Postcoital dysphoria: Prevalence and correlates among males

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Abstract

Consensual sexual activity is believed to be associated with a positive emotional experience, however, Postcoital Dysphoria (PCD) is a counter-intuitive phenomenon characterized by inexplicable feelings of tearfulness, sadness, or irritability following otherwise satisfactory consensual sexual activity. Prevalence of PCD has been reported among females, but not among males. The present study utilized an anonymous online questionnaire to examine the prevalence and correlates of PCD amongst an international sample including 1,208 male participants. Forty one percent reported experiencing PCD in their lifetime and 20% reported experiencing PCD in the previous four weeks. Between 3 - 4% of the sample reported experiencing PCD on a regular basis. PCD was found to be associated with current psychological distress, childhood sexual abuse, and several sexual dysfunctions. Results indicate that the male experience of the resolution phase may be far more varied, complex, and nuanced than previously thought and lay a foundation for future research investigating PCD among males. Findings have implications for therapeutic settings as well as the general discourse regarding the male sexual experience.

Key words: Dysphoria, Postcoital, Gender, Males, Resolution

Postcoital Dysphoria: Prevalence and Correlates among Males

The first three phases of the human sexual response cycle (excitement, plateau, orgasm) have been the focus of the majority of research on the human sexual response to date. The experience of the resolution phase, however, remains under-researched and therefore poorly understood. It is commonly believed that males and females experience a range of positive emotions including contentment and relaxation immediately following consensual sexual activity (Sadock & Sadock, 2008; Sewell, 2005), a view which is supported by models of the human sexual response (Basson, 2001; Masters & Johnson, 1966; Sadock & Sadock, 2008; Sewell, 2005). However, there is evidence that a counter-intuitive phenomenon known as Postcoital Dysphoria (PCD) may occur following otherwise satisfactory consensual sexual activity and is characterized by *inexplicable* feelings of tearfulness, sadness, or irritability (Sadock & Sadock, 2008). PCD occurs immediately following a sexual experience that in all other aspects was regarded as satisfactory, therefore, the dysphoria experienced is an unexpected emotional reaction. The psychological phenomenon of PCD is distinct from a rare physiological condition experienced by males called post-orgasmic illness syndrome which is believed to be an auto-immune response to semen (Serefoglu, 2017; Waldinger, 2016; Waldinger & Schweitzer, 2002).

The female experience of PCD has been recognized in the literature, but to date, no studies have been identified which have examined the existence or prevalence of this phenomenon among males. Initial studies on the postcoital experience of females showed that up to 46.2% of females had experienced PCD in their lifetime, and between 5% and 10% had experienced PCD in the previous four weeks (Bird, Schweitzer, & Strassberg, 2011; Schweitzer, O'Brien, & Burri, 2015). Interestingly, approximately 2% of females reported experiencing PCD on a regular basis throughout their lifetime (Bird et al., 2011; Schweitzer et al., 2015). Among females, PCD has been associated with current psychological distress,

past abuse, and several sexual dysfunctions (Bird et al., 2011; Schweitzer et al., 2015), which is consistent with literature regarding the influence of these factors upon sexual functioning in general.

While no empirical studies were identified concerning PCD among males, (Sadock & Sadock, 2008) assert that PCD may be more common among males than females, yet provide no evidence to support this claim. Anecdotal evidence from clinical settings as well as personal accounts posted on online blogs suggest that PCD *does* occur amongst males and has the potential to interfere with couple interactions following sexual activity (Friedman, 2009; R. Schweitzer, personal communication, May 14, 2016). For example, it has been established that couples who engage in talking, kissing, and cuddling following sexual activity report greater sexual and relationship satisfaction, demonstrating that the resolution phase is important for bonding and intimacy (Denes, 2012; Muise, Giang, & Impett, 2014). Therefore, the negative affective state which defines PCD has potential to cause distress to the individual, as well as the partner, disrupt important relationship processes, and contribute to distress and conflict within the relationship, and impact upon sexual and relationship functioning.

To provide context, in Western cultures, males face a range of expectations and assumptions about their preferences, performance, and experience of sexual activity (Farvid & Braun, 2006; Wiederman, 2005; Zilbergeld, 1999). These assumptions are pervasive within masculine sub-culture and include that males always desire and experience sex as pleasurable (Farvid & Braun, 2006; Murray, 2017; Zilbergeld, 1999), and that "real" sex must involve penetration and orgasm (Bignell, 1993; Sakaluk, Todd, Milhausen, & Lachowsky, 2014; Torun, Torun, & Özaydin, 2011; Zilbergeld, 1999). Furthermore, all sexual activity is commonly believed to be accompanied by a sense of accomplishment, achievement and invariably followed by a positive emotional experience and a general sense

of wellbeing (Mosher, 1980; Murray, 2017; Sadock & Sadock, 2008; Sakaluk et al., 2014). The experience of PCD is counter-intuitive as it contradicts these dominant cultural assumptions about the male experience sexual activity and of the resolution phase.

