do you: A. Keep abreast of other's happenings B. Get behind on the news
149. In phoning do you: A. Rarely question that it will all be said B. Rehearse what you'll say
150. In company do you: A. Initiate conversation B. Wait to be approached
151. Does new and non-routine interaction with others: A. Stimulate and energize you B. Tax your reserves
152. Do you prefer: A. Many friends with brief contact B. A few friends with more lengthy contact
153. Do you: A. Speak easily and at length with strangers B. Find little to say to strangers
154. When the phone rings do you: A. Hasten to get to it first B. Hope someone else will answer
155. Are you more inclined to be: A. Easy to approach B. Somewhat reserved

Questions taken from “The Perceived Stress Scale (PSS)” (Cohen, S., Kamarck, T., Mermelstein, R. 1983)

Alpha coefficients of reliability ranged from 0.84 to 0.86 among three samples of college students (Cohen et al 1983). The test-retest correlation was 0.85 for two days and 0.55 for six weeks.

The questions in this scale ask you about your feelings and thoughts **during the last month**. In each case, please indicate how often you felt or thought a certain way. If you ever felt that way during the last month, also indicate how upset you were because of it.

A **B** **C** **D** **E**
Never **Almost never** **Sometimes** **Fairly often** **Very often**

- 156. In the last month, how often have you been upset because of something that happened unexpectedly?
- 157. In the last month, how often have you felt that you were unable to control the important things in your life?
- 158. In the last month, how often have you felt nervous and "stressed"?
- 159. In the last month, how often have you felt confident about your ability to handle your personal problems?

The Differential Loneliness Scale – short version (Schmidt and Sermat 1983)

Instructions: For each statement below, decide whether it describes you or your situation or not. If it does seem to describe you or your situation, mark **A (TRUE)**. If not, mark it **B (FALSE)**. If an item does not seem applicable to you because you are currently not involved in the situation it depicts, e.g., a current romantic or marital relationship, then mark it B (FALSE). In these questions, you can think of Boston College as your “community” and your hallmates/roommates as your “neighbors.”

	A	B
	True	False
160. I feel close to members of my family.	A	B
161. I have a lover or spouse (boyfriend girlfriend husband or wife) with whom I can discuss my important problems and worries.	A	B
162. I feel I do not have much in common with the larger community in which I live	A	B
163. I have little contact with members of my family.	A	B
164. I do not get along very well with my family.	A	B
165. I am now involved in a romantic or marital relationship in which both of us are making a genuine effort at cooperation.	A	B
166. I have a good relationship with most members of my immediate family.	A	B
167. I do not feel that I can turn to my friends living around me for help when I need it.	A	B
168. No one in the community where I live seems to care much about me.	A	B
169. I allow myself to become close to my friends.	A	B
170. I seldom get the emotional security I need from a good romantic or sexual relationship.	A	B
171. I feel that I have “roots” (a sense of belonging) in the larger community or neighborhood I live in.	A	B
172. I do not have many friends in the city where I live.	A	B

173. I do not have any neighbors who would help me out in a time of need.	A	B
174. I get plenty of help and support from my friends.	A	B
175. My family seldom really listens to what I say.	A	B
176. Few of my friends understand me the way I want to be understood.	A	B
177. My lover or spouse senses when I am troubled and encourages me.	A	B
178. I feel valued and respected in my current romantic or marital relationship.	A	B
179. I know people in my community who understand and share my views and beliefs.	A	B

Caruso & Mayer (1998)—Emotional Empathy Scale

Principal components analysis was used to identify six distinct factors. The alpha reliability coefficient for the total scale was 0.88 (Caruso & Mayer 1998). The six factor scales were Empathetic Suffering, Positive Sharing, Responsive Crying, Emotional Attention, Feeling for Others, and Emotional Contagion.

For each of the following statements, please mark the letter that corresponds to how strongly you agree or disagree with each.

