

REVIEW

Avoidant Personality Disorder, Generalized Social Phobia, and Shyness: Putting the Personality Back into Personality Disorders

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With increasing recognition of social phobia as a common and often debilitating disorder, interest is developing in its boundaries with other disorders such as avoidant personality disorder and temperamental constructs such as shyness. Such interest reflects the more general debate concerning Axis I disorders, personality disorders, and what is considered normal personality variance. This review summarizes the available literature comparing avoidant personality disorder (APD), generalized social phobia (GSP), and shyness. In studies comparing APD and GSP, comorbidity rates have varied from approximately 25% to numbers high enough that the ability to diagnose one disorder without the other was questioned. Comparisons of the characteristics of APD and GSP have yielded few qualitative differences, although some studies have shown evidence that APD may represent a more severe form of GSP with respect to levels of symptoms, fear of negative evaluation, anxiety, avoidance, and depression. Personality dimensions including, but not limited to, shyness have been found to be strongly associated with GSP and APD, and there is some evidence that persons who suffer from social anxiety also suffer from fears and avoidance across nonsocial domains. In conclusion, although there is evidence that shyness, GSP, and APD exist along a continuum, the factors that constitute this continuum may need to be revised. (HARVARD REV PSYCHIATRY 2000;8:283-297.)

Recent years have witnessed a surge of interest in anxiety disorders, particularly social phobia (SP), once hailed as “the neglected anxiety disorder.”¹ Research in shyness and other temperamental dimensions is progressing on a parallel track.² Still relatively neglected, and perhaps sitting squarely between the world of clinical Axis I disorders such as generalized social phobia (GSP) and the normal variants of human temperament such as shyness, are the personality disorders, most notably avoidant personality disorder

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(APD). Where the boundaries lie between the clinical disorders of SP and APD and the temperamental constructs of shyness and social inhibition remains in question and is the focus of this review. Indeed, the conceptual distinctions among SP, APD, and shyness can be seen as a reflection of the larger issue regarding the boundaries among Axis I disorders, Axis II disorders, and normal personality variation. This paper summarizes what is known about these three entities relative to each other and concludes with an opinion about their boundaries based on the available data.

AVOIDANT PERSONALITY DISORDER

Individuals with APD display “a pervasive pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluation”³ that is extreme and debilitating enough to constitute a disorder. In Millon’s original description of the avoidant or active-detached personality,⁴ which led to the inclusion of the disorder in DSM-III,⁵ the central

TABLE 1. Differences between DSM-III-R and DSM-IV Criteria for Avoidant Personality Disorder*

| DSM-III-R | DSM-IV |
|--|---|
| 1) Is <i>easily hurt</i> by criticism or disapproval. | 2) Is <i>preoccupied</i> with being criticized or <i>rejected in social situations</i> . [No equivalent] |
| 2) <i>Has no close friends or confidants (or only one) other than first-degree relatives.</i> | 4) Is unwilling to get involved with people unless certain of being liked. |
| 3) Is unwilling to get involved with people unless certain of being liked. | 1) Avoids occupational activities that involve significant interpersonal contact, <i>because of fears of criticism, disapproval, or rejection.</i> |
| 4) Avoids <i>social</i> or occupational activities that involve significant interpersonal contact. | 5) Is <i>inhibited</i> in <i>new</i> interpersonal situations because of feelings of inadequacy. And 3) <i>Shows restraint within intimate relationships because of the fear of being shamed or ridiculed.</i> [No equivalent] |
| 5) Is <i>reticent</i> in social situations <i>because of a fear of saying something inappropriate or foolish, or of being unable to answer a question.</i> | 7) Is <i>unusually reluctant</i> to take personal risks or to engage in any new activities <i>because they may prove embarrassing.</i> |
| 6) <i>Fears being embarrassed by blushing, crying, or showing signs of anxiety in front of other people.</i> | 6) Views self as socially inept, personally unappealing, or inferior to others. |
| 7) <i>Exaggerates the potential difficulties, physical dangers, or risks involved in doing something ordinary but outside his or her usual routine, e.g., may cancel social plans because she anticipates being exhausted by the effort of getting there.</i> [No equivalent] | |

*Italics indicate differences between editions.

component was a defensive avoidance of social interactions despite an intense desire for closeness. Millon described a group of individuals who were keenly sensitive and alert to their environment, yet caught in isolation because they had little trust in others and little confidence in themselves. In his early conceptualization, such patterns were said to be deeply rooted in personality and difficult to change. His definition of avoidant personality served to distinguish the disorder from schizoid personality disorder, in which less social contact is desired and the affective and cognitive skills required for successful social relationships are lacking. With the publication of DSM-III-R,⁶ the emphasis shifted to social discomfort and fear of negative evaluation. In addition, the number of criteria required for the diagnosis decreased from seven to four, theoretically introducing more variance into the presentation.

It is difficult to characterize the changes in the criteria between DSM-III-R and DSM-IV. (See Table 1 for a summary of these changes.) Only the third criterion, "is unwilling to get involved with people unless certain of being liked," remained the same between versions. On the one hand, wording was introduced to increase the specificity of the diagnosis to social situations. An example of this is the added qualifier in criterion #1 of preoccupation with being criticized or rejected "in social situations." On the other hand, a new criterion, "views self as socially inept, personally unappealing, or inferior to others," added a global element of poor self-esteem not present in DSM-III-R. There were also many

more-subtle word changes of uncertain significance: "reticent," for example, was replaced with "inhibited" and "shows restraint." These changes are puzzling because they have occurred in the absence of systematic research, and much about APD remains unknown with respect to its etiology, phenomenology, course, and treatment.

Another development in DSM-IV was the removal of avoidant disorder in children, which involved excessive inhibition with unfamiliar people. Added was the diagnosis of reactive attachment disorder of infancy or early childhood, subdivided into inhibited and uninhibited types, but this diagnosis requires that the child's upbringing be associated with "grossly pathological care."