As PCD has not previously been studied among males, its prevalence and correlates in this population are currently unknown. Aligned with literature on sexual functioning and PCD, this exploratory study will examine the prevalence of PCD among males, as well as the association of PCD with various demographic, mental health, history of abuse, and sexual functioning variables. This will provide insight into the prevalence of PCD among males and the unique and common factors with which PCD is associated.

Aims

The first objective of this study was to determine the lifetime and four week prevalence of PCD among a sample of males. The second objective was to explore the associations between PCD over the lifetime and in the previous four weeks and a range of demographic, mental health, history of abuse, and sexual functioning variables. In line with the literature on PCD among females (Bird et al., 2011; Schweitzer et al., 2015), the following correlations were associated with PCD: more frequent experiences of PCD over the lifetime and in the previous four weeks would be associated with higher psychological distress; experiencing sexual abuse before the age of 16, and higher rates of sexual dysfunction.

Method

Participants

An international sample of 1,635 males were recruited via social media, online articles, and psychological research websites to voluntarily complete a cross-sectional online questionnaire. Of the males who began the questionnaire, 414 (25.32%) were excluded from the current study due to withdrawing before completing all questions relevant to the analyses,

resulting in study sample of 1,208 participants. The demographic information for the sample is shown in Table 1 in the results section.

Procedure

Ethical approval was provided by the University Human Research Ethics Committee (Approval Number: 1600000961). The data for this study was drawn from a larger questionnaire examining the postcoital experience of both males and females. Participants were eligible to participate if they were 18 years or over and sexually active. The online questionnaire was designed using Qualtrics, with branch and display logic ensuring participants only answered questions relevant to them and with the exception of open response questions, participants were required to respond to every item. Before accessing the questionnaire, participants were made aware of the purpose, risks and benefits of participation and provided consent. Data was collected from February to June 2017 and the questionnaire took approximately 30 minutes to complete. Participants were recruited online via social media, university email lists, psychological research websites, press releases from the university and subsequent articles about PCD on the websites of newspapers, magazines, and blogs both in Australia and internationally

Measures

Demographics

The questionnaire contained 14 items assessing age, sex, gender, sexual orientation, country of residence, and level of education. Status, length, and satisfaction within current sexual relationship were also assessed.

Postcoital dysphoria. Two items assessing lifetime and four week prevalence of PCD were embedded within the sexual dysfunction section of the questionnaire. The items asked participants whether in their life or in the past four weeks, they had “experienced inexplicable tearfulness, sadness, or irritability following consensual sexual activity?” (Bird et al., 2011;

Sadock & Sadock, 2008; Schweitzer et al., 2015). Responses were graded on a five-point Likert-type scale from 0 = *Never* to 4 = *All of the time* with higher scores indicating greater prevalence of PCD. Final scores represented the frequency endorsed.

Previous and current psychological distress

The Kessler Psychological Distress Scale (K10; Kessler et al., 2002) was employed to evaluate current psychological distress among participants over the previous four weeks. The emotional, cognitive, behavioral, and physiological symptoms of depression and anxiety were assessed using ten items scored on a five-point Likert-type scale ranging from 1 = *None of the time* to 5 = *All of the time*. For example, "During the past 4 weeks, how often did you feel that everything was an effort?" A summed total score was calculated ranging from 10 (low distress) to 50 (high distress). This scale is used widely in community and clinical samples (Andrews & Slade, 2001) and has been found to be internally consistent, achieving with a Cronbach's α of .89 (Kessler et al., 2002). The Cronbach's α found in this study was .92, revealing excellent internal consistency. Three items assessed history of depression, anxiety, and bipolar disorder. The wording was as follows: "Have you ever suffered from or been diagnosed with [depression/anxiety/bipolar disorder]?". Responses were coded dichotomously as 1 = *No*, 2 = *Yes*.

Past abuse. Six items assessing sexual, emotional, and physical abuse in childhood and as an adult were included. Two items assessing sexual abuse have been used in previous studies assessing PCD (Bird et al., 2011; Schweitzer et al., 2015): "Before the age of 16, were you ever forced or frightened into doing something sexually that you did not want to do?" and "Since the age of 16, have you ever been forced or frightened into doing something sexually that you did not want to do?". Emotional and physical abuse in childhood and adulthood were assessed with the following items: "Before the age of 16, were you ever exposed to [emotional or physical] abuse?". and "Since the age of 16, have you ever been

exposed to [emotional or physical] abuse?". All items regarding past abuse were coded dichotomously as 1 = *No*, 2 = *Yes*.