A Strongly Agree	B Agree	C Neither	D Disagree	E Strongly Disagree
180. I feel like crying when watching a sad movie.				
181. Certain pieces of music can really move me.				
182. Seeing a hurt animal by the side of the road is very upsetting.				
183. I don't give others' feelings much thought.				
184. It makes me happy when I see people being nice to each other.				
185. The suffering of others deeply disturbs me.				
186. I always try to tune in to the feelings of those around me.				
187. I get very upset when I see a young child who is being treated meanly.				
188. Too much is made of the suffering of pets or animals.				
189. If someone is upset I get upset, too.				
190. When I'm with other people who are laughing I join in.				
191. It makes me mad to see someone treated unjustly.				
192. I rarely take notice when people treat each other warmly.				
193. I feel happy when I see people laughing and enjoying themselves.				
194. It's easy for me to get carried away by other people's emotions.				
195. My feelings are my own and don't reflect how others feel.				
196. If a crowd gets excited about something so do I.				
197. I feel good when I help someone out or do something nice for someone.				
198. I feel deeply for others.				
199. I don't cry easily.				
200. I feel other people's pain.				
201. Seeing other people smile makes me smile.				
202. Being around happy people makes me feel happy, too.				
203. TV or news stories about injured or sick children greatly upset me.				
204. I cry at sad parts of the books I read.				
205. Being around people who are depressed brings my mood down.				
206. I find it annoying when people cry in public.				
207. It hurts to see another person in pain.				

208. I get a warm feeling for someone if I see them helping another person.

209. I feel other people's joy.

Gosling, Rentfrow, & Swann (2003)—measure of the Big-Five personality domains

Convergent correlations between the TIPI and the larger Big-Five inventory for each of the five domains—Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience—ranged from 0.65 for Openness to 0.87 for Extraversion (Gosling, Rentfrow & Swann 2003). (RATED ON 5-POINT RATHER THAN 7-POINT SCALE)

Here are a number of personality traits that may or may not apply to you. Please mark the letter that indicates the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristics applies more strongly than the other.

A
Strongly
Agree

B
Agree

C
Neither

D
Disagree

E
Strongly
Disagree

I see myself as:

- 210. Extraverted, enthusiastic
- 211. Critical, quarrelsome
- 212. Dependable, self-disciplined
- 213. Anxious, easily upset
- 214. Open to new experiences, complex
- 215. Reserved, quiet
- 216. Sympathetic, warm
- 217. Disorganized, careless
- 218. Calm, emotionally stable
- 219. Conventional, uncreative

Questions taken from “The Fear of Negative Evaluation Scale” (Leary 1983)

Cronbach alpha coefficients for internal reliability were found to be 0.91 (Gilbert and Meyer 2005).

Instructions: For each of the following statements, mark the letter on the answer sheet corresponding to the ext to which you agree with the item. If any of the items concern something that is not part of your experience, answer on the basis of how you think you might feel *if you had* such an experience. Otherwise, answer all questions on the basis of your own experience.

A
Very Little

B
A Little

C
Some

D
Much

E
Very much

- 220. I am afraid that people will find fault with me.
- 221. I am afraid that others will not approve of me.
- 222. I am frequently afraid of other people noticing my shortcomings.

223. It bothers me when people form an unfavorable opinion of me.

Questions taken from the “FEAR Scale”

For each of the following items, please rate how much fear they make you feel, in general. Please provide a rating from A (No fear at all) to E (Extreme fear), using the following scale.

