

How Unusual are the Contents of Paraphilias? Paraphilia-Associated Sexual Arousal Patterns in a Community-Based Sample of Men

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ABSTRACT

Introduction. This is a report of a cross-sectional study on paraphilia-associated sexual arousal patterns (PASAP) among men in a metropolitan city in Germany, EU.

Aim. To determine the prevalence of PASAP during sexual fantasies, fantasies accompanying masturbation, and real-life sociosexual behavior.

Methods. In a cross-sectional study, self-reported sexual history data were collected by questionnaire from 367 volunteers recruited from a community sample of 1,915 men aged 40–79 years.

Main Outcome Measures. The Derogatis Symptom Checklist—Revised (SCL-90–R) and the Life Satisfaction Questionnaire (LSQ; German original, *Fragebogen zur Lebenszufriedenheit*, [FLZ]) were administered to obtain a general subjective health measure and a measure of general as well as sex life satisfaction. The Questionnaire on Sexual Experiences and Behaviour was administered to comprehensively assess all relevant sexo-medical data.

Results. The percent of men that reported at least one PASAP was 62.4%. In 1.7% of cases, PASAP were reported to have caused distress. The presence of PASAP was associated with a higher likelihood of being single (odds ratio [OR] 2.6; 95%; confidence interval [CI] 1.047–6.640), masturbating at least once per week (OR 4.4; 95%; CI 1.773–10.914), or having a low general subjective health score (OR 11.9; 95%; CI 2.601–54.553). Pedophilic PASAP in sexual fantasies and in real-life sociosexual behavior was reported by 9.5% and 3.8% of participants, respectively.

Conclusion. The findings suggest that paraphilia-related experience can not be regarded as unusual from a normative perspective. At the same time, many men experience PASAP without accompanying problem awareness or distress, even when PASAP contents are associated with potentially causing harm to others. In view of the relevance for sex life and relationship satisfaction, presence of PASAP should be assessed in all sexual medicine consultations. Future research should focus on conditions in which PASAP reach clinical significance in the sense of mental disorders. Ahlers CJ, Schaefer GA, Mundt IA, Roll S, Englert H, Willich SN, and Beier KM. How unusual are the contents of paraphilias? Paraphilia-associated sexual arousal patterns in a community-based sample of men. *J Sex Med* **,**,**_**.

Key Words. Paraphilia; Pedophilia; Deviant Sexual Fantasies; Sexual Behavior; Prevalence

Introduction

Certain features in an individual's sexual experience can cause a profound impairment of that person's health, regardless of whether these experiences are limited to sexual fantasy or made

while engaged in masturbation or real-life sociosexual behavior. Provided that certain criteria are met, and indicating the potential clinical significance of some sexual arousal patterns, the current editions of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text revision

Table 1 Phenomenology of paraphilia-associated sexual arousal patterns (PASAP)

PASAP	Sexual arousal caused by
Transvestic fetishistic	Cross-dressing
Fetishistic	Use of nonliving objects, e.g., shoes and female undergarments
Voyeuristic	Act of observing an unsuspecting person who is naked, in the process of disrobing, or engaging in sexual activity
Exhibitionistic	Exposure of one's genitals to an unsuspecting stranger
Frotteuristic	Touching and rubbing against a nonconsenting person
Masochistic	Real, not simulated act of being humiliated, beaten, bound, or otherwise made to suffer
Sadistic	Real, not simulated acts in which the psychological or physical suffering, including humiliation, of the victim is sexually exciting to the person
Pedophilic	Sexual activity with a prepubescent child or children, generally age 13 years or younger

(DSM-IV-TR) [1] and the International Classification of Diseases (ICD-10) [2] offer *the paraphilias* and *the disorders of sexual preference*, respectively, as codified diagnostic categories. They can potentially lead to self-injury and “social and sexual relationships may suffer if others find the unusual sexual behavior shameful or repugnant or if the individual’s sexual partner refuses to cooperate in the unusual sexual preference” [1].

