Psychological dimensions of antisocial personality disorder as predictors of psychotherapy noncompletion among sexual offenders

Sébastien Larochelle, PhD
Louis Diguer, PhD
Olivier Laverdière, PhD
Dominick Gamache, MPs
Paul Samuel Greenman, PhD
Jean Descôteaux, PhD

The goal of this study was to examine whether psychological dimensions of antisocial personality disorder (ASPD), as conceptualized by Kernberg (1992), could predict psychotherapy noncompletion (PNC) among 50 men found guilty of sexual abuse of children. All participants began a 65-week, court-mandated course of cognitive-behavioral psychotherapy, which 20 (40%) of them did not complete. Pretherapy personality was assessed with the Structured Clinical Interview for DSM Axis II Disorders (First, Spitzer, Gibbon, Williams, & Benjamin, 1997), the Personality Organization Diagnostic Form (Diguer, Normandin, & Hébert, 2001), and Blatt and colleagues’ (Blatt, Bers, & Saffer, 1993; Blatt, Chevron, Quinlan, Saffer, & Wein, 1988) scales of mental representations, as well as the State-Trait Anger Expression Inventory (Spielberger, 1988). A discriminant function analysis, which explained 46% of the total variance, showed that descriptive (antisocial and narcissistic personality disorders), psychological (primitive defense mechanisms, identity diffusion and self-representations), and demographic (work status...
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and income) variables predicted PNC. The classification analysis correctly classified 78% of the participants. These findings support the hypothesis that psychological dimensions of ASPD help explain PNC among sexual offenders. The authors discuss the theoretical and clinical implications of these results. (Bulletin of the Menninger Clinic, 74[1], 1-28)

Decades of research on child sexual abuse clearly underscore the magnitude of the problem. According to Gorey and Leslie (1997), 15% of North American women and 7% of North American men endure sexual abuse before the age of 18. Many specialized psychotherapy programs for sexual offenders have been developed, most likely due to increased awareness of the enormous psychological impact of sexual assault on victims (Berliner & Elliott, 2002; Kolko, 2002) and of the financial burden that it places on society (Prentky & Burgess, 1990). Nevertheless, skepticism of proposed treatments for this population abound (Hanson et al., 2002; Losel & Schmucker, 2005; Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005), rooted in part in the fact that 15% to 86% of male sexual offenders who begin a therapy program do not complete it (Olver & Wong, 2009; Shaw, Herkov, & Greer, 1995). Considering that therapy noncompleters are more likely to re-offend than are completers (Edwards et al., 2005; Hanson et al., 2002; Seager, Jellicoe, & Dhaliwal, 2004), it is essential to identify the characteristics that affect psychotherapy noncompletion (PNC) among sexual offenders (Lussier & Proulx, 1998; McConaghy, 1999) for two main reasons. First, greater understanding of these characteristics would allow for the tailoring of treatments for sexual offenders and for the implementation of specific techniques aimed at increasing the proportion of individuals who complete psychotherapy. Second, on a more general level, the identification of personality dimensions and related characteristics might increase our knowledge and awareness of the risk factors associated not only with noncompletion but also, potentially, with re-offense. In pursuit of this aim, the relation among sexual offenders’ demographic characteristics, personality variables, and psychotherapy noncompletion has been investigated in several studies. However, the picture that emerges from these studies is far from clear. The
objective of the current study was therefore to go a step further by investigating several dimensions of the psychological functioning of sexual offenders within a multivariate framework, in addition to the widely studied demographic characteristics. These dimensions were selected from a theoretically coherent model of personality rooted in clinical research and experience.

Demographic Characteristics of Sexual Offenders and PNC
The research on the demographic characteristics of sexual offenders illustrates the troubling lack of consensus in the literature. For example, some investigators (e.g., Kraemer, Salisbury, & Spielman, 1998) have found that noncompleters are older than completers, whereas others (Geer, Becker, Gray, & Krauss, 2001; Langevin, 2006; Pelissier, 2007) have detected no such association between age and PNC. Similarly, according to Craissati and Beech (2001), Miner and Dwyer (1995), and Shaw and colleagues (1995), unmarried male sexual offenders are more likely to terminate psychotherapy prematurely than are married ones. However, other researchers (e.g., Geer et al., 2001; Langevin, 2006) have found that marital status does not seem to affect PNC.

There are also conflicting findings concerning the impact of education, employment status, and criminal history on PNC among sexual offenders. For instance, several investigators have uncovered a negative association between number of years of education and PNC (Geer et al., 2001; Pelissier, 2007); a sizable number of others (Gully, Mitchell, Butter, & Harwood, 1990; Langevin, 2006; Moore, Bergman, & Knox, 1999) have not. In a similar vein, work status predicted PNC in Browne and colleagues’ (1998) study but not in the one conducted by Abel and associates (1988). Similarly, most researchers assert that criminal history predicts PNC (Edwards et al., 2005; Langevin, 2006; Nunes & Cortoni, 2008; Pelissier, 2007), although Gully and colleagues (1990) did not observe a link between criminal history and PNC.