Male sexual dysfunction. Eight items assessed lifetime and four week prevalence of four common male sexual dysfunctions: Hypoactive Sexual Desire Disorder (HSDD), Erectile Dysfunction (ED), Delayed Ejaculation (DE), and Premature Ejaculation (PE). Replicating the technique used by Bird et al. (2011), item wording was based on diagnostic criteria from the DSM-5 (American Psychiatric Association, 2013). For example, for ED, the item asked participants if they had "difficulty maintaining or keeping an erection?" and for PE, whether the participant had "prematurely ejaculated (ejaculated very quickly after only a minimal amount of stimulation)?". A five-point Likert-type scale was used where 0 = *Never* to 4 = *All of the time* and final scores represented the frequency of each dysfunction. As these were assessed as single items, no psychometric properties were calculated.

Statistical analysis

While the present study primarily utilizes male data, some analyses (i.e., prevalence of PCD) compare males and females. Statistical analysis was undertaken using SPSS (version 24 for Windows) and a p-value < .05 was considered statistically significant. As participants were required to answer all items in the questionnaire, there were no missing data. Standard linear multiple regression analyses were used to explore the correlates of PCD. Normality was assessed via visual inspection of histograms and skewness and kurtosis statistics as statistical tests of normality (e.g., the Shapiro-Wilk test) are sensitive to large sample sizes (Field, 2014). Distributions of several variables including prevalence of lifetime and four week PCD were found to deviate from normality. Logarithmic transformation of variables and the removal of outliers did not meaningfully alter the interpretation; therefore, raw data was used and all cases were retained. Bootstrapped confidence intervals (Bias Corrected and

accelerated [BCa], based on 1000 samples) are shown for all analyses to provide a robust interpretation (Field, 2014).

Results

Demographic Information and Relationship Characteristics

The demographic information of the sample (N =1,208) is shown in Table 1. Participants ranged in age from 18 to 81 years (M = 36.92, SD = 14.93), the majority had completed tertiary education and identified as heterosexual. The sample contained participants from 78 countries and religion was unimportant to the majority of participants, M = 26.7, SD = 34.1 (0 = *not at all important*, and 100 = *very important)*. Only 15.9% described themselves as not being in a sexual relationship at the time of completing the questionnaire. Of the participants who were in a relationship, the majority had been in that relationship for over one year. The majority of participants reported being sexually satisfied (M = 74.32, SD = 23.87) in their current relationship/s (0 = *extremely unsatisfied*, and 100 = *extremely satisfied)*.

Table 1 goes about here.

Psychological Distress, Past Abuse, and Sexual Dysfunction

Table 2 presents the prevalence of abuse and current psychological distress among the sample. The most commonly reported mental health concern was the experience of having ever suffered from or diagnosed with depression (36.9%), followed by anxiety (32.5%), and bipolar disorder (3%); 25.3% of the sample reported more than one of these concerns. Sexual abuse in childhood was reported by 12.7% of participants (n = 154), and sexual abuse in adulthood by 8.9% (n = 107), 3.5% (n = 42) reported sexual abuse in childhood and adulthood. Emotional abuse was the most commonly reported form of abuse both before and after age 16. In terms of current psychological distress, as assessed by the K10, the mean score (20.05, SD = 7.72) indicated that the sample displayed slightly higher scores than the

general (non-clinical) population (Slade, Grove, & Burgess, 2011). A summary of the prevalence of the sexual dysfunctions assessed is presented in Table 3. Over the lifetime, DE was the most common experience for males, whereas over the previous four weeks, HSDD was most prevalent.

Tables 2 and 3 go about here

Prevalence of Postcoital Dysphoria

The prevalence of lifetime and four week PCD is presented in Table 4. For comparative purposes, data regarding the prevalence of PCD among females (N = 2,093) which was collected as part of the larger study is also presented. As shown, 41% (n = 495) of males reported experiencing PCD at some point in their lifetime, whereas 20.2% (n = 245) reported some experience of PCD in the previous four weeks. PCD that was experienced on a regular basis (*most of the time* or *all of the time*) over the lifetime was reported by 4.4% (n = 53) of males, and 4.1% (n = 51) of males over the previous four weeks. Further investigation showed that 36 males (3.1% of the sample) reported regularly experiencing PCD in their lifetime *and* in the previous four weeks.

Table 4 goes about here.

