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Paranoid Personality Disorder

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Description of the Disorder

Paranoid personality disorder (PPD) is characterized by a pervasive mistrust of other people (American Psychiatric Association [APA], 1994; Bernstein, Useda, & Siever, 1995; Miller, Useda, Trull, Burr, & Minks-Brown, 2001). Other common features of the disorder include quarrelsomeness, hostility, emotional coldness, hypersensitivity to slights or criticism, stubbornness, and rigidly held maladaptive beliefs of others' intents (APA, 1994; Bernstein et al., 1995; Miller et al., 2001). The prototypical picture is of someone who is preoccupied with real or imagined slights or threats, mistrusts the intentions or motives of others, and rarely trusts the seemingly benign appearance of things. The guiding underlying assumption is that others are malevolent—they can betray, hurt, take advantage, or humiliate. Thus, measures must be taken to protect oneself—by keeping one's distance from other people, not appearing weak or vulnerable, searching for signs of threat even in seemingly innocuous situations, preemptively attacking others who are viewed as threatening, and vigorously counterattacking when threatened or provoked. People with paranoid personality disorder tend to hold grudges, have “enemies,” are often litigious, and can be pathologically jealous, preoccupied with their partner's supposed sexual infidelities. Thus, in many respects, their antagonistic behavior exemplifies one extreme pole of the agreeableness-antagonism dimension of the five-factor model of personality (Widiger, Trull, Clarkin, Sanderson, & Costa, 2002).

Not surprisingly, this pattern of antagonistic behavior often causes difficulties in interpersonal relationships, including provocation of the very kinds of attacks these individuals fear. For example, people with paranoid personality disorder may correctly deduce that others are speaking ill of them or plotting against them behind their backs, but they do not recognize that this may be a consequence of their own antagonistic behavior. It is important to note, however, that people with paranoid personality disorder are usually not frankly psychotic, although they may experience transient psychotic-like symptoms under conditions of extreme stress (Miller et al., 2001). Unlike the symptoms of psychotic disorders such as paranoid schizophrenia and delusional disorder, in which a frank break with reality has occurred, the unfounded beliefs in paranoid personality disorder are rarely of psychotic proportions. Thus someone with paranoid personality disorder may believe without cause that coworkers are harassing him, for example, when he receives a call with no one responding on the other end. However, he is not likely to believe that the CIA is plotting against him. Thus his beliefs are plausible but often unfounded.

CASE EXAMPLE

A woman believed, without cause, that her neighbors were harassing her by allowing their young children to make loud noise outside her apartment door. Rather than asking the neighbors to be more considerate, she stopped speaking to them and began a campaign of unceasingly antagonistic behavior: giving them "dirty looks," pushing past them aggressively in the hallway, slamming doors, and behaving rudely toward their visitors. After over a year had passed, when the neighbors finally confronted her about her obnoxious behavior, she accused them of purposely harassing her. "Everyone knows that these doors are paper thin," she said, "and that I can hear everything that goes on in the hallway. You are doing it deliberately." Nothing that the neighbors said could convince her otherwise. Despite their attempts to be more considerate about the noise outside her apartment, she continued to behave in a rude and aggressive manner toward them.

Neighbors and visitors commented that the woman appeared tense and angry. Her face looked like a hard mask. She was rarely seen smiling. She walked around the neighborhood wearing dark sunglasses, even on cloudy days. She was often seen yelling at her children, behavior that had earned her the nickname "the screamer" among the parents at her children's school. She had forced her children to change schools several times within the same district because she was dissatisfied with the education they were receiving. An unstated reason, perhaps, was that she had alienated so many other parents. She worked at home during the day at a job that required her to have little contact with other people. She had few social contacts, and in conversation was often perceived to be sarcastic and hypercritical.

This case illustrates some of the central features of PPD according to the DSM-IV (APA, 1994), including the paranoid person's unwavering belief that others are out to harm her (PPD criterion 1), tendency to read malevolent intentions into otherwise benign events (PPD criterion 4), and persistence in holding grudges (PPD criterion 5). Many of the associated features of the disorder are also evident, including the paranoid person's tension and hostility, aloofness, hypercriticalness, and tendency to provoke reactions in other people that confirm her conviction that others can't be trusted.

Differential Diagnosis

PPD must be distinguished from other disorders involving paranoia, particularly paranoid schizophrenia and delusional disorder (APA, 1994). Unlike PPD, paranoid schizophrenia and delusional disorder involve frank delusions—that is, false beliefs of psychotic proportions. However, the presence of such beliefs is not always evident, as paranoid persons may take pains to hide such “crazy” beliefs from others. Moreover, the unwarranted beliefs of someone with PPD are not always so easy to distinguish from true delusions. In the above case, for example, the differential diagnosis would become easier if the woman began to accuse her neighbors of bugging her telephone, intercepting and opening her mail, surreptitiously breaking into her apartment, and so forth. Although such suspicions are not bizarre, they are of such an extreme nature that they suggest a delusional process may be present.

Finally, people with PPD sometimes develop transient delusions when under extreme stress (Miller et al., 2001). For example, a man with long-standing PPD developed lung cancer. Shortly after receiving the diagnosis, he developed the unfounded belief that his brothers, with whom he worked in a family business, were trying to swindle him, and cut off relations with them. His delusions did not appear to have a neurological basis: they occurred in the absence of delirium and other neurological complications due to the illness, and prior to his beginning medical treatment with radiation and chemotherapy. After his medical condition stabilized and he began taking antidepressant medication, this belief eventually disappeared and was never spoken about again.

PPD must also be distinguished from other personality disorders that share overlapping diagnostic features, particularly the other Cluster A personality disorders: schizotypal personality disorder, which can also be characterized by suspiciousness or paranoid ideation (schizotypal criterion 5), and schizoid personality disorder, which can also be characterized by aloofness (schizoid criteria 2 and 5) and emotional coldness (schizoid criterion 7; APA, 1994; Bernstein et al., 1995; Miller et al., 2001). However, schizotypal individuals display odd or eccentric ideas, peculiar thinking or speech, unusual perceptual experiences, and other “schizophrenia-like” features that

are not seen in PPD. Schizoid individuals, on the other hand, are socially withdrawn because of a preference for being alone rather than a desire to protect themselves from imagined threats.

PPD also shows a high degree of content overlap with personality disorders outside of Cluster A, particularly borderline (e.g., criterion 8, “inappropriate, intense anger,” and criterion 9, “transient, stress-related paranoid ideation”), narcissistic (e.g., criterion 9, “arrogant and haughty”), and avoidant (e.g., criterion 1, “avoids occupational activities involving significant interpersonal contact,” criterion 3, “shows restraint within interpersonal relationships because of fear of being shamed or ridiculed,” and criterion 4, “is preoccupied with being criticized or rejected”) personality disorders (APA, 1994; Bernstein et al., 1995; Miller et al., 2001).

Outstanding Issues

There is a paucity of empirical literature on PPD, despite the fact that this disorder is easily recognized and has long been described in the clinical and theoretical literature (Millon & Davis, 1996). Ten years ago, when we first reviewed the literature on paranoid personality disorder, we noted a similar state of affairs (Bernstein, Useda, & Siever, 1993; Bernstein et al., 1995). Over the past 10 years, the most notable developments have been a promising new questionnaire for PPD (Useda, 2002) and some interesting but inconclusive research findings on the question of whether PPD is a schizophrenia spectrum disorder (Asarnow et al., 2001; Nicolson et al., 2003). Otherwise, the literature on PPD during this period has consisted mostly of single-case studies and some theoretical articles written from a psychoanalytic object relations perspective. This is a pity, because PPD deserves greater attention.

The costs of PPD include disruptive behavior in the workplace, unnecessary litigation, relationship problems (e.g., pathological jealousy), violence (e.g., stalking), and increased psychiatric comorbidities (Miller et al., 2001). PPD patients are seen in a variety of clinical populations, and they can pose special problems for treatment when their mistrust affects the therapeutic relationship (Miller et al., 2001). Nevertheless, in our own experience, some PPD patients can achieve good therapeutic outcomes when they are given treatments appropriate to their problems (see “What Kinds of Treatments Are Likely to Be Most Effective for People With PPD?” below). Thus, there is a need for more research on PPD, including both fundamental studies (e.g., phenomenological, epidemiological, longitudinal, and laboratorial) and studies of promising assessment and treatment approaches. We hope that this chapter will stimulate more researchers to study this important but still poorly understood personality disorder.

This chapter is organized around the following unanswered questions about PPD:

- Are the DSM-IV criteria for PPD valid descriptors of the disorder?
- What theoretical models might explain the features of PPD?
- Is PPD a true category or a dimension that cuts across categories?
- Is PPD a schizophrenia-spectrum or delusional-spectrum disorder?
- Which environmental factors might contribute to the development of PPD?
- What is the most accurate means of assessing PPD?
- What kinds of treatments are likely to be most effective for people with PPD?

Descriptive and Theoretical Issues

Are the DSM-IV Criteria for PPD Valid Descriptors of the Disorder?