Personality Traits of Sexual Offenders and PNC
Results on the personality characteristics and history of sexual abuse among offenders are also quite contradictory. Gully’s research group detected a negative association between social skills
and PNC among sexual offenders (Gully et al., 1990), but Browne’s did not (Browne et al., 1998). Motivation to participate in therapy was also negatively correlated with PNC in two well-known studies (Beyko & Wong, 2005; Pelissier, 2007), but not in another (Abel et al., 1988). Sexual offenders who were themselves victims of sexual abuse as children were more likely to drop out of therapy for one reason or another in two studies (Craissati & Beech, 2001; Geer et al., 2001), but not in Browne and colleague’s (1998) sample. According to Miner and Dwyer (1995), participants’ low self-esteem correlates with PNC, whereas it does not according to Browne et al. (1998). Finally, strong denial, minimization, and rationalization of sexual offense predict PNC according to some researchers (Beyko & Wong, 2005; Edwards et al., 2005; Pelissier, 2007), but not according to Craissati and Beech (2001) and Langevin (2006). These perplexing results have rendered it difficult to identify specific predictors of PNC among sexual offenders.

Antisocial Personality Disorder and PNC
Certain characteristics of antisocial personality disorder (ASPD) have emerged from the confusion. Diagnosis of ASPD has been associated with PNC in most studies (Edwards et al., 2005; Langevin, 2006; Olver & Wong, 2009; Nunes & Cortoni, 2008). Although Shaw et al. (1995) did not replicate this finding, they attributed their results to the high prevalence of ASPD in their sample. Thus, there is evidence of a link between ASPD and PNC. Some characteristics of ASPD, such as a strong tendency to lie (Miner & Dwyer, 1995), to act aggressively during psychotherapy sessions (Beyko & Wong, 2005; Browne et al., 1998), and passive-aggressive or narcissistic personality traits (Rodrigue, 2000), are positively correlated with PNC.

In sum, research on PNC has produced varied and inconclusive results, particularly in terms of demographic and personality variables. The only predictors that have been consistently and significantly related to PNC seem to be ASPD and some of its features. However, ASPD is a large, descriptive category that does not include specific information about psychological dimensions or functioning.
The goal of this article is therefore to examine which of the psychological dimensions of ASPD are the best predictors of PNC. Many authors, such as Cleckley (1941), Hare (1991; Hare & Hart, 1995), Kernberg (1992), Millon and Davis (1998), and Stone (1993), have proposed conceptualizations of ASPD that define different psychological dimensions of this complex condition. We based our choice of predictors on Kernberg’s work because it includes the dimensions of ASPD that may represent a serious risk of PNC. Specifically, Kernberg’s (1992) model defines ASPD as the most severe form of narcissistic pathology within borderline personality organization. Its main psychological dimensions are identity diffusion, primitive defense mechanisms (e.g., splitting, denial, omnipotent control, primitive idealization, primitive devaluation, and primitive projection), and impaired reality testing in certain socio-relational contexts. In addition, ASPD is characterized by grandiose self-representations, aggressively infiltrated mental representations, and a lack of ethical and moral values. All of this facilitates the expression of aggression. The interpersonal relationships of individuals with ASPD reflect the pathology of aggression and mental representations, as they are characterized by total dishonesty, manipulation, exploitation, aggression, devaluation of others, and contemptuous reactions. ASPD appears to hinder the development of a therapeutic relationship and would, in theory, place patients with ASPD at considerable risk of PNC (Kernberg, 1992).

Hypotheses

Inspired by Kernberg’s work, we wished to examine how the following psychological dimensions of ASPD, thought to influence the course of the therapeutic relationship, might bear upon the problem of PNC: (1) identity diffusion, (2) primitive defense mechanisms, (3) reality testing, (4) mental representations, and (5) aggression. We expected that (1) a greater proportion of noncompleters would be diagnosed with ASPD than would completers; (2) noncompleters would present more severe identity diffusion, demonstrate the use of more primitive defense mechanisms, and show more reality testing losses than would completers; (3) noncompleters would exhibit more severe impairments in mental representation than would
completers; (4) noncompleters would show more aggression than would completers; and (5) these differences between completers and noncompleters would predict PNC.

Method

Participants
The sample consisted of 50 men found guilty of sexual offenses toward children. All participants were French-speaking White men. In all cases, the psychotherapy program (see description below) was court-ordered. Participants were recruited at an outpatient clinic of the Centre Hospitalier Robert-Giffard (CHRG) in Quebec City, Canada. They were solicited one to four weeks before therapy began; approximately 80% agreed to participate. This study was approved by the hospital and Laval University’s ethics review board, and written informed consent was obtained from participants after the study had been fully explained.

Thirty participants (60%) completed the psychotherapy. Completers were those who finished the psychotherapy program and successfully met all of the program goals established by the therapy team. Twenty participants (40%) did not complete therapy. Among these 20 participants, 6 (30%) dropped out, 4 (20%) terminated prematurely because they were reconvicted of sexual or nonsexual offenses during treatment or because they failed to comply with the conditions of their probation order while in psychotherapy, and 10 (50%) were expelled by the therapeutic team for a lack of motivation, denial of their sexual pathology, too many absences, failure to attain psychotherapy objectives, or incapacity to respect psychotherapy conditions (e.g., behaved aggressively during sessions or engaged in problematic use of drugs or alcohol). Demographic and clinical characteristics of completer and noncompleter groups are presented in Table 1.

Psychotherapy Program
The psychotherapy program at CHRG is 65 weeks long. It is based on the cognitive-behavioral approach and requires sexual offenders to participate in two group therapy sessions per week, each of which lasts two to three hours. In addition, if needed, some men
can have individual, family, or conjugal therapy sessions. The objectives of the psychotherapy are to induce change in the sexual offenders’ belief system, to eliminate their inappropriate sexual behaviors, and to increase their appropriate ones. In order to attain these objectives, several techniques are used: (1) cognitive restructuring, (2) social skills training (McGrath, Hoke, & Vojtimek, 1998), (3) empathy training (Grossman, Martis, & Fichtner, 1999), and (4) relapse prevention (Grossman et al., 1999). In addition, other techniques are used in order to eliminate deviant sexual arousal, such as (1) aversion therapy (Rice, Harris, & Quinsey, 1990), (2) covert sensitization (Grossman et al., 1999), (3) relaxation (McConaghy, Blaszczynski, & Kidson, 1988), and (4) masturbatory reconditioning (Grossman et al., 1999).