Associations between PCD and other variables

A correlation matrix displaying the Pearson correlations between all variables included in the present study is presented in Table 5. With the exception of age, positive correlations were present between PCD and all other variables. The large sample size allowed for all variables to be included in the subsequent standard linear multiple regression analyses with sufficient power to detect a small effect (Field, 2014). The first standard linear multiple regression (Table 6) was conducted with lifetime PCD as the criterion and it produced a statistically significant model, $F(20, 1187) = 20.80$, $p < .001$. Overall, 26% of the variance in lifetime PCD in this sample was accounted for. Current psychological distress accounting for

largest portion (3.3%) of unique variance in lifetime PCD over and above the other variables. This was followed by four week HSDD, which uniquely accounted for 2.6% of the variance. Sexual orientation was the third most influential variable associated with lifetime PCD, with homosexual males experiencing PCD more frequently, uniquely accounting for 1.4% of the variance. Child Sexual Abuse (CSA), four week PE, and age were the weakest variables in the model, uniquely accounting for 0.8%, 0.4%, and 0.2% of the variance respectively, with age showing a negative relationship with lifetime PCD.

A second standard linear multiple regression analysis was conducted to explore the associations between four week PCD and the same demographic, life history, mental health, as well as sexual functioning variables (shown in Table 6). The model accounted for 22.4% of the variance in four week PCD in this sample, and was statistically significant $F(20, 1187) = 17.120$, $p < .001$. Current psychological distress was most strongly associated with PCD, accounting for 4.6% of the variance. Four week HSDD, PE and DE were the next strongest associations, uniquely accounting for 2%, 1.3%, and 1.1% of the variance respectively. The weakest association in the model which showed significance were CSA and sexual orientation, uniquely accounting for 0.7% and 0.5%, of the variance in four week PCD respectively.

Tables 5 and 6 go about here

Discussion

This study sought to explore the prevalence and potential correlates of PCD among males. Assessing lifetime prevalence, 36.6% of the sample reported experiencing PCD intermittently (*a little of the time* or *some of the time)* and 4.4% reported experiencing PCD regularly *(most of the time* or *all of the time)*. When assessing four week prevalence, 16% of the sample reported experiencing PCD intermittently and 4.3% reported experiencing PCD

regularly. In total, 41% of males reported experiencing PCD in their lifetime and 20.2% in the previous four weeks.

As this is the first study to assess the prevalence of PCD among males, there is no prior research with which to compare the present results. While there are estimates of the prevalence of PCD among females (see Bird et al., 2011; Schweitzer et al., 2015), the most reliable prevalence comparisons can be made with female data collected as part of the larger exploratory questionnaire due to the large sample size, similar characteristics, and consistent methodology. The prevalence of PCD was lower for males compared to females at all levels of PCD (*a little-*, *some-, most-,* and *all- of the time*) over the lifetime, and the previous four weeks. Odds ratios revealed that compared to males, females were up to 2.87 times more likely to experience PCD in their lifetime, and up to 1.83 times more likely to experience PCD in the previous four weeks.

Overall, the prevalence rates found in the current study reveal that PCD occurs in a substantial proportion of males which has implications for the general discourse regarding the male experience of the resolution phase (and perhaps sex in general) as it diverges from popular assumptions about the experience of the time immediately following sexual activity (Farvid & Braun, 2006; Sakaluk et al., 2014; Sewell, 2005; Zilbergeld, 1999). The experience has been variously described by male participants who report PCD in terms of: hard to quantify but after sexual activity I get a strong sense of self-loathing about myself, usually I'll distract myself by going to sleep or going and doing something else or occasionally laying in silence until it goes away; I feel a lot of shame; I usually have crying fits and full on depressive episodes follow[ing] coitus that leave my significant other worried, and every once in a while she has crying spells after the act, but hers are rarer. Because I typically don't want my partner worried, however, sometimes I hold in the sadness for hours until she leaves

as we do not live together, and I sometimes have negative feelings which are difficult to describe (Direct quotes from open-ended survey questions).

These results demonstrate that the male experience of the resolution phase is not always positive and can at times be negative without explanation, indicating that it may be far more varied, complex, and nuanced than previously thought (Sewell, 2005).

