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ORIGINAL ARTICLE

Childhood abuse: Differential gender effects on mental health and sexuality[☆]

M. Abrams^{a,b,*}, M. Milisavljević^c, A. Šoškić^c



^a Psychology for NJ, LLC, 120, Mountain Park Road, Clifton, NJ 07013, USA

^b New York University, 70, Washington Square South, New York, NY, 10012, USA

^c University of Belgrade, Studentski trg 1, 11000 Belgrade, Serbia

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Summary

Objectives. — Childhood abuse is linked to many maladaptive outcomes in adulthood, but its effects on adult sexuality are rarely explored. The goal of this study was to explore adult correlates of childhood abuse, related to both sexual fantasies and behavior, as well as mental health. Moreover, the relationship of these outcomes and gender was explored.

Methods. — Surveys exploring sexual activity and fantasies, and psychopathological symptoms were conducted online on two groups of adults — those not abused in childhood, and those abused during their pre-teen age by close family members (sample of 349 participants).

Results. — Atypical sexual fantasies were more common in the abused than in the non-abused males, while the same relationship was not observed in the females. Similar tendencies, albeit not as strong, were seen in the case of sexual behaviors. On the other hand, both man and abused women were more prone to developing psychological symptoms, in comparison to non-abused group. However, this relationship was more pronounced in the females. Moreover, high tendency for borderline personality disorder was registered in both, abused males and females, but tendency for posttraumatic stress disorder was only increased in the females.

Conclusions. — Findings supported the hypothesis that gender moderates the outcomes of childhood abuse, with the abused males experiencing more disturbances in the sexuality domain, and the females experiencing more psychological symptoms. This is in accordance with findings claiming that male sexuality is more likely to be influenced by developmental events, while the females tend to experience more psychological symptoms in the face of childhood abuse.

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* Corresponding author. 120, Mountain Park Road, Clifton, NJ 07013, USA. E-mail address: mike.abrams@nyu.edu (M. Abrams).

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Introduction

Early life abuse by a family member is associated with a range of pathologies throughout the lifespan. The effects of childhood abuse on sexuality have not been thoroughly explored, yet studies suggest that childhood abuse can influence adult sexuality. Although much of the sexual behavior is innate, in humans it remains flexible and is shaped by developmental variations, traumas, and cultural demands (e.g., Bowlby, 1969). One study demonstrated that nearly half of the clients attending sex therapy have a history of childhood sexual abuse (Berthelot et al., 2014). Childhood sexual abuse was correlated with sexual avoidance and compulsivity (often co-existing) (Vaillancourt-Morel et al., 2015). In females, early life sexual abuse has been associated with revictimization in adulthood, as well as anxiety, fear and suicidal tendencies (Beitchman et al., 1992; Messman-Moore & Long, 2000). Further, Abrams and Stefan (2012) observed in a clinical sample that women who were severely sexually abused as youths are prone to sexual masochism, self-destructive lifestyles, and borderline personality disorder (BPD). Females also seem to experience more psychopathological effects of childhood sexual abuse (Rind et al., 1998). In males, childhood abuse seems to be related with adult sexual dysfunction and paraphilic behaviors (Abrams, 2016; Seibel et al., 2009). Some findings suggest that male sexuality is more likely to be affected by disturbances during the key age of sexual development (Bowlby, 1969; Harlow and Harlow, 1962).

In order to explore the relationship of childhood abuse and outcomes in adulthood, a study was conducted investigating the psychological symptoms and atypical sexual fantasies and acts in adults who were abused during childhood, and those who reported no abuse. According to the extant studies, it was expected that gender would moderate the outcome of abuse – males are expected to experience more sexual disturbances, and females more psychological symptoms.