Paranoid phenomena have long been described in the clinical and theoretical literature (Millon & Davis, 1996). By the end of the 19th century, clinicians recognized that paranoid phenomena could manifest themselves in a variety of forms and psychiatric contexts, from the frank persecutory beliefs and delusions systems often seen in schizophrenia to more subtle and circumscribed forms of paranoia (Millon & Davis, 1996). Kraepelin's (1921) seminal nosology of psychiatric disorders described three types of paranoid conditions resembling today's conceptualizations of paranoid schizophrenia, delusional disorder, and paranoid personality disorder, respectively. Most relevant to the present discussion, Kraepelin recognized that some individuals displayed milder paranoid phenomena characterized by fixed delusions but without the hallucinations and chronic deterioration of personality seen in dementia praecox (i.e., schizophrenia). A long-standing debate, which continues to this day, centers on the question of whether less severe paranoid disorders, such as PPD and delusional disorder, lie on a genetic continuum with schizophrenia, or whether they form a paranoid spectrum distinct from that of schizophrenia (Asarnow et al., 2001; Coryell & Zimmerman, 1989; Kendler & Gruenberg, 1982; Kendler, Masterson, & Davis, 1985; Maier, Lichtermann, Minges, & Heun, 1994; Nicolson et al., 2003).

A diagnostic term for paranoid personality disorder has existed in the psychiatric nomenclature of the United States since 1952 (APA, 1952) and has been included in every edition of the DSM. DSM-III (APA, 1980) and subsequent editions of the DSM recognized three personality disorders characterized by oddness and eccentricity: paranoid, schizoid, and schizotypal personality disorders. The description of schizotypal personality was based largely on features—such as suspiciousness, peculiar ideation, and peculiar

interpersonal behavior—seen in the biological relatives of schizophrenics in the Danish Adoption Study of the 1960s (Kety, Rosenthal, Wender, & Schulsinger, 1968). Thus from its inception, schizotypal personality disorder was conceptualized as a schizophrenia spectrum disorder. Although individuals with PPD are sometimes seen among the relatives of schizophrenic probands, the genetic connection between PPD and schizophrenia remains an open question (see below).

The six main traits associated with PPD, as described in the extensive clinical and theoretical literature on PPD (Cameron, 1943, 1963; Kraepelin, 1921; Kretschmer, 1925; Millon, 1969, 1981; Shapiro, 1965; Sheldon, 1940; Sheldon & Stevens, 1942; Turkat, 1985) and by the DSM-IV's Associated Features section (APA, 1994), are mistrust/suspiciousness, antagonism/aggressiveness, introversion/excessive autonomy, hypersensitivity, hypervigilance, and rigidity. Mistrust/suspiciousness is a lack of trust in others. PPD individuals question the loyalty or truthfulness of other people and are prone to think that others are "out to get them" and to respond defensively. Hypersensitivity is one's tendency to perceive others' remarks or comments as attacks or criticisms directed against oneself, one's beliefs, or one's performance of a task. PPD individuals tend to believe that others are judging them negatively, and, in response, they tend to experience anger and anxiety. Antagonism/aggressiveness is a tendency to feel angry, to be combative toward others, and to view others and the world as hostile. Introversion/excessive autonomy is a tendency to distance oneself from others, remain aloof, and feel tense around others. Hypervigilance is a tendency to continually scan the environment in an attempt to confirm hypotheses about the malevolent intentions or motives of others. Rigidity is a personality trait in which an individual's beliefs, behavior, and affective style are not readily open to questioning or change.

The DSM-IV criteria for PPD, however, appear to overrepresent the cognitive PPD trait mistrust/suspiciousness and to underrepresent the prototypical behavioral, affective, and interpersonal expressions of paranoid personality traits (Table 3.1). As is evident from Table 3.1, nearly all of the DSM-IV PPD criteria (six of seven) reflect the cognitive trait of mistrust/suspiciousness. Three of the seven DSM-IV criteria reflect the affective/interpersonal trait of hypersensitivity; two reflect the affective/interpersonal trait of antagonism; two reflect the cognitive trait of hypervigilance; one reflects the interpersonal trait of introversion; and one reflects the cognitive trait of rigidity. Thus the DSM-IV criteria mainly reflect the cognitive features of PPD, especially mistrust/suspiciousness, and poorly represent the other primary traits that have long been thought to underlie the disorder. Ironically, a sample selected on the basis of DSM-IV criteria without additional assessment would not be representative of PPD as it is represented in the DSM-IV's own description (i.e., in the Associated Features section for PPD) or in the clinical literature specific to PPD. For this reason, the diagnostic criteria for PPD appear to be greatly in need of revision.

Table 3.1 Correspondence of DSM-IV PPD diagnostic criteria to the primary traits of PPD

<i>Individuals Exhibit the DSM-IV Diagnostic Criteria for PPD When They . . .</i>	<i>Does This Behavior Correspond to the Six Main Traits Associated With PPD?</i>					
	<i>Mistrust/ Suspiciousness</i>	<i>Antagonism/ Aggressiveness</i>	<i>Introversion/ Excessive Autonomy</i>	<i>Hyper- sensitivity</i>	<i>Hyper- vigilance</i>	<i>Rigidity</i>
1. Suspect that others exploit, harm, or deceive	Yes	No	No	No	No	No
2. Doubt others' loyalty or trustworthiness	Yes	No	No	No	No	No
3. Are reluctant to confide in others for fear that information will be used against them	Yes	No	Yes	No	No	No
4. Read hidden or demeaning meanings into benign remarks or events	Yes	No	No	Yes	Yes	No
5. Bear grudges (i.e., are unforgiving of insults, injuries, or slights)	No	Yes	No	Yes	No	Yes
6. Perceive attacks on their character or reputation and are quick to react with anger or counterattack	Yes	Yes	No	Yes	Yes	No
7. Have recurrent suspicions of their partner's sexual infidelity	Yes	No	No	Yes	No	No

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For the DSM-V, we recommend that the PPD criteria be substantially revised to reflect the primary traits underlying the disorder in a more balanced and proportionate manner. Such a revision should result in greater diagnostic validity for PPD and may reduce the now considerable diagnostic overlap between PPD and other Axis II disorders that share some paranoid features (e.g., borderline, schizotypal, narcissistic, and avoidant personality disorders). An improved PPD criteria set would have important ramifications for this underresearched and often clinically neglected personality disorder. For one thing, it would lead to more accurate selection of PPD cases for research

purposes. For example, diagnostic criteria that more accurately reflect the phenotype of PPD would be of considerable benefit for future family/genetics studies, including studies that seek to identify a schizophrenia-spectrum or delusional-spectrum genotype. From a clinical perspective, criteria that better reflect the underlying traits of PPD should lead to better assessment and, as everyone hopes, better treatment of PPD. A self-report questionnaire assessing these revised criteria, the Paranoid Personality Disorder Features Questionnaire (Usedá, 2002), has recently been developed and has shown promising initial evidence of reliability and validity (see below).

What Theoretical Models Might Explain the Features of PPD?

Traditional psychoanalytic models of PPD have focused on the defense mechanism of projection: that is, the disavowing of one's own aggressive feelings and thoughts by projecting them onto another person (e.g., "I'm not feeling hostile toward you; you are feeling hostile toward me!" Vaillant, 1994). Despite controversy over the validity of the concept of projection (Holmes, 1978), there is considerable empirical support for the notion that patients with severe personality disorders employ projection and other maladaptive defenses. For example, studies using both self-rated and clinician-rated measures of defensive style have found that the use of projection as a defense is highly associated with severe personality disorders, including paranoid, borderline, and antisocial personality disorders (Drake & Vaillant, 1985; Koenigsberg et al., 2001; Lingardi et al., 1999; Paris, Zweig-Frank, Bond, & Guzder, 1996). Moreover, improvements in maladaptive defenses such as projection predict the outcome of psychodynamic psychotherapy over and above other predictors, including the severity of pretreatment psychopathology (Bond & Perry, 2004).

However, paranoid phenomena may also be explained using more contemporary cognitive processing models (Williams, Watts, MacLeod, & Mathews, 1997). For example, the misattributions of people with PPD (e.g., reading malevolent intentions into benign remarks or events) may be understood in terms of characteristic cognitive biases (Williams et al., 1997), including attentional biases (e.g., overfocusing on possible signs of threat), interpretative biases (e.g., misinterpreting innocuous comments or behavior as malevolent), and memory biases (e.g., dwelling on past slights or insults). Such cognitive processing models have the advantage of being amenable to empirical testing using standardized laboratory procedures. Moreover, the development of cognitive models has led to more effective forms of cognitive therapy for disorders, such as social phobia, that, like PPD, are characterized by misinterpretation of social cues (Bögels & Mansell, 2004). Because cognitive schemas, such as the conviction that others are not trustworthy, appear to be so central to PPD pathology (Beck, Freeman, & Associates, 1990), cognitive information processing models may prove to be highly fruitful in terms of our understanding and treating this difficult disorder.

