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The Moderating Influence of Self-Compassion on the Relationship between Shame Tendency and Hypersexuality

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ABSTRACT

Hypersexual behavior is thought to be associated with many negative outcomes, as well as shame-proneness. Self-compassion may be helpful in targeting the shame, which may attenuate the proposed cycle through which hypersexual behaviors become problematic by introducing alternate ways of relating to one's self. In this study, 364 online participants completed surveys assessing hypersexual behaviors, shame-proneness, and self-compassion. The results indicated that individuals who had low shame-proneness and low self-compassion tended to have higher hypersexual behavior. These findings suggest that self-judgment, over-identification, and isolation may be important for clinicians and researchers to consider in the development of hypersexual behaviors.

Hypersexuality, a preoccupation with sexual thoughts and behaviors that interfere with one's obligations despite potential negative consequences to self or others, is associated with personal distress (Black, Kehrberg, Flumerfelt, & Schlosser, 1997; Gola, Lewczuk, & Skorko, 2016; Kafka, 2010). People who report high levels of hypersexual behavior tend to have lower quality of life (Leppink, Chamberlain, Redden, & Grant, 2016), difficulties in meaningful relationships (Reid, Carpenter, Draper, & Manning, 2010), and higher levels of guilt, shame, and secrecy associated with their sexual behaviors (Kafka, 2013). Shame, self-criticism, and self-hostility are associated with hypersexuality (Dhuffar & Griffiths, 2014; Reid, 2010). Because self-compassion is antithetical to shame and negative attitudes toward self (Neff, 2003a), interventions designed to foster self-compassion may alleviate the shame-hypersexuality link. The focus of this research is to assess the degree to which self-compassion moderates the relationship between shame and hypersexuality.

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Hypersexuality

In some cases, individuals who have higher levels of hypersexual impulses may experience excessive masturbation, problematic pornography use, impulsive sexual behavior, and anonymous sexual activity via telephone or internet (Kafka, 2010). High hypersexual behavior is associated with increased prevalence of psychological disorders (e.g., depression, substance abuse, phobias), personality disorders (Black et al., 1997), high self-hostility, and increased self-criticism (Reid, 2010). Research suggests people with high hypersexuality tend to have low self-control (Grubbs, Volk, Exline, & Pargament, 2015; Reid, Dhuffar, Parhami, & Fong, 2012), increased negative affect, and reduced positive affect (Reid, 2010; Reid, Carpenter, Spackman, & Willes, 2008; Reid, Li, Gilliland, Stein, & Fong, 2011). Hypersexual individuals tend to have more difficulty regulating their negative emotions (Leppink et al., 2016), and they may use sexual behaviors both for pleasure and to cope with negative emotional states (Goodman, 2001; Guigliamo, 2006).

Shame

Shame is a negative emotion that occurs in response to an unacceptable thought or behavior that results in individuals seeing *themselves* as unacceptable (Tangney, Wagner, & Gramzow, 1992) and concern that others will see the individual in a negative way, even if others are unaware of the unacceptable action that was committed (Tangney, 2007). People who experience shame may also feel worthless, defective, or undeserving of acceptance or love (Struthers, 2010). In contrast, guilt is an emotion experienced after engaging in a behavior that one views as wrong, leading to concerns about the impact of their behavior on others (Tangney, 2007). Guilt differs from shame in that the *behavior*, rather than the self, is viewed as wrong or problematic (Tangney, 2007). Guilt may result in positive behavior change (Murray, Ciarrocchi, & Murray-Swank, 2007), while shame may lead to higher amounts of the problematic behavior, which decreases likelihood of changing the behavior (Gilliland, South, Carpenter, & Hardy, 2011), and increases the likelihood of hiding or isolative behaviors (Kyle, 2013). With shame, Tangney (2007) hypothesizes that self-hatred and a view of one's self as "bad" leads to feeling stuck and becoming emotionally dysregulated.

Shame may be a key component of addictive sexual patterns. Mental health practitioners have reported clinical observations that there is a relationship between shame and hypersexual behavior (e.g., Adams & Robinson, 2001; Wilson, 2000). Reid (2010) proposes that shame may lead to emotional blunting and attempts to engage in enjoyable activities to

minimize shame, which can lead to depression and anxiety due to one's negative view of self after engaging in the behavior (Reid, Stein, & Carpenter, 2011). This shame-behavior-negative evaluation-depression/anxiety sequence can promote the development of addictive patterns of hypersexual behavior. Chisholm and Gall (2015) theorize a cyclical nature between shame and problematic pornography use that may be related to morality or values. They propose that highly shame-prone individuals are more likely to develop addictive and hypersexual behaviors (e.g., pornography use). If people with high shame-proneness believe their sexual behavior is morally unacceptable, they may experience greater shame and self-criticism, resulting in a cycle of behaviors the individual may be unable to break (Chisholm & Gall, 2015).

Self-Compassion

Self-compassion (SC) is a construct developed by Neff (2003a) that captures the relationship individuals have with themselves during difficult times and how they experience challenges. The construct of SC consists of three continuums: self-kindness versus self-judgment, mindfulness versus over-identification, and common humanity versus isolation (Neff, 2003a). Self-kindness is the kind, caring way individuals speak to and treat themselves during difficult times, as opposed to judging or criticizing themselves (Neff, 2003a). Self-compassion is being kind to oneself despite awareness of one's flaws. People who tend to experience high levels of self-criticism, shame, and desires to punish themselves are low in this key aspect of self-compassion (Gregory, Glazer, & Berenson, 2017). Common humanity is seeing oneself as connected to humanity and the human experience, as opposed to viewing oneself as isolated from others and alone with one's problems (Neff, 2003a). Mindfulness involves individuals examining their thoughts in a non-judgmental manner instead of avoiding or over-identifying with their thoughts (Neff, 2003a).

In the general population, high SC is associated with good psychological health (Neff, Kirkpatrick, & Rude, 2007) and negatively correlated with psychopathology and scores of depression, anxiety, stress, neuroticism, rumination, thought suppression, and neurotic perfectionism (Barnard & Curry, 2011; Macbeth & Gumley, 2012; Muris & Petrocchi, 2016; Neff, 2003a; Neff, 2009). Increasingly, SC is found to be associated with various positive psychological outcomes including happiness, optimism, contentedness, wisdom, emotional intelligence, resilience, and adaptive coping (Neff, Rude, & Kirkpatrick, 2007; Neff, Hsieh, Dejitterat, 2005; Allen & Leary, 2010; Scoglio et al., 2018; Hollis-Walker & Colosimo, 2011). Further, it may protect against self-criticism and moderate an individual's response to others'

perceptions (Leary et al., 2007). The Self-Compassion Scale (SCS; Neff, 2003b) has a high correlation with life satisfaction; it is possible that SC interventions may promote resiliency and well-being (Neff, 2003a), as well as protecting against the development of psychopathology (Muris & Petrocchi, 2016). Additionally, those with higher SC tend to have interpersonal characteristics including empathic concern, perspective taking, forgiveness, and altruism (Neff & Pommier, 2013), thus leading to enhanced relationship functioning (Neff & Beretvas, 2013; Yarnell & Neff, 2013).

The SC subscales isolation, over-identification, and self-judgment tend to be positively associated with psychopathology, and this relationship seems to be stronger than the negative relationship between the positive subscales (self-kindness, common humanity, and mindfulness) psychopathology (Muris & Petrocchi, 2016). These findings suggest asymmetry between the negative-positive theoretical pairs of the subscale components.

