

Personality Disorder Comorbidity in Treatment-Seeking Men with Hypersexual Disorder

BRUCE N. CARPENTER

Brigham Young University, Provo, Utah

RORY C. REID

University of California, Los Angeles, California

SHEILA GAROS

Texas Tech University, Lubbock, Texas

LISA M. NAJAVITS

Boston University School of Medicine, Boston, Massachusetts

Consideration of Hypersexual Disorder as a diagnosable condition has led to recognition that various aspects of its psychopathology, including comorbidity, are largely unknown. Comorbidity with personality disorders (PDs) has been hypothesized, but the few studies assessing PD comorbidity are limited by sample size, recruitment methods, and varying definitions of hypersexuality. This study examines the presence of confirmed PD diagnoses among 132 men seeking treatment for Hypersexual Disorder, as diagnosed by the criteria proposed for DSM-5. The SCID-II Personality Questionnaire, a screening measure for DSM-IV-TR PDs, suggested potential disorders in 92% of the sample. However, only 17% of the sample met full criteria for a PD based on the SCID-II interview. Thus, whereas personality-based difficulty appears commonplace in these men, the broad, severe dysfunction required for a PD diagnosis does not. This prevalence is higher than expected for community samples, but lower than for either general clinic samples or that found in previous studies. The differences between this and previous studies may arise largely out of different sampling methods, suggesting that PD comorbidity among hypersexuals may be strongly influenced by other factors. Implications for clinicians and researchers are discussed.

Address correspondence to Bruce N. Carpenter, Ph.D., Department of Psychology, TLRB 295, Brigham Young University, Provo, UT 84602. E-mail: bruce_carpenter@byu.edu

The consideration of Hypersexual Disorder (HD) for inclusion in the *Diagnostic and Statistical Manual—5th edition* (DSM-5, APA, in press) has generated increased and more systematic attention to the various elements expected of DSM diagnoses. Basic data about key aspects of psychopathology provide a foundation for HD diagnosis; however, gaps exist regarding onset, course, epidemiology, and the like. One important area for understanding any disorder is that of comorbidity. These patterns of co-occurring conditions provide information about symptom overlap, potential areas of diagnostic confusion, the role of general versus specific vulnerability, risk patterns, potential for common underlying etiological factors, and how one disorder may contribute to developing another. A focus on comorbidity complements the extensive data already emerging on the psychological, behavioral, and sociological correlates of HD. In this study we examine the comorbidity of HD with Axis II personality disorders (PD).

There is no *a priori* expectation that Axis I conditions overlap with Axis II diagnoses, although about half do. PDs are found in about 10% of community adults (Sansone & Sansone, 2011) and about 14% of community adolescents (Johnson et al., 2000), but at much higher rates among psychiatric adults and teens (e.g., Feenstra, Buschbach, Verheul, & Hutsebaut, 2011; Zimmerman, Rothschild, & Chelminski, 2005). PDs, as pervasive, enduring, and early emerging conditions, by definition, are fertile soil for the development of many Axis I disorders. Furthermore, comorbidity is often associated with more severe psychopathology and high risk for negative prognosis (Crawford et al., 2008; Kessler, Chiu, Demler, & Walters, 2005). For example, as noted by Oldham et al. (1995), “When any personality disorder was present, there were significant odds that a mood, anxiety, psychotic, or eating disorder would also be present. . . .” (p. 571).

PROPOSED LINKAGES

General Psychopathology

Not surprisingly, a number of writers have suggested connections between HD and other psychopathology, and some data is available. Indeed, the proposed DSM-5 criteria for HD specify that hypersexual behavior is commonly “in response to dysphoric mood states (e.g., anxiety, depression, boredom, irritability)” and “in response to stressful life events,” a conceptualization that appears early in the literature (e.g., Coleman, 1987, 1990; Quadland, 1985). This connection to psychopathology has been challenged by studies with non-clinical populations, which generally find little if any association between sexual behavior, even when defined as deviant or extreme, and dysphoric mood or diagnosable psychopathology. For example, Rinehart and McCabe (1997) found that among college students, negative mood states are not more common among those with high versus low sexual desire.