Specified paraphilias include transvestic fetishism, fetishism, voyeurism, exhibitionism, frotteurism, sexual masochism, sexual sadism, and pedophilia (see Table 1 for descriptions). According to the ICD-10 criteria, having experienced intense sexually arousing fantasies about or urges to engage in or having actually engaged in the behavior in question are sufficient for a diagnosis of a mental disorder involving a paraphilia. In contrast, when following DSM-IV-TR, additional criteria must be met to reach the threshold for a diagnosis: namely, the respective intensive sexually arousing experiences must have recurred over a period of at least six months (Criterion A) and must cause clinically significant distress, interpersonal difficulty, or impairment in social, occupational, or other important areas of functioning (Criterion B). With respect to voyeurism, exhibitionism, frotteurism, and sexual sadism, Criterion B is also met when the person has acted upon the urges in question with a nonconsenting partner, i.e., in a real-life sociosexual context. Regarding pedophilia, in addition to Criteria A and B, the person must be at least age 16 years and at least five years older than the child (Criterion C). Hence, when others are in danger of suffering harm, neither marked distress nor impaired functioning needs to be present for a diagnosis of, e.g., pedophilia. This constitutes a significant change from DSM-IV in the chapters on Sexual Disorders and Gender Identity Disorders. Unfortunately, in DSM-IV-TR as in DSM-IV “acted on” is not differentiated into sociosexual and solitary sexual

behavior, such as masturbation or the use of child pornography.

Individual general health issues are not the only concern associated with unusual sexual preferences. When living out aspects of a deviant sexuality is no longer confined to an auto-erotic setting but affects partners, who either cannot or do not give consent, the well-being of innocent others is endangered. Thus, deviant sexual behavior also becomes relevant from a forensic perspective. To contradict the common notion that every child sexual abuser (i.e., sex offender) is a pedophile (i.e., has a paraphilia), it should be noted that in the case of sexual offenses, clinical and forensic issues regarding both victim and offender, such as the need for treatment, arise irrespectively of the offender presenting with a paraphilia.

Little research has been conducted on whether subjects experience distress in relation to their fantasies or fear acting out their fantasies in a sociosexual context, which would mean they would meet DSM-IV-TR Criterion B for a diagnosis of a paraphilia. Långström and Zucker noted that when investigating transvestic fetishism many researchers have not used impairment criteria [3]. In their own study on the prevalence and correlates of transvestic fetishism in a random sample of 18- to 60-year-olds (N = 2,450) they found that almost three percent (2.8%) of men reported at least one episode of transvestic fetishism that met DSM-IV-TR criteria. Although some data on paraphilias has been published, no other epidemiological study could be found in which DSM-IV-TR criteria were followed. Thus, the situation described by Långström and Seto [4] and Fagan and colleagues [5] regarding the lack of epidemiological data on paraphilias remained unchanged.

Since the publication of the current DSM in 2000, there has been intense debate regarding the classification of paraphilias as mental disorders [6–9]. Against the background of this debate and the current lack of epidemiological data, the main

aim of the present study was to examine in the general population the prevalence of paraphilia-associated sexual arousal patterns (PASAP), which by definition have no pathological quality per se. In addition, by assessing the intensity of sexual arousal in three different realms of experience, rather than simply the global presence of sexual arousal, and by assessing related distress, the prevalence of presumed diagnoses of paraphilias could be approximated. Furthermore, and bearing in mind that an individual with an unusual sexual preference may find it rather difficult to form and/or maintain a stable intimate relationship, the relation between PASAP and various other variables, such as relationship status, masturbation frequency, use of pornography, and satisfaction with one's life, including sex life, were investigated.

Methods

Study Population

The study population in this second phase of the Berlin Male Study (BMS), hereafter referred to as BMS-II, was comprised of 367 volunteers recruited from the sample used in the study's first phase (BMS-I). During BMS-I, the prevalence of erectile dysfunction, its age dependency, and its relation to general health variables as well as quality of life measures were determined [10].

The BMS, which was conducted between June and December 2002, is an epidemiological cross-sectional study on a sample selected as follows: of all 680,000 Berlin men aged 40–79 years, 16,210 men were selected by the Berlin Office of Vital Statistics to yield a sample representative with respect to age and district of residence, which resulted in a sample with the following distributions—40–49 years of age, $N = 5,000$ (30.8%); 50–59 years of age, $N = 4,685$ (28.9%); 60–69 years of age, $N = 4,606$ (28.4%); and 70–79 years of age, $N = 1,919$ (11.8%). From each of these four age categories, 1,500 men were selected at random (simple random sampling). This total sample ($N = 6,000$) was then contacted by mail and invited to fill in an enclosed questionnaire.

