Bracing for the worst, but behaving the best: Social anxiety, hostility, and behavioral aggression

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ABSTRACT

Social anxiety is marked by viewing social interactions as competitive, hypervigilance to signs of social threat, and avoidance of interactions that may result in social rejection. Therefore, social anxiety should relate to: (1) greater hostile feelings toward others, (2) heightened perceptions of hostility in others, and (3) relatively low levels of violence and aggression. To date, however, little is known about these relationships. In four independent non-clinical samples (total $N = 2643$), we examined relationships between social anxiety, hostility, and aggression using a range of measures that included both self-report and behavioral assessments. In Study 1, social anxiety correlated positively with feeling hostile toward others. In Study 2, social anxiety correlated positively with hostile perceptions of others. In Study 3, social anxiety was related to less positive attitudes toward behaving violently toward one's relationship partner. In Study 4, social anxiety was related to less aggressive behavior, as indicated by less intense and prolonged noise blasts delivered to a fictitious opponent. Taken together, these four studies paint a picture of socially anxious people as bracing for the worst by feeling and perceiving hostility in the social environment, but behaving the best by refraining from aggression and violence.

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1. Introduction

As social animals, humans have a fundamental desire for positive and lasting relationships (Baumeister & Leary, 1995). This need to belong is deeply rooted in evolutionary history and has consequences for psychological processes. Satisfying one's need to belong is linked to individual, interpersonal, and societal well-being. For example, people who have a strong sense of social connection in their lives, compared to those who do not, have better physical and mental health (Cacioppo, Hawkley, & Berntson, 2003; Leary, 1990; Uchino, Cacioppo, & Kiecolt-Glaser, 1996) and behave more benevolently toward others (Buckley, Winkel, & Leary, 2004; DeWall, Twenge, Gitter, & Baumeister, 2009).

Unfortunately, social anxiety – a phenomenon marked by fear and distress regarding potential negative evaluations from others – often thwarts individuals' need to belong. Both subclinical and clinical levels of social anxiety (i.e., social anxiety disorder [SAD], also known as social phobia), have a particularly chronic course with early age onset and low rates of recovery (Davidson, Hughes, George, & Blazer, 1993). Social anxiety relates not only to fear of negative evaluation, but it also relates to depression, suicidal

ideation, suicide attempts, and substance abuse (Buckner, Bernert, Cromer, Joiner, & Schmidt, 2008; Buckner, Schmidt, et al., 2008; Buckner, Schmidt, Bobadilla, & Taylor, 2006; Davidson et al., 1993; Grant et al., 2005; Kessler et al., 1997; Kessler, Stang, Wittchen, Stein, & Walters, 1999). Of particular relevance to the current investigation, social anxiety is linked to problems with interpersonal functioning (Schneier et al., 1994; Stein, Torgrud, & Walker, 2000). Thus, social anxiety is related to great personal suffering and high public health costs (Greenberg et al., 1999). Even at subclinical levels social anxiety can be disruptive for interpersonal functioning, an issue to which we now turn.

1.1. Social anxiety and hostility toward others

Social anxiety relates not only to problems with individual functioning, but the chronic fear of rejection indicative of social anxiety is thought to distort how people view social interactions. In fact, socially anxious people tend to view social interactions as competitions—competitions they usually lose (Rapee & Heimberg, 1997). Therefore, social anxiety may relate to feeling hostile toward others and perceiving hostility in others. To date, relatively little research has investigated these possible links between social anxiety and hostility.

In one of the few studies examining the link between social anxiety and hostility, social anxiety correlated positively with

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hostile feelings toward others (Gilbert & Miles, 2000). Relatedly, patients with SAD, compared with non-clinical controls, have higher trait anger levels (Erwin, Heimberg, Schneier, & Liebowitz, 2003) and exhibit anger and hostility toward others (Kachin, Newman, & Pincus, 2001). Other work has identified a sub-class of people with SAD who show signs of behavioral disinhibition, including heightened levels of anger and aggression (e.g., Kashdan, Elhai, & Breen, 2008; Kashdan & Hofmann, 2008; Kashdan, McKnight, Richey, & Hofmann, 2009).

1.2. Social anxiety and perceived hostility from others

Just as people with social anxiety may develop hostility toward others as a result of others' ability to outperform them in social situations, socially anxious people may assume others view social situations as competitions as well. They may therefore assume others feel as hostile toward them as they feel toward others. Indeed, people tend to perceive competitors as more hostile compared to non-competitors (e.g., Anderson & Morrow, 1995; Sherif & Sherif, 1953). Thus, social anxiety might relate to bracing for the worst in social interactions by perceiving high levels of hostility in one's environment.