Similarly, in a community-solicited sample of men, Brand et al. (2011) found that self-ratings of internet pornography addiction were only mildly associated with depression and not associated with anxiety. (However, with addiction scores of $M = 30.7$ [$SD = 9.2$] on a 20–100 scale, we might speculate that the variance mostly assessed normal ranges of behavior rather than much actual “addiction” behavior).

In contrast, associated psychopathology is more commonly found among those reporting out-of-control sexual behavior or among those seeking help for HD behavior, highlighting the apparent discontinuity between normal sexual behavior and hypersexuality. For example, Black, Kehrberg, Flumerfelt, and Schlosser (1997) found that among a sample of 36 adults reporting compulsive sexual behavior, one-third had six-month and one-half had lifetime comorbidity for any anxiety disorder and about one-third had comorbidity for a depressive disorder. Raymond, Coleman, and Miner (2003), in a sample of 24 non-patient adults with sexual compulsivity, found a mood disorder among 33% and an anxiety disorder among 42%. Lloyd, Raymond, Miner, and Coleman (2007) found that in a sample of 85 patients treated for compulsive sexual behavior, 68% had comorbid mood disorders and 25% had anxiety disorders.

In a series of studies, Reid and colleagues examined effect sizes between HD client means and normal means on various measures of psychopathology. An MMPI-2 study (Reid & Carpenter, 2009a) indicated effect sizes of about .8 to 1.5 for scales on Depression, Hysteria, Psychopathic Deviate, Paranoia, Psychasthenia/Anxiety, and Schizophrenia. About one-half had a clinically elevated score on Psychasthenia/Anxiety, and about one-third on Depression. When patients were clustered into four groups, based on similar MMPI-2 clinical scale profiles, the largest group (38%) had essentially normal MMPI-2 profiles; clinically elevated scores on Depression and Psychasthenia/Anxiety were present in the remaining three groups. In a similar study with the MMPI-2 Restructured Clinical Scales (Reid & Carpenter, 2009b), they found effect sizes of about 1.3 for scale Demoralization, .6 for RC scale Low Positive Emotions and .4 for RC scale Dysfunctional Negative Emotions; interestingly, however, almost half of this patient sample had no clinical elevation on any RC scale. In a study with the SCL-90, the HD group differed reliably from normal controls on most symptom subscales, with about one-half to three-quarters falling into clinical ranges (Reid, Carpenter, & Lloyd, 2009). Finally, with the NEO-PI-R (Reid, Carpenter, Spackman, & Willes, 2008), HD clients had an effect size of 1.1 on the factor scale of Neuroticism, and 1.4 and 1.1 for facet scores of Depression and Vulnerability to Stress, respectively; about half had clinical elevations on Neuroticism and Depression, and about one-third on Stress Vulnerability. In summary, though seemingly not associated with high sex drive, dysphoric emotional states do appear to have a moderate to strong association with the out-of-control sexual behavior of a subset of HD individuals.

PERSONALITY DISORDERS AND HYPERSEXUAL DISORDER

Various writers suggest connections between HD and PDs. For example, Carnes (1991) suggested that Cluster B (Antisocial, Borderline, Histrionic, Narcissistic) personality disorder traits are common among those with compulsive sexual behavior, with men more often displaying antisocial traits and women commonly displaying borderline, histrionic, and dependent traits. Montaldi (2002) proposed that many cases of hypersexuality “resemble the wider patterns of personality disorder” (p. 3), with hypersexual behavior as a form of acting out personal and interpersonal themes to validate the self, with mood regulation serving only a secondary function. Similarly, Montaldi suggested the nature of behavioral [dys]control is much like that seen in PDs and proposes an extensive list of parallels between HD and PDs, including patterns aligning with borderline, histrionic, narcissistic, resentment, and sadistic/masochistic personality styles.