Beck and his colleagues (1990) have argued that the core cognitive schemas in PPD concern feelings of inadequacy. These feelings of inadequacy, in combination with poor social skills and the external attribution of blame as a means of reducing anxiety, account for the features of PPD. In some respects, the cognitive biases in PPD described by Beck and his colleagues (1990) resemble those in social phobia, which is also characterized by feelings of inadequacy and the overfocusing on and misinterpretation of social cues (Bögels & Mansell, 2004). Unlike social phobics, however, who are painfully aware of their feelings of inadequacy and dwell on their past social blunders, people with PPD attribute the *cause* of their feelings of inadequacy to others ("I am not inferior; you are trying to make me feel inferior!"). Thus, the central interpretative bias in PPD appears to be a causal misattribution or externalization of blame onto other people (Beck et al., 1990). Rather than dwelling on their past social mistakes, as in social phobia, people with PPD ruminate on the injuries and injustices others have caused them. Beck and his colleagues' cognitive model of PPD appears to be a useful one that warrants empirical investigation.

Another potentially useful model is the integrative cognitive model of Jeffrey Young (Bernstein, 2005; Young, Klosko, & Weishaar, 2003). Young has posited that early maladaptive schemas (i.e., chronic, repetitive self-defeating themes or patterns originating in adverse childhood experiences and early temperament), schema modes (i.e., transient state-related patterns of schematic activation), and maladaptive coping mechanisms (i.e., maladaptive ways of coping with schematic activation) are the conceptual core of personality disorders. Young has identified 18 specific early maladaptive schemas (e.g., defectiveness, abandonment, emotional deprivation) as well as a variety of schema modes and three broad forms of maladaptive coping (i.e., schema surrender, schema avoidance, and schema overcompensation). Young and his colleagues have developed an integrative psychotherapy for personality disorders, schema therapy, which targets these maladaptive beliefs and coping mechanisms (Young et al., 2003). In a recent 3-year randomized clinical trial in the Netherlands, schema therapy produced substantial reductions in the features of borderline personality disorder, including improvements in the core personality characteristics (e.g., identity disturbance, unstable relationships) and behavioral features of the disorder (e.g., suicidal and parasuicidal behavior; Giesen-Bloo, Arntz, van Dyck, Spinhoven, & van Tilburg, 2004). A randomized clinical trial of the efficacy of schema therapy for PPD and other personality disorders (e.g., narcissistic, obsessive-compulsive, avoidant) is currently under way in the Netherlands (A. Arntz, personal communication, November 10, 2005).

Factor-analytic studies of the Young Schema Questionnaire, a self-report measure of early maladaptive schemas, have supported the validity of nearly all of the 18 early maladaptive schemas proposed by Young (Schmidt, Joiner, Young, & Telch, 1995; Waller, Meyer, & Ohanian, 2001). Retrospective studies have also found that early maladaptive schemas are associated with

etiologic factors hypothesized by Young, such as childhood trauma and insecure attachment, in both clinical and nonclinical samples (Cecero, Nelson, & Gillie, 2004; Leung, Thomas, & Waller, 2000; Waller, Meyer, Ohanian, Elliott, et al., 2001). Thus empirical research on the schema therapy model, though still in its early stages, supports the construct validity of early maladaptive schemas and related concepts.

Young has not applied his model specifically to PPD. However, the early maladaptive schemas that appear most relevant to PPD are defectiveness/shame, abuse/mistrust, and vulnerability to harm. Thus the person with PPD has deep feelings of inferiority and inadequacy (i.e., defectiveness); anticipates that others are out to harm, exploit, or humiliate him (i.e., abuse/mistrust); and feels fundamentally unsafe in the world (i.e., vulnerability to harm). As a result, he adopts a belligerent, overcompensating form of coping: he presents a hostile, aggressive face toward others, remains vigilant to possible attacks, and preemptively attacks or counterattacks in situations where he feels that he will be, or has been, harmed. Young's model would also posit that these early maladaptive schemas, schema modes, and maladaptive coping responses have their origins in childhood experiences, such as early experiences of abuse or neglect. Like Beck and his colleagues' (1990) model, Young's model (Young et al., 2003) appears to hold considerable promise for aiding our understanding of the cognitive mechanisms in PPD and is worthy of empirical investigation.

Empirical Issues

Although PPD has a long history in the clinical and theoretical literature (Cameron, 1943, 1963; Kraepelin, 1921; Kretschmer, 1925; Millon, 1969, 1981; Shapiro, 1965; Sheldon, 1940; Sheldon & Stevens, 1942; Turkat, 1985), research to date has provided only limited information about the course, family history, and treatment of this severe personality disorder.

Prevalence. The prevalence of PPD appears to range from about 0.5% to 2.5% in the general population, from about 2% to 10% in psychiatric outpatient settings, and from about 10% to 30% in psychiatric inpatient settings (APA, 1994; Bernstein, Useda, et al., 1993; Bernstein et al., 1995; Miller et al., 2001). However, these epidemiological data were based on DSM-III or DSM-III-R criteria for PPD; no more recent data on the population prevalence of PPD based on DSM-IV criteria are available. PPD has been found to be more prevalent among males than among females in clinical samples (APA, 1994; Bernstein, Useda, et al., 1993; Bernstein et al., 1995; Miller et al., 2001).

Longitudinal Course. There is scant evidence regarding the longitudinal course of PPD (Bernstein, Cohen, et al., 1993). However, recent evidence suggests that personality disorders in general exhibit a more fluctuating course than was previously believed possible (Grilo et al., 2004; Warner et al.,

2004). Thus even people with severe personality disorders, such as borderline personality disorder, may live for months or years without presenting serious manifestations of the disorder. Thus, it appears that the phenotypic manifestations of personality disorders exhibit a variable course over the life span, probably due to factors such as life stress and adaptation to changing life circumstances, while the underlying trait vulnerability for personality disorders appears to remain intact (Warner et al., 2004). On the other hand, it seems possible that some individuals “grow out of” their personality disorders, either because they obtain professional help or, more typical, due to ameliorative life experiences. There is no obvious reason that these considerations would not apply equally to PPD as they would to other severe personality disorders.

CASE EXAMPLE

A divorced man with long-standing PPD became noticeably warmer, less critical, more trusting, and more open to other people after he happily remarried and experienced the birth of his second child, a beloved daughter. Although he remained emotionally aloof compared to the average person and at times could still be sarcastic, belittling, and combative, these traits had considerably diminished—a noticeable and welcome change for friends, coworkers, and family members.

Is PPD a True Category or a Dimension That Cuts Across Categories?

Diagnostic Comorbidity. Patients with PPD often exhibit features of other personality disorders, especially the other Cluster A personality disorders (i.e., schizoid and schizotypal), but also the Cluster B personality disorders (i.e., borderline, narcissistic, and antisocial) and avoidant personality disorder (APA, 1994; Bernstein et al., 1995; Miller et al., 2001). In fact, one rarely finds a case of PPD that is not accompanied by one or more other comorbid personality disorders (Widiger & Rogers, 1989; Zimmerman, 1994). Studies of inpatient samples indicate that three fourths of those diagnosed with PPD receive additional personality disorder diagnoses (Widiger & Trull, 1998; Zimmerman, 1994). In studying an outpatient sample, Morey (1988) reported that those diagnosed with PPD most frequently received additional diagnoses of borderline (48%), narcissistic (35.9%), and avoidant (48.4%) personality disorders. In their review of the performance of the DSM-III-R criteria based on published and unpublished data sets, Widiger and Trull (1998) reported a high degree of overlap (i.e., > 38%) between PPD and borderline, avoidant, schizoid, schizotypal, and narcissistic personality disorders.

There are several potential explanations for the high degree of comorbidity between PPD and other personality disorders, including phenomenological

similarity between the personality disorders, artifactual overlap due to imprecision in the DSM diagnostic criteria, and the presence of shared or related underlying pathological processes. For example, both PPD and narcissistic personality disorder may share an underlying pathological process, namely, overcompensation for underlying feelings of inferiority and inadequacy. Thus, both paranoid and narcissistic individuals may be hypersensitive to slights or potential humiliations, but they cope with them in different ways: the paranoid person through aggression, and the narcissistic person through grandiosity. Clinical observation suggests that some individuals develop both paranoid and narcissistic forms of adaptation and therefore exhibit a comorbidity between the personality disorders based on a shared underlying etiology. Such individuals may be observed to fluctuate between paranoid and narcissistic modes of adaptation (Young, 2003), depending on situational factors, such as triggering life events.

CASE EXAMPLE

A successful businessman usually acted as if he were “on top of the world”—dressing impeccably, making sure that he was seen in the company of famous people and in all the “right places,” and trumpeting his accomplishments to anyone who would listen. However, when his business began to crumble, he blamed members of his management team, whom he accused of conspiring against him, smeared their reputations, and forced some of them to resign from the company. Thus when his usual narcissistic, grandiose mode of compensation failed and his inadequacies were publicly exposed, he resorted to an attack on his “enemies,” whom he perceived to be the source of his humiliation.