Also, in this questionnaire participants indicated if they were interested in receiving information regarding BMS-II (“Are you interested in receiving information regarding the second phase of this study?”). If the appropriate box was ticked, participants were sent a letter explaining that in BMS-II they would fill in further questionnaires regarding “their physical and psychological state during the past seven days, their sexuality, their

personality, and their relationship, if applicable”. Although participation in BMS-I was possible by returning the questionnaire by post, those interested in participating in BMS-II were either required to appear in person at the institute that conducted the study, or agree to be visited in their own home. All participants chose to come to the institute where individual assessments took place in confidential office rooms in 2003. Research assistants who were specially trained male and female graduate students of psychology or medicine welcomed the participants, explained the instruments to them, and were available to answer any questions during the entire duration of the assessment. Participants were not paid, but as an incentive, a travel voucher could be won in a raffle by one participant.

This research was approved by the Institutional Review Board of the University Hospital.

Study Questionnaire and Instruments

Computerized versions of both the Derogatis Symptom Checklist—Revised (SCL-90-R) [11] and the Life Satisfaction Questionnaire (German original, *Fragebogen zur Lebenszufriedenheit* [FLZ]) [12] were administered to obtain a general subjective health measure and two measures of life satisfaction (general life satisfaction and sex life satisfaction), respectively. Both instruments are widely used and have good psychometric qualities with reliability coefficients ranging from 0.77 to 0.89 for the SCL-90-R, and 0.82 to 0.95 for the FLZ.

To assess all other variables, the Questionnaire on Sexual Experiences and Behaviour (Q-SEB) was administered, which is an extensive paper-pencil tool designed to provide a comprehensive assessment of all relevant sexo-medical data. The Q-SEB covers specific domains such as sexual function, sexual preference, and sexual and gender identity in compliance with ICD-10 and, in part, DSM-IV-TR diagnostic criteria. At present, the questionnaire is only available in its original German version, the *Fragebogen zum Sexuellen Erleben und Verhalten* (FSEV) [13].

The Q-SEB contains single items to assess data about relationship status, masturbation frequency (“How often do you masturbate on average?”), use of pornography (“Have you ever used porn for sexual arousal?”), on exo-sexual relationships (“Have you ever had sexual contact with somebody else than your partner, while in that relationship?”), and all PASAP.

PASAP were assessed using a single item for each of the DSM-IV-TR paraphilias, thus addressing the clinically relevant, paraphilic phenomenology of voyeurism, transvestic fetishism, fetishism, sexual masochism, sexual sadism, exhibitionism, frotteurism, and pedophilia (Table 1). DSM-IV-TR Criterion A was operationalized by assessing sexual arousal in three different realms of sexual experience, two of which refer to sexual fantasy (general fantasies, daydreams, or thoughts on the one hand, and masturbation fantasies on the other) and one to real-life sociosexual behavior (“reality”, realized sexual contacts).

The intensity of sexual arousal was assessed for each realm of experience using five-point Likert type scales (0 = not at all arousing, 1 = slightly arousing, 2 = moderately arousing, 3 = quite arousing, and 4 = very arousing). To operationalize the intensity aspect of Criterion A, values of 1 and 2 as well as of 3 and 4 were later grouped as mildly sexually arousing and intensely sexually arousing, respectively. Criterion B was operationalized by asking participants who reported a PASAP to indicate whether the respective arousal pattern caused them any significant distress (0 = no distress, 1 = distress) and, if so, for how many months and/or years this had been the case. In order to estimate the prevalence of presumed diagnoses of paraphilias, DSM-IV-TR Criterion A was considered fulfilled if respondents chose values of 3 and 4 in any one of the three realms of experience, and Criterion B was considered fulfilled if related distress was reported. Assistance was on site to assure that participants clearly understood all questions and, with their consent, to control for missing data upon completion.