SOCIAL PHOBIA

Social phobia is characterized by an intense fear of social situations in which an individual may be exposed to unfamiliar people or scrutiny by others.⁵

Marks⁷ was the first to distinguish social fears from other types of phobias. The diagnosis of SP, now often referred to as social anxiety disorder, first appeared in DSM-III with the stipulation that one could not be diagnosed with this condition if the criteria for APD were met. In DSM-III-R this exclusionary clause was lifted, and emphasis was placed more on the subjective anxiety component of the disorder.⁸ In addition, the generalized subtype of SP was created for individuals who feared "most social situations." Indeed, according to

a recent report on SP subtypes in the National Comorbidity Survey,⁹ most individuals who suffer from SP have more than one social fear. With an estimated prevalence of 13%, SP is now recognized as the third-most-common psychiatric disorder, behind only major depressive disorder and alcohol dependence.¹⁰

COMPARISONS OF AVOIDANT PERSONALITY DISORDER AND GENERALIZED SOCIAL PHOBIA

Whether or not GSP and APD have clinically meaningful differences has been a subject of increasing discussion. Currently in DSM-IV, the major theoretical distinctions between the two disorders can be summarized along two lines. The first could be referred to as somatic anxiety. For a diagnosis of SP, an individual must experience symptoms of a panic attack when in a feared situation. The diagnosis of APD does not require panic attacks and is instead more related to the avoidance, restraint, and inhibition exhibited in feared situations. A parallel can be seen in panic disorder (PD) and agoraphobia, which are described under a single entity. SP, like panic attacks, emphasizes the anxiety symptoms themselves in a specific context, as well as the fear of being in that situation in the future. APD, like agoraphobia, refers to the marked isolation and avoidance that develop as a result of avoiding the feared situation.

The second difference can be thought of in terms of directionality. Persons with SP fear acting in a particular way that is embarrassing or humiliating, whereas those with APD fear being rejected or criticized no matter what they do. Thus, a person who avoids or withdraws from most social situations but does not experience panic attacks would meet criteria for APD but not GSP. (Of note, the one physical symptom of APD, blushing, has been removed in DSM-IV.) Similarly, an individual who avoids or endures social situations with difficulty because he or she does not perform well at these times may get only a diagnosis of GSP if that person does not suffer from poor self-esteem and overall feelings of inadequacy.

The importance of understanding the overlap and boundaries between APD and GSP goes beyond mere nosology. Clinicians more experienced in APD may easily overlook the diagnosis of comorbid social anxiety disorder and thus some new and effective treatment options. Similarly, those more versed in Axis I anxiety disorders and not on the lookout for APD could well underestimate the scope and chronicity of the symptoms and the way they may have become incorporated into an individual's identity more than might be expected for someone with "performance anxiety." Finally, if APD and GSP prove to be one condition, unnecessarily using two different diagnoses could increase a person's sense of psychiatric burden, in addition to being scientifically imprecise.

DSM-III Studies

In one of the first investigations to address this issue, Turner and colleagues¹¹ compared ten adult outpatients with SP to eight who also had APD. (See Table 2 for a summary of studies comparing SP and APD.) This study was done before a generalized subtype of SP was defined and used DSM-III criteria; nonetheless, the authors found that most subjects feared more than one social situation. Since APD was then an exclusionary criterion for SP, comorbidity could not be ascertained. In comparing the two groups, the authors found that patients with APD had higher scores on the Social Avoidance and Distress Scale¹² and on the Anxiety, Obsessive-Compulsive, and Depression scales of the Symptom Checklist-90-Revised.¹³ Self-reported anxiety, as measured by the State-Trait Anxiety Inventory¹⁴ and the Fear of Negative Evaluation scale,¹² did not differ between groups. Furthermore, the patients with APD were rated as less skilled when performing a series of structured social interactions.

In another early study Alnæs and Torgersen¹⁵ found that when the DSM-III hierarchy of assigning diagnoses was removed, 42 of 50 outpatients (84%) with SP also met criteria for APD. A strength of this investigation was that the sample was drawn from a general outpatient clinic rather than being specifically recruited for social anxiety. Examining patients with a wide range of diagnoses allowed them to find that APD was extremely common: it was diagnosed in 165 of 289 consecutive outpatients (57%) who presented to a university clinic. Furthermore, dependent personality disorder was found to be as common as APD in patients with SP. Thus, APD and SP appear to have been closely linked from the outset, even before the generalized subtype of SP was created.

DSM-III-R Studies

In 1992, 4 years after the publication of Alnæs and Torgersen's paper, a series of studies¹⁶⁻¹⁸ appeared in the *Journal of Abnormal Psychology*. With a new sample, Turner and co-workers¹⁶ compared a group of 28 outpatients with SP, specific type, and 61 with GSP. Fifteen (25%) of the patients with GSP also met criteria for APD. Although significant quantitative differences were seen between the specific and generalized subtypes of SP, patients with both GSP and APD were found to differ from those with GSP alone only in having higher scores on some measures of social anxiety and dysfunction and higher scores on the Beck Depression Inventory.¹⁹ The earlier finding that those with APD showed poorer social skills was not replicated. The authors concluded that GSP and APD are "more similar than they are different," differing mainly with regard to severity of illness.

Holt and colleagues¹⁷ reported on a group of 33 outpatients recruited for SP treatment. Of the 20 with GSP, ten (50%) also had APD. Again, more differences were found be-

