

ORIGINAL ARTICLE

The sexual attraction toward disabilities: a preliminary internet-based study

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Devotism, defined as sexual attraction toward disabilities, has not undergone extensive study. To verify whether devotees have characteristics suggestive of a paraphilic behavior, an ad hoc internet questionnaire was developed to study a population of 209 subjects enrolled from online devotee communities. With respect to the sexual preference, we observe a first population comprising subjects sexually attracted by disability *per se* and considers it as an erotic object. In the absence of disability, this group is also unable to become sexually aroused and experiences discomfort due to their condition. The second subpopulation comprises subjects attracted by specific characteristics of people with disabilities such as adaptability, fortitude, courage and ability to overcome obstacles. This group experiences low levels of discomfort for their sexual preference. Further studies will be necessary to confirm these data.

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INTRODUCTION

Physical or mental disability may alter the way individuals express their sexuality and may profoundly change feelings about sex. However, disabilities do not necessarily destroy interest in sexual activity, and people with disabilities can frequently both experience and provide sexual pleasure. If on the one hand people affected by disabilities experience their sexuality, then on the other hand they can also be the object of desire for some people sexually aroused by the disability itself.

Sexual attraction to disability (minor, such as missing fingers, or severe, such as blindness, limb amputation or quadriplegia) is known as *devotism*,¹ and subjects who are specifically interested in and sexually aroused by people with disabilities call themselves *devotees*. They have two additional subgroups, including people who want to become amputees and refer to themselves as *wannabes*² and able-bodied people who act as if they have a disability by using assistive devices (*pretenders*).²

Historically, the term 'devotism' has undergone some modifications: in the nineties, attraction toward disability was defined as *acrotomophilia*,³ although this term included only sexual interest in amputees. Later, a case-report analysis⁴ suggested that this attraction was the expression of a *factitious disability disorder* or it was interpreted as an identity disorder.⁴ Devotism may share conceptual convergences with fetishism⁵ or sadism.⁶ For the latter condition, sexual acts with disabled person may configure as exciting because of the psychological or physical suffering produced during the act. However, this sexual preference could thus not be considered a unified phenomenon but rather a broad spectrum of phenomena, with 'conventional' sexual behavior at one end and anomalous sexual behavior, up to paraphilic behavior, at the other. This perspective incorporates the idea that some paraphilias could be unusual but not disordered sexual variations.^{7–9}

Devotism has not undergone extensive study, with just a few sporadic case series reported in the literature.^{1–3,10–12} Greater attention has been paid to another group of subjects, who are sexually aroused by amputees only.^{13–22} The earliest survey in this area was conducted by a company producing stories about and pictures of amputees.^{11,13,14} A sample of 52 wannabes who had expressed a wish to become an amputee or had succeeded in doing so was later described.¹⁷

Our preliminary hypothesis is that the sexual attraction toward disability might configure as a paraphilic behavior. Thus, we try to verify whether all devotees have characteristics suggestive of a paraphilic behavior.

MATERIALS AND METHODS

Subjects

A population of devotees was studied between June 2009 and July 2010 according to a previously adopted and published study protocol.²³ In the current paper, the term 'devotism' will be used to name the study population. We are aware that the term 'devotism' may configure itself as a 'jargon term', but it is referenced in the scientific literature. In addition, no alternative terms with attested scientific basis and those that refer to subjects attracted by all kinds of disabilities may be found in the literature. Other scientific sounding terms, such as *acrotomophilia*,³ refer to subjects attracted by amputation alone and do not include all kinds of disabilities. The study group was an international population-based sample of men who had agreed to participate in Internet surveys. Data were collected from public access areas of English, German, Italian and Spanish-language section of Yahoo! Groups (<http://groups.yahoo.com>). By registering with the Yahoo! service, anyone is entitled to create discussion groups on any topic, provided no copyrighted material is posted and sexual or otherwise sensitive content is posted only to age-restricted sections of the site (see Yahoo!'s terms of service at <http://docs.yahoo.com/info/terms>). The word 'devotism' that we used to locate data on sexual preferences is used with a much broader significance. So, we have used the term 'devotees' added to

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the following terms: 'disability', 'amputations', 'wheelchair', 'crutches', 'blindness', 'sexuality' or the single terms 'amputees' or 'devotees handicap'. Additional Yahoo! groups were found on the web site 'devguide.org/home.shtml' on the basis of recommendations from members of the Yahoo! groups. After identification of possible participants, contact was then maintained by personal emails. Subjects were asked to participate in this survey if they were or had ever been sexually attracted toward physical or mental disabilities. Anyone who did not meet this criterion was excluded from the study. Participants agreeing to take part received a detailed description of the study aims and design and the level of commitment to which they would be agreeing. They were required to provide written informed consent before completing the survey. The participants were unpaid and joined freely in the research. Subjects reporting themselves as under the age of 18 years were excluded.