Self-Compassion, shame, and hypersexuality

Relatively little research has been conducted on self-compassion in hypersexual individuals. Reid, Temko, Moghaddam, and Fong (2014) used path analysis to determine that the relationship between the general tendency to experience shame (trait shame) and hypersexual behavior was mediated by SC in hypersexual individuals. Hypersexual behavior seems to be negatively associated with SC (Reid, Temko, et al., 2014); however, this study did not examine the subscales of the Self-Compassion Scale (SCS; Neff, 2003b), which may yield important information. Another potential limitation of this model is that self-compassion is proposed to be a mediator; however, extant research on these constructs has not established the time/order relationship between these variables necessary for mediation analysis (Hayes, 2013). Other research has been conducted on similar constructs. In a study comparing people with higher hypersexual behaviors to a control group, the hypersexual group had higher scores on measures of attacking one's self (Reid, Harper, & Anderson, 2009), which is similar to the self-criticism component of SC. A similar concept to SC is self-forgiveness, which occurs when people stop avoiding a problem behavior, stop punishing themselves, and begin acting kindly toward themselves (Hook et al., 2015). The relationship between self-forgiveness and hypersexual behavior appears to be mediated by shame/guilt (Hook et al., 2015).

Self-criticism has been interpreted as a manifestation of shame (Reid, Harper, & Anderson, 2009) and developing compassion toward oneself is thought to be an antidote to high shame and self-criticism (Gilbert, 2010). Self-compassion tends to be inversely correlated with shame (Ferreira, Pinto-Gouveia, & Duarte, 2013; Gilbert & Procter, 2006; Reid, Temko,

et al., 2014). Exercises aimed at increasing SC decrease both self-criticism (Lindsay & Creswell, 2014) and shame (Johnson & O'Brien, 2013). It is possible that SC may be important for those with tendencies toward hypersexual behavior.

For people who experience high shame and self-criticism, compassionate mind training (CMT), an intervention designed to promote SC, is helpful because it promotes kindness, warmth, and soothing and reassuring oneself (Gilbert & Procter, 2006). Self-compassion interventions might decrease the impact of shame and rumination on hypersexual behaviors (Reid et al., 2014). Odou and Brinker (2014) note that individuals prone to rumination can benefit from self-compassionate writing tasks. Mindfulness, another component of SC, has been researched in people with problematic pornography use. Twohig and Crosby (2010) examined the efficacy of Acceptance and Commitment Therapy (ACT) in internet pornography (IP) users. They found that ACT treatment led to reductions in IP use from an average of one hour per day before treatment to an average of 0.15 hours of use daily after treatment. While the other aspects of ACT may be responsible for the decrease in IP use, mindfulness skills gained through treatment may be worth investigating further, along with the other constructs of SC. Reid et al. (2014) suggest that individuals with hypersexuality may have difficulty remaining mindful and aware during challenging and distressing times, therefore turning to sexual behavior for comfort. Both, Laan, and Everaerd (2011) have noted that developing skills for attentional control (i.e., mindfulness) can be helpful for individuals with strong sexual appetites. Other research indicates that mindfulness and hypersexuality are inversely correlated (after controlling for impulsivity, stress proneness, and problems with emotion regulation) (Reid, Bramen, Anderson, & Cohen, 2014), which suggests that mindfulness interventions may be helpful for hypersexual individuals.

In recent years, increased understanding of the brain has led to a reconceptualization of addiction to include behavioral/process addictions, including food, sex, shopping and gambling (Smith, 2012; ASAM, 2011). A recognition of the similar impact a process addiction can have on an individual's behavior, mood, and judgment is now better understood and acknowledged. Excessive craving and drive toward sex can be conceptualized through the lens of addiction models. Given the success of mindfulness and self-compassion interventions for other types of addiction (e.g., food, cigarette use, substance use, internet gaming disorder, and gambling) (Dowd & Jung, 2017; Garland, Kiken, Faurot, Palsson, & Gaylord, 2017; Held, Owens, Thomas, White, & Anderson, 2018; Kelly, Zuroff, & Shapira, 2009; Kelly & Carter, 2015; Shonin, Van Gordon, & Griffiths, 2013), as well as for mood (Barnard & Curry, 2011; Macbeth & Gumley, 2012; Neff,

2003a; Neff, 2009) and emotion regulation difficulties (Scoglio et al., 2018), which typically co-occur with hypersexuality (Dhuffar, Pontes, & Griffiths, 2015; Reid et al., 2014; Kafka, 2010), it appears relevant to explore the relationship between self-compassion, shame, and hypersexual behavior as this could be an effective treatment for hypersexual individuals.

Proposed model

This study addresses the relationship between trait shame, hypersexuality, and self-compassion, while using neuroticism and pornography use as covariates. We hypothesize that trait shame will be positively related to hypersexuality (H_1), that self-compassion will have a direct negative relationship with hypersexuality (H_2), and that the relationship between shame-proneness and hypersexuality will be moderated by SC (H_3). We hypothesized that for participants with high SC, the relationship between shame-proneness and hypersexual behavior would be stronger than for participants with lower SC.

Method

Participants and procedure

All participants were recruited through Mechanical Turk (MTurk), an online marketplace where individuals are paid to complete surveys. Participants were compensated $1. The sample was comprised of individuals who endorsed viewing pornographic material in the past month. For the purpose of this study, pornography was defined as videos, images, or other sexually explicit material depicting nudity and sexual behavior. Of the participants, 201 were men, 160 were women, and three respondents identified as "other." The mean age for the sample was 34.6 with a range of 18–73. The sample was predominantly Caucasian ($n = 275$), but also consisted of Black ($n = 41$), Hispanic/Latino ($n = 22$), Asian ($n = 20$), and six other respondents. Almost 65% of the participants were in a committed relationship ($n = 235$), while 6.3% of participants stated they had never been in a relationship, 14% indicated they are single currently but had previously been in relationships, 7.4% reported they were in a non-committed dating relationship, almost 7% stated they were divorced or legally separated, and less than 1% reported they were widowed. Participants reported their average pornography use per week, ranging from 0–28 hours, with a mean of two hours of use per week. When asked about pornography use in the past month, nearly 26% of participants reported using pornography one to three times, 26.9% of participants indicated they had used

pornography—four to six times, 15.1% stated they had used it—seven to nine times, and 32.1% reported they had used pornography 10 or more times.

Measures

Test of Self-Conscious affect (TOSCA-3)

The TOSCA-3, developed by Tangney, Dearing, Wagner, and Gramzow (2000) is based on the original version of the TOSCA (Tangney, Wagner, & Gramzov, 1989). The TOSCA-3 contains 16 Likert-type items and yields scores on shame-proneness, guilt-proneness, externalization, detachment/unconcern, alpha pride, and beta pride. The ecological validity of the TOSCA is good due to design of the measure (Tangney, Wagner, & Gramzow, 1992). The psychometric properties of the TOSCA appear to be equal to or superior to other measures of guilt and shame (e.g., the Self-Conscious Affect and Attribution Inventory) (Tangney et al., 1992). The internal consistency for the TOSCA appears to be high; in a sample of college students, the internal consistency was Cronbach's $\alpha = .76$ for the shame subscale and Cronbach's $\alpha = .66$ for the guilt subscale (Tangney et al., 1992). Consistent with previous research, in this study, the TOSCA-Shame subscale yielded a Cronbach's α of .79.

Self-Compassion Scale (SCS)

The SCS was developed by Neff (2003b) to assess the six constructs of SC. It contains 26 Likert-type items and has six subscales: common humanity, isolation, self-kindness, self-judgment, mindfulness, and over-identification (Neff, 2003b). These subscales, as well as the total scale, have good internal consistency (Neff, 2003b). The SCS has good discriminate validity, good test-retest reliability (Neff, Rude, & Kirkpatrick, 2007), and good incremental validity (Neff, Kirkpatrick, & Rude, 2007). For this sample, the Cronbach's α for the Self Compassion Total Score was .93 and between .80 and .87 for each of the subscales.