- | A | B | C | D | E |
|---------|---------------------------------|---------------|---------------|--------------|
| No fear | A little fear | Moderate fear | A lot of fear | Extreme fear |
| 224. | Injury or death of a loved one. | | | |
| 225. | Your own early death. | | | |
| 226. | Spiders/Snakes | | | |
| 227. | Unemployment | | | |
| 228. | Heights | | | |
| 229. | Small, enclosed places | | | |

Questions taken from “The Attitudes Toward Self (ATS)”

Respond to each of the following statements by marking the letter on the answer sheet corresponding to how much you agree with it. Do not leave any items blank. Please be as honest as you can throughout, and try not to let your answer to one item influence your answers to other items. There are no correct or incorrect answers. You are simply to express your own personal feelings. For each statement, indicate how much you agree or disagree with it, by choosing one of the following responses:

- | A | B | C | D | E |
|------------------|---|---------------------------------|------------------------|---------------------|
| I agree
a lot | I agree
a little | I neither
agree nor disagree | I DISagree
a little | I DISagree
a lot |
| 230. | Compared to other people, I expect a lot from myself. | | | |
| 231. | When even one thing goes wrong I begin to wonder if I can do well at anything at all. | | | |
| 232. | When it comes to setting standards for my behavior, I aim higher than most people. | | | |
| 233. | I hardly ever let unhappiness over one bad time influence my feelings about other parts of my life. | | | |
| 234. | When I don't do as well as I hoped to, I often get upset with myself. | | | |
| 235. | If I notice one fault of mine, it makes me think about my other faults. | | | |
| 236. | I get unhappy with anything less than what I expected of myself. | | | |
| 237. | A single failure can change me from feeling OK to seeing only the bad in myself. | | | |

Questions taken from “The Life Orientation Test-Revised”

238. *In uncertain times, I usually expect the best.*
239. If something can go wrong for me, it will.
240. I hardly ever expect things to go my way.

241. *I don't get upset too easily.*

242. *Overall, I expect more good things to happen to me than bad.*

Attachment 3

243. Choose one of the following which best describes you:

a) I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't often worry about being abandoned or about someone getting too close to me.

b) I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being.

c) I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to merge completely with another person, and this desire sometimes scares people away.

Using the following scale and referring to the above descriptions:

A	B	C	D	E
Not at all	Somewhat	Moderately	Much	Very much
like me	like me	like me	like me	like me

244. To what extent does (a) apply to you?

245. To what extent does (b) apply to you?

246. To what extent does (c) apply to you?

Questions taken from "Aggression Questionnaire" (Buss and Perry 1992)

This scale has four subscales measuring four dimensions—Verbal aggression, Anger, Physical aggression, and Hostility. It is one of the most widely used scales in studies of aggression and violence. All of these dimensions have good internal consistency and validity over time (Gilbert and Miles 2000). Coefficient alphas for these subscales range from 0.74 to 0.84 (Gilbert and Miles 2000).

Using the 5-point scale below, indicate how uncharacteristic or characteristic each of the following statements is in describing you. Mark your response on the answer sheet.

A	B	C	D	E
Extremely	Somewhat	Neither	Somewhat	Extremely
Uncharacteristic	Uncharacteristic	Characteristic	Characteristic	Characteristic
of me	of me	nor	of me	of me
		Uncharacteristic		

247. Some of my friends think I am a hothead.

248. I have become so mad that I have broken things.

249. I wonder why sometimes I feel so bitter about things.

- 250. Once in a while, I feel a strong urge to strike another person.
- 251. ***I am an even-tempered person.***
- 252. I flare up quickly but get over it quickly.
- 253. Given enough provocation, I may hit another person.
- 254. I am sometimes eaten up with jealousy.
- 255. At times I feel I have gotten a raw deal out of life.
- 256. I have trouble controlling my temper.
- 257. I sometimes feel like a powder keg ready to explode.
- 258. Other people always seem to get the breaks.
- 259. Sometimes I fly off the handle for no good reason.
- 260. I get into fights a little more than the average person.

The Emotional Self-Disclosure scale

This was developed by Snell, Miller, and Belk (1988) to measure an individual's willingness to disclose personal feelings to friends of the same and opposite sex, and to spouses/partners (Snell et al. 1988). We added parents as another potential target of disclosures. There are eight subscales in this instrument—depression, happiness, jealousy, anxiety, anger, calmness, apathy, and fear. Coefficients of internal reliability ranged from 0.83 to 0.95.