A multilingual semi-structured questionnaire was developed at the University of L'Aquila. Multilingual semi-structured questionnaires were sent to 435 participants, and 348 questionnaires were returned. Of these, 219 were complete and potentially usable for our analysis. However, we decided to exclude 10 participants who described themselves as female devotees because of impossibility to perform significant comparisons. A total of 209 (60%) questionnaires were included in the final analysis and 139 (40%) were excluded, as large parts of the questionnaires were incomplete or incongruous. Relevant ethical safeguards were met with regard to participant confidentiality and informed consent.

Semi-structured questionnaire

Psychologists, psychotherapists and sexologists from the School of Sexology of L'Aquila University were asked to provide their suggestions for relevant questions for the sociodemographic and psychosexual characterization of the devotee population. The questionnaire was developed from the literature evidence^{1,2,10,11} and personal clinical experience. The final version consisted of 14 items, with the Kinsey Scale²⁴ used to measure sexual orientation. There were five domains, each with open and closed questions. The open questions were intended to assist the investigators in gathering as much relevant data as possible. The domains (Supplementary Appendix I) explored demographic profile and sexual orientation (Items 1–5), critical events for the development of devotism (Items 6–8,13), the quality and features of social and sexual relationships (Items 9/c, 10, 11), preference for a specific disability (Items 12,14,15) and discomfort caused by devotism (Items 9/a,9/b,9/d). Forward-backward translation of the questionnaire was carried out. The study protocol was accepted by the Ethic Committee of Rohe University.

Statistical methods

Categorical data were summarized by absolute and/or relative frequencies. Continuous variables were condensed to mean and standard deviation when appropriate. All statistical analyses were performed using the SPSS statistical analysis software package, version 10.0.

RESULTS

It should be noted that not all participants answered all questions, and so the totals below do not necessarily add up to 100%. Regarding demographics, all participants included in the final analysis described themselves as male devotees. On the basis of the Kinsey scale,²⁴ the vast majority of men, 83.1% (182/209), defined themselves as exclusively heterosexual, 2.9% (6/209) as exclusively homosexual, 4.8% (10/209) as bisexual and 5.3% (11/209) did not define their sexual orientation. Interestingly, the vast majority of participants clearly remembered specific events, occurring during a critical period, related to their sexual preference. Specifically, participants affirmed the following: (i) that their first sexual arousal in seeing a person with a disability was at the age of 6 or 7 years (46.8% (98/209)); (ii) that there were no people with disabilities among their family, friends or acquaintances (77.9% (163/209)); (iii) that the onset of their attraction for people with disabilities was traced back between the age of 6 and 14 years (70.8% (148/209)); and (iv) that, as a child, they were loved by their parents (77.5% (162/209)). Although around half the participants (42.6% (89/209)) had had any relationship ≥ 12 months, the vast majority of subjects [71.8% (150/209)] affirmed that they had ever

Table 1. Kind of Discomfort related to attraction toward people with disabilities

Kind of discomfort	Men ^a (N = 108)
Social prejudice (%; N)	39.8% (N = 43)
Sexual (sexual intercourse with partner, uncontrollable excitement) (%; N)	29.6% (N = 32)
Guilt (%; N)	13% (N = 14)
General discomfort (%; N)	8.4% (N = 9)
Psychological/spiritual (%; N)	6.5% (N = 7)
Fear of loneliness (%; N)	2.7% (N = 3)

^aA total of 108 men (51.7%; 108/209) referred to have felt some kind of discomfort because of Devotism.

had sexual intercourse with anyone without a disability suggesting that may exist a criterion of exclusivity, a well-known characteristic of paraphilic behavior. Another characteristic typical of paraphilic behavior is the discomfort perceived for a specific paraphilic condition. Overall, discomfort due to sexual attraction toward disabilities was reported by 51.7% (108/209) of participants, whereas a similar number (48.3% (101/209)) had never experienced any discomfort (Table 1). Less than half the participants (42% (63/150)) did not feel uncomfortable during sexual intercourse with an able-bodied partner, whereas 58% (87/150) of men reported feeling uncomfortable.