Hypersexual Behavior Inventory (HBI)

The HBI, developed by Reid, Garos, and Carpenter (2011), contains 19 Likert-type items on a five-point scale. Within the HBI are three subscales: control (the difficulty people have controlling their thoughts, actions, or emotions related to sexuality), coping (using sexual activity as a way to manage difficult emotions or cope with stressors), and consequences (experiencing negative consequences that people face due to sexual behavior) (Reid, Garos, et al., 2011). The HBI can be used with participants who engage in solitary or partnered sexual behaviors (Reid, Garos et al., 2011);

therefore, this is an appropriate measure to use with IP users. The HBI has good internal reliability for the entire measure as well as its subscales (Reid, Garos et al., 2011). The HBI's test-retest reliability is high, and the concurrent and discriminant validity are good (Reid, Garos et al., 2011). Scores equal to or greater than 53 indicate high hypersexual behavior (Reid, Garos et al., 2011); in this sample, 18% of participants' scores were equal to or higher than this cutoff. For this sample, the Cronbach's α for the HBI-Total Score was .95 and between .90 and .94 for each of the subscales. The mean total score was 37.75 ($SD = 15.72$, range 19–95).

International Personality Item Pool (IPIP)–Neuroticism

The 10-item IPIP-Neuroticism subscale of the IPIP-50 was used as a covariate for this study to control for the variance of negative affect more broadly. This is consistent with previous research on hypersexual behavior, which included neuroticism as a covariate (Grubbs, Exline, Pargament, Hook, & Carlisle, 2015; Grubbs, Volk, et al., 2015). The factor structure of all five subscales of the IPIP-50 has been supported in the literature (Gow, Whiteman, Pattie, & Deary, 2005; Socha, Cooper, & McCord, 2010). For this sample, the Cronbach's α for the 10-item IPIP–Neuroticism subscale was .92.

Pornography use

Pornography use, a second covariate in this model, was measured in average total time per day. Participants also estimated their average hours of IP use per day, which is consistent with other approaches (Grubbs, Exline, et al., 2015; Nelson, Padilla-Walker, & Carroll, 2010; Sun, Bridges, Johnson, & Ezzell, 2016; Wilt, Cooper, Grubbs, Exline, & Pargament, 2016). Using this measure as a covariate is consistent with previous research (Grubbs, Exline, et al., 2015; Grubbs, Volk, et al., 2015; Volk, Thomas, Sosin, Jacob, & Moen, 2016).

Results

A regression analysis was used to assess the relationship between hypersexuality, shame-proneness, and SC in pornography users. Hayes' (2017) process macro was used to assess the research hypotheses, and confidence intervals produced with 10,000 bootstrap samples. Each predictor was mean-centered to calculate cross-products and facilitate interpretability (Dawson, 2014; Echambadi & Hess, 2007). The predictor variable, trait shame-proneness, was assessed using the TOSCA shame subscale. The outcome variable was hypersexual behavior, assessed using the HBI. The proposed moderator, SC, was measured using the SCS. Neuroticism was a covariate in this model and was assessed using the IPIP-50. The second

Table 1. Pearson's *r*, means, and *SD*s.

	1	2	3	4	5	6	7	8	9	10	11	12	13
(1) SCS	1	.812**	−.801**	.678**	−.780**	.730**	−.796**	−.182**	−.145**	−.226**	−.108*	−.638**	−.434**
(2) SCS - Self-Kindness		1	−.474**	.660**	−.423**	.781**	−.431**	−.069	−.077	−.058	−.046	−.401**	−.209**
(3) SCS - Self-Judgement			1	−.280**	.743**	−.296**	.770**	.199**	.141**	.271**	.110*	.525**	.459**
(4) SCS - Common Humanity				1	−.295**	.721**	−.278**	.007	.011	−.008	.016	−.289**	−.163**
(5) SCS - Isolation					1	−.317**	.759**	.198**	.153**	.261**	.104*	.610**	.453**
(6) SCS - Mindfulness						1	−.364**	−.056	−.052	−.063	−.031	−.414**	−.208**
(7) SCS – Over-Identification							1	.299**	.237**	.347**	.205**	.684**	.466**
(8) HBI								1	.907**	.837**	.913**	.262**	.009
(9) HBI - Control									1	.588**	.822**	.214**	−.028
(10) HBI - Coping										1	.621**	.285**	.100
(11) HBI - Consequences											1	.191**	−.056
(12) IPIP - Neuroticism												1	.400**
(13) TOSCA - Shame													1
Mean	3.06	3.06	3.11	3.14	3.10	3.28	2.89	1.93	1.81	2.40	1.60	3.20	36.74
SD	.72	.88	.97	.91	.97	.85	1.00	.82	.96	.87	.97	.92	8.13
Scale	1–5	1–5	1–5	1–5	1–5	1–5	1–5	1–5	1–5	1–5	1–5	1–5	11–77
Cronbach's α	.775	.841	.872	.795	.802	.795	.839	.951	.944	.918	.900	.921	.787

Note.
*Correlation is significant at the .05 level (2-tailed).
**Correlation is significant at the .01 level (2-tailed).

Table 2. Process model results for moderation model.

Source	*b*	*SE*	*t*	LLCI	ULCI
Constant	2.5820	.1889	13.6664**	2.2105	2.9536
TOSCA-Shame	−.0119	.0056	−2.1226*	−.0228	−.0009
SCS-Total	−.0586	.0753	−.7784	−.2067	.0895
TOSCA-Shame X SCS-Total	.0160	.0067	2.3853*	.0028	.0292
IPIP-Neuroticism	.2399	.0573	4.1905**	.3525	.1273
Pornography Use	.0810	.0149	5.4405**	.0517	.1102

*$p < .05$;
**$p < .01$.

covariate, IP use, was measured with a self-report question about average use per week. Correlations, standard deviations, and Cronbach's α's can be found in Table 1.

We hypothesized that trait shame would be a predictor of hypersexual behavior and that higher trait shame would increase the likelihood of hypersexual behavior after controlling for neuroticism and pornography use (H_1). None of the zero-order correlations was statistically significant without including the covariates (i.e., neuroticism and average weekly pornography use) in the analysis. However, in the moderation analysis we found that trait shame was negatively related to hypersexual behavior, $b = -.012$, $t(5,363) = -2.123$, $p = .035$, see Table 2. Further, in the detailed examination of each combination of the subscales of the SCS and subscales of the HBI in the proposed model, trait shame was consistently a significant predictor of the HBI-Control subscale and the HBI-Consequences subscale for each of SCS subscales and SCS-Total. Trait shame was not a significant predictor for any of the models where the HBI-Coping subscale served as the dependent variable. Finally, trait shame was a significant predictor of HBI-Total in the models that include SCS-Total and the negative subscales of the SCS (i.e., Self-judgment, Isolation, and Over-Identification), see Table 3. The lack of significant findings related to the models utilizing the HBI-Coping subscale as the dependent variable suggest a dynamic that may need further exploration. Also, using each of the subscales of SCS as a moderator revealed a pattern of significance for the negative SCS subscales (i.e., Self-judgment, Isolation, and Over-Identification) and absence of significance for the positive SCS subscales (i.e., Self-kindness, Mindfulness, Common Humanity).

Our hypothesis that SC would be a direct predictor of hypersexuality (H_2) was not supported, $b = -.058$, $t(5,363) = -.778$, $p = .437$. We also proposed that self-compassion would moderate the relationship between trait shame and hypersexual behavior (H_3). Specifically, we asserted for IP users that as TOSCA-Shame increases, self-compassion would attenuate the relationship between trait shame and hypersexual behavior. The two-way interaction between trait shame and self-compassion was statistically significant, $b = .016$, $t(5,363) = 2.385$, $p = .018$. We used two approaches to probing the interaction. First, regression slopes were plotted using the 16th,

Table 3. Model coefficients for direct and indirect effects of subscales of the HBI, TOSCA-Shame, and SCS.