TABLE 2. Studies Comparing Social Phobia and Avoidant Personality Disorder

| Study | Sample | Diagnostic method | Subjects with GSP* who also had APD | Subjects with APD who also had GSP* | Other comparisons |
|-------------------------------------|---|--|--|--|---|
| Turner et al. ^{11,†‡} | Outpatients with DSM-III SP, with or without APD, at an anxiety disorders clinic (n = 18) | ADIS and "a consensus procedure" (Axes I and II) | 44% (8/18)* | NA§ | Compared to patients with SP alone, those with SP and APD showed more self-reported social avoidance and distress, interpersonal sensitivity, somatic anxiety, obsessive-compulsive symptoms, and depressive symptoms, poorer social skills during behavioral tasks, but no significant differences in self-reported fear of negative evaluation or state-trait anxiety |
| Alnaes & Torgersen ^{15,†‡} | General psychiatric outpatients diagnosed using DSM-III criteria (n = 289) | SCID-I (Axis I), SIDP (Axis II) | 84% (42/50)* | 25% (42/165)* | None |
| Reich et al. ^{20,†} | Outpatients with DSM-III-R SP in a clinical trial of alprazolam (n = 14) | SCID-I (Axis I); SCID-II, MCMI, PDQ (Axis II) | 21% (3/14), 36% (5/14), or 50% (7/14)* | NA§ | None |
| Schneier et al. ²³ | Outpatients with DSM-III-R SP at an anxiety disorders clinic (n = 50) | DSM-III-R checklist (Axis I), SCID-II (Axis II) | 89% (32/36) | NA§ | None |
| Herbert et al. ¹⁸ | Community-recruited subjects with DSM-III-R GSP or APD (n = 23) | SCID-R, ADIS-R (Axis I); SCID-II (Axis II) | 61% (14/23) | 100% (14/14) | Compared to subjects with GSP alone, those with both GSP and APD had more comorbid Axis I and Axis II diagnoses, more self-reported social anxiety, impairment, and depression, and more subjective distress (but equal social skills) during behavioral tasks |
| Holt et al. ¹⁷ | Outpatients with DSM-III-R SP at an anxiety disorders clinic (n = 33) | ADIS-R, SADS (Axis I); PDE (Axis II) | 50% (10/20) | NA§ | Compared to patients with GSP alone, those with both GSP and APD showed more self-reported social avoidance and distress and more social anxiety symptoms, comorbid depression, and overall clinical severity, but no significant differences in self-reported fear of negative evaluation and self-reported depression |
| Turner et al. ¹⁶ | Outpatients with DSM-III-R SP at an anxiety disorders clinic (n = 89) | ADIS-R (Axis I), SCID-II (Axis II) | 25% (15/61) | NA§ | Compared to patients with GSP alone, those with both GSP and APD had more self-reported depression and were poorer in some measures of social anxiety and functioning; they showed no significant differences in speech length, subjective anxiety, or negative thoughts when giving a speech |

| | | | | | |
|----------------------------------|---|--|--------------|--------------|--|
| Jansen et al. ^{36†} | Outpatients with DSM-III-R SP (n = 32) or PD (n = 85) | Unstructured interview (Axis I), SCID-II (Axis II) | 31% (10/32)* | 33% (10/30)* | In patients with SP, dependent personality disorder was as prevalent as APD; rates of comorbid APD did not differ significantly between patients with SP and those with PD None |
| Sanderson et al. ^{39†} | Outpatients with DSM-III-R anxiety disorders seeking cognitive therapy (n = 347) | SCID-P (Axis I), SCID-II (Axis II) | 37% (19/51)* | 42% (19/45)* | None |
| Hofmann et al. ^{30†} | Community-recruited subjects with DSM-III-R SP (n = 16) | SCID (Axis I), unstructured interview (Axis II) | 50% (8/16)* | NA§ | Compared to subjects with SP alone, those with both SP and APD had more self-reported social avoidance and distress, SP severity, and state anxiety when giving a speech but did not differ significantly in response to behavioral treatment |
| Hofmann et al. ³⁴ | Community-recruited subjects with DSM-III-R SP (n = 30) | SCID (Axis I), unstructured interview (Axis II) | 82% (14/17) | NA§ | Compared to persons with SP alone, those with both SP and APD showed more subjective anxiety and fearful cognitions but less cardiac reactivity while giving a speech None |
| Johnson & Lydiard ^{44†} | Outpatients with DSM-III-R SP (n = 44) | Not reported | 77% (34/44)* | NA§ | None |
| McNeil et al. ³² | Outpatients with DSM-III-R SP (n = 37) | ADIS-R (Axis I), SCID-II (Axis II) | 32% (8/25) | NA§ | Compared to patients with GSP alone, those with both GSP and APD did not differ significantly on general social, specific speech, or negative social evaluative versions of the Stroop test None |
| Skodol et al. ^{40†} | Inpatients on a personality disorders unit (n = 100) and outpatients seeking psychoanalysis (n = 100) | SCID-P (Axis I); SCID-II, PDQ-R, PDE (Axis II) | 73% (19/26)* | 44% (19/43)* | None |
| Tran & Chambless ⁴¹ | Outpatients with DSM-III-R SP at an anxiety disorders clinic (n = 45) | Unstructured interview, SCID (Axis I); MCMI, MCMI-II (Axis II) | 55% (16/29) | NA§ | Compared to patients with GSP alone, those with both GSP and APD showed more self-reported depression but no significant differences in self-reported social avoidance and distress, fear of negative evaluation, self-consciousness, and social impairment, or in subjective distress and observed social skills during a behavioral task |
| Alpert et al. ^{35†} | Outpatients with DSM-III-R MDD enrolled in depression research (n = 243) | SCID, HAM-D, ADDS (Axis I); SCID-II (Axis II) | 65% (42/65)* | 61% (42/69)* | Compared to patients with MDD alone, those with both MDD and APD showed greater social impairment and less assertiveness; compared to patients with MDD alone, those with SP, APD, and MDD were less likely to be married, employed, or college educated, had more comorbid Axis I disorders, and had an earlier onset of depression |

TABLE 2. Studies Comparing Social Phobia and Avoidant Personality Disorder (cont'd.)

| Study | Sample | Diagnostic method | Subjects with GSP* who also had APD | Subjects with APD who also had GSP* | Other comparisons |
|---------------------------------|---|---|-------------------------------------|-------------------------------------|--|
| Boone et al. ²⁴ | Outpatients with DSM-III-R (n = 41) | ADIS-R (Axis I), SCID-II (Axis II) | 31% (9/29) | NA§ | Compared to patients with GSP alone, those with both GSP and APD showed more self-reported social avoidance and distress, trait anxiety, and fear of negative evaluation, a trend toward more avoidance on behavioral tasks, but no significant differences in self-reported depression and SP symptom severity, or in state anxiety, negative self-statements, heart-rate reactivity, and social skills on behavioral tasks |
| Perugi et al. ^{37†} | Outpatients with DSM-III-R SP (n = 71) or PD (n = 119) in a long-term anxiety disorders program | SCID (Axis I), SCID-II (Axis II) | 70% (50/71)* | 53% (50/95)* | Compared to patients with PD, those with SP had a higher rate of comorbid APD |
| McGlashan et al. ^{46†} | Outpatients with DSM-IV personality disorders at multiple clinics (n = 571) and controls with depression (n = 97) | SCID (Axis I); DIPD-IV, PAF, SNAP (Axis II) | NA | 38% (60/157)* | None |

