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# Mindfulness, Emotional Dysregulation, Impulsivity, and Stress Proneness Among Hypersexual Patients

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**Objective:** The current study explores relationships between mindfulness, emotional regulation, impulsivity, and stress proneness in a sample of participants recruited in a Diagnostic and Statistical Manual of Mental Disorder Fifth Edition Field Trial for Hypersexual Disorder and healthy controls to assess whether mindfulness attenuates symptoms of hypersexuality. **Method:** Hierarchical regression analysis was used to assess whether significant relationships between mindfulness and hypersexuality exist beyond associations commonly found with emotional dysregulation, impulsivity, and stress proneness in a sample of male hypersexual patients ( $n = 40$ ) and control subjects ( $n = 30$ ). **Results:** Our results show a robust inverse relationship of mindfulness to hypersexuality over and above associations with emotional regulation, impulsivity, and stress proneness. **Conclusions:** These results suggest that mindfulness may be a meaningful component of successful therapy among patients seeking help for hypersexual behavior in attenuating hypersexuality, improving affect regulation, stress coping, and increasing tolerance for desires to act on maladaptive sexual urges and impulses. © 2013 Wiley Periodicals, Inc. *J. Clin. Psychol.* 70:313–321, 2014.

Keywords: mindfulness; hypersexuality; sex addiction; hypersexual disorder; emotion regulation

## Mindfulness and Hypersexual Behavior

Mindfulness interventions have been applied to a constellation of problems in the field of mental health in an effort to reduce psychological distress and emotional suffering (Baer, 2003). From a clinical perspective, the efficacy of mindfulness interventions has been demonstrated in disorders where behavior regulation is compromised (Brewer et al., 2011; de Lisle, Dowling, & Allen, 2011; Zylowska et al., 2008). Moreover, mindfulness seems to attenuate problematic characteristics that often are implicated in various psychiatric disorders including those involving deficits in self-control (Frieze, Messner, & Schaffner, in press), impulsivity (Peters, Erisman, Upton, Baer, & Roemer, 2011; Lattimore, Fisher, & Malinowski, 2011), and emotional dysregulation (Goodall, Trejnowska, & Darling, 2012; Hill & Updegraff, 2012; Robins, Keng, Ekblad, & Brantley, 2012).

Because impulsive behavior, emotional dysregulation, and stress proneness are also common in patients seeking help for hypersexual behavior (Kafka, 2010; Reid, 2010; Reid, Stein, & Carpenter, 2011), mindfulness approaches may have potential to benefit this population. As a precursor to a resource-intensive outcome study, it is expedient to investigate what, if any, relationships exist between mindfulness and hypersexuality. Because no prior research of mindfulness in hypersexual patients has been conducted, the current investigation sought to fill this void in the literature, by examining mindfulness in a treatment-seeking sample of hypersexual patients. Additionally, this study assesses whether significant relationships between mindfulness and hypersexuality exist beyond associations commonly found with emotional dysregulation, impulsivity, and stress proneness.

### *Hypersexual Disorder*

The proposed diagnostic criteria that were given consideration for the Diagnostic and Statistical Manual of Mental Disorder Fifth Edition (DSM-5) characterize hypersexual disorder (HD)

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as a phenomenon involving repetitive and intense preoccupation with sexual fantasies, urges, and behaviors, leading to adverse consequences and clinically significant distress or impairment in social, occupational, or other important areas of functioning (Bancroft, 2008; Kafka, 2010; Kaplan & Krueger, 2010; Marshall & Briken, 2010; Reid, Garos, & Fong, 2012). Patients seeking help for HD typically experience multiple unsuccessful attempts to control or diminish the amount of time spent engaging in sexual fantasies, urges, and behaviors in response to dysphoric mood states or stressful life events (Kafka, 2010). These symptoms must persist for a period of at least 6 months and must occur independent of drug use or mania in order for a diagnosis of HD to be established.