Data Analysis

Odds ratios and multivariate logistic regression analysis were determined using SPSS for Windows 12.0 (Chicago, IL, USA). *P* values were based on a two-sided test.

Results

Of the 1,915 men who returned their questionnaire in BMS-I (BMS-I response rate 31.9%), 367 volunteered to participate in BMS-II (BMS-II response rate 19.2%). Overall, BMS-II participants were younger, more likely to be single, better educated, and more likely to be employed than BMS-II nonparticipants (the significant difference with respect to age, however, was limited

to the age category 70–79 years). No significant differences were found between responders and nonresponders to BMS-II with respect to satisfaction with physical and mental health, sexual orientation, frequency of sexual activity, satisfaction with sex life, and prevalence of erectile dysfunction.

For the BMS-II sample, the distribution across the four age categories 40–49, 50–59, 60–69, and 70–79 was 27.9, 25.7, 30.6, and 15.8%, respectively. BMS-II participants' mean age was 57.51 (standard deviation = 10.14; note that because of the aim of BMS-I, only men 40–79 years old were invited to participate in the first place; as subjects were recruited in Berlin from a metropolitan population, demographic comparisons with the overall German population appear unreasonable).

Socio-demographic variables are listed in Table 2. Almost all participants had received at least 9 years of school education (97.8%) and had some kind of professional training (93.4%). The unemployment rate was 10.2%. The vast majority was heterosexual (90.2%) (Table 2).

Regarding the frequency of sexual arousal patterns related to the paraphilias, the results show that, overall, 62.4% of men in this sample reported some degree of sexual arousal from at least one paraphilia-related stimulus. The presence of at least one PASAP was most frequent within the realm of general sexual fantasy (58.6%), followed by the realm of masturbation fantasy (47.7%) and

Table 2 Characteristics of the study population (N = 367)

Variable (N)	n	%
Single	62	16.9
Education		
No school/special school leaving certificate	8	2.2
Graduation after 9 or 10 years of school	155	42.2
Graduation after 11–13 years of school	204	55.6
Professional training*		
No training	24	6.6
Training other than tertiary education	181	49.5
Tertiary education	161	44.0
(Self-)Employment*		
Unemployed	37	10.2
Part-time	12	3.3
Full-time [†]	158	43.4
Retired [‡]	157	43.1
Sexual orientation		
Heterosexual	331	90.2
Homosexual	8	2.2
Bisexual	28	7.6

*Results are based on N = 366 (professional training) and N = 364 (employment).

[†]Including the categories full-time university student/full-time vocational training (N = 3) and full-time homemaker/househusband (N = 1).

[‡]Including the category occupational disability/incapacitated (N = 14).

Table 3 Frequency of paraphilia-associated sexual arousal patterns (PASAP) by realm of experience (N = 367)

PASAP	Realm of Experience (RoE)			Presence in ≥1 RoE*	Problem Awareness [§]	Distress [§]
	Fantasy N (%)	Masturbation fantasy N (%)	Reality N (%)			
Fetishistic	110 (30.0)	97 (26.4)	90 (24.5)	131 (35.7)	5 (3.8)	0 (0.0)
Transvestic fetishistic	18 (4.9)	21 (5.7)	10 (2.7)	27 (7.4)	0 (0.0)	1 (3.7)
Masochistic	58 (15.8)	50 (13.6)	45 (2.3)	68 (18.5)	0 (0.0)	1 (1.5)
Sadistic	80 (21.8)	73 (19.9)	57 (15.5)	91 (24.8)	1 (1.1)	0 (0.0)
Voyeuristic	128 (34.9)	90 (24.5)	66 (18.0)	142 (38.7)	1 (0.7)	1 (0.7)
Exhibitionistic	13 (3.5)	12 (3.3)	8 (2.2)	15 (4.1)	0 (0.0)	0 (0.0)
Frotteuristic	49 (13.4)	26 (7.1)	24 (6.5)	55 (15.0)	0 (0.0)	1 (1.8)
Pedophilic	35 (9.5)	22 (6.0)	14 (3.8)	38 (10.4)	1 (2.6)	2 (5.3)
Other [†]	23 (6.3)	23 (6.3)	17 (4.6)	29 (7.9)	0 (0.0)	2 (6.9)
Presence of ≥1 PASAP [‡]	215 (58.6)	175 (47.7)	163 (44.4)	229 (62.4)	9 (3.9)	4 (1.7)

*Presence in at least one (≥1) realm of experience.