Proposed connections between specific personality disorders and Hypersexual Disorder. In addition to speculations about overlap between HD and PDs broadly, several authors have proposed HD comorbidity with specific disorders. For example, Rickards and Laaser (1999) analyzed elements of Borderline PD and sexual addiction/compulsivity, concluding the two are strongly connected and will thus have substantial comorbidity. In light of their analysis of commonalities, they proposed that comorbidity between these two conditions would be common; therefore, when treatment is offered for one condition, many cases of the other condition are likely to go undiagnosed and untreated. Similarly, in an analysis of psychoanalytic literature and a case study, Williams (2006) proposed a link between HD and Borderline PD such that “borderline and narcissistic processes may govern sexually addictive behavior” (p. 246). In contrast, a review of charts among 85 patients treated for compulsive sexual behavior (Lloyd et al., 2007) found only one case which met diagnostic criteria for Borderline PD, with most symptoms of that disorder being uncommon in the sample. Lloyd et al. concluded that only a superficial relationship between the two conditions exists, such as sharing features of impulsivity or affective instability.

Kastner and Sellbom (2012) found that among a normal, male and female college student sample, psychopathic personality traits, as estimated from MMPI-2-RF scores, were associated with higher scores on various measures of excessive sexual behavior. Those with higher psychopathy scores also reported more sexual partners, more casual sex, and less need to be attached to sexual partners.

In spite of frequent arguments that HD is a compulsive act or arises from anxiety, there are essentially no speculations to tie HD to either Obsessive-Compulsive PD or to Avoidant PD. The notion of sexual compulsivity is commonplace, and the expectation that obsessive-compulsive tendencies make one vulnerable to HD are implicit in the label (indeed, a very reason many

object to the “sexual compulsivity” term). Even so, there is little explicitly on the topic except for proposed connections to Obsessive-Compulsive Disorder (not OCPD; e.g., Raymond, Coleman, & Miner, 2003; Stein et al., 1992), and much of those data are on obsessive and/or compulsive traits, without much focus on whether a disorder is present. For example, Rinehart and McCabe (1998) found that among a sample of male and female, mostly single, college students, those with higher levels of what they termed “deviant sexual behavior/desire” had scores on a measure of obsessive-compulsive behaviors that were not reliably greater than those with lower levels of deviant behavior/desire. However, both the sample (college students) and the measures (true deviance so rarely endorsed that they recoded—without adequate information—into “trends”) appear to examine variation arising primarily within the normal range.

Empirically supported connections between personality disorders in general and Hypersexual Disorder. Two studies have examined the prevalence of PDs among those with variants of HD. Using advertisements in a hospital newspaper, Black et al. (1997) recruited 28 males and 8 females who reported compulsive sexual behavior (only 2 respondents were excluded). Most were in their 20s, single, and had a high school education. Nearly half were students. Using the Structured Interview for DSM-III-R Personality Disorders, the authors found that 83% of the respondents qualified for at least one PD, with 31% who qualified for more than one PD diagnosis. They formed a consensus diagnosis by requiring matching diagnosis on a PD questionnaire (for which 82% received a PD diagnosis) and on an interview (83% received diagnoses); 44% received a consensus diagnosis for any PD diagnosis (revealing much inconsistency in the diagnoses from the two methods). The diagnoses were well distributed across various PDs, with Paranoid, Histrionic, and Passive-Aggressive being somewhat more common.

Raymond, Coleman, and Miner (2003) also recruited subjects through a newspaper advertisement, excluding many who did not meet criteria for non-paraphilic compulsive sexual behavior and distress or impairment, yielding a sample of 22 males and 2 females. Using the SCID-II, they found that 46% qualified for a PD diagnosis, and many of these qualified for more than one. Cluster C PDs were slightly more common, but diagnoses were well distributed across 7 of the 11 PDs. The non-data-driven speculations by other researchers described previously were largely not borne out by these data, in that Borderline and Antisocial PDs were not particularly common.