**Measures**

**ASPD.** The Structured Clinical Interview for DSM Axis-II Disorders (SCID-II; First, Spitzer, Gibbon, Williams, & Benjamin, 1997) was used as a measure of ASPD at the descriptive or behavioral level. Research reports that the SCID-II has adequate interrater reliability (kappas ranging from .48 to .98 for categorical diagnosis and intraclass correlation coefficients [ICC] ranging from .90 to .98 for dimensional judgments) and internal consistency reliability (coefficients ranging from .71 to .94; Maffei et al., 1997).

**Psychological Dimensions of ASPD.** The Personality Organization Diagnostic Form (PODF; Diguer et al., 2001) was used to assess some of the psychological dimensions of ASPD: identity diffusion, primitive defense mechanisms, and reality testing. The PODF is an observer-rated instrument that evaluates personality organization and its dimensions according to Kernberg's model of personality (Kernberg, 1975, 1984; Kernberg & Caligor, 2005). It can be scored from several sources of information, including intakes, therapy sessions, self- and other descriptions, DSM evaluations, and relationship narratives. This measure was shown to have good to excellent interrater reliability (mean ICCs ranging from .63 to .85 for all of the PODF’s items and dimensions), good construct validity (borderline-neurotic and psychotic 2-factor structure which is an accurate reflection of Kernberg’s model, with loadings ranging from .43 to .92), good convergent validity (correlations ranging...
### Table 1. Demographic and descriptive characteristics of the completer and noncompleter groups (n=50)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Completers</th>
<th>Noncompleters</th>
<th>d*</th>
<th>Statistic (F/χ²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>30</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (mean)</td>
<td>41.87</td>
<td>42.00</td>
<td>0.01</td>
<td>F (1, 48) = 0.00, p = .97</td>
</tr>
<tr>
<td>Marital Status: no partner - partner (n/%)</td>
<td>18/60% - 12/40%</td>
<td>15/75% - 5/25%</td>
<td>0.31</td>
<td>χ²(1, N = 50) = 1.20, p = .27</td>
</tr>
<tr>
<td>Years of education (mean)</td>
<td>High school</td>
<td>High school</td>
<td>0.28</td>
<td>F (1, 48) = 0.97, p = .33</td>
</tr>
<tr>
<td>Work status; Welfare or unemployment/work or school (n/%)</td>
<td>9/30% - 21/70%</td>
<td>15/75% - 5/25%</td>
<td>0.98</td>
<td>χ²(1, N = 50) = 9.736, p = .00</td>
</tr>
<tr>
<td>Income (average in Canadian $)</td>
<td>20,666.67</td>
<td>10,000</td>
<td>0.89</td>
<td>F (1, 48) = 9.59, p = .00</td>
</tr>
<tr>
<td>Any Axis I disorder (n/%)</td>
<td>15/50%</td>
<td>15/75%</td>
<td>0.52</td>
<td>χ²(1, N = 50) = 3.13, p = .08</td>
</tr>
<tr>
<td>Mood disorders</td>
<td>4/13.33%</td>
<td>1/5%</td>
<td>0.28</td>
<td>χ²(1, N = 50) = 0.93, p = .34</td>
</tr>
<tr>
<td>Anxious disorders</td>
<td>1/3.33%</td>
<td>0/0%</td>
<td>0.24</td>
<td>χ²(1, N = 50) = 0.68, p = .41</td>
</tr>
<tr>
<td>Previous substance-related disorders</td>
<td>12/40%</td>
<td>13/65%</td>
<td>0.51</td>
<td>χ²(1, N = 50) = 3.00, p = .08</td>
</tr>
<tr>
<td>Adjustment disorder</td>
<td>1/3.33%</td>
<td>2/10%</td>
<td>0.28</td>
<td>χ²(1, N = 50) = 0.95, p = .33</td>
</tr>
<tr>
<td>Eating disorders</td>
<td>0/0%</td>
<td>0/0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychotic disorders</td>
<td>0/0%</td>
<td>0/0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Axis II disorder (n/%)</td>
<td>21/70%</td>
<td>18/90%</td>
<td>0.49</td>
<td>χ²(1, N = 50) = 2.80, p = .09</td>
</tr>
<tr>
<td>Avoidant</td>
<td>9/30%</td>
<td>3/15%</td>
<td>0.35</td>
<td>χ²(1, N = 50) = 1.48, p = .22</td>
</tr>
<tr>
<td>Dependent</td>
<td>3/10%</td>
<td>1/5%</td>
<td>0.18</td>
<td>χ²(1, N = 50) = 0.41, p = .52</td>
</tr>
<tr>
<td>Obsessive-compulsive</td>
<td>8/26.67%</td>
<td>4/20%</td>
<td>0.15</td>
<td>χ²(1, N = 50) = 0.29, p = .59</td>
</tr>
<tr>
<td>Personality Organization Diagnosis</td>
<td>n/%</td>
<td>(\chi^2(1, N = 50))</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------</td>
<td>-------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>Antisocial</td>
<td>4/13.33%</td>
<td>12/60%</td>
<td>1.13</td>
<td></td>
</tr>
<tr>
<td>Borderline</td>
<td>5/16.67%</td>
<td>6/30%</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>Histrionic</td>
<td>0/0%</td>
<td>0/0%</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>Narcissistic</td>
<td>6/20%</td>
<td>11/55%</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td>Paranoid</td>
<td>1/3.33%</td>
<td>2/10%</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>Schizoid</td>
<td>0/0.00%</td>
<td>0/0.00%</td>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td>Schizotypal</td>
<td>0/0.00%</td>
<td>0/0.00%</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td>Neurotic</td>
<td>0/0.00%</td>
<td>0/0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borderline</td>
<td>30/100%</td>
<td>20/100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychotic</td>
<td>0/0.00%</td>
<td>0/0.00%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