ADDS, Atypical Depression Diagnostic Scale; ADIS, Anxiety Disorders Interview Schedule; ADIS-R, Anxiety Disorders Interview Schedule-Revised; APD, avoidant personality disorder; DIPD-IV, Diagnostic Interview for Personality Disorders, fourth edition; GSP, generalized social phobia; HAM-D, Hamilton Depression Rating Scale; MCMI, Millon Clinical Multiaxial Inventory; MCMI-II, Millon Clinical Multiaxial Inventory, second edition; MDD, major depressive disorder; NA, not applicable; OCD, obsessive-compulsive disorder; PAF, Personality Assessment Form; PD, panic disorder; PDE, Personality Disorder Examination; PDQ, Personality Diagnostic Questionnaire; PDQ-R, Personality Diagnostic Questionnaire-Revised; SADS, Schedule for Affective Disorders and Schizophrenia-Lifetime, for Anxiety Disorders; SCID, Structured Clinical Interview for DSM Axis I Disorders; SCID-I, Structured Clinical Interview for DSM-III; SCID-II, Structured Clinical Interview for DSM-III-R Personality Disorders; SCID-P, Structured Clinical Interview for DSM-III-R Axis I Disorders; SCID-R, Structured Clinical Interview for DSM-III-R; SIDP, Structured Interview for DSM-III Personality Disorders; SNAP, Schedule for Nonadaptive and Adaptive Personality; SP, social phobia.

*Figures marked with an asterisk refer to SP, not GSP.

†Study did not distinguish between generalized and specific subtypes of SP.

‡Study used DSM-III criteria hierarchy; SP could not be diagnosed if criteria for APD were met.

§SP was a criterion for inclusion in the study.

||Numbers differed depending on the diagnostic instrument used.

tween the specific and generalized subtypes of SP than between GSP and APD, although patients with both APD and GSP scored higher on the Clinical Severity Rating of the Anxiety Disorders Interview Schedule–Revised,²⁰ the Social Avoidance and Distress Scale, and the Liebowitz Social Phobia Scale²¹ than did those with GSP alone. No differences were found in demographic variables, and in contrast to the previous study, no differences were found on the Beck Depression Inventory despite a 70% rate of comorbid depression in patients with both GSP and APD. Interestingly, the authors also analyzed the individual DSM-III-R criteria for APD and found that the group with both GSP and APD endorsed three of them (#3, “unwilling to get involved with people unless certain of being liked”; #4, “avoids social or occupational activities that involve significant interpersonal interaction”; and #7, “exaggerates the potential difficulties, physical dangers, or risks involved in doing something ordinary but outside his or her usual routine”) more often than did the group with GSP alone. They speculated that individuals with APD may be more timid in new situations, both social and nonsocial.

In the third investigation Herbert and coworkers¹⁸ studied a group of subjects recruited from the community for extreme shyness. Fourteen of the 23 subjects (61%) who met criteria for GSP also met criteria for APD, and no subjects were found who met criteria for APD and did not meet criteria for GSP. Compared to subjects with GSP alone, those with both APD and GSP were found to have higher self-reported scores of anxiety, depression, fear of negative evaluation, and social distress, as well as more comorbid diagnoses. No differences were found in social skills during a role-play task, although the APD group reported more subjective distress. Widiger,²² in analyzing these three studies, concluded that there was some agreement in the data to support the claim that APD and GSP differed only in terms of severity of dysfunction.

Around this time, Schneier and colleagues²³ assessed 50 outpatients from an anxiety disorders clinic and found that 32 (89%) of the 36 subjects who met criteria for GSP also had APD. When the authors examined the individual DSM-III-R criteria for APD, the only one that differed significantly between patients with GSP and those with specific SP was the single item that did not relate just to social situations—namely, “exaggerates the potential difficulties, physical dangers, or risk involved in doing something ordinary but outside his or her usual routine.” This item was endorsed by none of the patients with specific SP but about one-third of those with GSP. The authors concluded that GSP and APD overlapped enough for the utility of maintaining both diagnoses to be questionable, but they suggested that there may be subtle differences that warrant further study.

In a recent multimodal study by Boone and colleagues,²⁴ 12 outpatients with SP, specific type, 20 with GSP alone, and

nine with both GSP and APD were assessed using DSM-III-R diagnoses based on the Anxiety Disorders Interview Schedule–Revised for social phobia and the Structured Clinical Interview for DSM-III-R Axis II Disorders (SCID-II).²⁵ No differences were found on the Beck Depression Inventory²⁶ between the patients with GSP alone and those with both GSP and APD. Findings with regard to self-reported anxiety were mixed: individuals with both GSP and APD had significantly higher scores than did those with GSP alone on the Fear of Negative Evaluation scale, the Trait Anxiety Scale of the State-Trait Anxiety Inventory,²⁷ and the Social Avoidance and Distress Scale, but not on the total or social phobia subscale of the Social Phobia and Anxiety Inventory.²⁸ On the behavioral tasks, the only difference found was a trend toward more avoidance in patients with both GSP and APD than in those with GSP alone, as measured by their stopping a speech task before time had run out. The authors concluded that their study demonstrated “a continuum of increasing severity” from circumscribed SP through GSP and eventually to APD and questioned the utility of having separate diagnoses across two axes.

In summary, these investigations did not find evidence that GSP and APD are qualitatively distinct. In fact, there was more similarity between these two disorders than between the two subtypes of SP. Some quantitative differences, however, were found sporadically, with APD characterized by greater severity of symptoms and more impairment. Interestingly, these studies also began to hint at the possibility that persons with GSP and/or APD may suffer from fear and inhibition in more than just social contexts.