A number of limitations exist in previous investigations of the co-occurrence of HD and PDs, such as methods for recruiting study participants, varying diagnostic methods, and small sample sizes. This study seeks to address some of these limitations by examining the relationship between HD and PDs in a large sample of treatment-seeking individuals meeting proposed DSM-5 diagnostic criteria for HD.

METHOD

Participants

Participants were 132 males, all meeting criteria for HD who participated in a DSM-5 Field Trial (Reid et al., 2012). Participants were recruited from outpatient mental health treatment facilities in four states, some of which provide treatment for general psychiatric populations and some that specialize in the treatment of hypersexual behavior. All participants were diagnosed using the HD Diagnostic Clinical Interview, which is designed to align with the DSM-5 criteria for HD as currently proposed. Only those patients who were at least 18 years of age, were seeking treatment for out-of-control sexual behavior in an outpatient facility, and had an HD diagnosis were included in the study. Participants ranged in age from 20 to 66 ($M = 40.4$, $SD = 11.4$). Race was given as 91% White, 3% Hispanic, 5% Asian/Pacific and 1% African American; 27% were never married, 38% were in a first marriage, and 16% were in a second or more marriage; 36% had less than a college education, 27% had a bachelor's degree, and 35% had an advanced degree; 89% described themselves as heterosexual, with 9% gay and 2% bisexual; 14% had annual incomes below \$16,000, whereas 45% had incomes at or above \$100,000; and 82% had full-time employment, with 5% students.

Measures

The HD Diagnostic Clinical Interview (HD-DCI) is a structured interviewed assessing each of the proposed DSM-5 criteria and patterned after traditional structured diagnostic interviews. A field trial of proposed DSM-5 criteria using the HD-DCI found high reliability and strong psychometric properties (further description and data regarding the measure are found in Reid et al., 2012).

The Hypersexual Behavior Inventory (HBI; Reid, Garos, & Carpenter, 2011) is a 19-item, three-factor, self-report measure assessing frequency of hypersexual behaviors as outlined in diagnostic criteria proposed for DSM-5. The scale, yielding a total score and subscale scores assessing elements of control, coping, and consequences of HD, has high reliability ($\alpha = .95$) and good convergent and discriminant validity. HBI total scores ≥ 53 are considered clinically significant.

The Structured Clinical Interview for DSM Axis II Personality Disorders (SCID-II; First, Gibbon, Spitzer, Williams, & Benjamin, 1997) was developed to assess diagnostic criteria for each PD. The SCID-II assesses eleven DSM-IV Personality Disorders (including Personality Disorder NOS) as well as Depressive Personality Disorder and Passive-Aggressive Personality Disorder. The Personality Questionnaire for Axis II personality disorders (PQ) is an attendant, self-report measure intended to screen for major symptoms of each disorder. For this study, if sufficient symptoms on the PQ were reported (thresholds as recommended in the SCID-II manual), the appropriate SCID-II

TABLE 1 Axis II Personality Disorders in Men with Hypersexual Disorder (N = 132)