Hypersexual patients often present with high levels of comorbid psychopathology including mood, anxiety, attention-deficit, and substance-related disorders (Kafka & Prentky, 1994; Black, Kehrberg, Flumerfelt, & Schlosser, 1997; Raymond, Coleman, & Miner, 2003; Reid, Carpenter, Gilliland, & Karim, 2011). Personality characteristics such as proneness to boredom (Chaney & Blalock, 2006), impulsivity and shame (Reid, Garos, & Carpenter, 2011), interpersonal sensitivity, alexithymia, loneliness, and low self-esteem also have been observed in association with hypersexual behavior (Reid, Dhuffar, Parhami, & Fong, 2012; Reid, Stein, et al., 2011; Reid, Carpenter, Spackman, & Willes, 2008). Collectively, these comorbid conditions and characteristics create significant challenges for hypersexual patients.

The importance of finding effective treatments for HD cannot be underestimated given the gravity of its consequences (Reid, Garos, et al., 2012): Hypersexual patients are at increased risk for loss of employment, legal problems, social isolation, higher rates of divorce (Reid & Woolley, 2006; Reid, Carpenter, Draper, & Manning, 2010; Zapf, Greiner, & Carroll, 2008), and sexually transmitted infections (Coleman et al., 2010; Dodge, Reece, Cole, & Sandfort, 2004; Rinehart & McCabe, 1997, 1998). Unfortunately, there is a paucity of studies investigating effective interventions for HD, and existing research on treatment outcomes is fraught with numerous methodological limitations (Cantor et al., in press; Hook, Reid, Penberthy, Davis, & Jennings, in press; Reid, 2013). Subsequently, the field is in need of novel and innovative empirically supported treatments.

We hypothesized that the symptom cluster associated with HD might well be addressed effectively by mindfulness interventions that speak to improved awareness and cognitive control. Given the time, expense, and resources required to assess the efficacy of a mindfulness-based intervention in clinical populations, this study sought to obtain preliminary evidence for this approach by investigating relationships between mindfulness, emotional dysregulation, impulsivity, and stress proneness in patients assessed for HD based on the DSM-5 proposed classification criteria.

### *Mindfulness in Clinical Populations*

Mindfulness is defined as the process of bringing awareness and acceptance to one's moment-to-moment experience of thoughts, emotions, and bodily sensations in a nonjudgmental manner (Bishop et al., 2004; Kabat-Zinn, 1990). Although various meditation techniques used to cultivate mindfulness have originated from Buddhist spiritual philosophies (Hanh, 1976; Silananda, 1990; Thera, 1962), contemporary psychology has focused more on clinical applications for mindfulness practice and omitted adherence to any particular spiritual or religious dogma (Baer, 2003).

Given the overlap between trait mindfulness and so many other mental processes, it comes as no surprise that mindfulness approaches have been used successfully to treat a wide variety of psychiatric disorders and maladaptive behaviors. For example, studies have shown strong associations between mindfulness and symptom reduction in mood/anxiety disorders (Hofmann, Sawyer, Witt, & Oh, 2010), stress proneness (Baer, Carmody, & Hunsinger, 2012; Grossman, Niemann, Schmidt, & Walach, 2004; Shapiro, Astin, Bishop, & Cordova, 2005), obesity (Alberts, Mulkens, Smeets, & Thewissen, 2010; Dalen et al., 2010), and attention deficit disorders (van der Oord, Bögels, & Peijnenburg, 2012; Zylowska et al., 2008).

A large body of research has also linked mindfulness practice to positive outcomes in populations with substance-related disorders (Brewer et al., 2011; Witkiewitz, Bowen, Douglas, &

Hsu, in press; Dakwar & Levin, 2009). Particularly interesting are findings from a small pilot study that used Acceptance and Commitment Therapy (which shares some commonalities with mindfulness) in reducing 85% of problematic excessive pornography consumption in a sample of men (Twohig & Crosby, 2010).

As noted previously, patients seeking help for hypersexual behavior frequently present with comorbid psychopathology (Black et al., 1997; Kafka & Prentky, 1994; Raymond et al., 2003; Reid, 2007), exhibit deficits in emotion regulation, impulse control, and effective stress coping strategies (Reid, Stein, et al., 2011; Reid, 2010; Reid et al., 2008). It is plausible that mindfulness may attenuate psychopathology and other deficits found among hypersexual patients; however, research in the field has not yet examined relationships between mindfulness and hypersexual behavior. Although it is likely that previous findings linking mindfulness to impulsivity, emotional dysregulation, and stress proneness will generalize to hypersexual behavior, it is unclear whether unique variance will be attributable to hypersexuality. The present study seeks to explore these relationships in a treatment seeking sample of hypersexual men.