Categories Versus Dimensions. The high rates of comorbidity between PPD and other personality disorders, especially across clusters, raises the question of whether PPD is truly a discrete disorder or is more accurately described as a dimension that cuts across diagnostic categories. These issues touch on a major debate regarding personality disorder measurement: the dimensional versus categorical approach to personality disorder classification (Widiger & Frances, 2002). The dimensional approach focuses on the *degree* to which one exhibits a syndrome or construct. Although a variety of dimensional systems for personality disorders have been proposed, there appear to be two major variants of the dimensional approach. In the first approach, personality disorders are conceptualized as the extreme ends of dimensions that are shared with normal personality (Widiger & Frances, 2002). Most of the research based on this “normative” approach to personality disorders has utilized the five-factor model of personality as a theoretical framework (Widiger & Frances, 2002). In the alternative approach, personality disorders are conceptualized as spectrum variants of mental

illness, with Axis I disorders forming the extreme ends of the continuum (Siever & Davis, 1991).

When viewed from the perspective of the five-factor model of personality, there is consistent empirical evidence that PPD is negatively related to the personality dimension of agreeableness and positively related to the dimension of neuroticism (Costa & McCrae, 1990; Saulsman & Page, 2004; Trull, 1992; Wiggins & Pincus, 1989). These associations are moderate in magnitude. In addition, there is less consistent evidence that PPD shows weak, negative relationships to the personality dimensions of extraversion and conscientiousness (Saulsman & Page, 2004). Thus there is some empirical support for the notion that PPD lies on a continuum with normal personality. However, the hypothesized inverse relationship between PPD and extraversion—that is, the excessive need for autonomy often described in the clinical and theoretical literature on PPD—has received somewhat weaker empirical support. Evidence bearing on the question of whether PPD lies on a continuum with more extreme paranoid conditions—namely, schizophrenia and delusional disorder—is discussed below.

Is PPD a Schizophrenia-Spectrum or Delusional-Spectrum Disorder?

Family/Genetics Studies. It has long been noted that characteristics such as suspiciousness, referential thinking, and peculiar ideas are prevalent among relatives of schizophrenics (Bleuler, 1922; Kretschmer, 1925; Ray, 1863/1968). The famous Danish Adoption Study of the 1960s (Kety et al., 1968) was the first methodologically sophisticated attempt to study the prevalence of subsyndromal schizophrenialike traits in the adopted biological offspring of schizophrenic probands. The findings of this study supported the existence of a “schizophrenia spectrum”—a continuum of schizophrenialike characteristics in the nonpsychotic relatives of schizophrenic individuals. The description of these nonpsychotic but peculiar relatives of schizophrenics became the basis for the DSM-III/DSM-IV criteria for schizotypal personality disorder and, to a lesser degree, the other Cluster A personality disorders, PPD and schizoid personality disorder (Spitzer, Endicott, & Gibbon, 1979). Considerable subsequent evidence has been found to support the notion that schizotypal personality disorder falls on the schizophrenia spectrum (Siever & Davis, 2004). However, the evidence for PPD and schizoid personality disorder is less conclusive (Asarnow et al., 2001; Nicolson et al., 2003).

Another possibility is that PPD is a delusional spectrum disorder, on a genetic continuum with delusional disorder. The differential diagnosis between PPD and delusional disorder is based on the presence of frank delusions in the latter. However, in practice, this distinction is sometimes difficult to make (see “Differential Diagnosis” above). In fact, individuals

with delusional disorder often have features that are quite similar to those of PPD (e.g., pathological jealousy). Moreover, when under stress, people with PPD can sometimes develop transient delusions (Miller et al., 2001). These considerations suggest the possibility that PPD and delusional disorder share a common genetic diathesis that is different from the genetic diathesis of schizophrenia.

Two recent well-designed studies have addressed the question of whether PPD and other putative schizophrenia spectrum disorders are overrepresented among the relatives of schizophrenic probands. Asarnow and his colleagues (2001) found only slightly and nonsignificantly elevated morbid risks of PPD in the relatives of probands with childhood-onset schizophrenia compared to ADHD and community control groups. In contrast, Nicolson and his colleagues (2003) found large and statistically significant morbid risks of PPD in both child- and adult-onset schizophrenic probands compared to community controls. Both studies supported the hypothesized genetic linkages between schizotypal PD and schizophrenia but found no evidence of a genetic relationship between schizoid PD and schizophrenia. Interestingly, Asarnow and his colleagues (2001) also found elevated rates of avoidant personality disorder in the relatives of probands with childhood-onset schizophrenia compared to community controls. Thus the findings of the above studies offer contradictory support for the notion that PPD is a schizophrenia spectrum disorder.

The hypothesis that PPD is a delusional spectrum disorder has also received some empirical support (Baron et al., 1985; Erlenmeyer-Kimling et al., 1995; Kendler, Gruenberg, & Strauss, 1981; Kendler & Hays, 1981; Kendler, Masterson, et al., 1985; Winokur, 1985). However, many of these studies were hampered by small samples of probands with delusional disorder, and no recent replication of these findings using larger samples has been attempted. Thus the idea that PPD shares genetic linkages with delusional disorder remains an intriguing possibility.

However, a major shortcoming of all of these studies has been the uncertain diagnostic validity of PPD. Because the DSM-IV criteria may not fully represent the PPD phenotype, the ability to determine whether genetic linkages for PPD exist may have been hampered.

Which Environmental Factors Might Contribute to the Development of PPD?

There is relatively little research on environmental factors in the etiology of PPD. However, evidence from one longitudinal study suggests that traumatic childhood events, such as childhood abuse and neglect, may play a role in the development of PPD (Johnson, Cohen, Brown, Smailes, & Bernstein, 1999; Johnson, Smailes, Cohen, Brown, & Bernstein, 2000). Johnson and colleagues (Johnson et al., 1999, 2000) found that children

with substantiated histories of child abuse or neglect were at significantly greater risk for Cluster A personality disorders, including PPD, in young adulthood, even when other risk factors were taken into account. There is a considerable body of literature suggesting that childhood physical abuse is associated with anger and aggression in children and adolescents (Kolko, 2002)—features that are similar to those seen in PPD. Childhood physical abuse may therefore prove to play a specific etiologic role in the development of PPD. However, this hypothesis remains to be tested empirically.

In general, research suggests that both genetic and environmental factors play significant roles in the development of the traits that make up personality disorders (Livesley, Jang, & Vernon, 1998). There is little reason to suspect that PPD would be an exception. For example, an analysis of twin study data revealed that the types of traits that appear to characterize PPD, such as suspiciousness, hostility, oppositionality, and restricted expression of affect, have both strong heritable and environmental components (Livesley et al., 1998).

What Is the Most Accurate Means of Assessing PPD?

Accurate and efficient assessment of PPD is essential in treatment. Without an initial understanding of the client's paranoid perception of the world, a clinician who approaches a PPD client in a manner that may threaten her excessive need for autonomy and privacy may never see her after the first session. The therapeutic environment itself, with its emphasis on trust and disclosure, may be overwhelming to the PPD client. Furthermore, it would not be typical of a PPD client to present with complaints of paranoia (Turkat, Keane, & Thompson-Pope, 1990). Some (or perhaps many) PPD individuals may be falling through the cracks of the mental health system because they do not readily disclose problems with "paranoia" and may initially fail to be identified as possessing significant PPD traits. In addition, PPD individuals who are not delusional may draw less clinical attention than paranoid psychotic individuals who require more frequent and longer hospitalizations, antipsychotic medication, and more consistent follow-up. Furthermore, PPD individuals often drop out of therapy early or do not follow through with treatment plans (Turkat, 1985; Oldham & Skodol, 1994). Therefore, accurate and efficient assessment of significant and relevant PPD features is essential in diagnosis and selection of a treatment modality that takes into account the great difficulty a PPD client may have with disclosure as well as with the therapeutic relationship.

The Paranoid Personality Disorder Features Questionnaire (PPDFQ). The PPDFQ (Ueda, 2002) is a dimensional measure that assesses the six main traits associated with PPD as described by the clinical and theoretical literature on PPD (Cameron, 1943, 1963; Kraepelin, 1921; Kretschmer, 1925; Millon, 1969, 1981; Shapiro, 1965; Sheldon, 1940; Sheldon & Stevens, 1942; Turkat, 1985) as well as the DSM-IV's (APA, 1994)

Associated Features section on PPD: Mistrust/suspiciousness, antagonism, introversion, hypersensitivity, hypervigilance, and rigidity. Thus the PPDFQ appears to assess the fundamental traits underlying PPD in a more balanced and proportionate manner than do the DSM-IV's own PPD diagnostic criteria, which, as has already been noted, overemphasize the cognitive features of PPD. The PPDFQ provides additional diagnostic information (i.e., the presence *and* degree of impairment associated with specific maladaptive variants of the core personality traits of PPD) compared to other self-report questionnaires of PPD currently in use (e.g., MMPI PPD profiles [Merritt, Balogh, & Kok, 1998]).