Please indicate how willing you would be to discuss each of the following with a) parents, b) male friends, c) female friends, and d) spouse/partner/boyfriend/girlfriend (leave blank if N/A)

A	B	C	D	E
Not at all	Somewhat	Uncertain	Quite	Very
willing to discuss	willing to discuss		willing to discuss	willing to discuss

With parents	With male friends	With female friends	With spouse/partner	
261.	262.	263.	264.	Times when you are depressed .
265.	266.	267.	268.	Times when you felt happy .
269.	270.	271.	272.	Times when you felt jealous .
273.	274.	275.	276.	Times when you felt angry .
277.	278.	279.	280.	Times when you felt afraid .
281.	282.	283.	284.	Times when you felt discouraged .
285.	286.	287.	288.	Times when you felt pessimistic .
289.	290.	291.	292.	Times when you felt envious .
293.	294.	295.	296.	Times when you felt worried .
297.	298.	299.	300.	Times when you felt sad .
301.	302.	303.	304.	Times when you felt delighted .
305.	306.	307.	308.	Times when you felt suspicious .
309.	310.	311.	312.	Times when you felt hostile .
313.	314.	315.	316.	Times when you felt resentful .

A
Strongly
Agree

B
Agree

C
Neither

D
Disagree

E
Strongly
Disagree

To what extent do **you see yourself** this way:

317. An extravert

318. An introvert

319. Have high self-esteem

320. Shy

321. Self-absorbed

322. Other-focused

323. Have low self-esteem

324. Often envious of others

325. Calm

326. Easily agitated

327. Very proud

328. Very organized

329. A perfectionist

330. "Cool"

331. Introspective

332. Fantasize about running for office or entering some such public competition

333. Would actually enter such a competition

To what extent do **others see you** this way:

334. An extravert

335. An introvert

- 336. Have high self-esteem
- 337. Shy
- 338. Self-absorbed
- 339. Other-focused
- 340. Having low self-esteem
- 341. Often envious of others
- 342. Calm
- 343. Easily agitated
- 344. Very proud
- 345. Very organized
- 346. A perfectionist
- 347. "Cool"
- 348. Introspective
- 349. Fantasize about running for office or entering some such public competition
- 350. Would actually enter such a competition.

How characteristic are the following of you:

A	B	C	D	E
Not at all	Somewhat	Moderately	Much	Very much
like me	like me	like me	like me	like me

- 351. I send more text messages than my friends.
- 352. I often use text messages to avoid making a real phone call.
- 353. I often make a phone call when I know that no one will be home/answer the phone.
- 354. Instant Messenger is how I communicate with all of my friends.
- 355. Instant Messenger is necessary to get in contact with all of my social contacts.
- 356. I have been told I am addicted to Instant Messenger.
- 357. I have used the Internet to meet new people.

358. Are you currently in a relationship? A = Yes B = No

359. Have you ever wanted to date someone but been unwilling/unable to take the necessary steps to initiate a relationship? A = Yes B = No

On a scale of **A=Very Poor to E=Excellent**, how would you rate the quality of your relationship with each of the following:

A Very poor	B Poor	C Fair	D Good	E Excellent		
Very poor		Excellent				
360. Your parents/guardians?	A	B	C	D	E	
361. Your siblings?	A	B	C	D	E	<i>(leave blank if N/A)</i>
362. Close friends?	A	B	C	D	E	
363. Acquaintances?	A	B	C	D	E	

Have you ever been diagnosed with any of the following:

	A=Yes	B=No
364. ADD/ADHD?	A	B
365. Depression?	A	B
366. Anxiety?	A	B
367. Social phobia?	A	B
368. Learning disabilities?	A	B
369. OCD?	A	B

Do YOU think that you have any of the following:

	A=Yes	B=No
370. ADD/ADHD?	A	B
371. Depression?	A	B
372. Anxiety?	A	B
373. Social phobia?	A	B
374. Learning disabilities?	A	B

375. OCD?	A	B
-----------	---	---

PLEASE ANSWER THE REMAINING QUESTIONS DIRECTLY ON THE FORM

Next, I'd like to ask you to rate the following qualities in yourself and your current (or last) partner. Please rate each quality on a scale from 1 (Not at all attractive, pleasant, etc.) to 10 (Extremely attractive, pleasant, etc.). Write the number corresponding to your rating in the box next to each item.