## Methods

### *Participants*

This study combined a sample of hypersexual men with a sample of healthy community controls to provide greater variance in levels of hypersexual behavior for statistical analysis. The participants in this study comprised men ( $n = 40$ ) recruited during a DSM-5 Field Trial for Hypersexual Disorder (Reid, Carpenter et al., 2012). These participants were selected consecutively based on (a) a primary complaint of hypersexual behavior reported during intake and (b) willingness to participate in research, as reflected in consent provided at the outset of the treatment process. Ethnic representation among the hypersexual sample included Asian ( $n = 2$ ), Hispanic ( $n = 2$ ), African American ( $n = 2$ ), and Caucasian ( $n = 35$ ). The men ranged from 25 to 71 years of age (mean [ $M$ ] = 46.6, standard deviation [ $SD$ ] = 11.6). Relationship status included never married ( $n = 8$ ), first marriage ( $n = 16$ ), remarried ( $n = 8$ ), divorced ( $n = 2$ ), separated ( $n = 2$ ), and cohabitating ( $n = 4$ ). Education among the sample included high school education ( $n = 7$ ), some college ( $n = 7$ ), bachelor's degree ( $n = 14$ ), master's degree ( $n = 4$ ), and doctorate degree ( $n = 8$ ). Sexual preference included heterosexual ( $n = 30$ ), homosexual ( $n = 4$ ), and bisexual ( $n = 6$ ). None of the participants in this study met criteria for a paraphilic disorder.

The healthy community controls used in this study comprised men ( $n = 30$ ) drawn from a group of individuals who sought help for minor issues (e.g., communication problems) or a life transition (e.g., starting a new job) at an outpatient community clinic that provided brief counseling as part of an Employee Assistant Program. Historically, our work with these individuals has shown them to be psychologically healthy and the difficulties they encounter are usually resolved within two to three sessions of counseling. These subjects were assessed by a clinical psychologist using a structured diagnostic interview for psychopathology and determined to be void of meeting criteria for any mental health illness. Ethnic representation among the control sample included African American ( $n = 1$ ), Hispanic ( $n = 1$ ), and Caucasian ( $n = 28$ ), and participants ranged from 18 to 61 years of age ( $M = 43.3$ ,  $SD = 15.6$ ). Relationship status included never married ( $n = 6$ ), first marriage ( $n = 14$ ), remarried ( $n = 5$ ), divorced ( $n = 3$ ), and separated ( $n = 2$ ). Education among the control sample included high school education ( $n = 5$ ), some college ( $n = 34$ ), bachelor's degree ( $n = 23$ ), master's degree ( $n = 3$ ), and doctorate degree ( $n = 4$ ). Sexual preference included heterosexual ( $n = 29$ ) and homosexual ( $n = 1$ ). Education among the sample included high school education ( $n = 1$ ), some college ( $n = 7$ ), bachelor's degree ( $n = 13$ ), master's degree ( $n = 6$ ), and doctorate degree ( $n = 3$ ).

### *Measures*

*Mini International Neuropsychiatric Interview (MINI)*. The MINI is a structured diagnostic clinical interview used to assess DSM Fourth Edition Text Revision (DSM-IV-TR) psychopathology along the Axis I domains and includes a module that assesses for adult

Attention deficit hyperactivity disorder. It is used widely, and the psychometric properties have been established and reported in the literature. The brief clinical interview for psychiatric disorders takes approximately 15 minutes to administer and has been validated against other structured clinical interviews (Sheehan et al., 1998).

