
Treating Individuals with Debilitating Performance Anxiety: An Introduction

▼
Douglas H. Powell

Harvard Medical School

Clinicians often see clients who have debilitating performance anxiety. They suffer from public speaking anxiety, stage fright, test-taking anxiety, and writing block. Their condition is so severe as to threaten to end their academic or professional career. Musicians and athletes also seek help because their anxiety before and during an event causes them to perform at a level well below their demonstrated capabilities. An estimated 2% of the U.S. population is afflicted by debilitating performance anxiety. Effective treatments are now available. This article reviews those behavioral, cognitive, and technological therapies that have shown great promise for treating individuals who have debilitating performance anxiety and introduces this issue of the *Journal of Clinical Psychology: In Session* devoted to this topic. © 2004 Wiley Periodicals, Inc. *J Clin Psychol/In Session* 60: 801–808, 2004.

Keywords: performance anxiety; social phobia; treatment methods; behavior therapy; cognitive therapy

The treatment of individuals who have debilitating performance anxiety has interested me during most of the four decades I have worked as a clinical psychologist in a university mental health clinic. The first reason for my interest is that I have spent a great deal of time trying to help these individuals. Every year a number of clients have sought help from me for debilitating performance anxiety that threatened to end their academic or professional career because of inability to speak in classes that required it, failure to pass professional licensing examinations, or writing blocks that prevented them from completing a thesis. Aspiring musicians and varsity athletes suffered terribly because their anxiety caused them to perform at a level well below their demonstrated capabilities.

The second reason this subject held my interest for so long is the emergence of new and effective ways of treating performance anxiety. For veteran clinicians, one of the

Correspondence concerning this article should be addressed to: Douglas H. Powell, Ed.D., ABPP, Psychology Department, McLean Hospital, 115 Mill Street, Belmont, MA 02478; e-mail: douglas_powell@hms.harvard.edu.

most exciting events of the last quarter of the 20th century was the introduction of powerful methods for treating anxiety disorders. Behavioral, cognitive, and technology-based therapies give today's clinician an array of treatments for performance anxiety unknown to previous generations. Just as infections were difficult to treat before the era of penicillin, these anxiety disorders were highly resistant to the variety of interpersonal therapies that were the mainstay of most practitioners into the third quarter of the 20th century. Although psychotherapy seemed to reduce anxiety, performance often was unimproved (Smith, Arnkoff, & Wright, 1990). And, to carry the analogy further, just as before antibiotics infections threatened physical health, debilitating performance anxiety threatened mental health and future prospects.

This introduction presents examples, definitions, and estimated prevalence of debilitating performance anxiety. Then it reviews the most promising treatments for this extremely serious but highly treatable disorder.

Examples of Debilitating Performance Anxiety

Most people are nervous before they perform. It is a rare musician or athlete who is not apprehensive before stepping onto the stage or playing field. For a small number, however, the anxiety is disabling. These individuals suffer from debilitating performance anxiety. Here are several examples of debilitating performance anxiety that I have seen in my career in a university clinic and in private practice. In all cases, clients' debilitating performance anxiety threatened to terminate their education and/or substantially undermine the quality of their life.

Public Speaking Anxiety

Many individuals are so apprehensive about speaking in public they cannot perform competently. Students are in danger of failing courses that grade classroom participation because their anxiety inhibits their willingness to speak. Others say that they are so nervous during oral examinations that their mind goes blank and they are unable to answer the simplest questions. Anxiety causes newly minted Ph.D.'s to become tongue-tied and unable to perform competently during "job talks" that are necessary to find a position after graduation.

Stage Fright

The "stage" (the theater, the athletic arena) varies, but the disabling anxiety is constant. So worried is a gifted choral soloist about her ability to hit the first note that she considers giving up singing altogether. Stage fright constricts an orchestra conductor's physical range of motion to the point that he feels unable to move his arms in rhythm to the music. High tension causes athletes to underperform during competition. A star basketball player who has an 80% success rate from the charity stripe in practice cannot make a free throw during a game. A tennis player's first serve, which had been so reliable the day before a match, suddenly deserts her.