Method

Sample

A sample of 349 people was surveyed online. Participants were separated in two groups – 149 participants reported being abused in their childhood (cut-off age was 12 – abuse was experienced in pre-teen age, age particularly sensitive in sexual development (Bowlby, 1969)), while 200 participants reported no childhood abuse. Nature, severity and duration of the abuse were not specified. Current findings suggest that the type of abuse might not be the crucial factor influencing its outcomes (Cecil et al., 2017). Since abuse by immediate family members is considered the most traumatizing form of abuse (Courtois, 1988; Palmer et al., 1999) only individuals abused at homes by immediate family members (parents or siblings) were included in the study. Among abused participants, there were 78 males, and 71 females, and in the non-abused sample there were 107 males and 93 females.

Survey

The survey included questions about the psychological symptoms and atypical sexual desires (both, in fantasy and acted upon). The lists of fantasies/behaviors/symptoms were provided, and the participants were asked to check each one that applies to them. The psychological symptoms especially focused on those associated with posttraumatic stress disorder (PTSD) and BPD (based on the DSM-5 criteria), as studies suggest that these two disorders are commonly associated with the childhood abuse (Bounoua et al., 2015; Roberts et al., 2012). However, the symptom items were worded non-clinically. The list of psychopathological symptoms included: depression, panic attacks, phobia, anger, sadness, intrusive thoughts, anxiety, feeling misunderstood, feeling betrayed, loneliness or feeling alone, splitting (swinging from idealization to anger), other symptoms, and no symptoms. The list of sexual behaviors and fantasies was comprised from most common paraphilic behaviors from the website Fetlife.com (a web based social network for people interested in BDSM, fetish and kink), chosen paraphilic behaviors from the comprehensive list developed by John Money (Money, 1984), and insights gained from interviews with BDSM experts, sex therapists and clients (Abrams, 2016). The list included: orgies, bondage, domination, cuckolding, crossdressing, nudism, verbal abuse, sex assault, masochism, sadism, swinging, and submissiveness, and no such fantasies/experiences.

Procedure

Participants were recruited via CrowdFlower (now Figure 8), an Internet service that promotes the “crowdsourcing” services of its participant base. Crowdflower, like Amazon’s Mechanical Turk (MTurk), has been shown to be a reliable source of online survey data (Zhai et al., 2013). Participants were reimbursed for their completion of the survey with a predefined amount of money. Only the highest rated of participants (based on their reliability in prior surveys or work tasks) were included in the study.

Participants were presented with the primary aim of the study, technical details, and the option to withdraw at any time. The participants were provided with a resource they could contact in case the survey triggers any issues. They were asked to affirm that they were answering candidly with the caution that the gathered information will be used clinically.

Analysis

In all analyses there were two independent variables, both categorical and binary: gender (with levels male and female) and presence of pre-teen abuse (levels were abused and not abused). There were three groups of dependent variables exploring sexual and psychological manifestations, derived from the questions regarding:

- fantasies about atypical sexual activities (13 variables);
- previous engagement in these sexual activities (13 variables);

- presence of emotional psychopathological symptoms (12 variables).

Two additional variables regarding presence of psychopathological syndromes were calculated. All mentioned variables were categorical and binary – yes/no type (fantasy/behavior/symptom present or absent).

Statistics

Three new ratio variables were created, by calculating the percent of sexual fantasies, sexual acts actually performed, and psychological symptoms that each participant had endorsed. On these new variables, analyses of variance were performed.

Analyses were also performed to examine the influence of abuse on each of the sexual fantasies, the sexual behaviors and the psychological symptoms. The association between each dependent variable and the presence of pre-teen abuse was examined in the males and females separately. Since both, independent and dependent variables were categorical, one-sided Fisher exact tests were used for each of the dependent variables. Fisher's exact test was used because a significant portion of cells had counts below 10, making Pearson Chi-Square unsuitable. In the case of psychopathological syndromes, Chi-Square was used, as conditions for its use were satisfied. Odds ratios and confidence intervals (95%) were also calculated and are provided in the tables.

Results

Abuse and atypical sexual (and paraphilic) fantasies

Analysis of variance revealed significant effects of abuse ($F(1, 345) = 5200, P = .000$) and gender ($F(1, 345) = 6512, P = .023$) on the percent of sexual fantasies endorsed. The participants who reported childhood abuse and the males were more likely to engage in more atypical sexual fantasies.