Treatment Studies

One line of evidence not examined in the previously mentioned investigations is treatment response. Only two treatment studies were found that directly compared SP and APD. In the first study to examine this, Reich and colleagues²⁹ used alprazolam to treat 14 outpatients with SP. Depending on the diagnostic instrument employed, three, five, or seven (21%, 36%, or 50%, respectively) of these patients also had APD, rates that were not significantly higher than that found in a control group of patients with PD. Although the authors did not restrict their analyses to the patients with comorbid APD, they found improvement in many APD criteria with treatment. There were, however, two exceptions: having no close friends other than first-degree relatives (absent in DSM-IV), and exaggerating the risks of everyday situations, which as mentioned above is not specific to social situations. A later study by Hofmann and coworkers³⁰ of 16 patients with SP, eight (50%) of whom also had APD, involved a behaviorally oriented 8-week treatment program for individuals with public-speaking anxiety. Although persons with both SP and APD scored higher than did those with SP alone on many self-report measures of so-

cial anxiety and avoidance, the two groups improved similarly on self-report scores and on observer ratings during a speech. The authors stated that their study provided further evidence that APD and SP represent different points along a single continuum. In addition to these investigations, Beidel and Turner³¹ reported that in their experience, patients who have both APD and SP benefit more from social skills training and respond less well to intensive exposure treatment than do those with SP alone. Research that directly compares GSP and APD with regard to treatment response has yet to be undertaken.

Physiological and Neuropsychological Studies

Another possible line of comparison is performance on neuropsychological tests and physiological measures. McNeil and colleagues³² compared 12 outpatients with specific SP to 25 with GSP on three versions of the Stroop color-naming test.³³ Eight (32%) of the individuals with GSP also met criteria for APD according to the SCID-II. Although less interference was found in patients with specific SP than in those with GSP, no significant differences were seen on any version of the Stroop test between persons with both GSP and APD and those with APD alone.

In another study by Hofmann and coworkers,³⁴ subjects with SP had physiological measures taken while giving a speech to a small audience. Although the authors had hoped to test a group of persons with GSP but not APD, they were unable to find enough subjects who met this criterion. Consequently, they compared subjects with SP (regardless of subtype) and APD to those with SP alone. They found that individuals with both SP and APD reported more anxiety as well as more fearful cognitions when challenged with a speech but had lower heart rates than did those with SP alone. Limitations of the study included a small sample size (which was made even lower by missing data) and lack of a structured interview for APD.

These limited treatment and neuropsychological studies continue to fail to show any major distinctions between SP and APD. The study by Hofmann and coworkers,³⁴ however, points to an interesting mismatch between autonomic nervous system arousal and subjective distress: patients with both SP and APD reported more distress but less objective sympathetic arousal than did those with SP alone.

Studies from Broader Clinical Populations

A major limitation of many studies comparing GSP and APD has been sample recruitment. Most investigations have specifically recruited individuals with SP and then determined how many of them also met criteria for APD. By definition, then, all patients with APD in these studies also have GSP or at least specific SP. One exception to this is a recent study by Alpert and coworkers,³⁵ who examined 243 outpatients presenting with depression. Here, 65% of patients with SP

also met DSM-III-R criteria for APD. (This study did not distinguish between specific and generalized subtypes.) The rate of comorbid SP among those with APD was 61%. The authors compared patients with depression alone with those who also had SP and/or APD. Depressed patients with both APD and SP had an earlier age of onset for their first depressive episode and more Axis I comorbidity than did those with neither APD or SP, prompting the authors to speculate that it may be the combination of SP and APD that constitutes a distinct subgroup.

Jansen and colleagues³⁶ studied outpatients with SP or PD at a Dutch clinic. They found comparable rates of APD, as assessed by the SCID-II, in the two groups and concluded that avoidant features as defined by DSM-III-R were not specific to SP. Like the Alnæs and Torgersen study,¹⁵ this investigation found a strong relationship between SP and dependent personality disorder, which is also characterized by passivity and extreme sensitivity to rejection and disappointment.

Somewhat in contrast to the study by Jansen and colleagues, Perugi and coworkers³⁷ compared 71 outpatients with SP to 119 with PD at an Italian long-term treatment program for anxiety disorders. Using the Upjohn version of the SCID³⁸ for Axis I disorders and the SCID-II for Axis II disorders, the authors found an APD rate of 70% in the patients with SP—significantly higher than the 38% rate in patients with PD. Of the 95 patients in the sample with APD, 50 (53%) had SP. Examination of the individual criteria for APD showed that 73% of the individuals with PD and APD but only 42% of those with SP and APD endorsed the seventh criterion (exaggerating the risks of everyday situations)—again, the only one that does not necessarily involve social situations. Interpretation of this finding, however, is limited by the degree of overlap between SP and APD criteria (i.e., if patients with PD and APD had endorsed more of the other APD criteria, they probably would have met criteria for SP as well).

Sanderson and coworkers³⁹ assessed a group of 347 outpatients with a primary Axis I anxiety disorder diagnosed according to DSM-III-R criteria. Out of 51 patients with SP (subtype not determined), 19 (37%) also had APD. The rate of SP in persons with APD was 42%. This rate may be too low, since persons with more than one anxiety disorder were grouped according to their primary (i.e., most severe) anxiety disorder with regard to severity and interference.

Skodol and colleagues⁴⁰ examined a group of 200 patients; half were inpatients in a unit specializing in personality disorders and half were outpatients seeking psychoanalysis. Of the 26 patients diagnosed with current SP, 19 (73%) also met criteria for ADP. Forty-three patients were diagnosed with ADP; 19 (44%) of them also had SP. Using odds ratios, the authors determined that SP was 17 times as likely to occur in persons with ADP than in those without it. ADP, how-

ever, was also found to be significantly associated, although to lesser degrees, with panic disorder and obsessive-compulsive disorder.

In summary, these reports from broader clinical samples underscore the degree of overlap not just between APD and GSP but also between social anxiety and other affective and anxiety disorders.

Studies Involving Depression

The early finding that patients with both APD and GSP also tend to be more depressed was replicated in a more recent study by Tran and Chambless.⁴¹ These authors compared 16 outpatients with specific public-speaking SP to 29 patients with GSP, 16 (55%) of whom also had APD. Those with both GSP and APD scored higher on the Beck Depression Inventory than did those with GSP alone. However, no differences were found in specific demographic variables, in self-reported anxiety or avoidance, or in social skills or subjective anxiety during a behavioral task. This study was limited by its small sample size. In addition, the researchers relied on the Millon Clinical Multiaxial Inventory,^{42,43} a self-report measure, to diagnose APD.