*Hypersexual Behavior Inventory (HBI)*. The HBI is a 19-item Likert scale yielding a three-factor solution that uses a 5-point response format, ranging from 1 (*never*) to 5 (*very often*), with categories fully labeled. Scores range from 19 to 95, with higher scores reflecting greater hypersexual behavior. Scores  $\geq 53$  are suggested as an initial cutoff for those experiencing difficulties with hypersexuality based on average scores from patients. Scale items capture aspects of the DSM-V proposed classification criteria, such as engaging in sex in response to stress (e.g., "Doing something sexual helps me cope with stress"), or dysphoric mood (e.g., "I turn to sexual activities when I experience unpleasant feelings"), or multiple unsuccessful attempts to diminish or control sexual thoughts, urges, and behaviors (e.g., "Even though I promised myself I would not repeat a sexual behavior, I find myself returning to it over and over again"). Impairment in social, occupational, or other important areas of functioning are also captured by several items (e.g., "My sexual activities interfere with aspects of my life such as work or school" and "My sexual thoughts and fantasies distract me from accomplishing important tasks").

The scale has been used in college, community, and patient samples and has demonstrated high overall reliability ( $\alpha = .95$ ) and subscale reliability values of  $\alpha = .91$  on the Control subscale,  $\alpha = .91$  on the Coping subscale, and  $\alpha = .89$  on the Consequences subscale. Test-retest reliability in a sample of college students ( $N = 81$ ) over a 2-week period was high for the total HBI score ( $r = .85$ ), the Control subscale ( $r = .87$ ), the Coping subscale ( $r = .87$ ), and the Consequences subscale ( $r = .88$ ). Confirmatory factor analysis (CFA) provided support for the factor structure, showing an acceptable goodness of fit with a root mean square error of approximation (RMSEA) of .05 and a comparative fit index (CFI) of .95 (Reid, Garos, et al., 2011). The overall scale reliability in the current study was high ( $\alpha = .95$ ).

*NEO Personality Inventory—Revised (NEO-PI-R)*. The NEO-PI-R, designed to measure the Five-Factor Model (FFM) of personality, was used to assess self-reported personality traits (Costa & McCrae, 1992). The NEO has 240 items, comprising self-statements such as "I am a worrier," answered on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The NEO assesses 30 facets, six for each dimension of the FFM. Raw scores are standardized as T-scores ( $M = 50$ ,  $SD = 10$ ) using respective sex norms reported in the NEO manual (Costa & McCrae, 1992). Evidence on convergent and discriminant validity is presented in the NEO manual, including cross-observer agreement and prediction of external criteria (e.g., psychological well-being, needs, motives, creativity, educational/occupational achievements, and coping mechanisms). The NEO facets of interest in the current study were those measuring emotional regulation (Depression and Anxiety), behavioral regulation (Impulsiveness), and stress proneness (Vulnerability).

*Freiburg Mindfulness Inventory (FMI)*. The FMI short-form comprising 14 items is purported to represent a single dimensional construct reflecting tendencies to be mindful, regulate attention, awareness, and be nonjudgmental of one's experiences (Kohls, Sauer, & Walach, 2009; Walach, Buchheld, Buittenmuller, Kleinknecht, & Schmidt, 2006). The FMI items are endorsed on a 4-point Likert scale, ranging from 1 (*rarely*) to 4 (*almost always*), with categories fully labeled.

Correlations with the original long-form FMI (Buchheld, Grossman, & Walach, 2001) are high ( $r = .95$ ) and items yield acceptable internal consistency ( $\alpha = .86$ ). Items in the present study demonstrated high reliability ( $\alpha = .88$ ).

### Procedures

All participants completed a demographic survey, study measures, and also received a structured diagnostic clinical interview to assess for the DSM-5 proposed criteria for HD (see Reid,

Table 1  
Zero-Order Correlations Between Primary Study Variables

	1	2	3	4	5	6
1. Hypersexuality	—	-.69*	.52*	.51*	.64*	.48*
2. Mindfulness		—	-.65*	-.62*	-.64*	-.61*
3. Depression			—	.81*	.69*	.78*
4. Anxiety				—	.65*	.75*
5. Impulsivity					—	.63*
6. Vulnerability						—

\* $p < .001$ .

Carpenter et al., 2012, for procedures used in the DSM-5 Field Trial for Hypersexual Disorder) and were assessed for psychopathology including paraphilic disorders. The structured diagnostic interviews were conducted using the MINI and were administered by two doctoral-level clinicians with more than 8 years of experience. One clinician was trained in neuropsychology and the other in psychiatry.