	HBI-Control		HBI-Coping		HBI-Consequences		HBI-Total	
	Direct	Interaction	Direct	Interaction	Direct	Interaction	Direct	Interaction
SC-Self Kindness	.0333	.0108	.1061	.0024	.0577	.0049	.0657	.0076
TOSCA-Shame	−.0135*		.0007		−.0145*		−.0091	
SC-Common Humanity	.0793	.0029	.0927	−.0047	.0685	.0036	.0802	.0001
TOSCA-Shame	−.0128*		.0003		−.0138*		−.0088	
SC-Mindfulness	.0480	.0087	.0808	−.0019	.0569	.0070	.0619	.0046
TOSCA-Shame	−.0138*		.0006		−.0148*		−.0094	
SC-Self Judgement	.0778	−.0171**	.1787**	−.0113*	.0507	−.0109*	.1024*	−.0131**
TOSCA-Shame	−.0187**		−.0080		−.0180**		−.0149**	
SC-Isolation	.0779	−.0143*	.1491*	−.0054	.0244	−.0128*	.0838	−.0108*
TOSCA-Shame	−.0187**		−.0068		−.0179**		−.0140**	
SC-Over-Identification	.2031**	−.0179**	.2869**	−.0129*	.1611**	−.0156**	.2170**	−.0155**
TOSCA-Shame	−.0219**		−.0102		−.0215**		−.0179**	
SC-Total	−.0660	.0211**	−.0943	.0087	−.0149	.0173*	−.0584	.0160*
TOSCA-Shame	−.0164**		−.0027		−.0163**		−.0119*	

*$p < .05$;
**$p < .01$.

Note. IPIP-Neuroticism predicted a significant proportion of unique variance in all dependents in all models except for HBI-Coping with SC-Over-Identification as the moderator. Pornography Use predicted a significant proportion of unique variance in all dependents in all models.

50th, and 84th percentiles of SCS-Total (Hayes, 2017). In addition, the Johnson–Neyman technique (Johnson & Neyman, 1936) was used to calculate regions of significance and confidence bands, which provide values of the moderator at the point where the effects of the predictor are different from zero on the outcome (Bauer & Curran, 2005; Preacher, Curran, & Bauer, 2006). We found that there was no effect of the moderator at high levels of shame; however, at low levels of trait shame, lower levels of SC (16th and 50th) resulted in higher levels of hypersexual behavior (Figures 1 and 2). The Johnson-Neyman technique identified 58.5% and below as the region of significance for the interaction.

After performing the overall analysis, the SCS and the HBI were broken down into their respective subscales, and the regression model was applied to each subscale to determine how much variance each of the SCS subscales contributed to the HBI-Total and then on each of the HBI subscales (Table 3). Two of the SCS subscales (Self-judgment and Over-Identification) were significant predictors of HBI-Total. The remaining SCS subscales (Isolation, Self-Kindness, Mindfulness, and Common Humanity) were not statistically significant predictors of HBI-Total. The interactions between the SCS Self-judgment subscale and TOSCA-Shame, between SCS-Isolation and TOSCA-Shame, and between SCS-Over-Identification all significantly predicted HBI-Total. In other words, there was a significant interaction between all three of the negative self-compassion subscales with our shame measure to significantly predict hypersexual behavior. In the next step, we ran moderation analyses using each of the HBI subscales as the outcome variable (while using TOSCA-shame as the predictor and the negative SCS

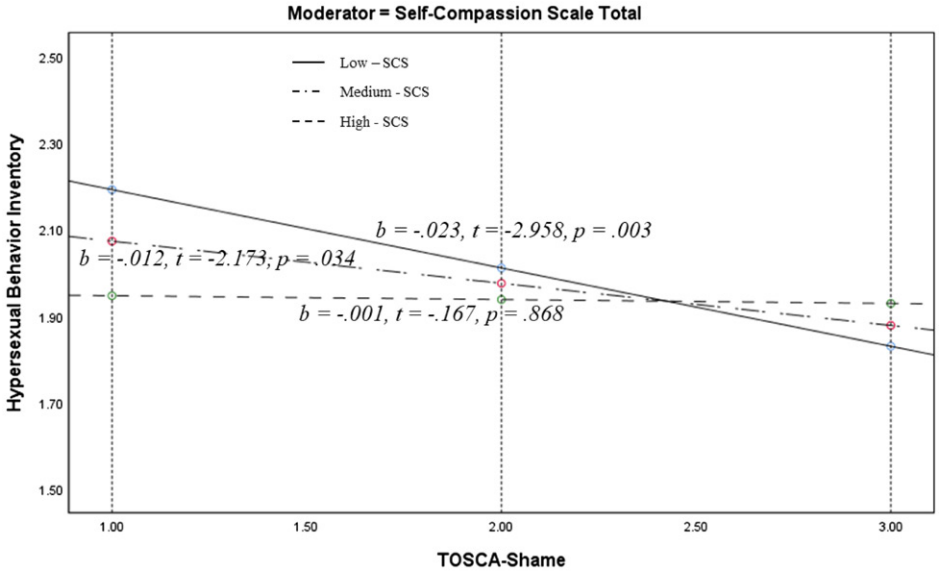


Figure 1. Interaction illustration of self-compassion on the TOSCA-shame–hypersexual behavior inventory relationship.

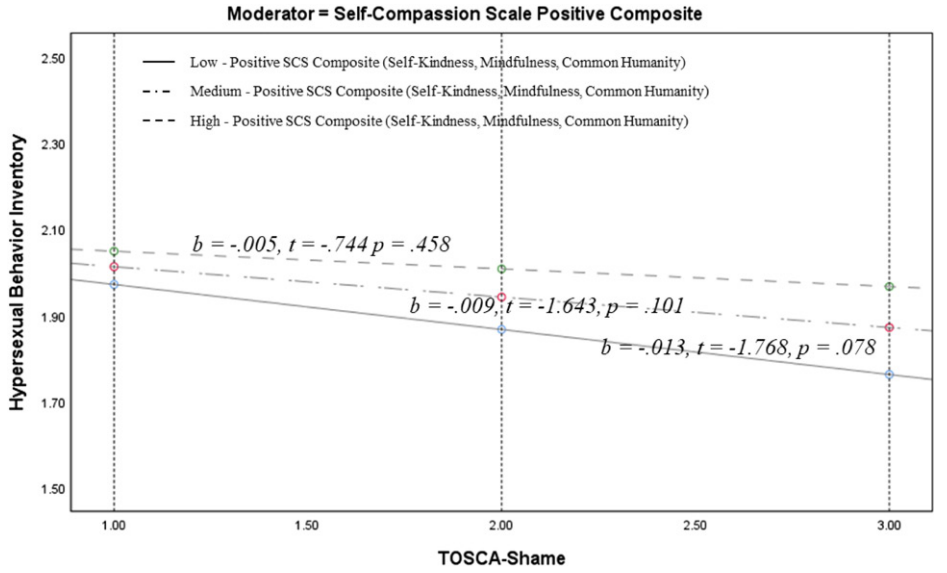


Figure 2. Interaction illustration of positive self-compassion on the TOSCA-shame–hypersexual behavior inventory relationship.

subscales as moderators). The pattern of significant interactions for each of the HBI subscales as outcome variables was nearly identical to the previous step, in which we used the HBI-Total as the outcome variable. None of the interactions between any of the positive SCS subscales (i.e., Self-kindness, Mindfulness, Common Humanity) and TOSCA-Shame were statistically significant predictors of HBI-Total or any of the HBI subscales, while

