Running Head: The Darker Side of Social Anxiety

The darker side of social anxiety: When aggressive impulsivity prevails over shy inhibition

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Abstract

The majority of definitions, research studies, and treatment programs that focus on social anxiety characterize the prototypical person with the disorder as shy, submissive, inhibited, and risk averse. This stereotype, however, has been challenged recently. Specifically, a subset of people with social anxiety who are aggressive, impulsive novelty seekers deviate from that prototype. People with this atypical profile show greater functional impairment and are less likely to complete or fare well in treatment compared with inhibited socially anxious people. The difference between these two groups of people with social anxiety cannot be explained by the severity, type, or number of social fears, nor by co-occurring anxiety and mood disorders. Conclusions about the nature, course, and treatment of social anxiety may be compromised by not attending to diverse behaviors and self-regulatory styles. These concerns may be compounded in neurobiological and clinical studies of people with social anxiety problems that rely on smaller samples to make claims about brain patterns and the efficacy of particular treatments.

Keywords: social phobia; self-regulation; impulsivity; aggression; classification

In 1998, Ricky Williams won the Heisman Trophy as the best college football player in the United States, and following this, he received an $8 million dollar contact to play for the Miami Dolphins in the National Football League. He was highlighted in the media and adored by fans wearing replicas of his jersey. Nobody knew that beneath his 6-foot tall, 225-pounds of muscle was someone suffering from the intense fear of being rejected, of being perceived as deficient compared to other people's expectations. He was diagnosed with social anxiety disorder (SAD) and although he could wear his helmet and pads and run with the football in front of 80,000 people, he was terrified of making small-talk with his teammates or having conversations with strangers for fear of looking foolish and being ridiculed. Despite his size, strength, speed, and money, Ricky was not immune to psychological pain. His dedication to becoming one of the best football players in the world was probably partially motivated by his intense, impairing desire to ward off social rejection at all costs. By sharing his story, including a successful response to pharmacological treatment, he reduced some of the stigma associated with SAD.

People feel socially anxious when they want to make a particular impression on others but doubt their ability to do so. Everyone feels socially anxious at some times, with varying frequency, intensity, duration, and functional disruption. In 1980, SAD was officially recognized as a psychiatric condition—defined by an intense fear and avoidance of social situations where there is potential for evaluation or rejection by others (American Psychiatric Association, 2000). With evidence showing that approximately 12% of people in the United States will show signs of SAD at some point

in their lifetime, it is one of the most common psychiatric conditions. Thus, it is important to revise our thinking about social anxiety as new data arise.

Research on developmental origins, phenomenology, and treatment is often based on assumptions that people with SAD form a homogenous group that can be understood through comparisons with people without this disorder. The prototypical person with SAD is characterized as shy, submissive, behaviorally inhibited, and risk averse (e.g., Beidel & Turner, 1998; Crozier & Alden, 2001). This profile can be found in academic articles, psychology textbooks, self-help books, and treatment protocols. It may seem obvious, though, that there are deviations from the prototype; at least a minority of people with SAD would be expected to exhibit behavior patterns that fail to resemble shyness or inhibition. However, the notion that there are meaningful subsets of people with SAD has been relatively ignored by scientists and clinicians. Whether nearly everyone with the disorder closely matches the prototype is an empirical question. Continuing to ignore meaningful heterogeneity can compromise our understanding of social anxiety.

The primary exception to this neglect has been an attempt to classify people with SAD based on the number and types of feared and avoided social situations (that is, the social anxiety symptoms themselves). In particular, generalized SAD refers to fearing most social situations involving direct interactions with others, such as meeting new people and maintaining conversations, whereas nongeneralized SAD refers to the fear of circumscribed social situations such as public speaking. Generalized and nongeneralized SAD reflect categories into which people can be classified in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM; APA, 2000). Although this is a good starting point, there is potential value in moving beyond the symptoms themselves and

target social and personality processes, such as relying on approach instead of avoidance strategies to regulate their thoughts and feelings. To date, these alternative perspectives have yet to be integrated into the theory, study, or treatment of social anxiety.

Most of the work on social anxiety has focused on people who exert great effort to conceal their thoughts and feelings and restrain their behavior (e.g., shyness, submissiveness) to prevent negative evaluation. However, there are studies providing evidence for a nonobvious subset of people with social anxiety who engage in various risky, disinhibited behaviors. As an example, research has documented a link between rejection (real or perceived) from significant others and hostile, aggressive reactions (Leary, Twenge, & Quinlivan, 2006). People with social anxiety problems are more likely to view ambiguous reactions from other people as negative. This leads to a self-fulfilling prophecy as their negative interpretation bias provides evidence that their goal of being accepted has been thwarted. In turn, they often feel anxious and angry. For some, this translates into the desire to hurt perpetrators and, for an even smaller group of people, to act aggressively toward others. That is, anger and aggression end up being a retaliatory response to rejection. For people with social anxiety, it may seem like a reasonable strategy to attack and reject other people before those people get a chance to do the same to them. Outward displays of anger and aggression can express dominance, earn acceptance and respect, and prevent a loss in social status from unexpected acts of rejection by other people (Leary et al., 2006). These short-term benefits, however, are balanced with costs such as a decreased likelihood of developing satisfying, lasting relationships and poorer physical health (e.g., Card & Little, 2006).