| Personality Disorder | Threshold Score Elevation | Personality Questionnaire | | Clinician-Administered SCID-II Interview | |
|----------------------|---------------------------|---------------------------|----|--|---|
| | | Positive Screen | | Qualified for Diagnosis | |
| | | N | % | N | % |
| Paranoid | ≥ 4 / 7 | 34 | 26 | 1 | 1 |
| Schizotypal | ≥ 5 / 9 | 15 | 11 | 0 | 0 |
| Schizoid | ≥ 4 / 7 | 11 | 8 | 1 | 1 |
| Histrionic | ≥ 5 / 8 | 21 | 16 | 0 | 0 |
| Narcissistic | ≥ 5 / 9 | 70 | 53 | 11 | 8 |
| Borderline | ≥ 5 / 9 | 63 | 48 | 0 | 0 |
| Antisocial | ≥ 3 / 7 | 30 | 23 | 4 | 3 |
| Avoidant | ≥ 4 / 7 | 52 | 39 | 3 | 2 |
| Dependent | ≥ 5 / 8 | 10 | 8 | 0 | 0 |
| Obsessive-Compulsive | ≥ 4 / 8 | 89 | 67 | 5 | 4 |
| Passive-Aggressive | ≥ 4 / 7 | 41 | 31 | 1 | 1 |
| Depressive | ≥ 5 / 7 | 45 | 34 | 1 | 1 |

interview was administered, with diagnoses made on the basis of interview results.

PROCEDURE

Current clients at the onset of the DSM-5 Field Trial and consecutive admissions afterwards were invited to participate if their presenting complaint was out-of-control sexual behavior. Response rates for the DSM-5 Field Trial averaged across the sites resulted in 73% of subjects accepting the invitation to participate. Participants completed the self-report measures and were then scheduled for an interview by a mental health professional trained in the HD-DCI and the SCID-II. All received the HD-DCI interview, and those who exceeded threshold scores on the PQ (see Table 2) also received relevant portions of the SCID-II administered by a doctoral level clinical psychologist with 10 years of experience. Only participants who met the criteria for HD were included in this analysis. Additional information regarding study methods for the DSM-5 Field Trial have been described elsewhere (Reid et al., 2012). All study procedures were approved by the Institutional Review Board at the University of California Los Angeles and all patients signed informed consent prior to participation.

RESULTS

Applying the recommended screening threshold scores, the PQ indicated the possibility of at least one PD in 121 of the 132 subjects (92%). Thus, nearly all

TABLE 2 Correlations between Hypersexual Behavior Inventory Scores and Personality Questionnaire Screening Scores ($N = 132$)

| PQ subscales | <i>r</i> | <i>p</i> |
|----------------------|----------|----------|
| Paranoid | .24 | .006 |
| Schizotypal | .04 | .660 |
| Schizoid | .06 | .497 |
| Histrionic | .18 | .038 |
| Narcissistic | .28 | .001 |
| Borderline | .34 | .000 |
| Antisocial | .16 | .067 |
| Avoidant | .18 | .045 |
| Dependent | .22 | .011 |
| Obsessive-Compulsive | .15 | .093 |
| Passive-Aggressive | .35 | .000 |
| Depressive | .25 | .004 |

participants were administered at least one module of the SCID-II. Many met screening thresholds for multiple PDs; for example, 84 (64%) exceeded the threshold for 3 or more PDs, and 29 (%) exceeded the threshold for 6 or more PDs. The numbers of subjects exceeding each threshold screening score are found in Table 1. Based on PQ results, the most common interview modules administered were for Obsessive-Compulsive, Narcissistic, and Borderline PDs, whereas Dependent, Schizoid, and Schizotypal PD modules were rarely indicated.

Correlations between HBI total scores and PQ scores are found in Table 2. Because the sample only includes individuals with elevated HBI scores, HBI variance is restrained; thus, the resulting correlations may be attenuated. Even so, these data suggest that attributes reflected in several of the PDs are associated with greater levels of hypersexual dysfunction. Indeed, the HBI scores of the 22 participants ($M = 81.2$) receiving PD diagnoses were generally higher than those without diagnosed PDs ($M = 72.8$), $t(130) = 3.07$, $p < .001$. That is, participants with greater levels of hypersexual behavior indicated a somewhat greater degree of personality dysfunction, most notably reflected in Borderline, Narcissistic, Paranoid Depressive, and Passive-Aggressive PD symptoms.