In addition to prevalence, this study aimed to assess various demographic factors, past abuse, psychological distress, and sexual dysfunction as possible correlates of PCD among males. The first hypothesis, that higher levels of psychological distress would be associated with more frequent experiences of PCD, was supported. Current psychological distress, as measured by the K10, emerged as the strongest variable associated with lifetime and four week PCD, where higher levels of psychological distress was more strongly associated with PCD. This finding is consistent with previous studies investigating the correlates of PCD among females (Bird et al., 2011; Schweitzer et al., 2015), as well as the literature surrounding the correlates of sexual difficulties in general (Laurent & Simons, 2009). Current psychological distress uniquely accounted for 4.6% of the variance in four week PCD and 3.4% of the variance in lifetime PCD, representing a small to medium effect. This finding supports the suggestion by (Burri & Spector, 2011) that one's current psychological state influences the experience of the resolution phase. Therapists working with individuals and couples facing current psychological distress may wish to consider the role of PCD as a potential contributor to distress. Future research may explore the relationship between psychological distress and PCD.

The second hypothesis, that CSA would be associated with more frequent experiences of PCD, was supported. CSA correlated with lifetime and four week PCD, however, it uniquely accounted for less than 1% of the variance in PCD in both models and the magnitude of the effect was small. This finding is consistent with PCD research among

females (Bird et al., 2011; Schweitzer et al., 2015). In total, 12.6% of males reported experiencing CSA, which is consistent with general prevalence estimates (Stoltenborgh, van Ijzendoorn, Euser, & Bakermans-Kranenburg, 2011). This result provides further evidence that sexual abuse in childhood negatively impacts sexual functioning in adulthood (Dube et al., 2005). Future qualitative research may broaden knowledge regarding the impact of CSA on the postcoital experience in general, and PCD specifically.

The third hypothesis, that PCD would be positively associated with sexual dysfunctions, was supported. In addition to significant small to moderate positive correlations between sexual dysfunctions and PCD four week HSDD and PE emerged as displaying significant relationships with lifetime PCD over and above that of the other variables in the model. While this may indicate that PCD increases the risk of future sexual dysfunction, the cross-sectional design of this study does not allow for causation to be established. An alternative interpretation may be that males display a tendency to reflect on past sexual encounters through the lens of their current sexual experiences, where encountering more sexual difficulties in the previous four weeks may result in an increased likelihood of recalling previous sexual encounters which resulted in negative affect. This interpretation is consistent with literature reporting males value their ability to perform sexually and are sensitive to self-perceived failure (McCarthy & Thestrup, 2009; Zilbergeld, 1999).

Overall, the relationship between PCD and sexual dysfunction is complex. On the one hand, positive correlations between each of the sexual dysfunctions measured and PCD, together with the fact that HSDD and PE were significant correlates of PCD, suggest that sexual dysfunctions and PCD are related. This supports the understanding that sexual difficulties tend to co-occur, with problems in one area of sexual functioning resulting in an increased likelihood of problems in other areas (Ramlachan & Campbell, 2014). On the other hand, the correlations between each sexual dysfunction and PCD were small to medium in

magnitude and sexual dysfunctions over the lifetime were not associated with either lifetime or four week PCD. This suggests that PCD occurs in the absence of sexual dysfunctions, supporting the notion that PCD occurs without obvious explanation. The definition of PCD necessitates that dysphoria occurs following an otherwise satisfactory sexual experience, yet males with more experience of sexual dysfunction experienced higher rates of PCD. Previous research amongst females (see Bird et al., 2011) found similar results inferring that PCD is related to, yet also occurs independently of, sexual dysfunction (Bird et al., 2011).

For the majority of males, PCD appears to occur infrequently and may therefore represent normal variation within the human experience of the resolution phase. This view is aligned with the good-enough sex model (Metz & McCarthy, 2007), which suggests that rather than having expectations of perfect performance (Zilbergeld, 1999), variation within sexual experience is normative and should be anticipated, rather than pathologized. When applied to PCD and resolution phase, the good-enough sex model may suggest that PCD, when experienced infrequently and without excess distress, may be an ordinary human response to sexual activity (Metz & McCarthy, 2007).

As the first study to focus on PCD among males, the results have implications for research and therapy. In keeping with suggestions from previous researchers (see Burri & Spector, 2011; Schweitzer et al., 2015), it is recommended that future research take a biopsychosocial approach. Secondly, investigations of the interplay between PCD and interpersonal or partner related variables such as relationship quality may be conducted, as these factors have been shown to influence sexual functioning and satisfaction (McCabe et al., 2010). Thirdly, biological correlates, such as hormone levels which have recently been found to influence partner interactions following sexual activity (Denes, Afifi, & Granger, 2016), and their possible relationship to PCD may be explored. Future research on PCD may also be extended by examining its occurrence specifically in the presence and absence of

orgasm or following masturbation (i.e., without a partner), as well as analysis of the possible relationship between psychotropic medication use and PCD.