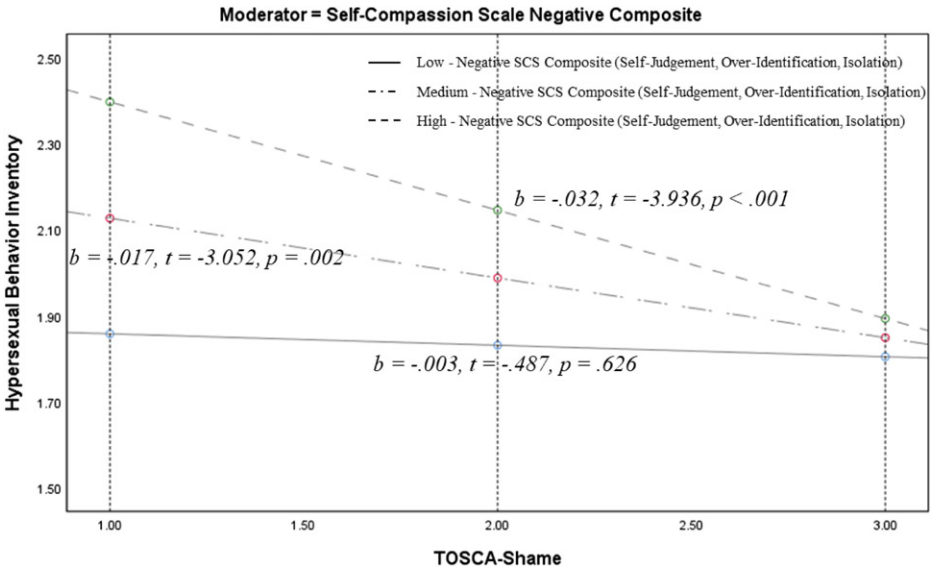


Figure 3. Interaction illustration of negative self-compassion on the TOSCA-shame–hypersexual behavior inventory relationship.

nearly all of the interactions involving the negative SC subscales were statistically significant for each of the HBI subscales (Table 3). These results indicate the source of interaction between trait shame and self-compassion is due to high levels of self-judgement, isolation, and over-identification rather than high levels of self-kindness, common humanity, and mindfulness. Stated differently, when people have low levels of shame, and frequently engage in judging themselves, over-identifying with their thoughts and feelings, and seeing themselves as alone with their problems, they tend to have greater hypersexual behavior compared to those who did not judge themselves, over-identify, or perceive that they were alone. In comparison, those with high shame tended to have similar levels of hypersexual behavior regardless of how much they judged themselves, over-identified, or saw themselves as alone with their difficulties. Figure 3 provides a graphic representation of the interaction between these variables. In contrasting the negative subscales (described previously) with the positive subscales (i.e., self-kindness, common humanity, mindfulness), it appears that these subscales have less impact on the level of hypersexual behavior. Figure 2 demonstrates that people with low shame and those with high shame who also have high self-compassion tend to have fairly similar rates of hypersexual behavior.

Discussion

The hypothesis that SC moderates the relationship between trait shame and hypersexual behavior was partially supported. At low levels of shame, low

levels of SC were associated with high hypersexual behavior, which was inconsistent with our hypothesis that predicted that high shame along with low SC would lead to high hypersexual behavior. This also appears to be in contrast with previous research in which high hypersexual behavior was associated with higher unpleasant emotions or negative affect (Reid, 2010; Reid, Carpenter, Spackman, & Willes, 2008). These results also contrast previous research that theorizes that hypersexual behaviors and IP use are used for emotion regulation or to avoid experiencing negative emotions (e.g., Adams & Robinson, 2001; Chisholm & Gall, 2015; Reid, Carpenter, & Lloyd, 2009; Reid, Harper, & Anderson, 2009; Reid, Stein, & Carpenter, 2011). Participants who tended to have low levels of shame tended to have higher hypersexual behaviors. This is in contrast with previous research, which seems to support the hypothesis that individuals with a higher tendency to experience shame have higher hypersexual behaviors. One possibility for this finding is that the sample used in the present study was a community sample, whereas previous research used clinical samples (e.g., Gilliland et al., 2011; Reid, Harper, & Anderson, 2009; Reid, Stein, & Carpenter, 2011). There may be important fundamental differences in clinical versus community samples that account for the differences in results. Perhaps by the time an individual presents to treatment for hypersexuality, their shame has become elevated as they acknowledged the presence of a highly stigmatized behavioral health problem in their lives. Alternately, individuals who present to treatment may differ from those who do not, either in terms of their moral objection to hypersexual behaviors or their tendency to experience shame, with high shame-prone people seeking treatment while low shame-prone individuals may be less likely to present to treatment. Likewise, the vast majority of studies using the HBI have used clinical populations.

A second possibility is that shame had a protective function in this sample, decreasing the hypersexual behaviors of participants. It might be the case that individuals who have high shame-proneness may avoid hypersexual behaviors since these might further increase their shame. This seems consistent with Kelly and Lamia's (2018) conceptualization of shame. These authors propose that shame motivates people to change their actions to behave in more prosocial ways because people are driven to alleviate the shame to return to positive emotions (Kelly & Lamia, 2018). In other words, experiencing shame in itself is not problematic; it is, in fact, healthy in that it helps people behave in ways that are socially desirable. The present study seems to indicate that individuals who experienced what may be healthy tendencies toward shame appeared to have less hypersexual behavior, suggesting their experiences of shame may have led to intentional shifts in behavior to live within perceived social norms related to sexuality.

A third possibility is that since many individuals with more severe difficulties with hypersexuality have difficulty experiencing, identifying, and verbalizing the emotions they experience (i.e., alexithymia; Reid, Carpenter, Spackman, & Wiles, 2008) and may avoid difficult emotions (Levin, Lillis, & Hayes, 2012), the participants may have lacked awareness of or had difficulty differentiating their internal experiences. This may have resulted in error in the TOSCA scores if participants were inaccurately self-reporting their internal experiences of emotions. Future research should replicate these findings to understand the relationship between trait shame and hypersexual behavior better.

Other explanations for these findings exist. We propose that shame could be a deterrent to hypersexual behaviors, allowing people to avoid these behaviors until they experience psychosocial stress that is greater than they can adequately manage, at which point hypersexual behaviors may increase. Stated differently, there may be a threshold of emotional distress, specifically shame, where people who are below the threshold are able to manage shame through healthy coping skills, but once the shame exceeds the threshold, hypersexual behavior may result.

Self-compassion was hypothesized to moderate the relationship between shame and hypersexual behavior. The results suggested that the positive subscales of SC (mindfulness, common humanity, and self-kindness) had less impact on hypersexual behavior compared to the negative SC subscales (over-identification, isolation, and self-judgment). It is possible that these negative subscales are better predictors of pathology, which may also predict hypersexual behavior. In other words, psychopathology, in general, may explain the presence of low SC and high hypersexual behavior. On the other hand, this study controlled for neuroticism, defined as the presence of ongoing emotional disturbance (Costa & McCrae, 2008), which is thought to be a marker of prospective or current psychopathology (Ormel et al., 2013). An exploration of the subscales of both the HBI and SCS showed that over-identification with one's thoughts and emotions had a stronger direct effect on participants' use of hypersexual behavior to cope with stressors or manage negative emotions compared with other interactions between subscales. This relationship indicates that the tendency to experience shame and over-identify with it (rather than creating distance between one's emotions through mindfulness) may lead to people engaging in sexual behaviors. This suggests mindfulness as an important therapeutic intervention for individuals who are engaging in sexual behaviors or using pornography as a way to manage their mood; this is consistent with recommendations from previous research (Reid, Bramen, et al., 2014; Reid, Harper, & Anderson, 2009; Reid, Temko, et al., 2014) and empirically supported interventions related to hypersexual behaviors (Twohig & Crosby,

2010). Mindfulness has been demonstrated to be negatively associated with criminality (Rainforth, Alexander, & Cavanaugh, 2003) and dishonest or cheating behaviors during experiments (Ruedy & Schweitzer, 2010); therefore, self-compassion may serve a preventive function with regard to behaviors that are inconsistent with one's moral values while increasing behaviors that are in line with one's values, particularly considering it makes people endorse harsh judgment with regard to their own moral violations (Wang, Chen, Poon, Teng, & Jin, 2017). Individuals with moral objections to hypersexual behavior and/or IP use may benefit from increasing mindfulness as a way of increasing one's awareness of the function of hypersexual behavior as well as the precursors to the behavior, and potentially decrease the behavior over time. Also, this may decrease impulsivity, which appears to be implicated in hypersexual behavior (Reid, Bramen et al., 2014) and problematic IP use (Wetterneck et al., 2012). By helping clients to observe their internal experiences through mindfulness interventions, clinicians may help clients with hypersexual behavior reduce impulsivity, which could then decrease use of IP or other hypersexual behaviors.