from .40 to .71 with the Health-Sickness Rating Scale [Luborsky, 1962] and ICCs ranging from .56 to .82 with therapists’ personality organization diagnosis), and moderate to excellent internal consistency (Cronbach α coefficients ranging from .70 to .97 for the PODF’s dimensional scores). These psychometric data were gleaned from participants with severely disturbed psychotic personality organization, from highly functioning and well-adapted participants with neurotic personality organization, and from normal individuals (Gamache et al., 2009; Hébert et al., 2003; Laverdière et al., 2007).

The PODF includes many scales, six of which (ranging from -3 to 3) evaluate identity diffusion (Subjective experience of self-identity), self perceptions (split vs. integrated), subjective experience of the self in time, behavior-emotions integration, object perceptions (split vs. integrated), and perceptions of others (shallow, flat vs. empathic), five of which (ranging from 0 to 3) evaluate primitive defenses (splitting, denial, omnipotent control, primitive idealization of self and others, and primitive devaluation of self and others), and four of which (ranging from 0 to 3) evaluate reality testing (lack of differentiation between self and others; failure to identify the origins of perceptions; lack of the capacity to evaluate one’s experience in terms of ordinary social norms; and presence of grossly inappropriate affects, thoughts, or behaviors). Dimensional scores are obtained by adding up the scores of items inside each of these three dimensions. Scores range from –18 to 18 for identity (higher negative scores correspond to more manifestations of identity diffusion and higher positive scores correspond to more manifestations of identity integration), from 0 to 15 for primitive defense mechanisms (higher scores indicate more frequent use of primitive defenses), and from 0 to 12 for reality testing (higher scores indicate more severely impaired reality testing). A personality organization diagnosis score is also obtained (i.e. psychotic, borderline, or neurotic) based on these dimensional scores.

Mental Representations. Blatt and colleagues (1988, 1993) developed scales to assess the development and impairment of mental representations by evaluating open-ended descriptions of self and significant others (e.g., parents, romantic partners). The conceptual level scale was used in this study to assess descriptions of self
and others. This scale was designed to evaluate, on a 9-point scale (from 1 to 9), the degree of integration and differentiation of affective and cognitive aspects of representations of self and other through five levels of development (sensorimotor preoperational, concrete-perceptual, external iconic, internal iconic, and conceptual). Another scale was used to evaluate self-descriptions: tolerance to contradictory aspects of the self, which assesses on a 5-point scale (from 1 to 5) the degree of integration of positive and negative aspects of the self. These self and other scales were used because they are thought to be valid measures of Kernberg’s concept of mental representations, and because they can be scored with acceptable interrater reliability ($r$ ranging from .88 to .96 and ICC ranging from .22 to .93; Besser & Blatt, 2007; Blatt et al., 1988; Diguer et al., 2004).

**Aggression.** The French version of the State-Trait Anger Expression Inventory (STAXI; Spielberger, 1988) was used to assess different aspects of aggression. The STAXI is a 32-item (1 = almost never, 2 = sometimes, 3 = often, and 4 = almost always) self-report instrument that contains a number of subscales. Based on Kernberg’s (1992) theoretical conceptions suggesting that the experience of aggression within the context of the therapeutic relationship and its expression in the form of devaluation and contempt of the therapy and therapist lead to considerable risk for PNC, we included in the analyses (1) the anger intensity scale, which assesses the presence and intensity of anger feelings; (2) the anger temperament scale, which evaluates the propensity to experience and to overtly express anger; and (e) the inappropriate anger expression scale, which refers to the frequency with which anger is expressed to others with sarcasm or contempt. Internal consistency estimates ($\alpha$ coefficients) for the original version of the STAXI range from .58 to .93 (Fuqua et al., 1991; Spielberger, 1988), and the factor structure of the instrument is excellent (Fuqua et al., 1991). The French version of the STAXI also has good psychometric properties: It reproduces the factorial structure of the original questionnaire, it has good internal consistency ($\alpha$ coefficients ranging between .55 and .87), and it has good construct (saturation coefficients higher than .30 for all items) and convergent validity (correlations ranging between .21 and .56 with the Psychiatric Symptom Index; Ilfeld, 1978) (Laughrea, Bélanger, Wright, & McDuff, 1997).
Procedure
All participants were evaluated for DSM-IV Axis I and Axis II disorders (American Psychiatric Association, 1994) by a licensed psychologist one to four weeks before the therapy began. For Axis I, only the major disorders (mood, anxiety, eating, substance-related, and psychotic) were assessed, using the Axis I interview of the SCID (First, Spitzer, Gibbon, & Williams, 1997). For Axis II, all personality disorders were evaluated with the personality disorders interview of the SCID (First, Spitzer, Gibbon, Williams, & Benjamin, 1997). All interviews were audio-recorded, and the diagnoses were revised and discussed with at least one other licensed psychologist. In addition, participants were administered an open-ended, unstructured interview in which they were asked to describe their parents and a significant other, as well as themselves. All descriptions were audio-recorded, transcribed, and then rated according to Blatt and colleagues’ mental representations scales (Blatt et al., 1988, 1993). The participants were also asked to recount 10 narratives relating incidents or events in relation to another person, according to the Relationship Anecdotes Paradigm interview method (RAP; Luborsky, 1998). The RAP has been shown to be a valid method of eliciting relationship narratives (Barber, Luborsky, Crits-Christoph, & Diguer, 1995). Finally, each participant filled out the STAXI (Spielberger, 1988) and a sociodemographic questionnaire.