The analysis of gender, abuse, and fantasies showed no significant three-way effects. However, five of 13 variables were associated with early life abuse in the male participants, and no such association was found in the females: orgies ($P = .011$), bondage ($P = .027$), verbal abuse ($P = .036$), swinging ($P = .009$), and having none of the fantasies ($P = .031$) (non-abused men marked this option more often). Only for cuckolding the association was significant for both genders ($P = .024$ for the males and $P = .014$ for the females). The effect of abuse in all cases was such that the fantasy was more common in abused participants (Table 1).

Abuse and unusual sexual (and paraphilic) behavior

As it was expected, the frequency of atypical sexual experiences was in all cases lower than that of fantasies, which could have affected the possibility of detecting potential relationships. Analysis of variance on the percent of experiences marked showed neither significant effect of gender, nor of abuse (interaction of factors was also non-significant).

Comparison of the male and female samples showed that there was a different pattern of results in the two groups.

The abused male participants had more frequent atypical sexual experiences overall (significant ($P = .013$) effect on the variable "no such experiences"), compared to the men who were not abused in pre-teens. On the other hand, the abused women were more likely to report being sexually assaulted, than the women who were not abused ($P = .043$), which is the only result that differs from the general trend. Percentages for each of the experiences are available at Table 2.

Abuse and clinical symptoms

Analysis of variance on the frequency of psychological symptoms showed the significant interaction of gender and abuse ($F(1, 345) = 7987, P = .005$). The increase in the number of symptoms marked by the abuse sample was more pronounced in the females, than in the males (Graph 1). Main effects of abuse ($F(1, 345) = 43,596, P = .000$) and gender ($F(1, 345) = 11,597, P = .001$) were also significant – more psychological symptoms were marked by the abused participants, and the females.

Analysis by gender revealed more about the relationship of abuse and psychological symptoms. The two-way analysis showed that all symptoms were significantly more common in the abused females. In the male participants significant increases were present in 4 out of 13 variables, but the effect was smaller than in the females: depression, anger, recurrent unwanted thoughts, and feeling betrayed by close people. All frequencies are shown in Table 3.

Psychopathological syndromes

Participants were asked about a number of psychological symptoms, clusters of which approximated the DSM-5 diagnostic criteria for BPD and PTSD. This survey was not meant to be a diagnostic instrument, and therefore it might be more precise to discuss the tendency toward PTSD and BPD. Tendency for PTSD was characterized by the presence of at least 3 of the following 5 symptoms: depression, panic attacks, phobias, intrusive thoughts, and recurrent anxiety. Tendency for BPD was assessed by detecting the presence of 4/7 following symptoms: depression, often feeling misunderstood, excessive anger, periods of prolonged sadness, often feeling betrayed, often feeling alone or lonely, and splitting. As expected, tendencies toward both syndromes were observed significantly more among the abused participants of both genders based on Pearson Chi-Square (PTSD: $\chi^2(1, n = 349) = 23.75, p = .000$, odds ratio: 3.7, CI 95%: 2.1–6.4; BPD: $\chi^2(1, n = 349) = 28.19, p = .000$, odds ratio: 4.4, CI 95%: 2.5–7.8). Tendency for PTSD was increased by abuse in the females ($\chi^2(1, n = 349) = 22.53, p = .000$, odds ratio: 5.5, CI 95%: 2.6–11.4), but not in the males. However, tendency for BPD was elevated in all abused participants, female ($\chi^2(1, n = 349) = 21.97, p = .000$, odds ratio: 6.4, CI 95%: 2.8–14.8) and male ($\chi^2(1, n = 349) = 7.63, p = .006$, odds ratio: 3, CI 95%: 1.3–6.7). Consistent with other findings, the relationship was stronger in the female sample.