PPDFQ items for each of these six traits were originally written to represent three modes of expression (i.e., cognitive, affective, and interpersonal/behavioral) of an underlying trait. Many items focused on the participant's assessment of his or her interpersonal relationships and interpersonal situations as well as on his or her interpretations of others' behaviors. For example, the item "I think most other people are hostile" was developed to represent the cognitive mode of antagonism. The item "I make an effort to pick up on every detail of another person's behavior" was written to reflect the behavioral mode of hypervigilance. The item response format was a five-point Likert scale assessing level of agreement (0 = strongly disagree; 1 = disagree; 2 = neutral, neither disagree nor agree; 3 = agree; 4 = strongly agree). The measure was designed to assess functioning over the previous 2 years.

Initial findings on the reliability and validity of the PPDFQ in a normative college student sample ($N = 106$) are encouraging (Usedá, 2002). The test-retest reliability of the six PPDFQ scores over a 6-week interval was good, and the hypothesized relationships between the PPDFQ subscales and the five-factor model of personality as well as Livesley's dimensional model of personality pathology were supported. Further validation of the PPDFQ in clinical samples is clearly indicated. It is hoped that the PPDFQ will prove a useful tool that will improve the validity of dimensional assessments of PPD in future studies.

What Kinds of Treatments Are Likely to Be Most Effective for People With PPD?

The treatment literature on PPD is limited to single-case studies. We could locate no report in the literature of a clinical trial of any treatment for PPD—psychotherapeutic or psychopharmacological. Perhaps one reason for this is that PPD patients are perceived by some clinicians to be untreatable. Clearly, their mistrust, antagonism, introversion, rigidity, and other features present challenges for psychotherapists, given that therapy is usually predicated on one's ability to form a trusting relationship with the therapist and to examine one's own assumptions about oneself, others, and the world.

A thorough discussion of possible treatment approaches to use with PPD patients is beyond the scope of this chapter. However, a few general guidelines

can be suggested. First, the goal of therapy with PPD patients is to help them recognize and accept their own feelings of vulnerability; heighten their feelings of self-worth and reduce their feelings of shame; help them develop a more balanced, trusting view of others; and reduce their reliance on counterproductive self-protective strategies, such as bullying, threatening, and intimidating others and keeping others at a distance. A variety of therapeutic approaches could be employed to accomplish these goals (e.g., cognitive-behavioral, psychodynamic). However, regardless of theoretical orientation, it is essential that the patient's mistrust and self-protective mechanisms be confronted directly in an empathic but clear and straightforward manner.

It is an old adage that you cannot "talk a paranoid person out of his paranoia." However, many individuals with PPD have some capacity to take perspective on their own suspicious cognitions. An approach of "collaborative empiricism" can be very helpful in this regard, in which the therapist invites the patient to join in a process of examining his or her beliefs in the light of objective evidence. Thought records can be used to help the patient identify and modify his or her maladaptive cognitions by weighing the evidence supporting them and contradicting them. In conducting this sort of inquiry, it is important to acknowledge that the patient's suspicions about others often contain a kernel of truth.

For example, one of us (D. P. B.) treated a PPD patient for 3 years using schema therapy (Bernstein, 2005; Young et al., 2003), an integrative form of psychotherapy that combines cognitive, behavioral, psychodynamic object relations, and existential/humanistic approaches. The patient had largely unfounded fears that his coworkers didn't respect him and that his boss was looking for an excuse to fire him. While there was little objective evidence to support his belief that others disrespected him or that his own job was in jeopardy, his workplace environment did appear to be a ruthless one in which senior staff deliberately fostered competition among coworkers, and many of his colleagues worried about their job security. The patient appeared to be relieved that his therapist validated the realistic aspects of his perceptions, rather than treating his beliefs as "crazy." Moreover, recognizing that many of his coworkers might also be feeling insecure about their jobs helped the patient to accept his own feelings of vulnerability. The patient was then able to engage in a process of collaborative empiricism with his therapist, in which they weighed the evidence supporting and contradicting his beliefs. The patient's "evidence" that others disrespected him was based mainly on ambiguous social interactions in which colleagues had appeared unfriendly or hadn't solicited his opinion during meetings. After examining the evidence critically, the patient was able to recognize that his colleagues' behavior could be open to a variety of alternative explanations. Moreover, the patient came to see that his own self-protective tendency to keep others at a distance was probably responsible for some of the unfriendliness he was experiencing. Similarly, his own tendency to keep quiet during meetings for fear of appearing stupid was probably responsible for the fact that others didn't solicit his opinions.

As a behavioral intervention, the therapist recommended that the patient take some of his colleagues out to lunch. After doing so, the patient noticed that his colleagues were more friendly and relaxed around him, contradicting his view that they didn't like him. Shortly thereafter, he received a glowing evaluation from his supervisor. Rather than being relieved, the patient reacted to this good news with mistrust: he couldn't believe that his supervisor could actually hold him in such high regard, and insisted that the supervisor must be secretly criticizing him behind his back! After some discussion, the patient was able to recognize that his reaction was based on a core defectiveness schema—the belief that he was irrevocably flawed, unlikable and unlovable. It was this core belief that was responsible for his frequent perception that others disrespected him. It was also responsible for his conviction that his wife was planning to leave him, despite the abundant evidence that she cared deeply for him and was satisfied with their relationship. Thus, the empathic but persistent confrontation of the patient's mistrustful beliefs and self-defeating coping mechanisms led over time to greater feelings of self-worth and self-acceptance, less mistrustful attitudes, greater ability to “reality test” his own suspicious beliefs, and more effective ways of relating to others.

Summary

PPD is a severe personality disorder that has received far less empirical attention than it deserves, given its prevalence in clinical populations and its negative consequences, such as disruptive behavior and interpersonal distress, unnecessary litigation, psychiatric comorbidity, and violence. In this chapter, we have recommended that the DSM-IV criteria for PPD be substantially revised to increase their validity and have discussed new directions for PPD research and treatment. We hope that this chapter will stimulate researchers and clinicians to pursue these new avenues with the goal of improving understanding and treatment of this difficult disorder.

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4

Schizoid Personality Disorder

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Introduction

Schizoid personality disorder (SCD) is one of the DSM's (American Psychiatric Association [APA], 2000) three "odd/eccentric" cluster personality disorders (along with schizotypal and paranoid personality disorders), which are characterized by phenomenological similarities to schizophrenia. SCD is distinguished from the other two personality disorders in this cluster by the prominence of social, interpersonal, and affective deficits (i.e., negative symptoms) in the absence of psychotic-like cognitive/perceptual distortions (i.e., positive symptoms).

Despite a rich and extensive clinical tradition regarding the schizoid character, its pre-DSM-III (APA, 1980) status was handicapped by considerable

heterogeneity and lack of clearly operationalized diagnostic criteria. The architects of DSM-III attempted to subdivide and sharpen the boundaries of this heterogeneous diagnosis by adding schizotypal and paranoid personality disorders to the “odd” cluster and moving avoidant personality disorder to the “anxious” cluster. The narrowing of the schizoid personality disorder diagnosis that resulted from these changes raised further questions, however, about its diagnostic boundaries and about whether the diagnosis is a valid separate entity. Evidence of extensive criterion overlap as well as comorbidity with other personality disorders (particularly schizotypal and avoidant) has been of particular concern in this regard. The low prevalence rates of DSM-IV-TR (APA, 2000) schizoid personality disorder have further complicated attempts to address these issues empirically. The scarcity of data on DSM-IV-TR schizoid personality disorder has remained a significantly limiting factor in resolving these concerns and in considering the status of SCD as we approach DSM-V.

Historical Background

Bleuler (1924) used the term “schizoid” to describe a tendency to turn inward and away from the external world, the absence of emotional expressiveness, simultaneous contradictory dullness and sensitivity, and pursuit of vague interests. From the 1950s until the mid 1970s, the term was used to describe schizophrenia-like spectrum disorders (Miller, Useda, Trull, Burr, & Minks-Brown, 2001) and encompassed the conceptions that are now delineated into separate Cluster A personality disorders (Wolff, 1998).

Although most historical clinical descriptions of schizoid personality disorder are consistent with DSM-IV-TR criteria, there appear to be some discrepancies. In addition to describing the familiar negative symptoms of schizoid personality disorder outlined in the DSM, many clinicians described the presence of contradictory affective and cognitive states in schizoid personality disorder that were not recognized in DSM-III (some of these features may have been absorbed into other personality disorders, such as schizotypal and avoidant). Kretschmer (1925), for example, differentiated two types of schizoid characteristics—the hyperaesthetic and the anaesthetic—that contrasted inner sensitivity with overt insensitivity. Rather than separating these contrasting behavioral tendencies into two distinct diagnostic groups, as DSM-III did with the schizoid and avoidant categories, Kretschmer suggested that these characteristics may coexist in the same person. Several clinicians have suggested that the schizoid individual's apparent outward insensitivity and indifference often belie marked inner sensitivity. This association highlights a problem with one of the DSM-III-R's (APA, 1987) schizoid personality disorder criteria, which is based on an inferred inner state—subjective indifference

to rejection or criticism. In an effort to eliminate this ambiguity, this criterion was revised in DSM-IV to emphasize a more objective behavioral description and to increase specificity for the context in which the relative lack of emotional expression takes place (APA, 1994).