In contrast to the screening measure, SCID-II data suggested that relatively few of these persons actually met DSM-IV PD diagnostic criteria. Collectively, 22 people (17%) met criteria for 25 PDs (one person qualified for two, and one qualified for three). This is somewhat greater than the general population base rate for any PD (about 10%), but below the base rate for clinical samples. As shown in Table 1, Narcissistic PD was most commonly diagnosed and was the only particular PD to meaningfully exceed the general population base rate and the only one to be approximately as high as general outpatient clinic base rates.

DISCUSSION

These data suggest that persons seeking treatment for Hypersexual Disorder are at modestly elevated risk for comorbid personality disorders. The rate of PDs among such persons is not quite twice that compared to the general population, but only about one-third that typically found in persons seeking help for psychiatric conditions. This elevated risk indicates that clinicians should explore the possibility of PDs among their hypersexual patients, although comorbidity will not be particularly common. There are, of course, other psychiatric conditions which have similar, lower-than-average rates of concurrent PD. Even so, this suggests that the development of hypersexual behavior will probably not be well-explained by the broad, extreme, personality-based dysfunction of diagnosed PDs, even if underlying personality variability not necessarily exceeding diagnostic thresholds might have some explanatory power.

The relatively low rates of PDs in our sample are especially important for clinicians, who often hold implicit theories of addictions related to personality. For example, there has been a long-standing view, often still asserted, that addicts of all kinds have an “addictive personality,” which has never been identified in research despite many studies on the topic (Nathan, 1988). Clinicians, as well as researchers, also may believe, by definition, that anyone with an addiction must have personality problems; this stance is typically based in fear, ignorance, or negative emotional attitudes toward addiction clients (Imhof, 1996). Clinicians in the current era, as in past eras, typically do not get formal training in addictions and may hold stereotyped views of patients with addictive-like disorders. Thus, our findings may be especially important in helping provide a more accurate, nuanced understanding of HD, especially as it presents in treatment-seeking samples of men most commonly seen in outpatient clinical practice by providers. What is *not* present with regard to HD is just as important as what is.

A comparison to other published data is instructive. For example, Reid and Carpenter (2009a), when clustering hypersexual patients into homogeneous groups based on MMPI-2 scores, found the largest cluster (about one-third of participants) to have normal profiles lacking any indication of other pathology. A relatively small proportion had highly deviant profiles (which are also those most likely to indicate PDs). Also consistent with these data, Lloyd et al. (2007) found only one case of Borderline PD among 85 patients in treatment for compulsive sexual behavior. Thus, there is some evidence that broad, highly deviant dysfunction is not common among treatment-seeking hypersexual patients.

These data, however, are in contrast to the earlier studies of Black et al. (1997) and Raymond et al. (2003). Both studies found substantially more comorbid PD among their participants, although our results for the pre-interview questionnaire are not dramatically different from the questionnaire

results of Black and colleagues (1997). The questionnaire data indicated a substantial number of positive screens for possible PD symptoms, but most patients did not meet full diagnostic criteria upon follow-up during clinical interview. We suspect that at least some of this difference can be explained by the different methods of subject recruitment. Both of these earlier studies recruited through newspaper advertisements, and both had rather small sample sizes. Neither of the earlier studies gave any indication that their participants were seeking treatment for hypersexual behavior. In contrast, all participants in this study were treatment-seeking specifically for hypersexual behavior, usually through a specialty clinic. Moreover, the subjects in this study were assessed as hypersexual based on self-report measures and a diagnostic interview for HD by two separate raters. Although there is a lack of extensive data, the recruitment methods employed by our research group over the past decade have generally captured participants who are older, tend to wait until their thirties or forties before seeking treatment despite reporting the onset of their dysfunctional behavior to be in the teen years, are smarter than average, and are mostly financially well-off (perhaps a prerequisite for treatment for a condition usually not covered by insurance). It's plausible therefore, that individuals seeking treatment for HD, on average, are generally highly functional. Thus, we may find different rates of comorbidity in other hypersexual populations, such as community samples or those seeking treatment primarily for other Axis I conditions.