The 10 narratives and the descriptions of parents, significant others, and self were used in conjunction with the SCID-I and II to score the PODF. Two licensed psychologists rated the PODF, and two others scored the self- and significant other descriptions. They were unaware of any other information pertaining to the participants.

Results

Interrater Reliability
In our study, interrater reliability for the PODF and Blatt et al.’s (1988, 1993) mental representations scales was calculated using ICC. As indicated in Table 2, estimates ranged from fair to excellent according to the guidelines set by Cicchetti and Sparrow (1981).
Prediction of PNC

As Tabachnick and Fidell (2007) explain, a minimum of five participants per variable is necessary in order for predictive analyses to be sufficiently powerful statistically. For this reason, given the relatively small size of our sample, univariate tests were first computed to examine differences between completers and noncompleters with respect to all of our variables: demographic, clinical, and psychological. In order to reduce the number of predictors, only variables with at least a medium effect size ($d \geq .50$; Cohen, 1992) were retained for the following analyses. These variables are (see Tables 1 and 3): (a) work status, (2) income, (3) any Axis I disorder; (4) previous substance-related disorders, (5) narcissistic personality disorder, (6) ASPD, (7) primitive defense mechanisms, (8) identity diffusion, and (9) tolerance of contradictory aspects of the self. A discriminant function analysis was performed to estimate which of these variables would predict PNC. The canonical correlation between the nine predictors and the discriminant function ($R = .68$, $F (9, 40) = 3.85, p < .01$) explained 46% of the between-group variance. As shown in Table 4, the predictors of PNC were, in order of statistical importance, (1) ASPD, (2) work status, (3) primitive defense mechanisms, (4) income, (5) narcissistic personality disorder, (6) identity diffusion, (7) tolerance to contradictory aspects of the self, (8) any Axis I disorder, and (9) previ-

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**Table 2. Interrater reliability calculations for the Personality Organization Diagnostic Form and Blatt et al.’s Mental Representations Scales**

<table>
<thead>
<tr>
<th>Variable</th>
<th>ICC</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PODF scales</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity diffusion</td>
<td>.54</td>
<td>Fair</td>
</tr>
<tr>
<td>Primitive defense mechanisms</td>
<td>.70</td>
<td>Good</td>
</tr>
<tr>
<td>Reality testing</td>
<td>.79</td>
<td>Excellent</td>
</tr>
<tr>
<td>Personality organization diagnosis</td>
<td>1.00</td>
<td>Excellent</td>
</tr>
<tr>
<td><strong>Blatt et al.’s mental representations scales</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual level of self-descriptions</td>
<td>.48</td>
<td>Fair</td>
</tr>
<tr>
<td>Conceptual level of other descriptions</td>
<td>.56</td>
<td>Fair</td>
</tr>
<tr>
<td>Tolerance to contradictory aspects of the self</td>
<td>.60</td>
<td>Good</td>
</tr>
</tbody>
</table>

*Intraclass correlation coefficients. According to the guidelines set by Cicchetti and Sparrow (1981). Calculated from a random subsample of 40% of the total sample. Calculated from a random subsample of 20% of the total sample.
ous substance-related disorders. However, the two latter variables were not good predictors of PNC because their loadings on the discriminant function were inferior to .33 (Comrey & Lee, 1992). Finally, the classification analysis showed that 77% of completers and 80% of noncompleters were correctly classified using these predictors. Altogether, 78% of the participants were correctly classified (Kappa = .55, 95% CI = .32 to .78).

Discussion

We observed a 40% rate of PNC in our sample, which is consistent with prior research (Browne et al., 1998; Craissati & Beech, 2001; Geer et al., 2001). It is also consistent with PNC rates in other populations, which vary from (1) 17% to 95% among alcoholics (Brewer, Zawadski, & Lincoln, 1990; Silberfeld & Glaser, 1978), (2) 16% to 89% among drug addicts (Daughters et al., 2005; De Leon & Schwartz, 1984), (3) 15% to 62% among male batterers (Gerlock, 2001; Taft, Murphy, Elliot, & Morrel, 2001), and (4) 16% to 79% among criminals (Field, 1989; Pellisier, Camp, & Motivans, 2003). Because sexual offenders who do not complete therapy pose a greater risk of recidivism than those who do (Edwards et al., 2005; Hanson et al., 2002; Seager et al., 2004), it is absolutely critical for the protection of society to understand the psychological factors that contribute both to noncompletion and to completion.