Johnson and Lydiard,⁴⁴ after reviewing many of the studies comparing APD and SP published prior to 1995, proposed the possibility of a particular subtype of APD associated with higher levels of depression. In this study they also reported data from their own sample of 44 patients with SP, 77% of whom also had APD. The authors concluded that evidence was mixed regarding APD as a more severe form of SP. They proposed other subtypes of APD in addition to the one associated with depression. Such subgroups might include persons who accept their anxiety and avoidance and therefore do not meet the threshold of interference required in SP, persons who are fearful of novelty in general, and persons who suffer mainly from attachment difficulties.⁴⁵

DSM-IV Studies

Only one investigation was found that compares the comorbidity of APD and GSP using DSM-IV criteria. This recent multicenter study by McGlashan and colleagues⁴⁶ is also unique in that the sample was especially recruited for personality disorders as part of the Collaborative Longitudinal Personality Disorders Study.⁴⁷ Axis II disorders were diagnosed using the Diagnostic Interview for Personality Disorders⁴⁸ and confirmed by either the Personality Assessment Form⁴⁹ or the Schedule for Nonadaptive and Adaptive Personality,⁵⁰ whereas Axis I disorders were assessed with the SCID.⁵¹ The rate of SP in the 157 APD group patients was 38%—significantly higher than the rate found in other personality disorder groups. The rate of APD among the 153 patients with SP across all personality disorder groups could not be assessed because a diagnostic hierarchy was imposed in assigning patients to a specific personality disorder group,

and many patients assigned to the non-APD groups also had APD in addition to another personality disorder. In fact, the rate of APD was nearly 50% in patients with a “primary” diagnosis of borderline or schizotypal personality disorder. Another interesting finding was that patients with APD had very high rates of alcohol abuse (44.6%) and major depression (81.5%). The base rates of these disorders were high across all personality disorder groups, however.

In summary, comparisons between GSP and APD have produced mixed results. In investigations of comorbidity, the rate of APD in patients with GSP has ranged from a low of 25%¹⁶ to a high of 89%.²³ These variations may be due to differences in recruitment and diagnostic strategies as well as in the populations studied. In addition, no one has yet examined the rate of APD in persons with GSP from a clinical population that was not specifically recruited for social anxiety. Studies examining broader clinical populations have found high rates of APD in other Axis I disorders such as PD and depression. The rate of SP in persons with APD varied even more, ranging between 25%¹⁵ and 100%.¹⁸ Several studies were unable to find enough patients who had APD but not GSP to do statistical analyses. In addition, other personality disorders (such as dependent personality disorder, which shares many features with APD) have been found to be common in patients with SP.

Studies that have tried to find meaningful differences among the various social anxiety diagnoses have found greater distinctions between the specific and generalized subtypes of SP than between GSP and APD. With regard to severity of SP symptoms such as anxiety, avoidance, and fear of criticism, the evidence is quite inconsistent. Some studies have found that comorbid APD is associated with more overall illness severity and impairment, whereas others have not. Few differences have been found in social skills or physiological measures during behavioral challenges, although some investigations have demonstrated more *subjective* distress in patients with comorbid APD. Several investigations have shown APD to be associated with a higher rate of depression. The relationship between APD and depression is interesting in many ways, including a possible cultural effect of being avoidant and passive in societies that value competition and assertiveness.

Although it is tempting to conclude that APD and GSP are roughly equivalent or that they represent different points along a continuum of social anxiety, further inspection reveals hints that the relationship may be more complicated. The difficulty in many studies of finding a group with APD but not GSP, more than the other way around, raises the intriguing possibility that APD differs from GSP not in severity but in scope—that is, APD reflects difficulties that include but are not limited to those in GSP. Alternatively, GSP and APD may well represent different points along a continuum, but the presumed denomination of this contin-

uum, namely, social anxiety, is too narrow. In analyses of the individual criteria for APD, the criterion reflecting timidity and inhibition in uncertain situations, social or otherwise, often had the best discriminative value, especially between the specific and generalized subtypes of SP. In addition, studies that recruited from more-general clinical populations found high levels of APD comorbid with other Axis I and Axis II disorders. These findings indicate that current conceptualizations of GSP and APD may be too specific to social situations. Although a fear confined to a single social situation (e.g., a fear of public speaking) may develop in isolation, a large percentage of individuals who suffer from fears and inhibitions in multiple social situations also appear to be timid and restrained across many other aspects of their lives. Ironically, the effort to refine the diagnosis of SP by including GSP, and therefore often APD as well, may have backfired and increased the heterogeneity of the disorder by capturing a large group of individuals who are fearful, passive, and reluctant to engage in a wide variety of activities that involve novelty or risk. Despite the relative lack of systematic study, it appears that the diagnosis of APD may better encompass the natural boundaries of this disorder. Unfortunately, the changes in criteria with DSM-IV have narrowed the diagnosis of APD and made it even closer to GSP, but data regarding this question are lacking. Perhaps the clearest conclusion that can be drawn from these studies is that more research is needed in this important and intriguing area.

SHYNESS

As the debate continues regarding the boundaries between APD and GSP, researchers at least generally agree that these diagnoses represent clinical disorders. On the other end of the proposed continuum, however, lies another poorly defined boundary—namely, that between the disorders of GSP and APD and the temperamental construct of shyness. Interestingly, some of the previously mentioned studies recruited subjects by advertising for people with “extreme shyness.” There are surprisingly few examples of a personality disorder and a personality trait sharing the same degree of similarity (at least on the surface) as that found between APD and shyness. Consequently, one could argue that establishing a link between APD and shyness puts personality dimensions back into the realm of personality disorders. But do the data actually support this link?

Shyness is considered to be a trait rather than a disorder and is not found in DSM-IV. Although the trait has no consensus definition, it is generally considered to refer to social reticence and reserve³¹ and to have behavioral, affective, cognitive, and physiological components very similar to those of GSP.⁵² Shyness is thought to be extremely common: Zimbardo and colleagues⁵³ found that 40% of the people they

interviewed considered themselves to be shy at that time, and over 90% claimed to have been shy at some point in life. Twenty-five percent considered themselves to be chronically shy.