Clinical implications

Clinicians may use the SCS with clients to gain an understanding of the clients' ways of relating to themselves. As previously mentioned, the negative subscales of the SCS had higher correlations with hypersexual behavior. Therapeutic interventions to help clients with hypersexual behaviors decrease self-judgment, over-identification, and perceived isolation, while these same interventions may simultaneously promote self-kindness, mindfulness, and common humanity. Also, compassion-focused therapy (CFT; Gilbert, 2010) may be an appropriate intervention for clients with low self-compassion who are also experiencing difficulty with hypersexual behaviors. Both SC interventions and CFT may help clients develop emotion regulation skills and improve their ability to identify and tolerate emotions.

Clinicians should assess for shame and guilt-proneness, either formally or informally. The results of this study indicate that clients who have low tendency to experience shame may have greater hypersexual behaviors, possibly because shame is thought to help keep our behavior in the range of what is socially desirable (Kelly & Lamia, 2018). Alternately, as suggested by previous research (Reid, Harper, & Anderson, 2009; Reid, Stein, & Carpenter, 2011), elevated shame-proneness may also suggest that the client is using sexual behavior as a way to manage shame and/or other negative emotions.

Limitations

There are some important limitations to this study. First, the data collected was cross-sectional and correlational; therefore, causality cannot be addressed. Second, self-report measures were used. It is possible that participants' responses were influenced by social desirability, difficulty recalling behaviors or other factors. Third, participants were obtained through MTurk. Although research indicates that MTurk workers tend to be more racially/ethnically diverse, have greater diversity in socioeconomic status, and have a wide age range (Casler, Bickel, & Hackett, 2013; Mason & Suri, 2012), the participants obtained through MTurk for this study may not be representative of the broader population of hypersexual individuals or IP users. Fourth, the HBI was normed and has been primarily used in research with clinical populations; however, the sample in this study was a nonclinical sample.

Future research

Since these findings regarding shame were inconsistent with previous research, this may warrant further exploration. Longitudinal studies may offer more clarity on the relationship between shame and hypersexual behavior. Also, qualitative research exploring the perceptions and lived experiences of individuals struggling with hypersexuality may provide additional information.

Future research should examine clinical interventions using SC in hypersexual individuals. Specifically, researchers should explore the effects of SC interventions on shame and specific hypersexual behaviors that are problematic for the participants. Individual therapy interventions such as those outlined by Gilbert (2010) or psychoeducational group protocols for self-compassion (Germer & Neff, 2013; Neff & Germer, 2013) might be useful for this population. Gilbert's (2010) compassion-focused therapy purports to target shame, while the group developed by Neff and Germer (2013) might help increase common humanity and destigmatize the nature of hypersexuality. A reduction of perceived stigma may then reduce shame or change the experience from shame to guilt, which may then further reduce the hypersexual behaviors (Gilliland et al., 2011; Murray et al., 2007). Research on the efficacy of these interventions with individuals who struggle with hypersexual behavior is indicated.

Several other factors such as impulsivity, experiential avoidance, and alexithymia are implicated in hypersexual behaviors such as IP use (Levin et al., 2012; Reid, Carpenter, Spackman, & Wiles, 2008; Wetterneck et al., 2012). These may be related to the mindfulness facet of SC. Future research should incorporate these constructs in statistical models examining problematic sexual behaviors.

In conclusion, this is one of the first studies to examine shame-proneness, self-compassion, and hypersexual behavior. Exploring the subscales of the SCS demonstrated that the negative aspects of self-compassion are predictive of hypersexual behavior. Also, in contrast with much of the previous research, low shame-proneness was associated with higher hypersexual behavior.

References

Adams, K. M., & Robinson, D. W. (2001). Shame reduction, affect regulation, and sexual boundary development: Essential building blocks of sexual addiction treatment. *Sexual Addiction & Compulsivity*, *8*(1), 23–44. doi:10.1080/10720160127559

Allen, A. B., & Leary, M. R. (2010). Self-compassion, stress, and coping. *Social and Personality Psychology Compass*, *4*(2), 107–118. doi:10.1111/j.1751-9004.2009.00246.x

Barnard, L. K., & Curry, J. F. (2011). Selfcompassion: Conceptualizations, correlates, & interventions. *Review of general psychology*, *15*(4), 289–303. doi:10.1037/a0025754

Bauer, D. J., & Curran, P. J. (2005). Probing interactions in fixed and multilevel regression: Inferential and graphical techniques. *Multivariate Behavioral Research*, *40*(3), 373–400. doi:10.1207/s15327906mbr4003_5

Black, D. W., Kehrberg, L. L., Flumerfelt, D. L., & Schlosser, S. S. (1997). Characteristics of 36 subjects reporting compulsive sexual behavior. *American Journal of Psychiatry*, *154*(2), 243–249. doi:10.1176/ajp.154.2.243

Both, S., Laan, E., & Everaerd, W. (2011). Focusing "hot" or focusing "cool": Attentional mechanisms in sexual arousal in men and women. *The Journal of Sexual Medicine*, *8*(1), 167–179. doi:10.1111/j.1743-6109.2010.02051.x

Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. *Computers in Human Behavior*, *29*(6), 2156–2160. doi:10.1016/j.chb.2013.05.009

Chisholm, M., & Gall, T. L. (2015). Shame and the X-rated addiction: The role of spirituality in treating male pornography addiction. *Sexual Addiction & Compulsivity*, *22*(4), 259–272. doi:10.1080/10720162.2015.1066279

Costa, P. T., & McCrae, R. R. (2008). The NEO inventories. In R. P. Archer & S. R. Smith (Eds.) *Personality Assessment* (pp. 213–245). New York, NY: Routledge. doi:10.1037/1040-3590.4.1.20

Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology*, *29*(1), 1–19. doi:10.1007/2Fs10869-013-9308-7

Dhuffar, M., & Griffiths, M. (2014). Understanding the role of shame and its consequences in female hypersexual behaviours: A pilot study. *Journal of Behavioral Addictions*, *3*(4), 231–237. doi:10.1556/JBA.3.2014.4.4

Dhuffar, M. K., Pontes, H. M., & Griffiths, M. D. (2015). The role of negative mood states and consequences of hypersexual behaviours in predicting hypersexuality among university students. *Journal of Behavioral Addictions*, *4*(3), 181–188. doi:10.1556/2006.4.2015.030

Dowd, A. J., & Jung, M. E. (2017). Selfcompassion directly and indirectly predicts dietary adherence and quality of life among adults with celiac disease. *Appetite*, *113*, 293–300. doi:10.1016/j.appet.2017.02.023

Echambadi, R., & Hess, J. D. (2007). Mean-centering does not alleviate collinearity problems in moderated multiple regression models. *Marketing Science*, *26*(3), 438–445. doi:10.1287/mksc.1060.0263

Ferreira, C., Pinto-Gouveia, J., & Duarte, C. (2013). Self-compassion in the face of shame and body image dissatisfaction: Implications for eating disorders. *Eating Behaviors*, *14*(2), 207–210. doi:10.1016/j.eatbeh.2013.01.005

Garland, E. L., Kiken, L. G., Faurot, K., Palsson, O., & Gaylord, S. A. (2017). Upward spirals of mindfulness and reappraisal: Testing the mindfulness-to-meaning theory with autoregressive latent trajectory modeling. *Cognitive Therapy and Research*, *41*(3), 381–392. doi:10.1007/s10608-016-9768-y

Germer, C. K., & Neff, K. D. (2013). Self-compassion in clinical practice. *Journal of Clinical Psychology*, *69*(8), 856–867. doi:10.1002/jclp.22021

Gilbert, P. (2010). *Compassion focused therapy: Distinctive features*. New York, NY: Routledge.