Test-Taking Anxiety

In spite of competent classroom work, some medical, law, and professional school students see their career aspirations threatened because their performance anxiety makes them unable to pass licensing examinations. They repeatedly fail the United States Medical

Licensing Examinations, the bar, or similar tests. All have a pattern of attaining scores on standardized multiple-choice questions that are significantly lower than their results on other forms of evaluation.

Writing Block

Some competent graduate or undergraduate students who have an otherwise strong academic track record are unable to complete term papers or theses. They know their subject, have done the necessary research, but cannot bring themselves to write about it. Or, if they are able to write a few pages, they rapidly lose momentum and founder. Many of those afflicted by writing performance anxiety have no trouble putting together lengthy outlines of the thesis they are not writing.

Comorbidity

As one might expect, a substantial number of clients seeking relief from performance anxiety suffer from other disorders as well (Sanderson, DiNardo, Rapee, & Barlow, 1990). For about one-third of these individuals the anxiety is comorbid with other disorders. Most commonly, their performance anxiety is a specific manifestation of generalized anxiety disorder. They have a lengthy history of severe worry and apprehension in areas unrelated to social or performance situations. Some are afflicted by social phobia and experience anxiety in nearly all interactions with others as well as performance settings.

For a smaller fraction of clients, performance anxiety is comorbid with depression. Ten to fifteen percent of those who have social phobia are also clinically depressed (Kessler, Stang, Wittchen, Stein, & Walters, 1999). For a few, performance anxiety is related to underlying psychological conflicts. A young woman is fearful of speaking in class because of a long history of feeling that, no matter how well she spoke, she could never satisfy her distant and unloving father. A capable medical student holds the unconscious belief that he is an imposter and his performance on the medical licensing examination will show him to be the fraud he knows he is.

But for the remaining two-thirds of the students and faculty members who sought relief from their performance anxiety, there was little evidence of significant comorbidity with Axis I or Axis II diagnoses, or with underlying psychological conflicts. For the most part, the disabling anxiety was limited to a specific type of performance in which failure directly threatened to terminate their education. It is these troubled individuals for whom the diagnosis of debilitating performance anxiety seems appropriate.

Defining Debilitating Performance Anxiety

Though performance anxiety as a psychological construct has been described in the literature for more than a half-century (e.g., Mandler & Sarason, 1952), the term does not appear in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed. (American Psychiatric Association, 1994); nor is it listed in any of its predecessors.

When performance anxiety is mentioned, it is usually as a characteristic of social phobia or social anxiety disorder. *Social phobia* is excessive and persistent fear of being with unfamiliar people or in situations of possible scrutiny by others, which triggers fears of acting in ways that will be embarrassing. Some aspects of debilitating performance anxiety are implied among the many examples of the situations in which people suffering from Social Phobia have difficulty coping; for example, "The avoidance, anxious anticipation, or distress in the feared . . . performance situation(s) interferes significantly with

the person's occupational (academic) functioning" (*Diagnostic and Statistical Manual of Mental Disorders*, 4th ed., p. 206).

For accurate diagnosis and treatment planning, clinicians could benefit from having reliable criteria that distinguish debilitating performance anxiety from related conditions. Efforts to identify characteristics that distinguish among subtypes of social phobia have produced mixed results. Two approaches have been promising. One separated social phobics into those who were anxious about interpersonal interactions generally and those who were uncomfortable only when they were being scrutinized by others (Mattick & Clarke, 1998).

Another approach classified anxious subjects according to the number of social situations they feared. Those who were apprehensive in most social settings but had at least one area that was unaffected (e.g., talking informally with teachers) were labeled as suffering from nongeneralized social phobias (Holt, Heimberg, & Hope, 1992). As the name implies, those who have specific social phobia are able to function normally in most situations and fear only a few circumscribed social circumstances such as speaking publicly or writing (Turner, Johnson, Beidel, Heiser, & Lydiard, 2003). Although significant differences are found, they are a matter of degree rather than of category (Hook & Valentiner, 2002; Turner, Beidel, & Townsley, 1992).