Predictors of PNC

The main objective of this article was to examine whether psychological dimensions of ASPD as conceived by Kernberg (1992) could predict PNC among sexual offenders. First, our results indicate that the descriptive diagnosis of ASPD per se is predictive of PNC. Sexual offenders with a diagnosis of ASPD are more likely to drop out of therapy than are those who do not. These results are in line with those obtained in other samples of sexual offenders (Edwards et al., 2005; Langevin, 2006; Nunes & Cortoni, 2008; Olver & Wong, 2009), as well as in samples of drug abusers and addicts (Daughters et al., 2008), male batterers (Chang & Saunders, 2002), and criminals (Pelissier et al., 2003). ASPD is related
Table 3. Means, Standard Deviations, and Effect Sizes of Psychological Dimensions of Antisocial Personality Disorder Predicting Psychotherapy Noncompletion (n = 50)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Completion M(SD)</th>
<th>Noncompletion M(SD)</th>
<th>F</th>
<th>p</th>
<th>d*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primitive defense mechanisms</td>
<td>11.57(3.20)</td>
<td>14.35(2.25)</td>
<td>11.33</td>
<td>.00</td>
<td>.97</td>
</tr>
<tr>
<td>Identity diffusion</td>
<td>-12.57(4.12)</td>
<td>-15.45(3.15)</td>
<td>7.02</td>
<td>.01</td>
<td>.76</td>
</tr>
<tr>
<td>Tolerance to contradictory aspects of the self</td>
<td>2.00(.95)</td>
<td>2.65(.93)</td>
<td>5.72</td>
<td>.02</td>
<td>.69</td>
</tr>
<tr>
<td>Anger temperament</td>
<td>1.82(0.55)</td>
<td>1.63(0.33)</td>
<td>1.92</td>
<td>.17</td>
<td>.40</td>
</tr>
<tr>
<td>Anger intensity</td>
<td>1.86(0.63)</td>
<td>1.68(0.36)</td>
<td>1.42</td>
<td>.24</td>
<td>.34</td>
</tr>
<tr>
<td>Conceptual level of descriptions of self</td>
<td>6.90(0.40)</td>
<td>6.80(0.70)</td>
<td>.41</td>
<td>.52</td>
<td>.19</td>
</tr>
<tr>
<td>Conceptual level of descriptions father</td>
<td>5.69(1.20)</td>
<td>5.55(1.54)</td>
<td>.13</td>
<td>.72</td>
<td>.10</td>
</tr>
<tr>
<td>Inappropriate anger expression</td>
<td>1.56(0.57)</td>
<td>1.52(0.60)</td>
<td>.05</td>
<td>.82</td>
<td>.07</td>
</tr>
<tr>
<td>Conceptual level of descriptions of mother</td>
<td>5.53(1.14)</td>
<td>5.60(1.27)</td>
<td>.04</td>
<td>.85</td>
<td>.06</td>
</tr>
<tr>
<td>Reality testing</td>
<td>0.40(0.62)</td>
<td>0.45(1.36)</td>
<td>.03</td>
<td>.86</td>
<td>.05</td>
</tr>
<tr>
<td>Conceptual level of descriptions of significant others</td>
<td>6.10(0.99)</td>
<td>6.10(1.02)</td>
<td>.00</td>
<td>1.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

*Cohen’s (1992) measure of effect size.
<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Correlation with the discriminant function</th>
<th>Standardized discriminant function coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antisocial personality disorder</td>
<td>.60*</td>
<td>.22</td>
</tr>
<tr>
<td>Work status</td>
<td>-.53*</td>
<td>-.16</td>
</tr>
<tr>
<td>Primitive defense mechanisms</td>
<td>.52*</td>
<td>.42</td>
</tr>
<tr>
<td>Income</td>
<td>-.48*</td>
<td>-.66</td>
</tr>
<tr>
<td>Narcissistic personality disorder</td>
<td>.42*</td>
<td>-.63</td>
</tr>
<tr>
<td>Identity diffusion</td>
<td>-.41*</td>
<td>.09</td>
</tr>
<tr>
<td>Tolerance to contradictory aspects of the self</td>
<td>.37*</td>
<td>.60</td>
</tr>
<tr>
<td>Any Axis I disorder</td>
<td>.28*</td>
<td>.17</td>
</tr>
<tr>
<td>Substance-related disorders (previous)</td>
<td>.27</td>
<td>.02</td>
</tr>
</tbody>
</table>

*p < .05.
to these outcomes, as it is to PNC in sexual offenders. Our observations also indicate that narcissistic personality traits, which are important features of ASPD in Kernberg’s (1992) view, are also predictive of PNC among sexual offenders. These results are consistent with those of Rodrigue (2000).

Second, our results demonstrate that certain specific psychological dimensions of ASPD can predict PNC above and beyond the mere diagnosis of the disorder. Specifically, noncompleters present more severe identity diffusion than do completers. In addition, noncompleters in our sample demonstrated the use of more primitive defense mechanisms (e.g., splitting, denial, omnipotent control, primitive idealization, and primitive devaluation) than did completers. These results extend those of previous research indicating that stronger denial of sexual offense is associated with PNC (Beyko & Wong, 2005; Edwards et al., 2005; Pellisier, 2007) because they suggest a direct link between primitive defense mechanisms and PNC among offenders. More generally, our results therefore seem to support the relation among primitive defenses, severe identity diffusion, ASPD, and poor prognosis (Kernberg & Caligor, 2005).