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy*, *13*(6), 353–379. doi:10.1002/cpp

Gilliland, R., South, M., Carpenter, B. N., & Hardy, S. A. (2011). The roles of shame and guilt in hypersexual behavior. *Sexual Addiction and Compulsivity*, *18*(1), 12–29. doi:10.1080/10720162.2011.551182

Gola, M., Lewczuk, K., & Skorko, M. (2016). What matters: Quantity or quality of pornography use? Psychological and behavioral factors of seeking treatment for problematic pornography use. *The Journal of Sexual Medicine*, *13*(5), 815–824. doi:10.1016/j.jsxm.2016.02.169

Goodman, A. (2001). What's in a name? Terminology for designating a syndrome of driven sexual behavior. *Sexual Addiction &Compulsivity: The Journal of Treatment and Prevention*, *8*(3-4), 191–213. doi:10.1080/107201601753459919

Gow, A. J., Whiteman, M. C., Pattie, A., & Deary, I. J. (2005). Goldberg's "IPIP" Big-Five factor markers: Internal consistency and concurrent validation in Scotland. *Personality and Individual Differences*, *39*(2), 317–329. doi:10.1016/j.paid.2005.01.011

Gregory, W. E., Glazer, J. V., & Berenson, K. R. (2017). Self-compassion, self-injury, and pain. *Cognitive Therapy and Research*, *41*(5), 777–786. doi:10.1007/s10608-017-9846-9

Grubbs, J. B., Exline, J. J., Pargament, K. I., Hook, J. N., & Carlisle, R. D. (2015). Transgression as addiction: Religiosity and moral disapproval as predictors of perceived addiction to pornography. *Archives of Sexual Behavior*, *44*(1), 125–136. doi:10.1007/s10508-013-0257-z

Grubbs, J. B., Volk, F., Exline, J. J., & Pargament, K. I. (2015). Internet pornography use: Perceived addiction, psychological distress, and the validation of a brief measure. *Journal of Sex & Marital Therapy*, *41*(1), 83–106. doi:10.1080/0092623X.2013.842192

Guigliamo, J. (2006). Out of control sexual behavior: A qualitative investigation. *Sexual Addiction & Compulsivity*, *13*(4), 361–375. doi:10.1080/10720160601011273

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). NY: Guilford Press.

Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non- meditators: A theoretical and empirical examination. *Personality and Individual Differences*, *50*(2), 222–227. doi:10.1016/j.paid.2010.09.033

Held, P., Owens, G. P., Thomas, E. A., White, B. A., & Anderson, S. E. (2018). A pilot study of brief self-compassion training with individuals in substance use disorder treatment. *Traumatology*, *24*(3), 219–227. doi:10.1037/trm0000146

Hook, J. N., Farrell, J. E., Davis, D. E., Van Tongeren, D. R., Griffin, B. J., Grubbs, J., … Bedics, J. D. (2015). Self-forgiveness and hypersexual behavior. *Sexual Addiction & Compulsivity*, *22*(1), 59–70. doi:10.1080/10720162.2014.1001542

Johnson, P. O., & Neyman, J. (1936). Tests of certain linear hypotheses and their application to some educational problems. *Statistical Research Memoirs*, *1*, 57–93.

Johnson, E. A., & O'Brien, K. A. (2013). Self-compassion soothes the savage EGO-threat system: Effects on negative affect, shame, rumination, and depressive symptoms. *Journal of Social and Clinical Psychology*, *32*(9), 939–963. doi:10.1521/jscp.2013.32.9.939

Kafka, M. P. (2013). The development and evolution of the criteria for a newly proposed diagnosis for DSM-5: Hypersexual disorder. *Sexual Addiction & Compulsivity*, *20*, 19–26. doi:10.1080/10720162.2013.768127

Kafka, M. P. (2010). Hypersexual disorder: A proposed diagnosis for DSM-V. *Archives of Sexual Behavior*, *39*(2), 377–400. doi:10.1007/s10508-009-9574-7

Kelly, A. C., & Carter, J. C. (2015). Self compassion training for binge eating disorder: A pilot randomized controlled trial. *Psychology and Psychotherapy: Theory, Research and Practice*, *88*(3), 285–303. doi:10.1111/papt.12044

Kelly, A. C., Zuroff, D. C., & Shapira, L. B. (2009). Soothing oneself and resisting selfattacks: The treatment of two intrapersonal deficits in depression vulnerability. *Cognitive Therapy and Research*, *33*(3), 301–313. doi:10.1007/s10608-008-9202-1

Kelly, V. C., & Lamia, M. C. (2018). *The upside of shame: Therapeutic interventions using the positive aspects of a "negative" emotion*. New York, NY: W.W. Norton & Company.

Kyle, S. E. (2013). *Identification and treatment of sexual shame: Development of a measurement tool and group therapy protocol*. (Doctoral dissertation). Retrieved from http://www.esextherapy.com/dissertations/Sarah%20E%20Kyle%20Identification%20and%20Treatment% 20of%20Sexual%20Shame%20Development%20of%20a%20Measurement%20Tool%20and%20Group%20Therapy%20Protocol.pdf

Leary, M. R., Tate, E. B., Adams, C. E., Batts Allen, A., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology*, *92*(5), 887–904. doi:10.1037/0022-3514.92.5.887

Leppink, E. W., Chamberlain, S. R., Redden, S. A., & Grant, J. E. (2016). Problematic sexual behavior in young adults: Associations across clinical, behavioral, and neurocognitive variables. *Psychiatry Research*, *246*, 230–235. doi:10.1016/j.psychres.2016.09.044

Levin, M. E., Lillis, J., & Hayes, S. C. (2012). When is online pornography viewing problematic among college males? Examining the moderating role of experiential avoidance. *Sexual Addiction & Compulsivity*, *19*(3), 168–180. doi:10.1080/10720162.2012.657150

Lindsay, E. K., & Creswell, J. D. (2014). Helping the self help others: Self-affirmation increases self-compassion and pro-social behaviors. *Frontiers in Psychiatry*, 5, 421. doi:10.3389/fpsyg.2014.00421

MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical psychology review*, *32*(6), 545–552. doi:10.1016/j.cpr.2012.06.003

Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods*, *44*(1), 1–23. doi:10.3758/s13428-011-0124-6

Muris, P., & Petrocchi, N. (2016). Protection or vulnerability? A meta-analysis of the relations between the positive and negative components of self-compassion and psychopathology. *Clinical Psychology and Psychotherapy*, *24*(2), 373–383. Advance online publication. doi:10.1002/cpp.2005

Murray, K. M., Ciarrocchi, J. W., & Murray-Swank, N. A. (2007). Spirituality, religiosity, shame, and guilt as predictors of sexual attitudes and experiences. *Journal of Psychology and Theology*, *35*(3), 222–234. doi:10.1177/009164710703500305

Neff, K. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*(2), 85–101. doi:10.1080/15298860390129863

Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity*, *2*(3), 223–250. doi:10.1080/15298860390209035

Neff, K. D. (2009). The role of self-compassion in development: A healthier way to relate to oneself. *Human Development, 52*, 211–214. doi:10.1159/000215071

Neff, K. D., & Beretvas, S. N. (2013). The role of self-compassion in romantic relationships. *Self and Identity*, *12*, 78–98. doi:10.1080/15298868.2011.639548