Another area in which the traditional literature differs from DSM-IV-TR concerns the schizoid's sexuality. Observations by Terry and Rennie (1938) of compulsive masturbation in SCD individuals are consistent with the DSM criterion of absent sexual relationships but not with the absence of sexual desire. Other clinical features either not reported or deemphasized in DSM-IV-TR include autistic thinking, fragmented self-identity, and symptoms of derealization/depersonalization. Numerous clinicians (particularly psychodynamically oriented ones) have stressed the fragmented personality structure and the use of such primitive defensive mechanisms as splitting. Guntrip (1969) and other clinicians reported the frequent presence of depersonalization, derealization, absence of feeling, and disembodiment in SCD individuals. The psychoanalytic literature also makes extensive references to the "primitive character structure" of the schizoid and in particular to an identity disturbance that may contrast with the more dramatic and affectively charged identity disturbance reported in borderline personality disorder patients. Bleuler (1954) and other clinicians also emphasized the phenomenological similarities between schizoid personality and schizophrenia, which anticipated current questions concerning the relationship of all three Cluster A diagnoses to schizophrenia.

The Diagnosis of Schizoid Personality Disorder

Daryl is a 28-year-old male who lives in an apartment above his parents' garage. Because he tends to avoid interacting with his family, his parents felt that he would feel happy about the move to his own space. He appeared indifferent to the change. Daryl works as a computer programmer in a small firm and is in danger of losing his job. His supervisor is becoming frustrated because Daryl seems indifferent to feedback or criticism. His coworkers describe him as a "loner" and report being disconcerted by his apparent lack of emotion. Daryl's mother complains that he never smiles or frowns at anything. When she tries to include him in family activities, he appears cold and detached. Daryl has little interest in making friends and has never been in a romantic relationship. He has never been excited by the prospect of sexual intercourse. Although he spends most of his free time building models of airplanes, he does not overtly enjoy this activity. When complimented about his airplanes, Daryl appears not to notice or to care.

Prevalence

It has been noted that schizoid personality is among the least frequently observed of the personality disorders (Miller et al., 2001). This low prevalence has likely contributed to the dearth of information surrounding the demographic characteristics of the disorder. DSM-IV-TR notes that SCD may be first apparent in late childhood. Because this is a period in which cooperative play is in ascendance, the social isolation associated with SCD becomes more salient. In addition, the disorder is also more common in men than in women (APA, 2000). See Table 4.1 for the DSM-IV-TR criteria for SCD.

The DSM-IV-TR does not provide data regarding SCD prevalence. This omission may be due to the uncommon appearance of schizoid individuals in clinical settings, or to the fact that current conceptions of SCD identify only the most severe cases of the disorder (Wolff, 1998). Considerable variation in the prevalence rates is apparent across clinical settings. Estimates of the prevalence of SCD in the general population based on community surveys (Reich, Yates, & Nduaguba, 1989), nonpsychiatric controls (Drake & Vaillant, 1985), and relatives of psychiatric patients (Zimmerman & Coryell, 1990) have ranged from 0.5% to 7%.

Prevalence rates vary considerably depending on the DSM version. Studies using DSM-III-R criteria generally report higher prevalence rates than those using DSM-III criteria. For example, Morey and Heumann

Table 4.1 DSM-IV-TR criteria for diagnosing schizoid personality disorder

<i>Criteria</i>	<i>Description</i>
A.	A pervasive pattern of detachment from social relationships and a restricted range of expression of emotions in interpersonal settings, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following.
(1)	Neither desires nor enjoys close relationships, including being part of a family
(2)	Almost always chooses solitary activities
(3)	Has little, if any, interest in having sexual experiences with another person
(4)	Takes pleasure in few, if any, activities
(5)	Lacks close friends or confidants other than first-degree relatives
(6)	Appears indifferent to the praise or criticism of others
(7)	Behavior or appearance that is odd, eccentric, or peculiar
B.	Does not occur exclusively during the course of Schizophrenia, a Mood Disorder With Psychotic Features, another Psychotic Disorder, or a Pervasive Developmental Disorder and is not due to the direct physiological effects of a general medical condition.

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Note. If criteria are met prior to the onset of Schizophrenia, add "Premorbid," e.g., "Schizoid Personality Disorder (Premorbid)."

(1988) compared DSM-III with DSM-III-R SCD diagnoses in the same group of 291 personality-disordered patients, reporting a substantially higher prevalence using DSM-III-R criteria (1.4% versus 11.0%). These differences reflect changes incorporated into DSM-III-R that provided a richer and potentially more sensitive description and attempted to reduce the risk of oversimplification (Akhtar, 1987). For example, the use of a polythetic system that does not require any single feature added further flexibility and may have increased the sensitivity of the diagnosis.

Based on DSM-IV criteria, results from an epidemiological catchment area study found prevalence rates between 0.7% and 0.9% (Samuels et al., 2002). Prevalence rates are also dependent on classification systems. For example, a Swedish community sample study utilizing the International Classification of Diseases (ICD-10; World Health Organization, 1992) system found SCD prevalence to be as high as 4.5% (Ekselius, Tillfors, Furmark, & Fredrikson, 2001).

Psychometric Properties

The internal consistency of measures of schizoid personality disorder is poor; a recent study using the Diagnostic Interview for DSM-IV Personality Disorders (DIPD-IV) reported a Cronbach's alpha coefficient of .47 and mean intercritereon correlation of .11 (Grilo et al., 2001). By a large margin (histrionic PD being the next lowest, $\alpha = .64$), this is the poorest internal consistency of any personality disorder (Grilo et al., 2001). Other studies have reported slightly higher levels of internal consistency, with alpha ranging between .63 (Farmer & Chapman, 2002) and .68 (Ottosson, Ekselius, Grann, & Kullgren, 2002). Nevertheless, schizoid personality disorder had the lowest consistency of any of the personality disorders in each of these studies.

Because of the low base rate of SCD, studies aiming to determine sensitivity, specificity, and predictive power of individual criteria have been marked by an insufficient sample size for conducting appropriate analyses (Farmer & Chapman, 2002). Some past research has examined criterion performance for the DSM-III-R conceptualization of SCD. (Due to criterion changes in the DSM-IV-TR, these data will be reported only for those items which have remained constant throughout subsequent revisions.) The results of three studies examining the performance of the DSM-III-R criteria (Millon & Tringone, 1989 [$N = 26$]; Morey & Heumann, 1988 [$N = 32$]; Freiman & Widiger, 1989 [$N = 8$]) were divergent, although some trends were apparent. Of the criteria reflecting impaired capacity for interpersonal relationships, only "neither desires nor enjoys close relationships . . ." demonstrated high sensitivity (.62-.87) and specificity (.86-.93) and was considered prototypical (78/100) by clinicians. The criterion "almost always chooses solitary activities" showed high sensitivity

(.73–.88) and was judged prototypical (76/100) but had moderate specificity (.78–.88). The criterion “lacks close friends or confidants . . .” also demonstrated high sensitivity (.69–.72), but it had the lowest specificity (.55–.68) of all the schizoid criteria. The low specificity of criteria indicates that these features are shared with other personality disorders.

In contrast to the criteria referring to interpersonal relationships, the criteria “has little, if any, desire to have sexual experiences . . .” and “appears indifferent to the praise and criticism of others” demonstrated low sensitivity (.62–.75; .00–.34), mid to low prototypicality (71/100; 55/100), but high specificity (.78–1; .93–.95). These criteria may define a subgroup of patients dominated by deficits in both affective responsivity and capacity for pleasure. It was concluded that retaining these criteria in subsequent versions of the DSM, despite their low sensitivity, might be justified by their possible ability to identify a subset of atypical cases. There are currently no data concerning the DSM-IV-TR criteria “takes pleasure in few, if any, activities” and “behavior or appearance that is odd, eccentric, or peculiar.”

Compatibility of DSM and ICD-10 Criteria

The revisions to SCD introduced in DSM-III-R and further modified in DSM-IV have not produced satisfactory levels of agreement between DSM and ICD-10. A study examining prevalence rates in a Swedish community sample and comparing these rates between ICD-10 and DSM-IV found that differences were most striking for the classification of SCD (ICD-10 = 4.5%; DSM-IV = 0.9%; Ekselius et al., 2001). The kappa was .32, which is a low level of agreement in view of the fact that the next lowest value was .50 for antisocial/dyssocial personality (Ekselius et al., 2001). This conclusion is further supported by a study examining the concordance of personality disorders between DSM-IV and ICD-10, which found schizoid to exhibit the poorest agreement between systems (kappa = .37; Ottosson et al., 2002). This discordance is attributable to arbitrary thresholds (Ottosson et al., 2002) and additional ICD-10 criteria that do not have corresponding DSM-IV items (e.g. ., “marked difficulty in recognizing and adhering to social convention, resulting in eccentricity of behavior” [World Health Organization, 1992, p. F60.1]).