The Effects of Identity Diffusion and Primitive Defenses on PNC

Our findings provide concrete empirical support for Kernberg’s work, which suggests that ASPD is characterized by the greatest severity of identity diffusion among all personality disorders (Kernberg & Caligor, 2005). Severe identity diffusion arises from the defense mechanism called splitting, which involves dissociation and active separation of contradictory experiences of the self and others. The splitting mechanism is reinforced by other primitive defenses intimately connected with it (e.g., denial, omnipotent control, primitive idealization, and primitive devaluation). As a result, this entire constellation of primitive defenses tends to create distortions and chronic disturbances in interpersonal relations. In the context of psychotherapy interactions, the use of omnipotent control, typical of ASPD patients, includes efforts to manipulate the therapist (Kernberg, 1998) and to devalue the therapy and the person providing it. Such behaviors are known to have an adverse effect on the development of a therapeutic relationship and to bring about
PNC (Clarkin, Yeomans, & Kernberg, 2006). Previous research on the effect of primitive defenses on PNC indicated that patients with borderline personality organization who use omnipotent control and idealization/devaluation as defense mechanisms may be more narcissistic and at greater risk of PNC (Horner & Diamond, 1996). The findings of the present study extend this knowledge to sexual offenders.

**Mental Representations Impairments and PNC**

As their scores on tolerance of contradictory aspects of the self scale show, noncompleters had more severely impaired mental representations than did completers in our sample. These results are in line with those of Horner and Diamond (1996), which indicate that the developmental level of the mental representations of borderline personality organization patients’ is a critical factor in distinguishing psychotherapy completers from noncompleters. Specifically, Horner and Diamond found that completers tend to demonstrate a higher degree of access to and tolerance for a wide range of rapprochement subphase experiences (Mahler, Pine, & Bergman, 1975), including both autonomy and relatedness. Completers are thought to be able to relinquish omnipotence in favor of a more realistic awareness of aloneness, dependency, and need for relatedness with others. In contrast, noncompleters are found to be more narrowly organized around narcissistic issues of omnipotence or self-absorption (Horner & Diamond, 1996). They are presumed to be more concerned with establishing, protecting, and maintaining a viable sense of self, separation, and autonomy than they are with the quality of their interpersonal relations. For these reasons, they may attack the therapy and the therapist to ward off intolerable dependency needs. This closely corresponds to the dynamics of narcissistic pathology, of which ASPD is part (Kernberg, 1992). The fact that the sexual offenders in our sample demonstrated similar patterns of object representations impairments helps explain the high levels of PNC that we observed.

**Demographic Characteristics and PNC**

Our results show that some demographic characteristics can predict PNC in sexual offenders. Those who were on welfare or un-
employed were at greater risk of PNC than were those with active lives. It is not surprising that our results also indicate that noncompleters had lower incomes than did completers; they were more often unemployed or socially dependent than were completers.

These findings support Kernberg and colleagues’ (Clarkin et al., 2006) clinical observations, which suggest that prior to coming to treatment, many borderline personality organization patients are deemed to be disabled, unable to work, and therefore entitled to public assistance. According to many authors (Clarkin et al., 2006; Hare, 1991), such a parasitic lifestyle is a complex feature of ASPD because it involves, despite a capacity to function at work, an intentional, manipulative, selfish, and exploitative financial dependence on others and on the social system. Hare (1991) even refers to the use of threats and coercion in the parasitic obtainment of support and help from others. Social dependency thus constitutes an important risk of PNC because therapeutic efforts might be defeated in favor of the maintenance of the pathology’s associated psychological and financial secondary gains (Clarkin et al., 2006).

Aggression and PNC

However, contrary to our expectations, self-reported aggression as a psychological dimension of ASPD did not predict PNC in this sample. This finding appears to contradict the observations of several researchers, who have claimed that aggression plays a central role in PNC among borderline personality organization patients (Smith, Koenigsberg, Yeomans, & Clarkin, 1995; Yeomans, Gutfriend, Selzer, & Clarkin, 1994). There are several possible explanations for this discordant finding. A first possible explanation pertains to the dynamics of ASPD as a narcissistic pathology, in which pathological grandiose self-representations constitute, by their idealized nature, a massive defense against the awareness of any negative personality aspects, including manifestations of aggression (Koenigsberg et al., 2000). Moreover, it may well be that our self-report measure of aggression added to this effect because questionnaires focus on conscious aspects of respondents’ self-concepts (Westen, 1995). As Kernberg and Caligor (2005) and Zimmerman (1994) suggest, patients with such personality pathologies may not be sufficiently aware of certain pathological personality features to
report on them, they may lack insight into the effect their behaviors have on others, and they may even lie and deny negative personality characteristics. As an alternative method, one could consider developing an observer-based method for rating aggression, for example, by examining all aggressive behaviors (e.g., sexual and nonsexual offenses, suicidal and parasuicidal behaviors) from participants’ records. It is possible that the STAXI failed to capture the egosyntonic and passive forms of aggression manifest in the passive, exploitative, and parasitic lifestyle that seems to characterize our sample according to the discriminant analysis.

In sum, our discriminant analysis shows that PNC can be predicted by a multivariate set of descriptive, psychological, and demographic variables. Sexual offenders at greater risk of PNC are those with: (1) ASPD, (2) narcissistic personality disorder, (3) more severe identity diffusion, (4) more frequent use of primitive defense mechanisms, and (5) more severe self-representations impairments. Sexual offenders at greater risk of PNC are also those who (1) are unemployed and on welfare, and (2) have low incomes. It seems that these noncompleting sexual offenders meet all of the criteria for Kernberg’s ASPD, which is the most severe narcissistic pathology embedded in borderline personality organization. Further, this personality profile resembles the passive type of psychopath (Koenigsberg et al., 2000; PDM Task Force, 2006), whose aggression manifests itself as a passive-parasitic exploitation of and dependence on others and society. Therefore, our study is the first to offer concrete empirical support for Kernberg’s theoretical conceptions that suggest that PNC is strongly determined by the presence of ASPD and its psychological dimensions. Many authors (Clarkin et al., 2006; Hare, 1991; Kernberg, 1992) emphasize that the predominance of aggression and its expression in interpersonal relationships are central to PNC.