Debilitating performance anxiety does indeed have a number of qualities in common with these social phobia subtypes. For example, little difference exists among them in overall anxiety level or degree of impairment. Anxiety is high and impairment is severe. Also, their anxiety does not follow the familiar Yerkes and Dodson (1908) bell-shaped curve in which optimal performance on a task results from moderate levels of anxiety, and poor performance is caused by insufficient or excessive anxiety.

Research with competitive athletes and others in the limelight indicates that another model—the catastrophic model of anxiety and performance—may be more relevant to understanding social phobias, including those who have performance anxiety (Hardy & Parfitt, 1991). In these cases, the figure describing the effect of anxiety on performance more closely resembles the left half of a bell curve. At first there is a direct relation between increasing anxiety (along the horizontal axis) and better performance (on the vertical axis). But at a certain level of anxiety—imagine the line at the 50th percentile of a normal distribution—performance suddenly plummets and does not recover. This is what it feels like to be unable to speak publicly or hit a ball over the net in a match.

Clinical experience finds that debilitating performance anxiety has several characteristics that distinguish it from social phobia as well as from nongeneralized and specific social phobias. These differences suggest that debilitating performance anxiety might usefully be considered a subtype of social phobia. A clinical model summarizing the characteristics that distinguish debilitating performance anxiety from social phobia and from nongeneralized social phobia and specific social phobia is shown in Table 1.

As used here, *performance anxiety* is defined as debilitating performance anxiety. The term *debilitating* is used as a modifier to differentiate anxiety that impairs performance from normal apprehension or from anxiety that facilitates performance (Rafferty, Smith, & Ptacek, 1997). Thus, *debilitating performance anxiety* refers to strong but delimited fears that severely compromise an individual's capacity to execute a task at a level that could be reasonably expected, which is crucial to that person's normal adjustment.

The term *delimited fears* means that high anxiety causes difficulty in a single area. This characteristic distinguishes debilitating performance anxiety from the other forms of social phobia. It is limited to a specific task that individuals must perform, as opposed to social interactions with others. Though the anxiety burdens them, the problem does not significantly interfere with normal adjustment in other areas of life. Many people whose

Table 1
*Distinguishing Debilitating Performance Anxiety From Two Other Social Phobia Subtypes:
 A Clinical Model*

Distinguishing Qualities	Social Phobia	Nongeneralized/ Specific Social Phobia	Debilitating Performance Anxiety
Overall impairment	More pervasive	Less pervasive	Limited
Focus of fears	Most interactions with others	One or few interactions with others	Limited to specific performance situations
Expectations of self	Low	Moderate	High
Fear of scrutiny by others	Primary	Primary	Secondary
Anticipatory anxiety	High	High	Variable
Commitment to feared task	Avoidant	Ambivalent	Committed

anxiety blocks them from speaking in a course that grades student participation experience little apprehension when talking informally to their friends, to older adults, and even to faculty members after class. Medical students whose fears cause them to fail licensing examinations frequently perform competently in their classes and clinical work.

In contrast to other social phobics, individuals who have debilitating performance anxiety have, on the whole, high expectations for themselves. For many, it is the fear of being ordinary that prevents them from performing. Doctoral students who have writer's block are convinced that what they see themselves producing is utterly inadequate, far below what they aspire to, even though their professors are perfectly happy with the work they see. People unable to talk in class frequently believe that unless they can have a brilliant thought and can frame it in words of gold, they have nothing worthwhile to contribute. Even otherwise competent medical students who have severe test-taking anxiety share this characteristic. For many it is not the licensing exam that creates anxiety. Rather, it is the certainty that the multiple-choice test format will not allow them to display the extent of their knowledge.