The severity of a person's social fears fails to provide information on the types of strategies they will choose to cope. Recent research shows that some people with social anxiety use qualitatively different regulatory strategies than withdrawal, escape, and other avoidance-based strategies (Kachin, Newman, & Pincus, 2001; Kashdan, Elhai, & Breen, 2008; Kashdan, Collins, & Elhai, 2006; Kashdan & Hofmann, 2008; Kashdan, McKnight, Richey, & Hofmann, 2009). Seemingly paradoxical behaviors (i.e., approach-oriented behaviors such as aggressive acts) have been found in many people with social anxiety.

Person-Centered Research

My colleagues and I conducted several studies to examine whether people with social anxiety can be meaningfully differentiated by their reliance on inhibition and escape strategies compared with impulsive, risk-prone behaviors. Instead of focusing on the relationships among variables, we focused on whether there was evidence for particular subsets of people. To date, evidence can be found in independent studies with clinical (SAD diagnoses; Kashdan & Hofmann, 2008; Kashdan et al., 2009) and nonclinical samples (elevated trait social anxiety; Kashdan et al., 2008).

In the first study, we found evidence that a subset of adults in the community diagnosed with SAD made impulsive decisions to seek out novel information and experiences, regardless of the danger involved (41% of the sample); this subset of people with SAD showed substantially greater novelty-seeking tendencies than did a large (normative) sample without disorders. The other group of people with SAD fit the prototype, endorsing little to no interest in the new and unfamiliar (59% of the sample), substantially lower than the normative sample (Kashdan & Hofmann, 2008). These

groups could not be explained by differences in the severity and impairment of their social anxiety symptoms (or by the strategy of classifying people according to categories listed in the DSM). Being in the high novelty-seeking group only amplified problems, as these people reported more severe substance use problems than did others diagnosed with SAD.

In a second study with a college student sample, we sought to further understand whether excessive social anxiety and being inclined toward disinhibition would be a toxic combination leading to particularly poor functioning (Kashdan et al., 2008). The groups were determined by social anxiety severity and subjective appraisals about risky activities (sex, aggression, substance use, socializing), including whether such activities are anxiety provoking, interesting and engaging, and improve their social status. Three distinct groups were revealed. There was a low social anxiety group characterized by beliefs that risky activities are not dangerous or a source of interest and that participating in them would not impress other people. Furthermore, we found evidence for two groups with elevated social anxiety but divergent appraisal patterns—a disinhibited group and a prototypical group. The disinhibited group was characterized by strong beliefs that risk-taking would offer opportunities to satisfy curiosity and enhance one's social status; the prototypical inhibited group was characterized by strong beliefs that risk-taking would be dangerous and offer little to no opportunities to satisfy curiosity or enhance one's social status. Importantly, these two groups with elevated social anxiety could also be distinguished by their quality of life. The disinhibited group reported greater problems managing negative emotions and hostile impulses, less social support, and less ability to adapt to changing situations and demands (psychological flexibility) compared with the

other groups. Upon tracking their behavior over the course of 3 months, we found that the disinhibited group reported more frequent social interactions but also more frequent risky sexual behavior, aggression, and substance abuse than the other groups.

In a third study, we explored impulsive, risk-prone behaviors in a large sample of 679 people with a current diagnosis and 1,143 people with a lifetime diagnosis of SAD in the National Comorbidity Survey-Replication (NCS-R; Kashdan et al., 2009). Consistent with the social-anxiety literature, the majority of people (79% of the sample) reported a prototypical pattern of behavioral inhibition and risk aversion. A sizeable number of people (21% of the sample), however, reported elevated aggression and moderate levels of sexual impulsivity that are rarely described in reference to SAD; they also endorsed severe substance-use problems. Studying these groups was shown to possess clinical utility because disinhibited, socially anxious people had poorer general mental and physical health, less education and income, and a greater risk for several other mental health disorders. Despite greater impairment, this subset of people was no more likely to seek treatment for SAD. Once again, social-anxiety severity and impairment and co-occurring anxiety and depressive disorders failed to differentiate groups predisposed toward risk-prone versus risk-averse behaviors.

Despite limitations inherent to each study, concerns about reliability and generalizability are minimized by the convergence across clinical and nonclinical populations and various assessment strategies. Summarizing this body of work, it becomes apparent that the DSM classification system insufficiently characterizes how people with SAD can diverge from one another. Moreover, these neglected differences appear to have implications for understanding quality-of-life issues and, thus, treatment.