Comorbidity

Rates of comorbidity of SCD with other personality disorders are listed in Table 4.2. The highest co-occurrence is with schizotypal personality disorder, perhaps because of the high overlap between the two criteria sets

Table 4.2 Comorbidity of schizoid personality disorder with other Axis II disorders

	<i>PRN</i>	<i>SZT</i>	<i>ATS</i>	<i>BDL</i>	<i>HST</i>	<i>NAR</i>	<i>AVD</i>	<i>DPD</i>	<i>OCP</i>
<i>Percentage of criterion group receiving schizoid diagnosis</i>									
Dahl (1986)	0	80	40	20	20	0	60	0	0
Morey (1988)	47	38	3	19	9	28	53	19	16
Freiman & Widiger (1989)	62	62	25	38	0	38	88	0	0
Skodol et al. (1988)	40	60	0	60	0	20	80	20	20
Millon & Tringone (1989)	4	27	0	0	0	8	23	15	8
Farmer & Chapman (2002)	5	27	0	8	0	0	10	–	3

Note. Key to personality disorder abbreviations: PRN, paranoid; SZT, schizotypal, ATS, antisocial; BDL, borderline; HST, histrionic; NAR, narcissistic; AVD, avoidant; DPD, dependent; OCP, obsessive compulsive. The blank for DPD on the Farmer and Chapman (2002) study is due to an insufficient sample size.

(e.g., social isolation, restricted affect). Avoidant personality disorder also demonstrated high comorbidity with SCD. Lesser degrees of comorbidity were demonstrated with paranoid, antisocial, and borderline personality disorders. Although SCD is sometimes considered a member of the schizophrenia spectrum, sharing some overlap with other Cluster A disorders, it has also been evaluated in the context of Asperger's syndrome (Wolff, 1998). The sections that follow will discuss SCD's overlap with avoidant personality disorder, its relationship with Asperger's disorder, and the role of SCD in the schizophrenia spectrum.

Schizoid and Avoidant Personality Disorders

Kretschmer (1925) distinguished between two disorders: anaesthetic (withdrawn due to indifference) and hyperaesthetic (withdrawn due to an overstimulation of outside influences). This distinction, which parallels the DSM-IV-TR distinction between schizoid and avoidant personality types, has engendered numerous controversies (Miller et al., 2001). Despite their phenotypic similarities, avoidant personality is listed as a Cluster C anxious disorder, whereas schizoid is in Cluster A, the odd and eccentric group.

Some studies suggest that SCD can be distinguished from avoidant personality disorder (Trull, Widiger, & Frances, 1987) on the basis of intimacy

needs and sensitivity to rejection. However, contrasting historical descriptions suggesting that sensitivity and insensitivity coexist in schizoid personality disorder and more recent studies suggesting that anxiety and other clinical symptoms occur in both disorders (Overholser, 1989) call for additional investigation.

Although some researchers have argued that the etiology of the social withdrawal symptom presentation is sufficient to draw a line between SCD and avoidant personality disorder (see Chapter 10), the research literature has demonstrated poor discriminant validity between the two disorders. A recent study revealed that of those persons given a diagnosis of SCD, 40% met criteria for avoidant personality disorder (Farmer & Chapman, 2002). Another study examining comorbidity of personality disorders found that schizoid and avoidant personality disorders were correlated at a significant rate ($r = .51$; Solano & De Chavez, 2000). In addition, personality measures have demonstrated difficulty in distinguishing between the two disorders. An analysis of discriminant validity utilizing three measures, the International Personality Disorder Examination (Loranger, Susman, Oldham, & Russakoff, 1987), the Personality Diagnostic Questionnaire (Hyler & Rieder, 1994), and the Millon Clinical Multiaxial Inventory (Millon, Millon, & Davis, 1994), found that avoidant and schizoid personality disorders were not clearly distinguishable from each other due to high intercorrelations (Blackburn, Donnelly, Logan, & Renwick, 2004).

Schizoid and Asperger's Syndrome

A recent body of literature points to a possible link between SCD and Asperger's syndrome. There is significant overlap in the phenomenological criteria for both disorders: solitary activity, lack of empathy, emotional detachment, increased sensitivity, paranoid ideation, unusual styles of communication, and rigidity of mental set (Wolff, 1998). In a study of parents of autistic children, Wolff (1998) found a heightened level of schizoid personality traits in the parents compared with matched control pairs. Both disorders additionally share nonverbal behavior deficits that often interfere with interpersonal relationships.

Despite these similarities, researchers have noted differences between the two disorders. Wolff (1998) asked, "If there is an overlap between Asperger's and SCD, how is it possible that autism and schizophrenia rarely aggregate in the same families, or occur so rarely in the same person?" (p. 124). The clinical presentation of the two disorders is quite different. Asperger's disorder, or autism, becomes evident between 2 and 3 years of age when imaginative play is in ascendance. In contrast, schizoid children do not appear to be lacking in fantasy proneness; to the contrary, schizoids sometimes appear to have trouble distinguishing make-believe from reality (Wolff, 1998).

Whereas autism is usually apparent in early childhood, schizoid traits are usually first apparent in middle childhood, when the development of social skills and such activities as team sports are more common. Although the disorders share similar symptoms, it is likely that they stem from separate etiologies.

Dimensions and Boundaries in the Schizophrenia Spectrum

There is considerable item overlap and comorbidity between SCD and schizotypal personality disorder. SCD shares deficit symptoms with schizotypal personality disorder, specifically those contributing to an asociality due to deficits in interpersonal skills and affect expression (Siever, Kalus, & Keefe, 1993). One group of researchers reported that schizoid personality correlated highly ($r = .65$) with schizotypal personality (Solano & De Chavez, 2000). Other researchers found that of those persons given a diagnosis of SCD, 80% met criteria for schizotypal personality disorder (Farmer & Chapman, 2002). A longitudinal study following 141 schizoid adolescents discovered that three fourths of this sample met DSM-III criteria for schizotypal personality disorder (Wolff, 1991). Although SCD shares several social deficit symptoms with schizotypal personality disorder, the two disorders can be distinguished by the absence of positive symptoms (e.g., magical thinking) in schizoid personality disorder.

Because elevated rates of all three disorders in Cluster A are found in the families of schizophrenic patients relative to the general population, all three disorders may reflect a shared genetic predisposition (Miller et al., 2001). One line of studies, examining the history of mental illness in the relatives of schizophrenic individuals, suggests that the boundaries of schizophrenia-related disorders may extend beyond schizotypal personality disorder to include schizoid and paranoid personality disorders (Baron et al., 1985; Gunderson, Siever, & Spaulding, 1983). Cluster A disorders are often seen in the biological relatives of patients with schizophrenia. In a controlled family study of inpatients with schizophrenia, it was found that Cluster A personality disorders occurred at a rate of 2.1% in probands in comparison to a rate of 0.3% in matched control families (Maier, Lichtermann, Minges, & Heun, 1994). In addition, the premorbid histories of individuals with schizophrenia often include paranoid, schizoid, and schizotypal personality disorder diagnoses. Furthermore, the high-risk offspring of schizophrenic patients followed longitudinally are later distinguishable from normal controls only by the prevalence of all Cluster A disorders, not by each separately (Erlenmeyer-Kimling et al., 1995). A retrospective study in which family members of schizophrenic patients were interviewed using the Structured

Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II; First, Gibbon, Spitzer, Williams, & Benjamin, 1997) found that 27.5% of the sample met criteria for premorbid SCD (Solano & De Chavez, 2000). Nevertheless, retrospective designs are vulnerable to hindsight bias, which may adversely affect the validity of reports. A prospective study is necessary to replicate and extend these findings.

In contrast, other studies suggest that a relationship with schizophrenia extends to schizotypal personality disorder but not to SCD (Baron et al., 1985). For example, Maier, Lichtermann, Minges, and Heun (1994) examined psychiatric illnesses in the relatives of schizophrenic patients. They found that of the Cluster A disorders, SCD occurred the least frequently in probands (between 0.3% and 0.7%). Given that schizotypal personality disorder, another Cluster A disorder believed to overlap etiologically with schizophrenia, occurred in 2.1% of relatives, it seems likely that the relationship between SCD and schizophrenia is tenuous at best.

As noted, the historical definition of SCD may add to the confusion surrounding the methodology of studies aimed at determining the boundaries of SCD. Some studies examining the genetic boundaries of the schizophrenia spectrum may also have been confounded by a failure to distinguish between SCD and schizotypal personality disorder. Evidence that negative rather than positive symptoms are associated with increased heritability in schizophrenia (Dworkin & Lenzenweger, 1984) would theoretically support a familial/genetic link between schizophrenia and SCD, because the latter is largely expressed through mild negative symptoms.