It follows that another quality that differentiates debilitating performance anxiety from other forms of social phobia is that the individuals who experience it are less concerned with the scrutiny of others than their own judgment of how well they will carry out the feared task. Unlike other social phobics, whose primary fear is how others will judge them, these individuals are less bothered by the scrutiny of others than by the morbid fear of being unable to execute a task in a way that is acceptable to them. Later, they may exhibit considerable postevent rumination (Abbott & Rapee, 2004), believe that they performed poorly, and worry about the impact of their failure on others, but not while they are performing.

Commitment to the feared task differentiates those who have debilitating performance anxiety from those who have other types of social phobia. Most social phobics want to avoid most interactions with others if they can, and those who have nongeneralized/specific social phobias are at best ambivalent about engaging a particular feared situation. By contrast, individuals who have debilitating performance anxiety remain committed to the challenge that terrifies them. The musician will not give up her singing even though the thought of next month's concert nauseates her; the varsity basketball or tennis athlete, playing poorly under competitive pressure, does not consider dropping the sport an option; the law school graduate who has failed the bar seven times keeps trying because he cannot imagine being anything but a lawyer.

Most of those who have social phobia experience a relatively high and constant level of anticipatory anxiety when they think about exposing themselves to interactions with others. Considerable variation exists among those who have debilitating performance anxiety. Some worry well in advance of a required performance situation, but an equal number suppress their anxiety and apparently barely think about the task they fear. The differences in ways these clients manage their feelings are probably based on personality style: Those who experience their anxiety more fully have been called *sensitizers* and those who put their fears out of their mind have been described as *repressors* (Shipley, Butt, Horowitz, & Fabry, 1978).

Repressors pay a physiological price for putting their fears out of mind. For instance, patients about to undergo gallbladder surgery were shown a film vividly detailing the procedure three times. Their heart rate was monitored during each of the showings. At baseline the pulse of the sensitizer group substantially exceeded the average pulse of the repressors. But during the first showing of the gallbladder surgery film, the heart rate of the repressors jumped nearly 75% and that of the sensitizers declined 20%. These findings have been replicated in the laboratory with Specific Social Phobics (Hofmann, Newman, Ehlers, & Roth, 1995). In this issue Powell replicates these findings clinically with medical students.

Frequency of Debilitating Performance Anxiety

The frequency of social phobia in the U.S. population during a 12-month period has been estimated to be about 8% (Kessler, McGonagle, Zhao, Nelson, Hughes, & Eshelman, 1994). The percentages are similar for children and adolescents (Lengua, Sadowski, Friedrich, & Fisher, 2001).

The proportion of the population of the United States who suffer from debilitating performance anxiety is not known precisely, but might be inferred from other data. Taking disabling test anxiety among medical students as an example, it is known that in the United States in recent years about 6.2% of a medical class failed to graduate, were required to take a leave of absence, had to repeat a year, or had to proceed on a reduced course schedule (Jonas, Etzel, & Barzansky, 1994). Academic reasons, including failure to pass professional licensing examinations, played a major role in approximately two-thirds of these cases. On the basis of clinical experience, my estimate is that debilitating test performance anxiety played a significant role in the academic difficulties of about half of these students. If that estimate is correct, then about 2% of a medical school class would be vulnerable to this problem.

Largely because most research focuses on relative differences in anxiety level among subjects rather than on those few who have debilitating performance anxiety, empirical data are lacking as to the proportion of those afflicted with other disabling fears in the classroom, on the concert stage, in athletic endeavors, or elsewhere. For instance, a survey of 2,212 professional orchestral musicians in London found that 16% said that performance anxiety was a severe problem for them (Fishbein, Middlestadt, Ottati, Straus, & Ellis, 1988). However, this research does not tell us the number of musicians who were unable to play their instrument because of their fears. In the absence of other findings, it seems reasonable to assume that about 2% of the population is vulnerable to one or another form of debilitating performance anxiety. Public speaking, musical, and test anxiety have been reported in nearly every developed country in the world.