The results have implications for the general community's understanding that the male sexual experience varies and that the time immediately following sex may not always be experienced positively, Males who experience PCD, and their partners, may find it comforting to know that they are not alone in their experience and that negative postcoital experiences may simply reflect normal variation in human sexual response.

Strengths and Limitations

Several sampling, operationalization, and design limitations are noted. While the sample is large, it may not be representative due to the nature of the topic and method of recruitment. Evidence suggests that differences exist between self-selected participants and non-participants of sexuality research (Dunne et al., 1997, Strassberg & Lowe, 1995). However, the anonymity of online surveys has been shown to be of value in sexuality research.

Sampling may also have been biased by attracting participants who had or were experiencing PCD, and deterred those who had not heard of or experienced PCD. Conversely, because PCD is unfamiliar, participants may have answered without sufficient contemplation on their own experience or in a way that reflects dominant cultural assumptions about the experience of the resolution phase (Farvid & Braun, 2006; Sakaluk et al., 2014; Sewell, 2005; Zilbergeld, 1999). Thus, there may also be reason to suspect that PCD may be more common among males than was reported in this study.

Potential limitations were also present in the operationalization of abuse history, PCD, and sexual dysfunction within the questionnaire. Firstly, emotional and physical abuse were assessed using single item questions which were open to participant interpretation of what constitutes emotional or physical abuse. Secondly, as the study of PCD is in its infancy, a

scale for its measurement does not yet exist. While the items used to assess PCD in this questionnaire were consistent with previous studies (Bird et al., 2011; Schweitzer et al., 2015), future research would benefit from the use of a nuanced and precise definition of PCD to ensure participants understand the distinct experience. This may be achieved by developing a valid and reliable scale assessing distinct facets of PCD such as frequency, severity, persistence, and distress.

The retrospective nature of this study may have led to misrepresentation due to recall bias (Eisenhower, Mathiowetz, & Morganstein, 2004). Future research may consider a mixed methods approach, incorporating an anonymous online measure as well as qualitative data to assess the prevalence and subjective phenomenology of PCD.

Conclusion

Results indicate that a proportion of males have experienced PCD, that PCD most often occurs intermittently, and that a small percentage of males will experience PCD on a regular basis. Among males, PCD appears to be associated with current psychological distress, sexual abuse during childhood, and with several sexual dysfunctions. Taking the view of Metz & McCarthy's (2007) good-enough sex model, for the majority of males, PCD which occurs intermittently may represent natural variation in the human experience of the resolution phase rather than a sexual dysfunction. The results challenge the dominant cultural discourse by showing that the male experience of the resolution phase may be far more varied, complex, and nuanced than previously thought.

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Table 1

Demographic Information

Variable	*n*	Percentage
Country of residence – in order of representation		
USA	318	26.3%
Australia	284	23.5%
UK	111	9.2%
Russia	55	4.6%
New Zealand	39	3.3%
Germany	38	3.1%
Other	363	30%
Education		
Completed secondary school	1,154	95.5%
Years of tertiary education		
0	71	5.9%
1-4	475	39.3%
5-6	295	24.4%
7-10	313	25.9%
Sexual Orientation		
Heterosexual	1019	84.4%
Homosexual	189	15.6%
Current relationship status		
Single	289	23.9%
In a relationship, but not living together	282	23.3%
Living with a partner, but not married	201	16.6%
Married	395	32.7%
Separated	20	1.7%
Other	21	1.7%
Length of current relationship		
Not currently in a relationship	330	27.2%
Less than 6 months	84	7%
6 – 12 months	77	6.4%
1 – 3 years	182	15.1%
3 – 6 years	126	10.4%
6 – 12 years	140	11.6%
12 – 24 years	133	11.0%
Greater than 24 years	136	11.3%
Sexual relationship status		
Not in a sexual relationship	192	15.9%
Exclusive/Monogamous	789	65.3%

Non-exclusive/Non-monogamous	227	18.8%

Note. $N = 1,208$.

Table 2

Prevalence of Abuse and Current Psychological Distress

Variable	*n*	Percentage
Before the age of 16		
Sexual abuse	154	12.7%
Physical abuse	296	24.5%
Emotional abuse	467	38.7%
Since the age of 16		
Sexual abuse	107	8.9%
Physical abuse	176	14.6%
Emotional abuse	468	38.7%
Current psychological distress		
10 – 19	664	55%
20 – 24	250	20.7%
25 – 29	132	10.9%
30 – 50	162	13.4%

Note. $N = 1,208$.