Table 1 The percentage of endorsed fantasies in abused and non-abused sample, a number of participants that endorsed each of the fantasies (by gender), and odds ratios with confidence intervals (95%).

Fantasy	Male				Female			
	Abused	Not abused	Odds ratio	Confidence interval (95%)	Abused	Not abused	Odds ratio	Confidence interval (95%)
Orgies	47* n=37	30 n=32	2.1151	1.1524–3.8821	25 n=18	23 n=21	1.1644	0.5653–2.3985
Bondage	20* n=16	9 n=10	2.5032	1.0678–5.8681	21 n=15	20 n=19	1.0432	0.4875–2.2325
Domination	20 n=16	19 n=20	1.1226	0.539–2.3381	14 n=10	16 n=15	0.8525	0.358–2.0296
Cuckolding	14* n=11	5 n=5	3.3493	1.1136–10.0734	7* n=5	— n=0	N/A	N/A
Crossdressing	5 n=4	5 n=5	1.1027	0.2863–4.247	4 n=3	5 n=5	0.7765	0.1793–3.3634
Nudism	26 n=20	24 n=26	1.0743	0.5478–2.1066	11 n=8	7 n=7	1.5601	0.5377–4.5265
Verbal abuse	10* n=8	3 n=3	3.9619	1.0158–15.4531	4 n=3	3 n=3	1.3235	0.2591–6.7621
Sexual assault	9 n=7	5 n=5	2.0113	0.6137–6.5912	10 n=7	4 n=4	2.4336	0.6836–8.6639
Masochism	10 n=8	8 n=9	1.2444	0.4575–3.3847	4 n=3	5 n=5	0.7765	0.1793–3.3634
Sadism	8 n=6	10 n=11	0.7273	0.2569–2.0589	4 n=3	4 n=4	0.9816	0.2126–4.5328
Swinging	26** n=20	11 n=12	2.7299	1.243–5.9952	3 n=2	4 n=4	0.6449	0.1148–3.6243
Submissiveness	8 n=6	8 n=9	0.9074	0.3091–2.6637	24 n=17	21 n=20	1.1491	0.5504–2.399
No such fantasies	22* n=17	35 n=38	0.506	0.2596–0.9866	52 n=37	50 n=47	1.0651	0.574–1.9762

* P < 0.05.

** P < 0.01.

Table 2 The percentage of endorsed sexual experiences in abused and non-abused sample, a number of participants that endorsed each of the experiences (by gender), odds ratios and confidence intervals (95%).

Experiences	Male				Female			
	Abused	Not abused	Odds ratio	Confidence interval (95%)	Abused	Not abused	Odds ratio	Confidence interval (95%)
Orgies	24 n=19	16 n=17	1.7049	0.8199–3.5452	10 n=7	7 n=7	1.3438	0.4489–4.0227
Bondage	15 n=12	10 n=11	1.5868	0.6607–3.8108	22 n=16	14 n=13	1.7902	0.7977–4.0177
Domination	18 n=14	12 n=13	1.5817	0.6973–3.5878	10 n=7	10 n=9	1.0208	0.3609–2.8879
Cuckolding	4 n=3	4 n=4	1.03	0.2239–4.7389	3 n=2	3 n=3	0.8696	0.1414–5.3481
Crossdressing	5 n=4	5 n=5	1.1027	0.2863–4.247	3 n=2	2 n=2	1.3188	0.1812–9.5981
Nudism	14 n=11	21 n=22	0.6343	0.2875–1.3997	8 n=6	6 n=6	1.3385	0.4128–4.34
Verbal abuse	8 n=6	2 n=2	4.375	0.8587–22.2891	8 n=6	6 n=6	1.3385	0.4128–4.34
Sexual assault	4 n=3	5 n=5	0.816	0.1891–3.5211	11* n=8	3 n=3	3.8095	0.9725–14.9234
Masochism	5 n=4	2 n=2	2.8378	0.5065–15.9001	4 n=3	4 n=4	0.9816	0.2126–4.5328
Sadism	3 n=2	6 n=6	0.443	0.087–2.2559	4 n=3	3 n=3	1.3235	0.2591–6.7621
Swinging	6 n=5	6 n=6	1.153	0.3398–3.9227	1 n=1	3 n=3	0.4286	0.0436–4.2096
Submissiveness	10 n=8	4 n=4	2.9429	0.8533–10.1496	17 n=12	14 n=13	1.2516	0.533–2.9392
No such experiences	38* n=30	56 n=60	0.4896	0.2701–0.8875	61 n=43	68 n=63	0.7313	0.3838–1.3933

* P<0.05.