†Other arousal patterns include wearing diapers, sex with elderly, sex with amputees, asphyxia, necrophilic, urophilic, koprophilic, and zoophilic.

‡Presence of at least one (≥1) PASAP.

§Sample size for variables *problem awareness* and *distress* was N = 363.

“reality,” i.e., actual sexual behavior (44.4%). This trend was observed for each of the various specified PASAP, except for the transvestic fetishistic PASAP. Over all three realms of experience, voyeuristic (38.7%) and fetishistic (35.7%) PASAP were reported most frequently, followed by sadistic (24.8%), masochistic (18.5%), and frotteuristic (15.0%) PASAP. Among the less frequently reported PASAP were pedophilic (10.4%), transvestic (7.4%), and exhibitionistic (4.1%) PASAP. Regarding sexually arousing behavior (see Table 3, column “reality”) that would be of interest from a forensic perspective, voyeuristic (18.0%) PASAP was reported more often than frotteuristic (6.5%), pedophilic (3.8%), and exhibitionistic (2.2%) PASAP (Table 3).

Although 3.9% of the men who reported at least one PASAP also reported problem awareness in relation to their PASAP, the over all proportion of men reporting PASAP-related distress was only 1.7% (Table 3).

More than half (53.7%) of the sample reporting at least one PASAP found the stimulus in question to be intensely sexually arousing, with exhibitionistic (53.3%), fetishistic (45.0%), and voyeuristic PASAP (43.7%) yielding the highest scores followed by masochistic (36.8%), sadistic (35.2%), frotteuristic (29.1%), pedophilic (26.3%), and transvestic fetishistic PASAP (22.2%) (Figure 1).

As Table 4 shows, logistic regression analysis found that PASAP were significantly associated with being single, masturbating at least once per week, ever having had a sexual relationship with a third party while in a relationship, ever having used pornography for sexual arousal, and a low general subjective health score.

Discussion

Despite the generally undisputed clinical and forensic relevance of paraphilias, there is a lack of reliable data on the frequency of sexual fantasies and behaviors related to paraphilias in the general population. The second phase of the BMS-II was designed mainly to help fill this gap by investigating the frequency of various PASAP in a nonclinical community sample. Furthermore, despite the obvious limitations involved in investigating the prevalence of mental disorders using self-reported questionnaire data, appropriate DSM-IV-TR criteria were operationalized so that presumed diagnoses of paraphilias could be estimated.

With respect to the clinical diagnosis of paraphilias, what is to be experienced as intensely sexually arousing ought to be of “unusual” nature. Bearing this in mind, the BMS-II results raise the “normative question.” For example, more than a third of the sample reported being sexually aroused by stimuli related to fetishism or voyeurism. To a lesser extent, but far from deserving the label “unusual”, 10% to 25% of the men found sadistic, masochistic, frotteuristic, and pedophilic scenarios sexually arousing. Overall, approximately two-thirds found at least one paraphilia-related scenario sexually arousing to some degree, be it in sexual fantasies, while masturbating, or in real-life sociosexual behaviors. Thus, the results seem to support the advice that clinical supervisors typically give to juniors regarding the assessment of sexual preferences: “If you do not ask the patient, you will never find out.” The high frequencies found here appear even more relevant