Treatments for Debilitating Performance Anxiety

Though highly treatable, individuals who have performance anxiety, as well as non-generalized and specific social phobia, are far more reluctant to seek therapy than the

generalized social phobics. This is true in the United States (Magee, Eaton, Wittchen, McGonagle, & Kessler, 1996) and in Germany, where mental health services are free (Wittchen, Stein, & Kessler, 1999).

This issue of the *Journal of Clinical Psychology: In Session* gives the reader an opportunity to review the application of several treatments for the various manifestations of debilitating performance anxiety. In the articles that follow, the authors describe the principles underlying their treatment and then provide case examples of their therapy in action. Three articles describe different treatment models for public speaking anxiety. Rodebaugh and Chambliss provide an example of how cognitive therapy enabled a young man to overcome his fears about speaking in public. Another approach to treating public speaking anxiety is shown in Botella, Hofmann, and Moscovitch's Internet-based self-applied intervention with a Spanish law student. McCullough and Osborn illustrate the value of short-term dynamic therapy in imaginary therapeutic interactions with a priest, a news anchor, and an anxious suitor, each with problems that interfere with the ability to speak in public.

Lazarus and Abramovitz show how elements of the multimodal approach—behavior, affect, sensation, imagery, cognition, interpersonal relationships and drugs/biological factors (BASIC I.D.)—are effective for an individual who had another kind of public performance anxiety: a violinist whose extreme fear of performing in public jeopardized his career. Powell demonstrates the effectiveness of behavioral methods with medical students who failed professional licensing examinations. Birk's article takes a fresh look at the usefulness and limitations of pharmacotherapy for performance anxiety and underscores the importance of clinical judgment in the selective use of medication. Bitran and Barlow's Commentary succinctly reviews the cause of social phobia and reviews three components crucial to the treatment of these and other disorders: (1) changing antecedent cognitive reappraisals, (2) preventing emotional avoidance, and (3) facilitating action tendencies not associated with the emotion that is dysregulated.

Though they have not written for this issue, two other individuals have contributed a great deal to these articles about treating performance anxiety. The first is *In Session's* founding editor, Marvin R. Goldfried, who first had the idea for an issue devoted to performance anxiety. The second is Samuel M. Turner, whose thinking about social phobia has been influential to so many of us and who was prevented by illness from writing an article on the behavioral treatment of performance anxiety.

All told, this issue presents and illustrates behavioral, cognitive, psychodynamic, Internet, multimodal, and pharmacological treatments for debilitating performance anxiety. These therapies do not exhaust all of the treatment options. Others have successfully applied different techniques, such as meditation, hypnosis, virtual reality and biofeedback, to treat these conditions. Neither do these articles cover numerous other effective sequences and combinations of therapies for debilitating performance anxiety. What these approaches share is a consensus that some form of exposure is an essential element of any treatment for this condition.

We fully anticipate that the readers of this issue will have their own ways of approaching these troubled clients. We hope that the pages that follow will stimulate new ways of thinking about the treatment of debilitating performance anxiety.

Select References/Recommended Readings

- Abbott, M.J., & Rapee, R.M. (2004). Post-event rumination and negative self-appraisal in social phobia before and after treatment. *Journal of Abnormal Psychology*, 113, 136–144.
- Brown, T.A., Chorpita, B.F., & Barlow, D.H. (1998). Structural relationships among dimensions of the DSM-IV anxiety and mood disorders and dimensions of negative affect, positive affect and autonomic arousal. *Journal of Abnormal Psychology*, 107, 179–192.