Table 3 The percentage of psychopathological symptoms in abused and non-abused sample, a number of participants that endorsed each of the symptoms (by gender), odds ratio, and confidence intervals.

Symptoms	Male				Female			
	Abused	Not abused	Odds ratio	Confidence interval (95%)	Abused	Not abused	Odds ratio	Confidence interval (95%)
Depression ^a	50* n=39	35 n=37	1.8919	1.042–3.4349	69*** n=40	33 n=31	4.4545	2.2966–8.6402
Panic attacks ^a	20 n=16	17 n=18	1.276	0.6043–2.6943	42*** n=30	16 n=15	3.8049	1.8409–7.8641
Phobias ^a	20 n=16	13 n=14	1.7143	0.7812–3.7621	37*** n=26	11 n=10	4.7956	2.1236–10.8296
Anger ^b	32* n=25	17 n=18	2.3323	1.1642–4.6722	37** n=26	16 n=15	3.0044	1.4424–6.2583
Sadness ^b	24 n=19	17 n=18	1.5923	0.7721–3.2873	51*** n=36	17 n=16	4.95	2.4296–10.085
Intrusive thoughts ^a	33* n=26	21 n=22	1.9318	0.9941–3.5742	46** n=33	25 n=23	2.643	1.3621–5.1285
Recurrent anxiety ^a	26 n=20	20 n=21	1.4122	0.7033–2.8354	42* n=30	27 n=25	1.9902	1.0315–3.8399
Feeling misunderstood ^b	23 n=18	17 n=18	1.4833	0.7143–3.0804	44** n=31	24 n=22	2.5011	1.2801–4.887
Feeling betrayed ^b	28** n=22	9 n=10	3.8017	1.6839–8.6236	45*** n=32	12 n=11	6.1166	2.7927–13.3964
Loneliness/Alone ^b	35 n=27	25 n=27	1.5686	0.8282–2.9709	49** n=35	26 n=24	2.7951	1.4484–5.3941
Splitting ^b	8 n=6	4 n=4	2.1458	0.5845–7.8777	15* n=11	4 n=4	4.0792	1.2406–13.4126
Other	1 n=1	1 n=1	0.7264	0.0447–11.7955	— n=0	- n=0	N/A	N/A
No symptoms	15 n=12	26 n=28	0.513	0.242–1.0872	7*** n=5	32 n=30	0.1591	0.0581–0.4358

^a PTSD symptoms.

^b Borderline symptoms.

* P < 0.05.

** P < 0.01.

*** P < 0.001.

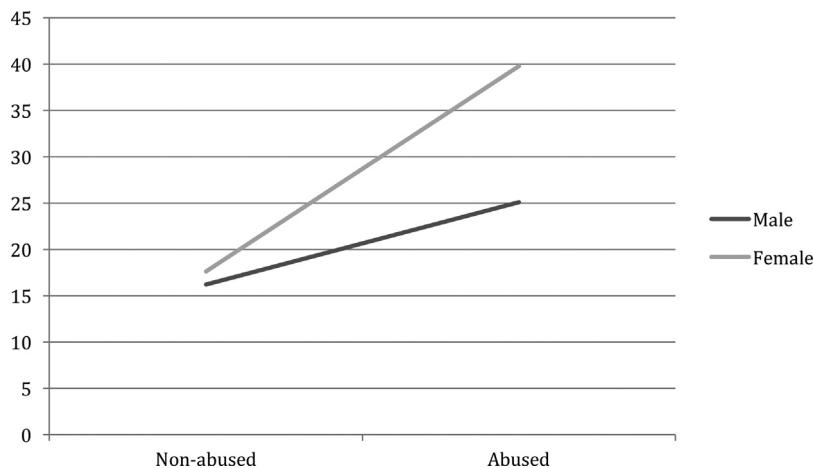


Figure 1 The percent of the psychological symptoms marked by non-abused and abused males and females.