The stark differences between the rates suggested by the PQ and those of the full interview are troubling. A screening instrument is best designed to be sensitive to pathology rather than specifics, but the PQs inability to rule out most negative cases puts its utility into question. It does reduce the number of interview modules required, but should not be interpreted by itself as indicative of pathology.

Finally, understanding comorbidity with HD requires understanding of associations with Axis I disorders. Indeed, the diagnostic criteria of HD suggest comorbid difficulties with anxiety disorders, mood disorders, substance-abuse, and attention-deficit disorders. Our understanding of the modest number of HD cases in which a PD is present will be enhanced by a complete picture of its pathology.

REFERENCES

- American Psychiatric Association. *Diagnostic and Statistical Manual*, 5th edition. (in press). Washington, DC: American Psychiatric Association.
- Black, D. W., Kehrberg, L. L. D., Flumerfelt, D. L., & Schlosser, S. S. (1997). Characteristics of 36 subjects reporting compulsive sexual behavior. *American Journal of Psychiatry*, *154*, 243–249.
- Brand, M., Laier, C., Pawlikowski, M., Schächtle, U., Schöler, T., & Altstötter-Gleich, C. (2011). Watching pornographic pictures on the Internet: Role of sexual

- arousal ratings and psychological-psychiatric symptoms for using Internet sex sites excessively. *Cyberpsychology, Behavior, and Social Networking*, *14*, 371–377.
- Carnes, P. (1991). *Don't call it love: Recovery from sexual addiction*. New York: Bantam Publishing.
- Coleman, E. (1987). Sexual compulsivity: Definition, etiology, and treatment considerations. *Journal of Chemical Dependency Treatment*, *1*, 189–204.
- Coleman, E. (1990). The obsessive–compulsive model for describing compulsive sexual behavior. *American Journal of Preventive Psychiatry & Neurology*, *2*, 9–14.
- Crawford, T. N., Cohen, P., First, M. B., Skodol, A. E., Johnson, J. G., & Kasen S. (2008). Comorbid axis I and axis II disorders in early adolescence. *Archives of General Psychiatry*, *65*, 641–648.
- Feenstra, D. J., Busschbach, J. J. V., Verheul, R., & Hutsebaut, J. (2011). Prevalence and comorbidity of Axis I and Axis II disorders among treatment refractory adolescents admitted for specialized psychotherapy. *Journal of Personality Disorders*, *25*, 842–850.
- First, M. B., Gibbon, M., Spitzer, R. L., Williams, J. B. W., & Benjamin, L. S. (1997). *User's guide for the structured clinical interview for DSM-IV Axis II personality disorders (SCID-II)*. Washington, DC: American Psychiatric Press.
- Imhof, J. E. (1991). Countertransference issues in alcoholism and drug addiction. *Psychiatric Annals*, *2*, 292–306.
- Johnson, J. G., Cohen, P., Kasen, S., Skodol, A. E., Hamagami, F., & Brook, J. S. (2000). Age-related change in personality disorder trait levels between early adolescence and adulthood: A community-based longitudinal investigation. *Acta Psychiatrica Scandinavica*, *102*, 265–275.
- Kastner, R. M., & Sellbom, M. (2012). Hypersexuality in college students: The role of psychopathy. *Personality and Individual Differences*, *53*, 644–649.
- Kessler, R., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-Month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*, 617–627.
- Lloyd, M., Raymond, N. C., Miner, M. H., & Coleman, E. (2007). Borderline personality traits in individuals with compulsive sexual behavior. *Sexual Addiction & Compulsivity*, *14*, 187–206.
- Montaldi, D. E. (2002). Understanding hypersexuality with an Axis II model. *Journal of Psychology & Human Sexuality*, *14*, 1–23.
- Nathan, P. E. (1988). The addictive personality is the behavior of the addict. *Journal of Consulting and Clinical Psychology*, *56*, 183–188.
- Oldham, J. M., Skodol, A. E., Kellman, H. D., Hyler, S. E., Doidge, N., Rosnick, L., & Gallaher, P. E. (1995). Comorbidity of Axis I and Axis II disorders. *American Journal of Psychiatry*, *152*, 571–578.
- Quadland, M. C. (1985). Compulsive sexual behavior: Definition of a problem and an approach to treatment. *Journal of Sex & Marital Therapy*, *11*, 121–132.
- Raymond, N. C., Coleman, E., & Miner, M. H. (2003). Psychiatric comorbidity and compulsive/impulsive traits in compulsive sexual behavior. *Comprehensive Psychiatry*, *44*, 370–380.