Participants were classified as hypersexual based on their responses to the HD structured interview,<sup>1</sup> which queried the following: (a) a reported pattern of hypersexual behavior that persisted for at least 6 months; (b) reported preoccupation with sexual thoughts, urges, and the pursuit of sexual activities in response to dysphoric moods or to avoid, cope, or deal with stress; (c) reported inability to reduce or control the frequency of sexual fantasies, urges, and behaviors; (d) pursuit of sex despite the risk for physical or emotional harm to self and/or others; (e) personal distress induced by frequency or intensity of sexual fantasies, urges, and behaviors; (f) significant problems in personal relationships, social interactions, work, or other important aspects of daily living; and (g) sexual activities were not substance-induced or limited exclusively to mania. All study procedures were approved by the Institutional Review Board at the University of California, Los Angeles and all subjects signed informed consent prior to participation.

## Results

Data were analyzed for extreme scores and met the requirements of test assumptions of normality, linearity, homoscedasticity, homogeneity, and multicollinearity. Subsequently no transformations were conducted. No missing data was observed.

### *Correlational Relationships*

Table 1 shows zero-order correlations between the primary study variables and mindfulness. As expected given previous research findings, mindfulness was inversely related to levels of depression, anxiety, impulsivity, and stress proneness. Mindfulness also showed a significant negative correlation with levels of hypersexual behavior as measured by the HBI.

### *Unique Contributions of Mindfulness*

Hierarchical regression analysis was used to assess the unique contribution attributable to mindfulness in predicting the variance in hypersexuality after controlling for levels of emotional dysregulation, impulsivity, and stress proneness. The HBI score was entered as the dependent variable with the FMI score entered as an independent variable. Scores on NEO facets reflecting emotional dysregulation (Anxiety and Depression), impulsivity (Impulsiveness), and stress

<sup>1</sup>A copy of the HD structured clinical interview used for our DSM-5 Field Trial can be obtained from the first author.

**Table 2**  
*Hierarchical Regression Analysis Using the Enter Procedure Predicting Hypersexuality From Measures of Depression, Anxiety, Stress Proneness, Impulsivity, and Mindfulness*

Variable	$\Delta R^2$	<i>B</i>	SE	$\beta$	<i>t</i>
Step 1	.42				
Anxiety		.181	.277	.113	.653
Depression		.059	.319	.035	.186
Impulsiveness		.867	.231	.509	3.753**
Vulnerability		.069	.253	.044	.271
Step 2	.12				
Anxiety		.082	.250	.051	.326
Depression		-.099	.287	-.059	-.346**
Impulsiveness		.596	.219	.350	2.730
Vulnerability		-.057	.230	-.036	-.250
Mindfulness (FMI)		-1.288	.319	-.490	-4.032**

Note. SE = standard error; FMI = Freiburg Mindfulness Inventory.

\* $p < .01$ ;  $p < .001$ .

proneness (Vulnerability) were controlled for in the analysis and entered in Step 1 followed by the FMI score in Step 2. After controlling for the covariates, the FMI score accounted for an additional 12% of the variance in scores on the HBI suggesting mindfulness makes a unique contribution to levels of hypersexuality (FMI:  $\beta = -.49$ ,  $t = -4.03$ ,  $p < .001$ ) over and above the variance in HBI scores predicted by emotional dysregulation, impulsivity, and stress proneness (Table 2). An F-test comparing the nested models showed that adding mindfulness contributed significantly to prediction of hypersexuality ( $F = 16.25$ ,  $p < .001$ ).

## Discussion

Mindfulness is about being present in the moment with whatever arises including uncomfortable or stressful experiences. Given the results of this study, a mindfulness approach to reducing problematic sexual fantasies, urges, and behaviors seems plausible and is supported by these data. Not only does mindfulness have the potential to attenuate symptoms of anxiety, depression, impulsivity, and stress proneness commonly found in hypersexual patients, but it also appears to have an association with hypersexuality over and above that found with the covariates in these data.

This is the first published study exploring associations between hypersexual behavior and mindfulness. More specifically, a primary aim of this study assessed whether mindfulness offered unique contributions to hypersexuality beyond those commonly found with emotional dysregulation, impulsivity, and stress proneness. As expected, significant associations were found between unpleasant emotions, impulsivity, stress proneness, and hypersexuality replicating findings noted in other studies (Reid et al., 2008; Reid, 2010). Consistent with our prediction, mindfulness showed a significant inverse relationship with hypersexuality and accounted for unique variance in hypersexual behavior beyond that found in associations with our other covariates.