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, *69*(1), 28–44. doi:10.1002/jclp.21923

Neff, K. D., Hsieh, Y. P., & Dejitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, *4*(3), 263–287. doi:10.1080/13576500444000317

Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, *41*(1), 139–154. doi:10.1016/j.jrp.2006.03.004

Neff, K. D., & Pommier, E. (2013). The relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing meditators. *Self and Identity*, *12*(2), 160–176. doi:10.1080/15298868.2011.649546

Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality*, *41*(4), 908–916. doi:10.1016/j.jrp.2006.08.002

Nelson, L. J., Padilla-Walker, L. M., & Carroll, J. S. (2010). "I believe it is wrong but I still do it": A comparison of religious young men who do versus do not use pornography. *Psychology of Religion and Spirituality*, *2*(3), 136–147. doi:10.1037/a0019127

Odou, N., & Brinker, J. (2014). Exploring the relationship between rumination, self-compassion, and mood. *Self and Identity*, *13*(4), 449–459. doi:10.1080/15298868.2013.840332

Ormel, J., Jeronimus, B. F., Kotov, R., Riese, H., Bos, E. H., Hankin, B., … Oldehinkel, A. J. (2013). Neuroticism and common mental disorders: Meaning and utility of a complex relationship. *Clinical Psychology Review*, *33*(5), 686–697. doi:10.1016/j.cpr.2013.04.003

Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, *31*(4), 437–448. doi:10.3102/10769986031004437

Rainforth, M. V., Alexander, C. N., & Cavanaugh, K. L. (2003). Effects of the transcendental meditation program on recidivism among former inmates of Folsom Prison: Survival analysis of 15-year follow-up data. *Journal of Offender Rehabilitation*, *36*(1-4), 181–203. doi:10.1300/J076v36n01_09

Reid, R. C. (2010). Differentiating emotions in a sample of men in treatment for hypersexual behavior. *Journal of Social Work Practice in the Addictions*, *10*(2), 197–213. doi:10.1080/15332561003769369

Reid, R. C., Bramen, J. E., Anderson, A., & Cohen, M. S. (2014). Mindfulness, emotional dysregulation, impulsivity, and stress proneness among hypersexual patients. *Journal of Clinical Psychology*, *70*(4), 313–321. doi:10.1002/jclp.22027

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. doi:10.1080/15332691.2010.491782

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*(1), 47–63. doi:10.1080/14681990802702141

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. doi:10.1080/00926230701636197

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. doi:10.1097/01.pra.0000416016.37968.eb

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. doi:10.1080/10720162.2011.555709

Reid, R. C., Harper, J. M., & Anderson, E. H. (2009). Coping strategies used by hypersexual patients to defend against the painful effects of shame. *Clinical Psychology & Psychotherapy*, *16*(2), 125–138. doi:10.1002/cpp.609

Reid, R. C., Li, D. S., Gilliland, R., Stein, J. A., & Fong, T. (2011). Reliability, validity, and psychometric development of the pornography consumption inventory in a sample of hypersexual men. *Journal of Sex & Marital Therapy*, *37*(5), 359–385. doi:10.1080/0092623X.2011.607047

Reid, R. C., Stein, J. A., & Carpenter, B. N. (2011). Understanding the roles of shame and neuroticism in a patient sample of hypersexual men. *The Journal of Nervous and Mental Disease*, *199*(4), 263–267. doi:10.1097/NMD.0b013e3182125b96

Reid, R. C., Temko, J., Moghaddam, F. J., & Fong, T. W. (2014). Shame, rumination, and self-compassion in men assessed for hypersexual disorder. *Journal of Psychiatric Practice*, *20*(4), 260–268. doi:10.1097/01.pra.0000452562.98286.c5

Ruedy, N. E., & Schweitzer, M. E. (2010). In the moment: The effect of mindfulness on ethical decision making. *Journal of Business Ethics*, *95*(S1), 73–87. doi:10.1007/s10551-011-0796-y

Scoglio, A. A., Rudat, D. A., Garvert, D., Jarmolowski, M., Jackson, C., & Herman, J. L. (2018). Selfcompassion and responses to trauma: The role of emotion regulation. *Journal of Interpersonal Violence*, *33*(13), 2016–2036. doi:10.1177/0886260515622296

Shonin, E., Van Gordon, W., & Griffiths, M. D. (2013). Buddhist philosophy for the treatment of problem gambling. *Journal of Behavioral Addictions*, *2*(2), 63–71. doi:10.1556/JBA.2.2013.001

Socha, A., Cooper, C. A., & McCord, D. M. (2010). Confirmatory factor analysis of the M5-50: An implementation of the International Personality Item Pool item set. *Psychological Assessment*, *22*(1), 43–49. doi:10.1037/a0017371

Smith, D. E. (2012). Editor's note: The process addictions and the new ASAM definition of addiction. *Journal of Psychoactive Drugs*, *44*(1), 1–4. doi:10.1080/02791072.2012.662105

Struthers, W. M. (2010). *Wired for intimacy: How pornography hijacks the male brain*. Downers Grove, IL: InterVarsity Press.

Sun, C., Bridges, A., Johnson, J. A., & Ezzell, M. B. (2016). Pornography and the male sexual script: An analysis of consumption and sexual relations. *Archives of Sexual Behavior*, *45*(4), 983–994. doi:10.1007/s10508-014-0391-2

Tangney, J. P. (2007). Shame. In R. F. Baumeister & K. D. Vohs (Eds.), *Encyclopedia of Social Psychology* (Vol. 2, pp. 870–872). Thousand Oaks, CA: Sage Publications Inc.

Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. New York, NY: Guilford Press.

Tangney, J. P., Dearing, R. L., Wagner, P. E., & Gramzow, R. (2000). *The Test of Self-Conscious Affect–3 (TOSCA-3)*. Fairfax, VA: George Mason University.

Tangney, J. P., Wagner, P., & Gramzow, R. (1992). Proneness to shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology*, *101*(3), 469–478. doi:10.1037/0021-843X.101.3.469

Tangney, J. P., Wagner, P., & Gramzow, R. (1989). *The Test of Self-Conscious Affect*. Fairfax, VA: George Mason University.

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. doi:10.1016/j.beth.2009.06.002

Volk, F., Thomas, J., Sosin, L., Jacob, V., & Moen, C. (2016). Religiosity, developmental context, and sexual shame in pornography users: A serial mediation model. *Sexual Addiction and Compulsivity*, *23*(2-3), 244–259. doi:10.1080/10720162,2016.1151391

Wang, X., Chen, Z., Poon, K. T., Teng, F., & Jin, S. (2017). Self-compassion decreases acceptance of own immoral behaviors. *Personality and Individual Differences*, *106*, 329–333. doi:10.1016/j.paid.2016.10.030

Wetterneck, C. T., Burgess, A. J., Short, M. B., Smith, A. H., & Cervantes, M. E. (2012). The role of sexual compulsivity, impulsivity, and experiential avoidance in internet pornography use. *The Psychological Record*, *62*(1), 3–18. doi:10.1007/BF03395783

Wilson, M. (2000). Creativity and shame reduction in sex addiction treatment. *Sexual Addiction & Compulsivity*, *7*, 229–248. doi:10.1080/10720160008403699

Wilt, J. A., Cooper, E. B., Grubbs, J. B., Exline, J. J., & Pargament, K. I. (2016). Associations of perceived addiction to internet pornography with religious/spiritual and psychological functioning. *Sexual Addiction & Compulsivity*, *23*(2–3), 260–278. doi:10.1080/10720162.2016.1140604

Yarnell, L. M., & Neff, K. D. (2013). Selfcompassion, interpersonal conflict resolutions, and well-being. *Self and Identity*, *12*(2), 146–159. doi:10.1080/15298868.2011.649545

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