- Reid, R. C., & Carpenter, B. N. (2009a). Exploring relationships of psychopathology in hypersexual patients using the MMPI-2. *Journal of Sex & Marital Therapy*, *35*, 294–310.
- Reid, R. C., & Carpenter, B. N. (2009b). Demoralization, hypomanic activation, and disconstraint scores on MMPI-2 scales as significant predictors of hypersexual behavior. *Sexual Addiction & Compulsivity*, *16*, 173–189.
- Reid, R. C., Carpenter, B. N., Hook, J. N., Garos, S., Manning, J. C., Gilliland, R., . . . Fong, T. (2012). Report of findings in a DSM-5 field trial for Hypersexual Disorder. *Journal of Sexual Medicine*, *9*(11), 2868–2877.
- Reid, R. C., Carpenter, B. N., & Lloyd, T. Q. (2009). Assessing psychological symptom patterns of patients seeking help for hypersexual behavior. *Sexual and Relationship Therapy*, *24*, 47–63.
- Reid, R. C., Carpenter, B. N., Spackman, M., & Willes, D. L. (2008). Alexithymia, emotional instability, and vulnerability to stress proneness in patients seeking help for hypersexual behavior. *Journal of Sex & Marital Therapy*, *34*, 133–149.
- Reid, R.C., Garos, S., & Carpenter, B. N. (2011). Reliability, validity and psychometric development of the Hypersexual Behavior Inventory in an outpatient sample of men. *Sexual Addiction & Compulsivity*, *18*, 30–51.
- Rickards, S., & Laaser, M. (1999). Sexual acting-out in borderline women: Impulsive self-destructiveness or sexual addiction/compulsivity? *Sexual Addiction & Compulsivity*, *6*, 31–45.
- Rinehart, N. J., & McCabe, M. P. (1997). Hypersexuality: Psychopathology or normal variant of sexuality? *Sexual and Marital Therapy*, *12*, 45–60.
- Rinehart, N. J., & McCabe, M. P. (1998). An empirical investigation of hypersexuality. *Sexual and Marital Therapy*, *13*, 369–384.
- Sansone, R. A., & Sansone, L. A. (2011). Personality disorders: A nation-based perspective on prevalence. *Innovations in Clinical Neuroscience*, *8*(4), 13–18.
- Stein, D. J., Hollander, M. D., Anthony, D. T., Schneider, F. R., Fallon, B. A., Liebowitz, M. R., & Klein, D. F. (1992). Serotonergic medications for sexual obsessions, sexual addictions, and paraphilias. *Journal of Clinical Psychiatry*, *53*, 267–271.
- Williams, D. (2006). Borderline sexuality: Sexually addictive behavior in the context of a diagnosis of borderline personality disorder. In J. Hiller, H. Wood, & W. Bolton (Eds.), *Sex, mind, and emotion: Innovation in psychological theory and practice* (p. 229–248). London: Karnac Books.
- Zimmerman, M., Rothschild, L., & Chelminski, I. (2005). The prevalence of DSM-IV personality disorders in psychiatric outpatients. *American Journal of Psychiatry*, *162*, 1911–1918.