	1=Not at all attractive to 10=Extremely attractive	
Your overall facial attractiveness		
Your partner's facial attractiveness		
	1=Not at all attractive to 10=Extremely attractive	
Your overall body attractiveness		
Your partner's body attractiveness		
	1=Not at all attractive to 10=Extremely attractive	
Your overall physical attractiveness		
Your partner's overall physical attractiveness		
	1=Very unpleasant personality to 10=Extremely good personality	
Your personality		
Your partner's personality		
	1=Not at all confident to 10=Extremely confident	
Your confidence/poise		
Your partner's confidence/poise		
	1=Very low intellectual capacity to 10=Extremely high intellectual capacity	
Your intellectual capacity		
Your partner's intellectual capacity		
	1=Very low ability to succeed in life to 10=Extremely high ability to succeed in life	
Your ability to succeed in life		
Your partner's ability to succeed in life		

For each of the situations below in which a person might choose to communicate or not, please indicate the percentage of time (**from 0=never to 100=always**) you would a) want to communicate and b) actually communicate in each situation. Write the percentage (%) of time you would want to talk in the first column to the right of the item, and write the % of time you would actually talk in the second column.

		% of time you would <u>want</u> to talk	% of time you would <u>actually</u> talk
1.	Present a talk to a group of strangers		
2.	Talk with an acquaintance while standing in line		
3.	Talk with a salesperson in a store		
4.	Talk in a large meeting of friends		
5.	Talk in a small group of strangers		
6.	Talk with a friend while standing in line		
7.	Talk with a waiter/waitress in a restaurant		
8.	Talk in a large meeting of acquaintances		
9.	Talk with a stranger while standing in line		
10.	Present a talk to a group of friends		
11.	Talk in a small group of acquaintances		
12.	Talk in a large meeting of strangers		
13.	Talk in a small group of friends		
14.	Present a talk to a group of acquaintances		

DATE CHOICES: _____

How important are of each of the following characteristics when deciding to:

- a) casually date someone
- b) enter into a serious relationship with someone.

A	B	C	D	E
Not at all	Somewhat	Moderately	Quite	Extremely
Important	Important	Important	Important	Important
Casually Date	Serious Relationship			
_____	_____	Facial attractiveness		
_____	_____	Attractive body type		
_____	_____	Kind; nice; caring		
_____	_____	Easy to talk to		
_____	_____	Warm; welcoming; open		
_____	_____	Talkative; gets along with everyone		
_____	_____	Poise/confidence		
_____	_____	Ability to succeed in life		
_____	_____	Sense of humor		
_____	_____	Honesty/Trustworthiness		
_____	_____	Religious background		
_____	_____	Popularity with peers		

How much does your sense of self-worth depend on how attractive your partner is? (Circle your answer)

- | | | | |
|-----------|----------|--------------|------------|
| 1 | 2 | 3 | 4 |
| Very much | Somewhat | Not too much | Not at all |

How embarrassed would you be to be seen (publicly) in a romantic situation with someone who you really liked but who was physically unattractive? (Circle your answer)

- | | | | |
|------------------|----------|---------------------|------------------------|
| 1 | 2 | 3 | 4 |
| Very embarrassed | Somewhat | Not too embarrassed | Not at all embarrassed |

Imagine that there is a Homecoming dance approaching that everyone is going to, and you would really like to invite a date to go with you.

If you knew of four people (A, B, C and D) with differing degrees of pleasing personalities and attractiveness (as described in the Situations below), which person would you be most likely to invite?