Some researchers have suggested the existence of subtypes within shyness—for example, public and private shyness.² The publicly shy person is afraid of doing something that will cause embarrassment, whereas the privately shy person is more introverted, has less self-confidence, and fears feeling bad. Another proposed subtyping model distinguishes between individuals whose shyness is mainly characterized by a fear response in social situations, with all of the autonomic nervous system correlates, and those whose shyness takes the form mainly of self-consciousness and preoccupation with being seen negatively under scrutiny.⁵⁴ The parallels between these subtypes and theoretical distinctions between GSP and APD are apparent. Unfortunately, these proposed subtypes have received little empirical testing and validation.⁵⁵

Comparison Studies

No known studies directly compare shyness and SP. Because shyness is considered to be a continuous trait rather than a categorical entity, “comorbidity” rates are difficult to examine. However, scores on self-report measures of SP, including the Social Phobia Scale and the Social Interaction Anxiety Scale,⁵⁶ were found to be highly correlated with the Revised Cheek and Buss Shyness Scale,^{54,57} even after the investigators controlled for depression. In a large epidemiological sample of nearly 1500 individuals, Davidson and coworkers⁵⁸ found that subjects who met criteria for “subthreshold social phobia” resembled those who met DSM-III criteria for SP much more than they did controls in demographic variables (female gender, unmarried), conduct disturbance, relationship difficulties (less social support), and impairment (more work problems, lower income). A recent study by Cooper and Eke⁵⁹ found that mothers of 4-year-olds who were shy but had no other behavioral disturbances were significantly more likely than mothers of children with behavioral disturbances and fears other than shyness to suffer from SP themselves. The authors speculated that this pure shyness (i.e., shyness seen only in social situations and apart from other fears) may manifest itself in adulthood as SP, but not necessarily as other anxiety disorders such as generalized anxiety disorder. Their conclusions, however, were limited by the confounding of “pure” shyness and severity in their sample. In addition, the study did not distinguish between mothers with GSP and those with specific SP.

Stemberger and colleagues⁶⁰ compared 68 adults with specific SP or GSP and 25 normal controls with respect to personality dimensions of neuroticism and extroversion, as measured by the Eysenck Personality Inventory,⁶¹ as well as the course and nature of SP symptoms, as assessed

by the Social Anxiety History and Interview Questionnaire.¹¹ They found that the individuals with GSP had significantly higher levels of neuroticism and significantly lower levels of extroversion than did those with specific SP or controls. In addition, 76% of the 52 persons with GSP reported a history of childhood shyness—a rate significantly higher than was found in controls (52%) or persons with specific SP (56%).

Differences between shyness and SP have also been noted. These differences, however, have tended to be more in the form of varying severities along similar dimensions rather than unique characteristics of one entity and not the other. In a review article Turner and colleagues⁶² found SP to be associated with a later age of onset, more avoidance, and more impairment compared to shyness. They also found some counterintuitive evidence that SP, an Axis I disorder, is associated with a more chronic course than is shyness, despite shyness's conceptualization as an underlying temperament. They noted that systematic comparisons are limited by the heterogeneity within shy populations and by the lack of a universal definition of shyness.

Shyness as a Personality Dimension

Indeed, there is some reason to question whether shyness is a valid personality dimension at all. Early temperament researchers Chess and Thomas^{63,64} identified nine temperaments from the New York Longitudinal Study; these did not include shyness but did include a more general dimension of approach/withdrawal. Buss and Plomin,⁶⁵ who developed the Emotionality, Activity, and Sociability Temperament Scale for both adults and children, have also struggled to find empirical support for a separate shyness dimension. Their sociability dimension has many items that relate to an individual's preference to be alone or with people, which they concluded is related to shyness but does not encompass it. More recently, the five-factor model of personality, which has been found to have good psychometric properties,⁶⁶ has categorized the main personality dimensions as neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness. Shyness, per se, is not seen as a dimension; components of it are spread across different dimensions. The Temperament and Character Inventory,^{67,68} another personality scale that is widely used and has been rigorously tested, also does not use shyness as a separate dimension. Instead it proposes the three core traits of novelty-seeking, harm-avoidance, and reward-dependence. Shyness, under this system, is considered to be a component of harm avoidance.

Few studies have used such instruments in “shy” samples. One recent study⁶⁹ found that undergraduate women who identified themselves as shy on the Cheek and Buss Shyness Scale⁵⁷ were more risk-averse during a non-social gambling task than were their nonshy counterparts.

More data, however, have been published regarding personality dimensions and APD. Recently, 34 Norwegian patients with APD completed the Revised Neuroticism, Extraversion, Openness Personality Inventory.⁷⁰ In this study 88% of the sample had the combination of higher-than-average neuroticism and lower-than-average extroversion scores. This finding is consistent with the results of earlier studies⁷¹ using DSM-III-R criteria, in which APD was found to be associated with high neuroticism and low extroversion, but much less closely correlated with the dimensions of openness to experience, agreeableness, and conscientiousness. Griego and colleagues⁷² found in a group of 163 undergraduate students that levels of APD symptoms as assessed with the Coolidge Axis II inventory^{73,74} were associated positively with harm-avoidance and negatively with persistence, self-directedness, cooperativeness, and self-transcendence. Surprisingly, they did not find the expected negative association between APD and the dimension of novelty-seeking. Taken together, these data show that GSP and APD are consistently associated with certain personality traits that include but are not limited to shyness.

Behavioral Inhibition

Kagan and colleagues⁷⁵ have studied children who become fearful and withdrawn in response to new people and situations, a temperament that he terms “behavioral inhibition to the unfamiliar.” This temperament has been hypothesized to be related to the amygdala, a brain region that is speculated in behaviorally inhibited children to have a lower threshold of arousal and a more pronounced response when activated. Such differences have been identified in infants as young as 4 months by low or high levels of reactivity to new situations.

Since behavioral inhibition is not limited to social contexts, one might expect children with this trait to have higher rates of many anxiety disorders including APD, which includes avoidance of nonsocial experiences. Data relating behavioral inhibition to clinical disorders is emerging, but the results are somewhat mixed. Early work linking behavioral inhibition and clinical disorders was done with PD rather than SP. In one study⁷⁶ children of parents with PD were found to have higher rates of behavioral inhibition than did controls. Conversely, parents of behaviorally inhibited children were found to have higher rates of adult or childhood anxiety disorders.⁷⁷ In addition, children identified as behaviorally inhibited, especially those who retained this temperament throughout early childhood, were found to be at higher risk for developing one or more anxiety disorders, including avoidant disorder and phobias.^{78,79} In contrast, Mick and Telch⁸⁰ found higher childhood behavioral inhibition scores in college students who reported social anxiety but not in those who reported generalized anxiety symptoms. The authors concluded that behavioral

inhibition had a more specific association with social anxiety than with general anxiety, although, interestingly, they found that the group with current social anxiety also reported more *nonsocial* fears in childhood. This study was limited by small sample size and by use of self-report instruments for both childhood behavioral inhibition and current anxiety assessments.