Table 3

Prevalence of Sexual Dysfunctions

Frequency	HSDD	ED	DE	PE
		Lifetime		
Never	33.4%	38.2%	28.2%	32.4%
A little of the time	37.7%	39.0%	44.5%	40.3%
Some of the time	25.5%	18.2%	21.0%	20.3%
Most of the time	3.0%	3.8%	5.3%	6.0%
All of the time	0.5%	0.7%	1.0%	1.0%
		Four week		
Never	58.4%	69.6%	64.6%	74.8%
A little of the time	27.0%	18.4%	22.5%	14.9%
Some of the time	9.1%	6.7%	6.5%	6.0%
Most of the time	4.8%	4.1%	4.5%	2.8%
All of the time	0.7%	1.2%	1.9%	1.5%

Note. N = 1,208. HSDD = Hypoactive Sexual Desire Disorder, ED = Erectile Dysfunction, DE = Delayed Ejaculation, PE = Premature Ejaculation.

Table 4

Prevalence of Lifetime and Four Week PCD and Odds Ratios as a Function of Sex

	Male		Female		
Frequency	*n*	%	*n*	%	Odds Ratio [95% CI]
Lifetime PCD					
Never	713	59%	699	33.4%	
Any experience	495	41%	1,394	66.6%	2.87* [2.48, 3.33]
A little of the time	291	24.1%	736	35.2%	1.71* [1.46, 2.01]
Some of the time	151	12.5%	506	24.2%	2.23* [1.83, 2.72]
Most of the time	48	4.0%	134	6.4%	1.65* [1.18, 2.32]
All of the time	5	0.4%	18	0.9%	2.09 [0.77, 5.64]
Four week PCD					
Never	963	79.7%	1,427	68.2%	
Any experience	245	20.2%	666	31.8%	1.83* [1.55, 2.17]
A little of the time	134	11.1%	370	17.7%	1.72* [1.39, 2.13]
Some of the time	61	5.0%	164	7.8%	1.60* [1.18, 2.16]
Most of the time	35	2.9%	90	4.3%	1.51* [1.01, 2.24]
All of the time	15	1.2%	42	2%	1.63 [0.90, 2.95]

Note. * $p < .05$. Male $N = 1,208$, Female $N = 2,093$ respondents as part of the same survey. Odds ratios are expressed as the likelihood of females experiencing PCD when compared to males.

Table 5

Correlation Matrix of Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Age	-																				
2. Sexual orientation	-.13**	-																			
3. Current psychological distress	-.31**	.09**	-																		
4. Lifetime depression	-.04	.11**	.37**	-																	
5. Lifetime anxiety	-.10**	.11**	.39**	.56**	-																
6. Lifetime bi-polar disorder	-.63*	.05	.15**	.15**	.16**	-															
7. Sexual abuse (C)	.04	.10**	.06*	.11**	.13**	.11**	-														
8. Physical abuse (C)	.08**	.01	.13**	.22**	.18**	.04	.29**	-													
9. Emotional abuse (C)	-.01	.10**	.23**	.28**	.23**	.06*	.21**	.50**	-												
10. Sexual abuse (A)	-.03	.24**	.16**	.12**	.14**	.12**	.25**	.18**	.15**	-											
11. Physical abuse (A)	-.01	.07*	.14**	.18**	.13**	.07*	.12**	.40**	.27**	.28**	-										
12. Emotional abuse (A)	-.03	.08**	.30**	.29**	.25**	.10**	.14**	.35**	.53**	.26**	.41**	-									
13. Lifetime HSDD	-.17**	.18**	.30**	.21**	.23**	.12**	.04	.06	.11**	.14**	.08**	.13**	-								
14. Lifetime ED	.16**	.07*	.17**	.17**	.13**	.06*	.04	.10**	.13**	.13**	.09**	.12**	.25**	-							
15. Lifetime DE	-.09**	.05	.23**	.19**	.17**	.10**	.08**	.07*	.10**	.10**	.09**	.14**	.22**	.33**	-						
16. Lifetime PE	.01	-.06*	.09**	.02	.02	-.03	-.01	.01	.05	.06*	.04	.04	.06*	.15**	-.18**	-					
17. Lifetime PCD	-.16**	.19**	.38**	.22**	.20**	.14**	.17**	.15**	.17**	.17**	.13**	.21**	.24**	.12**	.15**	.12**	-				
18. Four week HSDD	-.05	.12**	.30**	.18**	.14**	.07*	.05	.11**	.12**	.11**	.08**	.14**	.51**	.25**	.19**	.05	.33**	-			
19. Four week ED	.22**	.06	.17**	.12**	.13**	.04	.03	.08**	.08**	.08**	.05	.08**	.17**	.62**	.19**	.15**	.13**	.34**	-		
20. Four week DE	.05	.02	.22**	.22**	.19**	.10**	.07*	.08**	.12**	.10**	.08**	.14**	.20**	.30**	.61**	-.05	.17**	.20**	.38**	-	
21. Four week PE	-.02	-.07*	.12**	.01	.05	-.01	.01	.01	.03	.06*	.03	.04	.04	.11**	-.19**	.66**	.15**	.07*	.13**	-.06*	-
22. Four week PCD	-.11**	.11**	.36**	.14**	.12**	.13**	.14**	.11**	.12**	.13**	.08**	.13**	.15**	.14**	.10**	.13**	.71**	.28**	.19**	.20**	.20**