The findings in this study also offer some support for the DSM-5 proposed classification criteria for HD (Kafka, 2010). Specifically, stress and emotional dysregulation have been hypothesized as precipitating and perpetuating risk factors for hypersexuality, and, accordingly, we would expect correlations to reflect this relationship, which is consistent with our findings. The role of impulsivity among hypersexual patients is less clear and it may operate as a context-specific phenomenon in the wake of sexual stimuli as opposed to more generalized deficits in inhibitory control. Regardless, this study provides some preliminary justification for using mindfulness applications to attenuating maladaptive characteristics among hypersexual patients (Baer et al., 2012; Hill & Updegraff, 2012).

Moreover, given the relationship between mindfulness and hypersexuality, future research should consider what aspects of mindfulness might reduce problematic hypersexual behavior and its consequences. Future studies might further elucidate these relationships to determine the existence of mediating or moderating relationships between mindfulness, hypersexual behavior, and the covariates in this study. A feasibility study examining mindfulness in a sample of hypersexual patients is also supported by these data and should be strongly considered.

Despite a number of interesting findings, this study is limited in several ways. This study is cross-sectional and based on correlational data and therefore does not address causality. This study also possesses the limitations commonly associated with studies using self-report measures. Inferences about our findings beyond those listed in this study should be made with caution, in part because our sample was limited to male participants. Additionally, a more diverse ethnic representation among participants in our sample would have been ideal.

Interventions using mindfulness continue to be explored across a broad range of domains and psychological conditions. The findings in this study suggest that hypersexual populations may also benefit from mindfulness interventions given the high comorbid distress, impulsiveness, and emotional dysregulation exhibit by this group.

## References

- Alberts, H. J., Mulkens, S., Smeets, M., & Thewissen, R. (2010). Coping with food cravings. Investigating the potential for a mindfulness-based intervention. *Appetite, 55*, 160–163.
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice, 10*, 125–143.
- Baer, R. A., Carmody, J., & Hunsinger, M. (2012). Weekly change in mindfulness and perceived stress in a mindfulness-based stress reduction program. *Journal of Clinical Psychology, 68*, 755–765.
- Bancroft, J. (2008). Sexual behavior that is “out of control”: A theoretical conceptual approach. *Psychiatric Clinics of North America, 31*, 593–601.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., . . . Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice, 11*(3), 230–241.
- Black, D. W., Kehrberg, L. D., Flumerfelt, D. L., & Schlosser, S. S. (1997). Characteristics of 36 subjects reporting compulsive sexual behavior. *American Journal of Psychiatry, 154*(2) 243–249.
- Brewer, J. A., Mallik, S., Babuscio, T. A., Nich, C., Johnson, H. E., Deleone, C. M., . . . Rounsaville, B. J. (2011). *Drug & Alcohol Dependence, 119*, 72–80.
- Buchheld, N., Grossman, P., & Walach, H. (2001). Measuring mindfulness in insight meditation (vipassana) and meditation-based psychotherapy: the development of the Freiburg Mindfulness Inventory (FMI). *Journal for Meditation and Meditation Research, 1*, 11–34.
- Cantor, J. M., Klein, C., Lykins, A., Rullo, J. E., Thaler, L., & Walling, B. R. (in press). A treatment-oriented typology of self-identified hypersexuality referrals. *Archives of Sexual Behavior*.
- Chaney, M. P., & Blalock, A. C. (2006). Boredom proneness, social connectedness, and sexual addiction among men who have sex with male internet users. *Journal of Addictions & Offender Counseling, 26*(2), 111–122.
- Coleman, E., Horvath, K. J., Miner, M., Ross, M. W., Oakes, M., & Rosser, B. R. (2010). Compulsive sexual behavior and risk for unsafe sex among internet using men who have sex with men. *Archives of Sexual Behavior, 39*(5), 1045–1053.
- Costa, P. T., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO-PIR) and NEO Five-Factor Inventory Professional Manual. Odessa, FL: Psychological Assessment Resources.
- Dakwar, E., & Levin, F. R. (2009). The emerging role of meditation in addressing psychiatric illness, with a focus on substance use disorders. *Harvard Review of Psychiatry, 17*, 254–267.
- Dalen, J., Smith, B. W., Shelley, B. M., Sloan, A. L., Leahigh, L., & Begay, D. (2010). Pilot study: Mindful Eating and Living (MEAL): Weight, eating behavior, and psychological outcomes associated with a mindfulness-based intervention for people with obesity. *Complementary Therapies in Medicine, 18*(6), 260–264.