Discussion

In this study, relationship of childhood abuse with adult atypical sexual acts or fantasies and with symptoms of PTSD and BPD was explored. A distinct gender difference in the impact of the abuse was detected, consistent with some previous research (Abrams, 2016; Abrams and Stefan, 2012). In accordance with our hypotheses, childhood abuse in this study was related to the increase in atypical sexual fantasies or behaviors, primarily in the males, and with the increase of BPD and PTSD symptoms in both genders, but more pronounced in the females.

Results of this study confirmed the expectations regarding moderating effect of gender on effect of abuse on sexuality – in fantasy and behavior. Specifically, the abused males reported having more atypical sexual desires (fantasies). Although results of Anova do not show interaction of gender and abuse, detailed analysis of the frequency of paraphilic and unusual fantasies shows that they tend to increase more in the abused men than in the abused women, with the exception of cuckolding, which increased similarly in both abused males and females. This is particularly interesting, as cuckolding is the rarest occurring fantasy. It could be hypothesized that this fantasy may stem from the complicated relationship toward sexuality, described by Vaillancourt-Morel et al. (2015). Significantly, the fantasy of participating (versus actual participation) in orgies, swinging, nudism, and especially cuckolding tend to be associated with sexual masochism (Abrams, 2016).

Atypical sexual tendencies were more often left in fantasy than brought to action. This influenced the lower number of significant effects, yet the general tendencies remained the same. These activities were more common in the males, as the non-abused males more often reported not having any of these experiences. The noteworthy result was the increased number of the females who reported being sexually assaulted in abused group. Since the question regarding the atypical acts was not limited to adulthood, it is possible that sexual assault in question was the very childhood abuse they have previously reported. However, in

some participants this could be the consequence of lifestyle and risky sexual behaviors influenced by early-life abuse (Norman et al., 2012).

The relationship between psychopathological symptoms and syndromes and abuse was more pronounced, with all symptoms and syndromes being more common in those abused in childhood. Furthermore, there was an interaction between abuse and gender – the abused females experienced a greater number of different psychological symptoms than the abused males.

According to the results, childhood abuse is likely to be related to distinct consequences in adulthood, both in sexuality and psychological well-being. However, it appears that gender moderates these outcomes. Interest in atypical sexual experiences is higher in the male sample, with practically no association in the women. This is also in accordance with the fact that male sexuality seems to show more plasticity in response to developmental disturbances (Bowlby, 1969; Chivers et al., 2004; Harlow and Harlow, 1962). When it comes to emotional or personality symptoms, both abused men and women were affected; however, the effects were stronger in the female sample, which is in accordance with previous studies (Rind et al., 1998).

Conclusion

The current study supports the notion that early life abuse permeates different areas of adult functioning, yet males and females face somewhat different consequences. Further studies should address the question whether these outcomes differ in relationship to the type of abuse, its severity and duration, as well as the relationship between the abuser and the victim. Moreover, while the occurrence of atypical sexual interests was higher in the abused sample, the fact that there were no meaningful increases in atypical sexual acts requires more study. Further research should focus on exploring the sexual function of people abused in childhood, and whether they experience heightened distress from their atypical sexuality.

Disclosure of interest

The authors declare that they have no competing interest.

Acknowledgements

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All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent was obtained from all individual participants included in the study. All participants were cautioned about the content of the study, had the right to withdraw at any time, and were offered consultations with a licensed psychologist at any point in the process. The study was conducted anonymously.

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