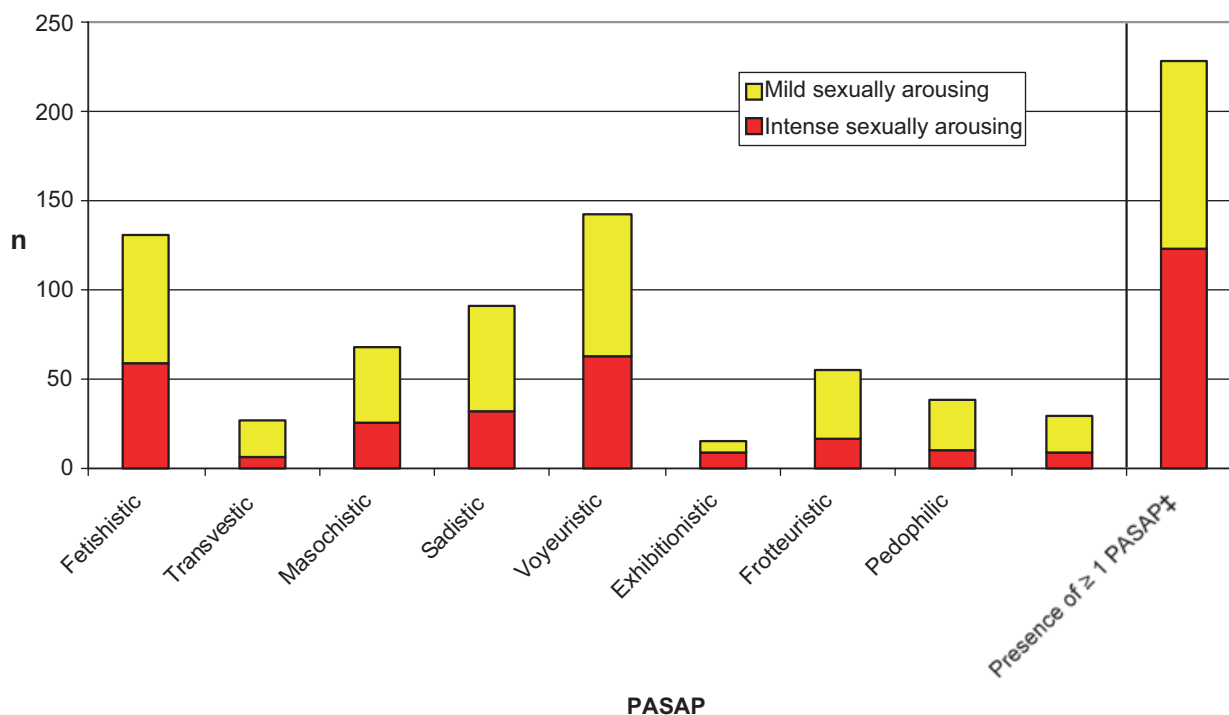


Figure 1 Intensity of sexual arousal by paraphilia-associated sexual arousal patterns (PASAP) across all realms of experience (N = 367).

when considering that five of the eight PASAP investigated bear the risk of leading to a sexual offence and causing harm to the victim.

As a rule, the realm of general sexual fantasy had the highest frequency of sexual arousal by stimuli related to the paraphilias. This is to be expected because, on the one hand, the “mental movie’s

director” is not restricted and, on the other, there is no threat of moral or legal sanctions. The exception was scenarios related to transvestic fetishism, where sexual arousal was most frequently experienced during masturbation. Again, this is hardly surprising when considering the particularities of this PASAP.

Though the findings regarding distress caused by the PASAP may be viewed in a positive light, that is, by assuming that healthy individuals are able to integrate certain peculiarities of their sexuality, they do raise concern. For example, of those reporting a pedophilic PASAP in at least one realm of experience, only 5.3% were distressed about their preference (2/38). However, approximately one-third (36.8%; (14/38) of that subsample had actually acted upon their impulses by engaging in sexual contacts with children (see Table 3). Although distress was rarely reported as a consequence of PASAP in general, it is interesting that none of the 24.8% men (91/367) sexually aroused by sadistic scenarios, of whom more than half had experienced arousal during actual sadistic socio-sexual behavior (57/91), reported any distress. Unfortunately, we do not have information about whether the partner would not consent to the sadistic practices, so it remains unclear whether

Table 4 Presence of at least one paraphilia-associated sexual arousal pattern (PASAP) and association with various other variables

Variable	OR	P value*	95% CI
Singlehood	2.637	0.040	1.047–6.640
Masturbation† [1]	0.797	0.529	0.392–1.618
Masturbation [2]	1.656	0.199	0.767–3.578
Masturbation [3]	4.399	0.001	1.773–10.914
Exo-sexual relationship (ever)‡	1.864	0.300	1.062–3.269
Pornography use (ever)	2.653	0.000	1.535–4.586
General life satisfaction (FLZ)	1.007	0.302	0.994–1.020
Sex life satisfaction (FLZ)	1.024	0.232	0.985–1.065
Low general subjective health score (SCL-90–R)	11.913	0.001	2.601–54.553

*Multivariate logistic regression analysis (P values were based on a two-sided test).