- de Lisle, S. M., Dowling, N. A., & Allen, J. S. (2011). Mindfulness-Based Cognitive Therapy for problem gambling. *Clinical Case Studies, 10*(3), 210–228.
- Dodge, B., Reece, M., Cole, S. L., & Sandfort, T. G. M. (2004). Sexual compulsivity among heterosexual college students. *Journal of Sex Research, 41*(4)343–350.
- Friese, M., Messner, C., & Schaffner, Y. (in press). Mindfulness meditation counteracts self-control depletion. *Consciousness and Cognition*.
- Goodall, K., Trejnowska, A., & Darling, S. (2012). The relationship between dispositional mindfulness, attachment security, and emotion regulation. *Personality & Individual Differences, 52*, 622–626.
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research, 57*, 35–43.
- Hanh, T. N. (1976). *The miracle of mindfulness: A manual for meditation*. Boston, MA: Beacon.
- Hill, C. L. M., & Updegraff, J. A. (2012). Mindfulness and its relationship to emotional regulation. *Emotion, 12*(1), 81–90.
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting & Clinical Psychology, 78*(2), 169–183.
- Hook, J. N., Reid, R. C., Penberthy, J. K., Davis, D. E., & Jennings, D. J. II. (in press). Methodological review of treatments for non-paraphilic hypersexual behavior. *Journal of Sex and Marital Therapy*.
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your mind to face stress, pain, and illness*. New York, NY: Delta Publishing.
- Kafka, M. P. (2010). Hypersexual Disorder: A proposed diagnosis for DSM-V. *Archives of Sexual Behavior, 39*(2), 377–400.
- Kafka, M. P., & Prentky, R. A. (1994). Preliminary observations of DSM-III-R Axis I comorbidity in men with paraphilias and paraphilia-related disorders. *Journal of Clinical Psychiatry, 55*(11), 481–487.
- Kaplan, M. S., & Krueger, R. B., (2010). Diagnosis, assessment, and treatment of hypersexuality. *Journal of Sex Research, 47*(2–3), 181–198.
- Kohls, N., Sauer, S., & Walach, H. (2009). Facets of mindfulness: Results of an online study investigating the Freiburg Mindfulness Inventory. *Personality and Individual Differences, 46*, 224–230.
- Lattimore, P., Fisher, N., & Malinowski, P. (2011). A cross-sectional investigation of trait disinhibition and its association with mindfulness and impulsivity. *Appetite, 56*, 241–248.
- Marshall, L. E., & Briken, P. (2010). Assessment, diagnosis, and management of hypersexual disorders. *Current Opinion in Psychiatry, 23*(6), 570–573.
- Peters, J. R., Erisman, S. M., Upton, B. T., Baer, R. A., & Roemer, L. (2011). A preliminary investigation of the relationships between dispositional mindfulness and impulsivity. *Mindfulness, 2*(4), 228–235.
- Raymond, N. C., Coleman, E., & Miner, M. H. (2003). Psychiatric comorbidity and compulsive/impulsive traits in compulsive sexual behavior. *Comprehensive Psychiatry, 44*(5) 370–380.
- Reid, R. C. (2007). Assessing readiness to change among clients seeking help for hypersexual behavior. *Journal of Sexual Addiction and Compulsivity, 14*(3)167–186.
- Reid, R. C. (2010). Differentiating emotions in sample men in treatment for hypersexual behavior. *Journal of Social Work Practice in the Addictions, 10*(2), 197–213.
- Reid, R. C. (2013). Personal perspectives on hypersexual disorder. *Sexual Addiction & Compulsivity*.
- Reid, R. C., Carpenter, B. N., Draper, E. D., & Manning, J. C. (2010). Exploring psychopathology, personality traits, and marital distress among women married to hypersexual men. *Journal of Couple & Relationship Therapy, 9*(3), 203–222.
- Reid, R. C., Carpenter, B. N., Gilliland, R., & Karim, R. (2011). Problems of self-concept in a patient sample of hypersexual men with attention-deficit disorder. *Journal of Addiction Medicine, 5*(2), 134–140.
- Reid, R. C., Carpenter, B. N., Hook, J. N., Garos, S., Manning, J. C., Gilliland, R., . . . Fong, T. W. (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., 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*(2), 133–149.