Situation 1

Person	Personality Rank	Attractiveness	<i>Which person would you invite?</i>
A	great personality	not at all attractive	<input type="checkbox"/>
B	good personality	fairly attractive	
C	fair personality	somewhat attractive	
D	unpleasant personality	very attractive	

How would you invite this person?

- A In person
- B Through a friend/mutual acquaintance
- C By phone
- D Through Instant Messenger
- E In an e-mail

Situation 2

Person	Personality Rank	Attractiveness Rank	<i>Which person would you invite?</i>
A	pleasing personality	not at all attractive	<input type="checkbox"/>
B	pleasing personality	fairly attractive	
C	pleasing personality	somewhat attractive	
D	pleasing personality	very attractive	

How would you invite this person?

- A In person
- B Through a friend
- C By phone
- D Through Instant Messenger
- E In an e-mail

If the same four people (A, B, C and D) *invited you* to the dance, which person would you be most likely to go with?

Situation 1

Person	Personality Rank	Attractiveness	<i>Which person would you go with?</i>
A	great personality	not at all attractive	<input type="checkbox"/>
B	good personality	fairly attractive	
C	fair personality	somewhat attractive	
D	unpleasant personality	very attractive	

Situation 2

Person	Personality Rank	Attractiveness Rank	<i>Which person would you go with?</i>
A	pleasing personality	not at all attractive	<input type="checkbox"/>
B	pleasing personality	fairly attractive	
C	pleasing personality	somewhat attractive	
D	pleasing personality	very attractive	

PROFESSOR RECOMMENDATION CHOICES:

It is two weeks before applications to graduate school/medical school are due and you have not yet asked a professor for a recommendation. You must choose a professor and ask him/her for the recommendation immediately. The first professor (Professor A) has connections with your top choice school (to which you have a fairly good chance of being accepted), but is extremely cold and reserved. The second professor choice (Professor B) is friendlier than Professor A, but is still rather intimidating to approach. Professor B also has connections with a school, but it is with a middle-tier school, not your top choice. Finally, your third professor choice (Professor C) only has connections to a low-ranked school, one of your safety schools that you would prefer not to attend. However, he/she is extremely friendly, helpful, and accommodating and most students would feel completely comfortable asking this professor for a recommendation. If you were in this decision, and had to ask for a recommendation immediately, which professor would you actually to ask? Is this the professor you would most like to ask?

Prof A: connections with top choice school; very cold, reserved, etc.

Prof B: connections with a middle tier school; friendlier than Prof. A

Prof C: connections with a lower-ranked school; very friendly, helpful, and accommodating

Actually Ask:

Most like to Ask:

Have you ever been in a situation similar to this in which you had to ask a professor for a recommendation at the last minute? If so, who did you choose?

Why did you wait until the last minute?

Would it make a difference if you felt like all of your chances for success depended on this recommendation?

If you had three months to obtain the recommendation, when would you ask the professor?

In the first month?

In the second month?

In the third month?

If so, in the first, second, third, or fourth week of the third month?

PAPERS AND PRESENTATIONS:

If you were given a choice of paper topics of varying degrees of difficulty and each one correlated to the maximum grade you could get for that paper (i.e.: most difficult=A, slightly less difficult=B, average difficulty=C, and very easy=D), which paper would you choose to write?

What is your reasoning behind this choice?

If you were given a similar option in terms of a presentation that you have to make (but all difficulties are the same length presentation), which would you choose?

Why?

What difficulty would you choose if the most difficult topic also had to be the longest presentation, while the easiest was the shortest length presentation?

Why?

In general, would/do you start working on papers or presentations more quickly after they are assigned?

Dating history:

How many people have you dated: Once? _____
Two or more dates (but no relationship)? _____
Relationship: 4 dates-6 months? _____
Relationship: More than 6 months? _____

Longest relationship: _____

Shortest relationship: _____

Final Demographic Information:

What is your current overall GPA? _____

What is your major GPA? _____

What is your major? _____