†Frequency of masturbation is once per month at the most [1], once per week at the most [2], and at least once per week [3].

‡Extramarital sexual relationship (note that nonsingle status counts, irrespective of actual marital status).

CI = confidence interval; FLZ = Fragebogen zur Lebenszufriedenheit; OR = odds ratio; SCL-90–R = Derogatis Symptom Checklist—Revised.

this finding is caused by a truly sadistic subsample or whether all 91 men were engaging in consensual sadomasochistic role-play. This particular finding, however, seems to correspond well with the significantly lower scores on a scale of psychological distress by men who had engaged in BDSM (bondage, discipline, sadomasochism) compared with other men [14].

From a clinical perspective, it is not surprising that being single was associated with a higher likelihood of having at least one PASAP. However, whether the specific sexual preference was the cause for failing to build or maintain a relationship remains to be further investigated.

As indicated by the low rates of reported distress, the prevalence rates for presumed diagnosis of paraphilias would be lowest when following DSM-IV-TR criteria (note that the intensity of arousal varied considerably). When following the ICD-10 criteria, however, a research diagnosis of paraphilia can be made when a PASAP has been experienced in “real life,” which in this study would yield much higher prevalence rates. Arguably, for almost half of this study’s sample (44.4%), the impulses were so intense that experiencing arousal in the realm of sexual fantasy was not sufficient and, thus, led to either masturbation or real-life sociosexual behaviors. These individuals would be issued a presumed diagnosis of a specific paraphilia (Table 3).

Empirical research on sexual fantasies has shown that sexual fantasies involving socially unacceptable and/or illegal behaviors are not only held by those women and men who actually act out these sexual impulses [15–17]. The prevalence of the various paraphilic fantasies varies considerably within studies. In one study, for example, sexual fantasies involving a “young girl” were reported by 61.7% within the general male population compared with 5.3% reporting “bestiality” [18]. Though most fantasies were entertained by both men and women, men seemed to report higher prevalence rates for most types of fantasies. Again, the prevalence of a particular fantasy varied considerably across studies. For example, Briere and Runtz reported a prevalence of 21% for sexual attraction to children [19], whereas Templeman and Stinnett found that 17% of their sample reported sexual thoughts about having sex with girls under the age of 15 (5% for under the age of 12), 54% reported voyeuristic fantasies, and 7% reported exhibitionistic thoughts [17]. The endorsement rates of sexual fantasies within community samples vary from 3% in one sample of

women to 61.7% in a sample of adult males [18,20].

To analyze the epidemiological data, the prevalence rates used here are based on the number of cases found in the BMS-II sample of $N = 367$, but with the initial population-based sample of $N = 6,000$ as the denominator. Our assessment is conservative, in that we assume positive self-selection of affected subjects. Looking only at those PASAP that put others at risk and that occurred in the sociosexual realm of experience, the obtained prevalence rates ranged from 0.13% for exhibitionistic behavior (8/6,000) to 0.4% for frotteuristic behavior (24/6,000). Regarding pedophilic behavior, 0.23% (14/6,000) reported sexual contacts with children, which is of particular concern (Table 3).

Extrapolating these findings to the general male population aged 40–79 years, the absolute number of men who socially acted out their sexual interest in prepubescent children would be 1,800 for the city of Berlin and 69,000 for Germany. However, bearing in mind both the conservative approach taken and the fact that the current study did not include the most sexually as well as criminally active group of men, namely those aged 20–40 years, the absolute number of men acting upon their pedophilia-related arousal will most likely be considerably higher. As the self-reported data refers to lifetime experiences of men aged 57 years on average, a comparison with the annual official statistics on number of child sexual abuse cases in Berlin or Germany is not possible.