- Fishbein, M., Middlestadt, S., Ottati, V., Straus, S., & Ellis, A. (1988). Medical problems among ICSOM musicians: Overview of a national survey. *Medical Problems of Performing Artists*, 3, 1–8.
- Hardy, L., & Parfitt, G. (1991). A catastrophic model of anxiety and performance. *British Journal of Psychology*, 82, 163–178.
- Holt, C.S., Heimberg, R.G., & Hope, D.A. (1992). Avoidant personality disorder and the generalized subtype of social phobia. *Journal of Abnormal Psychology*, 10, 318–325.
- Hook, J.N., & Valentiner, D.P. (2002). Are specific and generalized social phobias qualitatively distinct? *Clinical Psychology: Science and Practice*, 9, 379–395.
- Jonas, H.S., Etzel, S.I., & Barzansky, B. (1994). Educational programs in US medical schools, 1993–1994. *Journal of the American Medical Association*, 272, 694–701.
- Kessler, R.C., McGonagle, K.A., Zhao, S., Nelson, C.B., Hughes, M., & Eshelman, S. (1994). Lifetime and 12-month prevalence of DSM-III-R: Psychiatric disorders in the United States. *Archives of General Psychiatry*, 51, 8–19.
- Kessler, R.C., Stang, P., Wittchen, H.U., Stein, M., & Walters, E.E. (1999). Lifetime comorbidity between social phobia and mood disorders in the US National Comorbidity Survey. *Psychological Medicine*, 29, 555–567.
- Lengua, L.J., Sadowski, C.A., Friedrich, W.N., & Fisher, J. (2001). Rationally and empirically-derived dimensions of children's symptomatology: Expert ratings and confirmatory factor analyses of the CBCL. *Journal of Consulting and Clinical Psychology*, 69, 683–698.
- Magee, W.J., Eaton, W.W., Wittchen, H.U., McGonagle, K.A., & Kessler, R.C. (1996). Agoraphobia, simple phobia, and social phobia in the National Comorbidity Survey. *Archives of General Psychiatry*, 53, 159–168.
- Mandler, G., & Sarason, S.B. (1952). A study of anxiety and learning. *Journal of Abnormal and Social Psychology*, 47, 166–173.
- Mattick, R.P., & Clarke, J.C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour Research and Therapy*, 36, 455–470.
- Rafferty, B.D., Smith, R.E., & Ptacek, J.T. (1997). Facilitating and debilitating trait anxiety, situational anxiety, and coping with an anticipated stressor: A process analysis. *Journal of Personality and Social Psychology*, 72, 892–906.
- Sanderson, W.C., DiNardo, P.A., Rapee, R.M., & Barlow, D.H. (1990). Symptom comorbidity in patients diagnosed with DSM-III-R anxiety disorders. *Journal of Abnormal Psychology*, 99, 308–312.
- Shiple, R., Butt, J., Horowitz, B., & Fabry, J. (1978). Preparation for a stressful medical procedure: Effect of amount of stimulus pre-exposure and coping style. *Journal of Consulting and Clinical Psychology*, 46, 499–507.
- Smith, R.J., Arnkoff, D.B., & Wright, T.L. (1990). Test anxiety and academic competence: A comparison of alternative models. *Journal of Counseling Psychology*, 37, 313–321.
- Turner, S.M., Beidel, D.C., & Townsley, R.M. (1992). Social phobia: A comparison of specific and generalized subtypes and avoidant personality disorder. *Journal of Abnormal Psychology*, 101, 326–331.
- Turner, S.M., Johnson, M.R., Beidel, D.C., Heiser, N.A., & Lydiard, R.B. (2003). The social thoughts and beliefs scale: A new inventory for assessing cognitions in social phobia. *Psychological Assessment*, 15, 384–391.
- Wittchen, H.U., Stein, M., & Kessler, R.C. (1999). Social fears and social phobia in a community sample of adolescents and young adults: Prevalence, risk factors and co-morbidity. *Psychological Medicine*, 29, 309–323.
- Yerkes, R.M., & Dodson, J.D. (1908). The relation of strength of stimulus to rapidity of habit formation. *Journal of Comparative and Neurological Psychology*, 18, 459–482.