Note: * $p < .05$, ** $p < .01$. $N = 1{,}208$ except where specified. ^ $n = 1015$. (C) = Childhood, (A) = Adulthood. HSDD = Hypoactive Sexual Desire Disorder, ED = Erectile Dysfunction, DE = Delayed Ejaculation, PE = Premature Ejaculation.

Table 6

Multiple Regression Analyses for Lifetime and Four Week PCD

Variable	Criterion: Lifetime PCD					Criterion: Four week PCD				
	B	95% BCa CI for B	*SE B*	β	sr^2	*B*	95% BCa CI for B	*SE B*	β	sr^2
(Constant)	-.604	[-1.045, -0.144]	.201			-.291	[-0.734, 0.156]	.189		
Age	-.003	[-0.006, 0.000]	.002	-.057*	.002	-.002	[-0.006, 0.001]	.002	-.043	.001
Orientation	.300	[0.159, 0.433]	.064	.124**	.014	.164	[0.042, 0.292]	.060	.074*	.005
Current psychological distress	.026	[0.018, 0.033]	.004	.228**	.033	.028	[0.021, 0.036]	.003	.268**	.046
Lifetime anxiety	-.033	[-0.152, 0.096]	.060	-.017	.000	-.129	[-0.256, -0.002]	.056	-.075*	.003
Lifetime depression	.070	[-0.043, 0.188]	.058	.038	.001	.022	[-0.086, 0.137]	.054	.013	.000
Lifetime bi-polar disorder	.249	[-0.077, 0.534]	.133	.048	.002	.310	[-0.033, 0.648]	.125	.065	.004
Sexual abuse (C)	.258	[0.109, 0.404]	.071	.098**	.008	.225	[0.073, 0.372]	.067	.093**	.007
Physical abuse (C)	.089	[-0.051, 0.230]	.064	.043	.001	.085	[-0.062, 0.227]	.060	.045	.001
Emotional abuse (C)	-.036	[-0.143, 0.076]	.059	-.020	.000	-.024	[-0.136, 0.078]	.055	-.014	.000
Sexual abuse (A)	.047	[-0.119, 0.217]	.086	.015	.000	.032	[-0.177, 0.246]	.081	.011	.000
Physical abuse (A)	.020	[-0.143, 0.182]	.073	.008	.000	-.015	[-0.158, 0.135]	.068	-.006	.000
Emotional abuse (A)	.103	[-0.024, 0.228]	.058	.057	.002	-.008	[-0.124, 0.115]	.055	-.005	.000
Lifetime HSDD	.000	[-0.064, 0.059]	.031	.000	.000	-.060	[-0.116, 0.007]	.029	-.064	.003
Lifetime ED	-.029	[-0.100, 0.040]	.034	-.030	.000	.003	[-0.066, 0.072]	.032	.003	.000
Lifetime DE	.017	[-0.053, 0.087]	.034	.018	.000	-.063	[-0.136, 0.008]	.032	-.069	.003
Lifetime PE	.051	[-0.018, 0.114]	.032	.053	.002	.000	[-0.054, 0.057]	.030	.000	.000
HSDD four week	.200	[0.130, 0.276]	.031	.202**	.026	.159	[0.083, 0.232]	.029	.175**	.020
ED four week	-.008	[-0.081, 0.067]	.036	-.008	.000	.029	[-0.052, 0.111]	.033	.031	.000
DE four week	.055	[-0.019, 0.128]	.033	.059	.002	.126	[0.050, 0.202]	.031	.146**	.011
PE four week	.091	[0.016, 0.158]	.035	.087*	.004	.147	[0.067, 0.228]	.033	.153**	.013

Note: N = 1,208. * $p < .05$, ** $p < .01$. BCa based on 1000 samples. Lifetime PCD adjusted $R^2 = .25$. Four week PCD adjusted $R^2 = .21$. (C) = Childhood, (A) = Adulthood. HSDD = Hypoactive Sexual Desire Disorder, ED = Erectile Dysfunction, DE = Delayed Ejaculation, PE = Premature Ejaculation