Assessment

Although there are no measures designed to explicitly assess SCD, a number of comprehensive structured interviews include scales assessing the disorder. For example, the SCID-II (First et al., 1997) is a widely used instrument in the assessment of personality disorders. Interrater reliability estimates for SCD using this measure ($\kappa = .90$ for categorical assessments and intraclass correlation = .93 for dimensional assessments) have been formed (Maffei et al., 1997). A similar interview, the Structured Interview for DSM-IV Personality Disorders (SIDP-IV; Pfohl, Blum, & Zimmerman, 2001), also demonstrated good psychometric properties for SCD. For example, a recent study revealed that the SIDP-IV found higher levels of SCD in familial-high-risk siblings of schizophrenia patients versus normal controls (Auther, 2003).

In addition, there are several self-report questionnaires that assess SCD. The DSM-IV and ICD-10 Personality Questionnaire (DIP-Q) is a self-report measure designed to measure DSM-IV and ICD-10 personality disorders using 140 true/false questions (Ottooson, Grann, & Kullgren, 2000). Although this measure is useful because it offers diagnoses based

on both diagnostic systems, a study examining the test-retest reliability reported a kappa value of only .42 for SCD (Ottosson, Grann, & Kullgren, 2000). In terms of internal consistency, the study reported Cronbach's alpha statistics of .68 and .69 for the DSM-IV and ICD-10, respectively. More research is necessary to evaluate the validity of this instrument for assessing SCD.

Another potentially useful assessment tool focuses on a specific symptom dimension of SCD. Chapman, Chapman, and Raulin (1976) developed the Social Anhedonia Scale (SocAnh), a 40-item self-report measure that gauges level of indifference to other people. A high score on the scale, which has an internal consistency between .80 and .90 (Chapman et al., 1976), has been found to correlate with schizophrenia spectrum disorders (Kwapil, 1998). Nevertheless, there are no known data concerning this scale's ability to differentiate among Cluster A disorders.

Treatment

There are few reported treatments of SCD, partly because such patients are theoretically unlikely to request treatment; aloof and "loner" behavior tendencies that characterize the disorder also would probably make the seeking of treatment unlikely (Stone, 1993). In addition, clinical reports indicate that few schizoid individuals see indifference to interpersonal contact and avoidance of others as problematic (Miller et al., 2001). When schizoid persons do seek help, it is rarely for prolonged periods of time (Stone, 1993). In fact, it is often a comorbid Axis I disorder (Miller et al., 2001), an acute stress, familial pressure, or a shift in life circumstances (Siever & Kendler, 1987) that leads the schizoid individual to appear in mental health settings.

There are no well-controlled studies of treatment efficacy for SCD. However, a few researchers have suggested target areas for treatment pending further research. For example, Beck and his colleagues (1990) suggest increasing social contact, learning skills useful for identifying emotions in the self as well as others, and using group therapy as a tool for practicing role playing and modeling appropriate behavior. Major changes and modifications of character structure are considered unlikely, probably because of theorized constitutionally determined limitations in affective response and expression (Millon, 1981). Therapy should probably be aimed at achieving modest reductions in social isolation and at promoting more effective adjustment to new circumstances. It is important to note that these therapeutic techniques have not been tested in controlled trials. The role of drug therapy for SCD remains an open question.

SCD seems to persist across the lifetime. A longitudinal study following a sample of schizoid children and comparing them with demographically matched normal controls demonstrated an increase in treatment for psychiatric disorders and a decrease in occupational functioning and rate of involvement in

intimate relationships (Wolff, 1991). However, the course of illness is not entirely bleak; rates of independent living and employment for these individuals were not different from those of control subjects (Wolff, 1991).

Toward DSM-V

The current DSM classification system relies on an approach in which criteria are counted and then held in comparison to a cutoff value. For such personality disorders as SCD, in which the signs and symptoms appear to be highly subjective, this approach may be particularly problematic. Because a number of symptoms are vague and subjective, the threshold for a criterion is inevitably somewhat arbitrary. For example, the wording of criterion 2 (“almost always . . .”) and criterion 4 (“takes pleasure in few . . .”) leaves considerable room for clinical interpretation. In addition, a number of the criteria for SCD, such as criterion 6 (“appears indifferent . . .”), rely heavily on behavioral observations (see Table 4.1). These criteria leave room for errors based on the context of assessment and biases resulting from the rater’s experience.

Future research using taxometric methods (Meehl, 1995) should determine whether SCD is qualitatively or quantitatively different from normality. These methods estimate accurate base rates, locate optimal cuts on indicators, and provide a classification of individuals as accurate as indicators will permit. They also help determine whether a disorder, such as SCD, is underpinned by a taxon (category in nature) rather than a dimension. If taxometric methods prove SCD to be qualitatively distinct, then future conceptions of the disorder should focus on identifying a discrete biological etiology, such as a dominant gene, a configural set of genes, or prenatal or perinatal insult. Such a finding could also imply that SCD is a member of the schizophrenia spectrum, which appears to be qualitatively distinct from normality. This state of affairs may seem paradoxical, given that the schizophrenia spectrum is marked by dimensional variation. Nevertheless, it’s useful to recall that within a taxon one can find dimensional variation attributable to polygenic factors, environmental influences, and the like. Taxometric methods could also help to establish whether SCD differs in kind or degree from avoidant personality disorder, a condition with which it overlaps substantially.

Alternatively, taxometric methods could suggest that SCD is underpinned by a latent dimension rather than a taxon. A dimensional approach to conceptualizing SCD has been gaining increased support (Matthews, Saklofske, Costa, Deary, & Zeidner, 1998). Dimensional models treat personality as a multivariate space and view personality dysfunction as extreme constellations of this space. One example is offered by researchers working to translate personality disorders into a five-factor model (FFM; Widiger, Trull, Clarkin, Sanderson, & Costa, 1994). Widiger and his colleagues (1994) presented promising data for

the use of the FFM in conceptualizing SCD. They found that low levels of extraversion, low levels of neuroticism, especially on facets such as self-consciousness, and low levels of openness to experience best characterized SCD. A follow-up study (Trull & Widiger, 1997) provided further validity for this conceptualization by demonstrating that SCD was negatively correlated with measures of extraversion. A recent study determined that once comorbid symptomatology is removed from Cluster A disorders, SCD is characterized by low levels of such extraversion facets as positive emotions, warmth, and gregariousness (Trull, Widiger, & Burr, 2001).

A number of other dimensional models show promise for further conceptions of SCD. One criticism that surrounds the five-factor model is that it is based on personality constructs described by laypersons and omits complex personality features seen in clinical settings (Shedler & Westen, 2004). One alternative dimensional model has been derived from a card-sorting method: the Shedler-Westen Assessment Procedure-200 (SWAP-200). Researchers interviewed a large sample of psychiatrists and clinical psychologists who characterized specific personality disorders seen in their clinical work using a set of 200 personality-descriptive statements (Shedler & Westen, 2004). A Q (within-subject) factor analysis of these data yielded 12 dimensions: schizoid orientation, psychological health, psychopathy, hostility, narcissism, emotion dysregulation, dysphoria, obsessionality, thought disorder, oedipal conflict, dissociation, and sexual conflict statements (Shedler & Westen, 2004). The schizoid orientation dimension (Shedler & Westen, 2004) may be particularly suitable for describing and classifying SCD. For example, the highest factor loading (.58)—“appears to have little need for human contact; is genuinely indifferent to the presence of others” (p. 1749)—bears some similarities to several DSM-IV-TR criteria for SCD, but the next-highest loading (.57)—“tends to think in concrete terms and interpret things in overly literal ways; has limited ability to appreciate metaphor, analogy, or nuance” (p. 1749)—offers a new clinical perspective on SCD. By highlighting clinically relevant facets of the disorder, the SWAP-200 offers to enrich clinical description and potentially add criteria that differentiate SCD from schizotypal and avoidant personality disorders.

Conclusions

Given the dearth of empirical information, many aspects of SPD remain poorly understood. Despite a rich clinical history, appropriate DSM placement of the diagnosis remains unclear. Information on prevalence is inconsistent at best, and more discriminating diagnostic features are sorely needed. Most DSM-IV-TR SCD criteria with high specificity demonstrate unsatisfactory sensitivity, and those with high sensitivity generally have low specificity. There are no good treatment outcome data, and information on

the course of illness is limited. Distinguishing SCD from other phenomenologically similar personality disorders in Cluster A and from avoidant personality disorder remains a key concern. The question of whether SCD is part of the schizophrenia spectrum disorders requires additional investigation. Future research should incorporate biological markers (e.g., deviant smooth eye tracking, attentional deficits) that have been observed in schizotypal personality disorder and schizophrenia (Siever et al., 1993). In addition, family history studies and designs including less seriously affected individuals are necessary to determine the extent of genetic overlap between SCD and both Asperger's disorder and schizophrenia (Wolff, 1998).

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