Schwartz and coworkers⁸¹ reexamined 73 adolescents from among Kagan and colleagues' original subjects. They had initially been assessed at either 21 or 31 months of age and determined to be behaviorally inhibited or uninhibited.^{82,83} Those who had been characterized as inhibited were found to have much higher levels of social anxiety as adolescents than did those who had been characterized as uninhibited. Sixty-one percent of the inhibited toddlers continued to manifest generalized social anxiety 12 years later, as judged by interview and behavioral observations. The association was particularly strong in girls: as adolescents, 44% of the girls found earlier to be behaviorally inhibited were socially anxious and "impaired to a major degree" by their anxiety. Although many of the socially anxious adolescents also had concurrent performance anxiety, separation fears, and specific fears, the association among these forms of anxiety was not significantly higher in the behaviorally inhibited group. The authors concluded that their data suggested some specificity between an inhibited temperament and social anxiety. Whether an association remained between behavioral inhibition and timidity in novel nonsocial domains, however, remained unanswered, because the interview used was based on standard diagnostic categories (e.g., specific phobia, separation anxiety, performance anxiety), and there is no diagnosis for people who are generally passive and timid in both social and nonsocial contexts.

Kagan and colleagues⁸⁴ have argued against the notion that behavioral inhibition represents part of an overall continuum, maintaining instead that it is a discrete temperamental category. This conclusion is in part based upon their findings that the children who continued to be shy and restrained in unfamiliar situations throughout childhood were those who were originally most extreme in their behavioral restraint. The authors suggested that "most of the children we call inhibited belong to a qualitatively distinct category of infants who were born with a lower threshold for limbic-hypothalamic arousal to unexpected changes in the environment or novel events that cannot be assimilated easily." More-direct evidence in support of the claim that behavioral inhibition represents a categorical rather than a dimensional feature, however, is lacking. Future research may help to determine whether similar factors underlie both "normal" shyness and clinical levels of anxiety and avoidance, or whether these states proceed through unique pathways.

SUMMARY AND CONCLUSIONS

APD and GSP have a complex relationship both to each other and to what is considered normal personality dimensions, including shyness. Part of the difficulty in delineating the boundaries between APD and GSP is due to the fact that both entities have undergone multiple changes in their diagnostic criteria. Although much more information is needed, studies that have directly compared these disorders have found little evidence of qualitative differences between them with respect to etiology, demographics, phenomenology, course, or treatment. Some investigations, however, have found evidence that APD may represent a more severe form of GSP in terms of levels of SP symptoms, anxiety, avoidance, depression, and fear of criticism. Rates of comorbidity have ranged from 25% to nearly 100%, leading some to question whether one could have APD but not GSP.

Although GSP and ADP share many features with the personality dimension of shyness, this relationship is even murkier and less well studied. Some studies have found that people who are shy are intermediate in levels of social anxiety and avoidance between controls and persons with diagnosable SP. In addition, some preliminary data indicate that the rate of SP may be higher among individuals who as children were shy, fearful, and reserved in novel situations. On the other hand, researchers of behavioral inhibition, a possible temperamental precursor to SP and other anxiety disorders, have argued against an overall continuum of social anxiety from none through everyday shyness and up to clinical psychiatric disorders. In either event, currently available data support the claim that personality factors are strongly associated with APD and GSP.

An intriguing hypothesis for some of the inconsistent findings that link shyness to both APD and GSP is that current conceptualizations of shyness and GSP are too narrowly restricted to social domains. Research indicates that children with behavioral inhibition are reserved and passive in unfamiliar nonsocial domains. Personality profiles of patients with APD show not only low extroversion scores, as expected, but also low levels of stress tolerance. These findings indicate that the focus of social anxiety as a distinct entity, whether as temperament trait or clinical disorder, may be too limiting. Instead, it may be necessary to "cast a wider net" into areas such as introversion, passivity, and fear of novelty before an exploration of the vertical boundaries between trait and disorder can proceed. This point has important clinical implications: the treater who assumes that social situations are the exclusive area of difficulty may be overlooking both major domains of difficulty and potential targets of therapeutic action.

APD, which is not limited to social situations, may be the best diagnostic category available in the current DSM sys-

tem to identify this constellation of symptoms and their possible underlying temperament. Both Millon and Cloninger have recently advocated a reevaluation of the current Axis II classification to bring it more into alignment with personality dimensions. Millon⁸⁵ has proposed classifying pathology into simple reactions, which are not associated with personality traits, and complex syndromes, which are more closely related to various "personality patterns." According to this taxonomy, specific SP would likely fall into the category of a simple reaction, with GSP and APD better understood as complex syndromes. Cloninger⁸⁶ has proposed a personality disorder subtyping system based on the dimensions of novelty-seeking, harm-avoidance, and reward-dependence.

Much more research is needed, however, before many of the questions raised in the literature can be answered. One effort that could help to clarify the boundaries between GSP and APD would be to diagnose patients routinely along both Axis I and Axis II. Although most investigations involving personality disorders require a rigorous investigation of comorbid Axis I conditions, the reverse is often not true, except in cases where this comorbidity is the focus of the study. Analyzing the impact of Axis II conditions in studies involving treatment, neuroimaging, or neuropsychological test performance of patients with SP could help to delineate any potential differences between this disorder and APD. Furthermore, analysis of individual DSM criteria in larger samples, similar to what was done by some earlier researchers,^{17,23,30} may be useful in phenomenological studies.

To further our understanding in the area of shyness and clinical disorders, more prospective studies involving children, especially in community settings, will probably be required. Kagan's work with behaviorally inhibited children is a model in this regard, although future research may benefit from also including other temperamental types in the same study. Toward that end, adaptation of the five-factor model for use in children may be a requisite intermediate step. From a clinical standpoint, a better understanding of what factors help to solidify or overcome the association between childhood inhibition and later clinical disorders is obviously of tremendous value in efforts to prevent the distress and disability associated with severe anxiety and avoidance.

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