Even though this hypothesis on aggression was not directly supported here in terms of results on the STAXI, we do not think that it should be discarded. First, as explained before, the self-report measurement of aggression may not be appropriate with this population. Second, numerous clinical observations and theoretical developments lead to the conclusion that aggression is a core characteristic of borderline personality organization and severe nar-
cissistic pathologies (Clarkin et al., 2006; Kernberg, 1984, 1992; Kernberg & Caligor, 2005). Aggression reaches its highest intensity and its most overt expression within ASPD. Interpersonal interactions with such patients are characterized by contempt reactions, devaluation, manipulation, exploitation, and occasional outbursts of violence. In the therapeutic context, this aggression generally finds expression in the devaluation of the therapy and the therapist. These destructive behaviors hinder the development of a positive therapeutic relationship, which puts patients with ASPD at great risk of PNC. There is empirical evidence of the presumed impact of ASPD on the therapeutic relationship, as some researchers have found that aggressive behaviors in psychotherapy sessions predict PNC among sexual offenders (Beyko & Wong, 2005; Browne et al., 1998).

Our results may have several implications for clinical practitioners. For example, in terms of evaluation and prognosis, it seems that not only do overt ASPD characteristics (as demonstrated by violent and antisocial acts) have a strong impact on prognosis and PNC of sexual offenders, but the more covert ones do as well. These include severe identity diffusion (very poor and unstable object and self-representations), self-representation impairments (either grandiose or severely devaluated evaluation of oneself, or the oscillation between these two conditions), and the use of primitive defenses (mainly splitting, denial, and omnipotent control). Covert forms of ASPD are often present in attitudes and lifestyles such as different forms of parasitism, exploitation, and passivity. In terms of therapy and other forms of intervention (case management, social work, etc.), it may be relevant to follow these conclusions to form more homogeneous groups or treatment conditions. One possibility would be to group patients according to their level of covert-overt ASPD manifestations in order to facilitate the therapeutic work on actual manifestations of the disorder, and to allow patients who are relatively free of overt and covert ASPD characteristics to derive more benefit from treatment. These criteria could also be used to set therapeutic goals and adjust interventions and treatment parameters with all patients who have severe ASPD characteristics, for example, by setting up strict treatment parameters about acting out and manifestations of overt aggression inside and
outside of psychotherapy sessions. Other parameters about covert manifestations inside and outside of sessions (passive exploitation, parasitism, and secondary gains) might also be useful. For example, practitioners could discuss with ASPD patients the need for some form of work or active employment (Clarkin et al., 2006). The achievement of an active and independent level of functioning might not only have a positive impact on PNC, but it may also lead to important psychological benefits, such as the resolution of identity diffusion.

Another clinical conclusion that can be drawn from our results is that passivity and parasitism are linked to pathological narcissism and that they should be worked on in relation to this syndrome (Clarkin et al., 2006). Pathological narcissism entails grandiose self-representation and omnipotent control manifestations in the therapeutic relationship, which can often take the form of contempt reactions, devaluation, manipulation, exploitation, and occasional violent outbursts against the therapist. The focus of intervention could be the systematic interpretation of these manifestations and of the oscillation between split grandiose and devalued self-representations (Kernberg, 1984). This may gradually bring about a more integrated identity, that is, the resolution of the pathologically grandiose self-concept. The normal capacity to depend on the therapist gradually replaces the previous inability to depend on him or her, marking also the dissolution of the grandiose self-concept and the narcissistic defenses (Kernberg, 1984). In sum, precise treatment objectives derived from precise assessment should facilitate clinical work.

One limitation of this study is that the sample size did not allow for distinction among dropouts, reconvicted participants, expelled noncompleters, and completers. In addition, our sample did not include psychotic personality organization, neurotic personality organization, or inpatient sexual offenders. In future research, samples should be broader and include a larger representation of participants. Therefore, the generalizability of our findings is limited to borderline personality organization and outpatient sexual offenders.
Conclusion

Given the fact that noncompleters are at greater risk of relapse, PNC among sexual offenders is a major problem. Ways to reduce it must therefore be identified and put in place in order to protect children and society. Some researchers have suggested that predictors of PNC should be used to exclude sexual offenders from treatment programs (Browne et al., 1998; Moore et al., 1999). However, to our knowledge, there is no predictive model that can correctly classify 100% of noncompleters. Like Rodrigue (2000), we believe that to exclude patients on this basis would constitute a more serious error than to admit into psychotherapy individuals with important risk of PNC. We also agree with Beyko and Wong (2005), who have argued that empirical results should be used to improve and modify psychotherapy programs rather than to exclude presumed noncompleters. The PNC predictors may offer indications that could be used by clinicians in order to adapt their interventions (Rodrigue, 2000). By identifying and intervening in the early stages of therapy on variables that may result in PNC, it might be possible to prevent recidivism more effectively.

PNC among sexual offenders is a relatively recent domain of investigation. Even though we believe that our findings are interesting and theoretically consistent, our study is the first to examine PNC in the light of previous results and a coherent model of personality organization. The relation among our variables warrants further investigation, including replication and a cross-validation of the discriminant function. In addition, future studies should examine the relationship between PNC and other variables to therapists, psychotherapy, and the therapeutic relationship. These efforts may contribute to the development of psychotherapeutic interventions that are more effective at preventing child sexual abuse.
References


Larochelle et al.


Larochelle et al.