Although the subjects were recruited from a representative sample of 6,000 men, the participants in this study were volunteers, which means there is the potential for selection bias. The participants in BMS-II were younger, better educated, and more likely to be single as well as employed compared with nonresponders. Based on these variables alone, the assumption that the results are biased in a specific way is hardly justified. Motivation to participate in sexological studies may be present both in persons with sexual problems and those with a liberal attitude towards sexual themes [21]. Although the generalizability of our results is limited, it remains unclear whether the findings are associated with overrepresentation or underrepresentation of men with PASAP. Presumably the participants were open to research in the area of sexuality. However, there was no obvious indication that they wanted to participate specifically because of having a “different” sexuality and they reported few problems or suffering with regard to their PASAP (Table 2).

Another sample characteristic that may limit the conclusions that can be drawn with respect to pedophilic interest is that the overwhelming majority of the participants were in a current stable sexual relationship. This seems to be particularly important when considering that pedophilic PASAP involves girls in the vast majority of cases; boys only play a minor role as desired sexual partners across all realms of experience. However, it is well known from clinical work that most men with a confirmed diagnosis of manifest pedophilia have a sexual inclination towards prepubertal boys. Thus, as men with a preference for male minors obviously did not take part in the BMS, the assumption is that among BMS-II participants there were “only” pedophile men of the so-called nonexclusive hetero-pedophilic type. These men are able to have and enjoy sex with adult women, and are likely to be bound in an intimate relationship whilst at the same time feeling sexually attracted to prepubertal girls. Such men may be expected to be less problem-conscious and to experience less suffering from their tendencies, simply because they both wish to and can interact with partners of similar age and, thus, have the possibility of fulfilling their desire for an intimate relationship. It is exactly this option that *exclusively* pedophilic men do not have, and this is why they may experience more pronounced suffering and may be less willing to take part in sexological studies. Consequently, it will remain a difficult challenge for future researchers to accurately assess the prevalence of exclusively pedophilic interests among the general population.

Conclusion

Although 44.4% of the BMS-II sample (163/367) engaged in at least one paraphilia-related socio-sexual behavior, this proportion dropped to 2.7% when it was calculated using the initial BMS-I sample as denominator (163/6,000). Extrapolating this prevalence to Germany’s population of men aged 40–79 years gives a figure of 525,000 men having had similar experiences. In view of this number, both mental and real-life sexual experiences that are currently commonly regarded as peculiar and exotic should lose their status as “rarities.” These behaviors probably affect communication and satisfaction for both partners in a relationship and might play a role in disturbances of sexual function (in both partners!)

However, adverse effects arising from having a PASAP are not likely to be adequately dealt with.

This is unfortunate, as it deprives patients and their partners of access to timely and appropriate therapy, which in only very rare cases would involve psychiatric treatment. We think it is clear that moral evaluations of PASAP remain a weighty factor that has prevented the reclassification of this “deviation” as “normal.” The more physicians and therapists are aware of the actual prevalence of PASAP, the more likely it is that they will consider them when assessing patients and taking a sexual history, which is crucial for selecting therapeutic options. For example, clinical evidence suggests that erectile dysfunction might occur as a consequence of a paraphilic pattern of arousal, if the pattern has a problematic connotation for the patient and/or the partner [22].

Despite some new knowledge resulting from this study, more research is needed on both the prevalence of PASAP and paraphilias proper in the general population. Likewise, more research is needed on which variables are strongly associated with sexual preferences. In conducting this epidemiological research, standardized assessment tools ought to be used and international classification criteria followed so that more accurate prevalence rates may be reached and data from different studies can be compared. Ideally, a short and a long item could be agreed upon as representing an operationalization of a wide and a narrow interpretation of the phenomenology of the paraphilias, respectively (DSM-IV-TR Criterion A). What constitutes “intense” sexual arousal? When is the criterion of “recurrent” fulfilled?

An even greater challenge awaits researchers when attempting to operationalize DSM-IV-TR Criterion B. Often, patients presenting with an unusual sexual preference are not aware that this specific aspect of their sexuality is causing them distress or impairment. It is the therapist who helps them to see this connection or see it more clearly. How should this person then tick the appropriate box as a participant in a questionnaire study? Similar problems must be considered when attempting to find out more about how certain sexual experiences can affect intimate communication between partners and relationship satisfaction, contribute to the development of disorders of sexual functioning, and lead to long-term inability to form and maintain relationships.

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