The great majority of men (90.9% (190/209)) answered they had not experienced any sexual attraction toward people with mental disabilities, with just 5.3% of men (11/209) answering they had experienced such an attraction. However, 11% (23 participants) did not exclude the possibility of experiencing such an attraction in the future.

Table 2 lists the preference of devotees for a specific disability. Differences were found in the distribution of different physical characteristics toward which male devotees directed their attention. Of great importance are data of devotees answering to be sexually attracted by amputations (29.8% (62/209)), prosthesis and/or surgical appliances (11% (23/209)) and crutches (5.7% (12/209)). Conversely, 10% (22/209) of participants answered that they were attracted by the way people approach their disability (Table 2). Men attracted by the way people approach their disability (subpopulation 1) had distinctive characteristics with respect to men attracted by disability *per se* (subpopulation 2) configuring two different subpopulations of devotees (Table 3). A higher proportion of participants belonging to subpopulation 1 referred (i) to have experienced sexual intercourse with an able-bodied person, (ii) to have had lasting relationship with anyone with a disability and (iii) to have never had exclusively sexual intercourse with someone with a disability. Interestingly, a lower percentage of subjects belonging to subpopulation 1 had experienced discomfort due to sexual attraction toward disabilities and during sexual intercourse with an able-bodied person.

DISCUSSION

An interesting finding emerging from our study is that the vast majority of subjects who define themselves as devotees have characteristics suggestive of paraphilic behavior. These subjects are unable to become sexually aroused in the absence of the paraphilic object (in this case disability) and reported experiencing discomfort due to their condition. This, coupled with their lack of any sexual relationship with able-bodied people, may suggest that these subjects may fall, on the basis of DSM 5 criteria for the definition of paraphilia,^{25–28} in the category 'exclusive paraphilia'.

This is a reasonable inference, considering that 71.8% of participants (150/209) in our survey reported that they had sexual

intercourse with an able-bodied person. However, the evidence that 71 of the 91 participants who experienced discomfort during sexual intercourse with able-bodied people belonged to the first population indicates that they certainly do not prefer sexual intercourse with an able-bodied person. We suggest therefore that this subpopulation can be preferentially attracted by disability, although those of them who also experienced discomfort due to their sexual attraction toward disability may have characteristics closer to a paraphilic behavior.

DSM-IV-TR defines paraphilia as 'recurrent, intense sexually arousing fantasies, sexual urges or behaviors generally involving (1) nonhuman objects, (2) the suffering or humiliation of oneself or one's partner or (3) children or other non-consenting persons that occur over a period of at least 6 months (Criterion A). For some individuals, paraphilic fantasies or stimuli are obligatory for erotic arousal and are always included in sexual activity. In other cases, the paraphilic preferences occur only episodically (e.g., perhaps during periods of stress), whereas at other times the person is able to function sexually without paraphilic fantasies or stimuli. (...) The diagnosis is made if the behavior, sexual urges or fantasies cause clinically significant distress or impairment in social, occupational or other important areas of functioning (Criterion B).²⁹

Some authors have questioned the essence of Criterion A, stressing that the distinction between a mental disorder and a healthy sexual interest depends on the nature of the specific

sexual interest rather than its intensity.³⁰ In addition, doubts were also present as to the utility of Criterion B. In the past, it was believed that people with paraphilia were not usually distressed by their condition itself but by the onset of problems in social relations due to their sexual behavior.

The DSM-5 subgroup proposes a new definition of paraphilia,^{25-28,31} which distinguishes, on the basis of Criterion B, paraphilia from paraphilic disorder. Most people with atypical sexual interests do not have a mental disorder, which is a paraphilic disorder www.dsm5.org. According to the new definition, a paraphilic disorder is 'a paraphilia that is currently causing distress or impairment to the individual or a paraphilia whose satisfaction has entailed personal harm, or risk of harm, to others. A paraphilia is a necessary but not a sufficient condition for having a paraphilic disorder, and a paraphilia by itself does not automatically justify or require clinical intervention www.dsm5.org'.

Although our survey was not tailored to investigate characteristics such as intensity and specificity of paraphilia, our data seem to suggest that a subset of our first subpopulation of devotees may prefer the paraphilia to conventional sexual intercourse. Although they may also engage in conventional sexual activity, these subjects may fall in the category 'preferred paraphilia'.