- Reid, R. C., Dhuffar, M. K., Parhami, I., & Fong, T. W. (2012). Exploring facets of personality in a patient sample of hypersexual women compared with hypersexual men. *Journal of Psychiatric Practice*, 18(4), 262–268.
- 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(1), 30–51.
- Reid, R. C., Garos, S., & Fong, T. (2012). Psychometric development of the Hypersexual Behavior Consequences Scale. *Journal of Behavioral Addictions*, 1(3), 115–122.
- Reid, R. C., Stein, J. A., & Carpenter, B. N. (2011). Understanding the roles of shame and neuroticism in a patient sample of hypersexual men. *Journal of Nervous and Mental Disease*, 199(4), 263–267.
- Reid, R. C., & Woolley, S. R. (2006). Using Emotionally Focused Therapy for couples to resolve attachment ruptures created by hypersexual behavior. *Sexual Addiction & Compulsivity*, 13(1), 219–239.
- Rinehart, N. J., & McCabe, M. P. (1998). An empirical investigation of hypersexuality. *Sexual and Marital Therapy*, 13(4) 369–384.
- Rinehart, N. J., & McCabe, M. P. (1997). Hypersexuality: Psychopathology or normal variant of sexuality? *Sexual and Marital Therapy*, 12(1) 45–60.
- Robins, C. J., Keng, S. L., Ekblad, A. G., & Brantley, J. G. (2012). Effects of Mindfulness-Based Stress Reduction on emotional experience and expression: A randomized controlled trial. *Journal of Clinical Psychology*, 68, 117–131.
- Shapiro, S. L., Astin, J. A., Bishop, S. R., & Cordova, M. (2005). Mindfulness-based stress reduction for health care professionals: Results from a randomized trial. *International Journal Stress Management*, 12(2), 164–176.
- Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., . . . Dunbar, G. C. (1998). The Mini-International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry*, 59(suppl. 20): 22–57.
- Silananda, U. (1990). *The four foundations of mindfulness*. Boston, MA: Wisdom Publications.
- Thera, N. (1962). *The heart of Buddhist meditation: A handbook of mental training based on the Buddha's way of mindfulness*. London, UK: Rider and Company.
- Twohig, M. P., & Crosby, J. M. (2010). Acceptance and commitment therapy as a treatment for problematic internet pornography viewing. *Behavior Therapy*, 41(3), 285–295.
- van der Oord, S., Bögels, S. M., & Peijnenburg, D. (2012). The effectiveness of mindfulness training for children with ADHD and mindful parenting for their parents. *Journal of Child and Family Studies*, 21(1), 139–147.
- Walach, H., Buchheld, N., Buttenmuller, V., Kleinknecht, N., & Schmidt, S. (2006). Measuring Mindfulness—The Freiburg Mindfulness Inventory (FMI). *Personality and Individual Differences*, 40, 1543–1555.
- Witkiewitz, K., Bowen, S., Douglas, H., & Hsu, S. H. (in press). Mindfulness-based relapse prevention for substance craving. *Addictive Behaviors*.
- Zapf, J. L., Greiner, J., & Carroll, J. (2008). Attachment styles and male sex addiction. *Sexual Addiction & Compulsivity*, 15(2), 158–175.
- Zylowska, L., Ackerman, D. L., Yang, M. H., Futrell, J. L., Horton, N. L., Hale, T. S., . . . Smalley, S. L. (2008). Mindfulness meditation training in adults and adolescents with ADHD: A feasibility study. *Journal of Attention Disorders*, 11(6), 737–746.