Despite theoretical models positing that social anxiety relates to assuming others are critical (Clark & Wells, 1995; Rapee & Heimberg, 1997), data testing this hypothesis are mixed. Some work shows that people with SAD, compared to non-clinical controls, rate social interaction partners as friendlier (Alden & Wallace, 1995). Yet other reports find that people with relatively high levels of social anxiety, compared to those with relatively low levels of social anxiety, are more likely to assume others judge them negatively (Leary, Kowalski, & Campbell, 1988). The current studies seek to resolve these conflicting findings. We predict that social anxiety will correlate positively with feeling hostile toward others and perceiving hostility in others.

1.3. Social anxiety and behavioral aggression

Although socially anxious people may be hypervigilant for hostility in their environment, they may be less likely than their non-socially anxious counterparts to behave aggressively toward others out of fear that others will judge them negatively for behaving aggressively. Behaving aggressively is linked to rejection and negative evaluation among both children (Juvonen & Gross, 2005) and adults (Gottfredson & Hirschi, 1990). It is therefore not surprising that higher levels of social anxiety relate to suppressing emotions associated with aggressive behavior, such as anger (Erwin et al., 2003). Weber, Wiedig, Freyer, and Gralher (2004) showed that social anxiety correlated negatively with self-reported frequency of providing non-hostile feedback to others when angry, correlated positively with reports of acting submissively when angry and ruminating about the event, and was unrelated to actual aggression after experiencing laboratory-induced anger. It therefore remains unclear whether social anxiety is in fact related to less aggressive behaviors or whether people with social anxiety merely report they are less aggressive. To resolve much ambiguity in the literature, one study in the current investigation (Study 4) examined the relationship between social anxiety and actual aggressive behavior.

Why might socially anxious people not act aggressively toward others? Various models of aggression in samples unselected for anxiety argue that hostile cognitions can serve as a precursor to actual aggressive behavior (e.g., Anderson & Bushman, 2002; Berkowitz, 1990). However, we propose that, despite feeling hostility toward others, the fear of negative evaluation should lead socially anxious people to behave the best—with low levels of aggression. In the case of social anxiety, elevated perceptions of

hostility should serve as a cue to avoid potential rejectors rather than engaging them through aggressive actions. We propose that social anxiety will relate to behaving less aggressively. However, we know of no published research examining how social anxiety relates to attitudes toward behaving aggressively and actual aggressive behavior in the laboratory. The current studies, therefore, are poised to make a novel contribution to both the social anxiety and aggression literatures.

Prior work from the social anxiety and aggression literatures lend some support to our prediction of relatively low levels of aggression among the socially anxious, even in the presence of heightened perceptions of hostility. Socially anxious people generally show signs of being risk-averse, shy, and behaviorally inhibited (Leary, 2001; Maner et al., 2007). Of particular importance, socially anxious people, compared to their non-socially anxious counterparts, tend to show signs of behavioral and physiological withdrawal when confronted with socially threatening situations (Liebowitz, 1987; Maner, Miller, Schmidt, & Eckel, 2008).

Aggression involves a variety of approach-relevant emotions and behaviors. In a recent and authoritative review of the literature, Carver and Harmon-Jones (2009) argued that anger relates to an approach motivational system, whereas anxiety relates to an avoidance motivational system. For example, feelings of anger correlate with relative left frontal activity, which in turn relates to aggression (Harmon-Jones & Sigelman, 2001). Other work has shown that behavioral inhibition, which correlates with trait anxiety, was related to giving less critical feedback to a person who had behaved in a conflictual manner (Wingrove & Bond, 1998). Thus, theory and empirical evidence suggest that anxiety may relate to a general tendency to avoid situations that may call for aggression—and may result in lower levels of aggression when people are actually placed in an aggressive situation.

1.4. Present research

Although prior work has provided some evidence for links between social anxiety and hostility or anger (e.g., Erwin et al., 2003; Gilbert & Miles, 2000; Henderson & Zimbardo, 1998), few studies have systematically examined the relations between social anxiety, hostility, and aggression. We conducted four studies to test our hypotheses that: (1) social anxiety relates to heightened feelings of hostility toward others, (2) social anxiety relates to perceiving others as hostile, (3) social anxiety relates to less positive attitudes regarding the use of aggressive behaviors, and (4) social anxiety relates to less aggressive actual behavior.

2. Study 1

Study 1 provided an initial test of our hypothesis that social anxiety is linked to heightened feelings of hostility toward others. A large undergraduate sample completed measures of social anxiety, depression, and hostile feelings toward others. Consistent with prior work (Erwin et al., 2003; Gilbert & Miles, 2000; Henderson & Zimbardo, 1998; Kachin et al., 2001), we hypothesized that social anxiety would correlate positively with hostile feelings toward others. We extended prior work by examining whether the social anxiety–hostility link would remain after controlling for depression and participant gender.

2.1. Method

2.1.1. Participants

Participants were undergraduate students who were approached via email to participate in an on-line survey and offered a chance to win one of 10 monetary prizes ($25) for