The second subpopulation consists of individuals who are not sexually attracted by the disability *per se* but rather by the way people with disabilities deal with their condition ('their adaptability, fortitude, courage and ability to overcome obstacles'). This is the main distinctive characteristic that leads us to believe that this sexual attraction cannot be considered a form of fetishism, given that the object of attraction is seen as a whole rather than in terms of disability, and that it does not reflect the essence of paraphilia. In addition, these subjects experience low levels of discomfort due to their sexual preference and are able to build and maintain lasting relationships with their partners, whether disabled or able bodied.

On the basis of these considerations, this population could represent the boundary between a true pathological condition, ranging from paraphilic disorder to an 'unusual' sexual preference (paraphilia), and what is socially considered as 'conventional sexuality'.

Similar to any method, Internet-based studies (IBSs) have been criticized, in this case due to lack of control over the participant's environment, vulnerability to fake responses and possible non-representativeness of the general population. Although these are fair criticisms, some of these preconceptions have proved unfounded due to consistency with findings using traditional methods.³² Repeat responders can be another problem, although this was mitigated in our survey as the questionnaires were not

Table 2. What do you find most attractive about people with disabilities?

Kind of disability	Men (N = 209)
<i>Physical characteristics (%; N)</i>	
Amputations	29.8% (N = 62)
Prosthesis/Surgical appliance	11% (N = 23)
Crutches	5.7% (N = 12)
Other physical disease	5.3% (N = 11)
Disabled appearance	4.8% (N = 10)
Wheelchair	3.9% (N = 8)
Paraplegia	2.9% (N = 6)
Blindness	0.4% (N = 1)
<i>Psychological attitude (%; N)</i>	
Adaptability/fortitude	10.5%; (N = 22)
Need for care	9%; (N = 19)
Intelligence/humor	5.2%; (N = 11)
	11.5%; (N = 24)
No response (%; N)	11.5%; (N = 24)

Table 3. Differential characteristics of subpopulations of devotees

Items	Subpopulation 1 ^a , (preference for physical characteristics of people affected by disabilities) (N = 138) ^b	Subpopulation 2 ^a , (preference for psychological attitudes of people affected by disabilities) (N = 55) ^b
9/a. 'Does this attraction make you feel uncomfortable?' (%; n)	65.2%; 90/138	29%; 13/55
9/c. 'Have you ever had sexual intercourse with an able-bodied person?' (%; n)	60.8%; 87/138	94.5%; 52/55
9/d. 'If so, have you ever felt uncomfortable during sexual intercourse with an able-bodied person?' (%; n)	51.5%; 71/138	21.8%; 12/55
10. 'Have you ever had any lasting (≥ 12 months) relationship with an amputee/anyone with a disability?' (%; n)	31.9%; 44/138	74.5%; 41/55
11. 'Have you ever had sexual intercourse with an amputee/anyone with a disability?' (%; n)	30.6%; 45/138	54.5%; 30/55

^aThe populations were selected accordingly with their preference for physical characteristics (subpopulation 1) or psychological attitudes (subpopulation 2) (item 12).

^b11.9% (26 participants) of participants are not included in this analysis due to responses of Decline to Answer.

filled out anonymously. It should be noted that IBSs can also offer important advantages over traditional methods, in particular, the ability to access very large potential study populations and, consequently, to collect data on particularly rare fetishism.³³

A possible bias of our study is that data were only gathered from subscribers to Yahoo! groups, who may not represent the general population of devotees. In addition, it is also possible that not all the disability typologies have been included in our search strategy, although we believe to have covered a wide range of those. However, it should be acknowledged that most research on unusual sexual behavior is based on data sources that are, in all likelihood, even less representative. Another significant limitation is that, taken individually, some of the questions may not be sufficiently specific to investigate some of the characteristics of devotism. In any case, as with any new methodology, prudence is justified and our data should be interpreted cautiously. Finally, the use of a non-standardized semi-structured questionnaire can represent another evident limit of this study.

Devotism may cover a wide array of conditions, ranging from unambiguously pathological conditions to more blurred clinical pictures. Although this represents only a first study on this kind of sexual attraction, data could be of interest for the discussion of future inclusion criteria of the large family of paraphilias. Future research investigating specific aspects related to paraphilia such as intensity, specificity and preference of paraphilic symptom will be necessary to identify subjects with clear paraphilic behavior.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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Supplementary Information accompanies the paper on International Journal of Impotence Research website (<http://www.nature.com/ijir>)