Reconsidering Findings on Cognitive-Behavioral Interventions for Social Anxiety Disorder

Ongoing treatment efforts offer a rationale for further examination of the heterogeneous behavior patterns in people with SAD. Cognitive-behavioral interventions for SAD along with some variant of exposure techniques appear to be the most efficacious, and improvements tend to be sustainable months and years after termination. Despite promising results, a closer examination of the magnitude of treatment effects suggests there is room for improvement. Only about 20 to 50% of patients with SAD achieve at least moderate end-state functioning following psychological and pharmacological interventions (e.g., Fedoroff & Taylor, 2001), indicating that a large number of people still experience significant distress and impairment after treatment. There is a need to better understand which patients fail to respond to standard treatment protocols and how interventions can be tailored to enhance the magnitude of treatment efficacy. People with SAD suffering from impulse-control problems and hostile interpersonal patterns that are not directly targeted by existing interventions may be overly represented in the group of clients failing to respond. Supporting this premise, in one large clinical trial, adults with SAD and greater anger and aggression problems in cognitive-behavioral group therapy were less likely to complete treatment; those that did exhibited worse outcomes (Erwin, Heimberg, Schneier, & Liebowitz, 2003). At best, therapy was minimally effective in reducing anger, aggression, and impulsivity (the magnitude of benefits, expressed by Cohen's *d*, ranged from .11 to .27,**,** which would be regarded as small effects). Thus, there is preliminary evidence that people with SAD who

are particularly angry and aggressive might require a modified protocol to treat their disorder and improve their quality of life.

Future Directions

The research detailed in this paper suggests a critical set of behaviors and self-regulatory processes that have been omitted from most descriptions of social anxiety and thus remain poorly understood. In particular, social anxiety is rarely discussed in connection with aggressive and unsafe sexual behaviors, selfish and impulsive acts, and intense novelty and thrill seeking. With a strong theoretical basis and growing empirical support, this research suggests that prototypical homogeneity is an erroneous conclusion that can lead to misleading research findings about the nature and treatment of SAD.

For people with social anxiety, opportunities to generate positive experiences and develop relationships decrease dramatically as attempts to avoid anxious feelings—as well as the situations that elicited them in the past or might do so in the future—absorb finite attention and energy (Kashdan, 2007). Impulsive, risk-prone behaviors can be adaptive in the short-term by regulating anxiety (e.g., substance abuse), preventing rejection (e.g., pre-emptive aggression), and producing pleasurable moments of belonging (e.g., sex with prostitutes). However, regular, rigid use of these behaviors appears to compromise well-being. People who are impulsive (lacking self-control) tend to exhibit less rational decision-making, lower pain tolerance, less persistence on demanding tasks, less satisfaction and commitment in social interactions and relationships, greater stereotyping and prejudice, poorer physical health, and shorter lifespans (e.g., Baumeister, Gailliot, DeWall, & Oaten, 2006; Vohs, Baumeister, & Ciarocco, 2005). In both children and adults with social anxiety, the presence of strong

self-control capacities protect them from peer aggression and ostracism, low self-esteem, and self-medication by alcohol and drugs—all common in people with social anxiety (Ayduk et al., 2000). These findings suggest that although social anxiety and impulsivity are relatively independent, scientists and therapists can gain a better understanding of their psychological and social well-being by addressing both dimensions and their interrelationship. Moreover, recent laboratory experiments suggest that people can be trained to enhance their self-control capacities and thus better inhibit impulsive urges and regulate emotions and attentional resources (Baumeister et al., 2006). Essentially, training people to be more self-disciplined, whether in their physical workout routines or finances or eating habits, improves willpower in situations when self-control is tested (e.g., being interviewed for a job by a very physically attractive person). The inclusion of self-control exercises as an adjunct to existing SAD interventions might lead to improved efficacy for the subset of people with impulsive, risk-prone behavior patterns.

If approximately one out of five people with SAD deviate from the shy, submissive stereotype, these findings have far-ranging implications. This atypical manifestation of SAD is more likely to be undetected and misdiagnosed by allied health professionals, which is of particular concern when the first professional to evaluate people for the presence of anxiety disorders tends to be primary care practitioners with less expertise in psychology. As for basic research, scientists have continued to compile evidence on brain regions and mechanisms that are particularly active and relevant to SAD. Yet, these correlations are often modest and inconsistent. One explanation is the presence of meaningful individual differences in biological heterogeneity. Since impulsive, novelty-seeking tendencies are independent from inhibition at biological

levels of analysis, the precision of ongoing research efforts might be compromised by the failure to account for the subset of people with SAD who deviate from the social anxiety stereotype. Conclusions about the nature, course, and treatment of social anxiety may be compromised by not attending to heterogeneity in behavior.

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Recommended Reading

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