

Sexual preferences and associated disorders: toward an extended model for description

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Summary

The notion of human sexual preferences relates to relatively stable patterns of sexual response and to directing sexual behaviors toward specific arousing stimuli, which are also important for sexual satisfaction. The preferences may pertain to the properties of the object or the sexual activity itself. Diagnosing sexual preferences, in its basic form, is conducted with the use of disorder criteria defined in diagnostic classifications (ICD-10, DSM-5). However, while employing these criteria enables the categorization of the patient's sexual preferences as normal or pathological, they seem clearly insufficient for describing complex sexual interest patterns in a comprehensive manner. The goal of this article is to present a detailed dimensional model for describing sexual preferences. This proposal assumes the description of two aspects of preference: a contentual aspect, defining the individual hierarchy of sexually attractive and aversive stimuli, and a formal aspect. The latter involves four dimensions: the diversity of stimuli falling within the pattern of the patient's sexual interest, preference changeability in time, the coherence between individual components of responding to sexual stimuli, and insight into one's own preferences. The proposed model supplements the basic description of sexual preferences conducted on the basis of diagnostic criteria. The model can be a tool useful for diagnostic practice, particularly in precise characterization of various difficulties experienced by patients in relation to the properties of their sexual interests. It can also inspire new research on features of human sexual response patterns which have been neglected in previous analyses.

Key words: sexual preferences, paraphilia, clinical diagnosis

Introduction

Relatively stable patterns of sexual response and directing sexual behavior toward specific arousing stimuli are described using the term sexual preferences [1]¹. These

¹ There is an ongoing debate in the literature on the usefulness of various terms in describing the topic at hand. It pertains to the accuracy of the term 'sexual preference' as such, as well as other terms, such as 'sexual

preferences may pertain to the properties of the object² or the sexual activity itself, determining sexual arousal and satisfaction [2–4]. Sexual preferences are reflected in the contents of sexual fantasies, the history of sexual behavior, the subject's assessment of sexual attractiveness and the intensity of physiological response to various people, situations, and forms of realization [5]. Sexual preference is an important element of analyses concerning normative human sexuality, as they determine sexual choices of partners and behaviors, and influence person's well-being and the quality of intimate relations. It is also the object of analysis regarding sexual pathologies, e.g., deviant and/or criminal behaviors [4, 6, 7].

Clinicians analyze the issue of their patients' sexual preferences primarily in the context of their suffering and impairment of adaptation. Although using the category of disorder for chosen patterns of sexual interests is controversial [8–11], the clinical perspective in these analyses is important for both scientific and practical reasons. It focuses attention on individual and social consequences of particular forms of individual's sexual interests. If the preferred sexual behavior is not socially accepted and a patient wants to comply with social norms, their deviant preference may be a source of internal conflict, resulting either in sexual frustration when the patient refrains from satisfying their urges or in shame, guilt and anxiety when they follow them. Moreover, atypical sexual interests may also result in adaptive difficulties, e.g., limiting the person's ability to participate in preferred erotic situations. They can also influence their non-sexual relationships: family, social and professional ones [11, 13]. This defines which sexual interest patterns may become a clinical problem.

Diagnosing sexual preferences involves, in its basic form, assessment using criteria for disorders (cf. ICD-10, DSM 5). These criteria include: the unusualness of the content of sexual urges, pattern stability in time (more than 6 months), exhibiting behaviors in accordance with atypical urges, experiencing distress or impairment of social functioning in connection with the preferences. Although employing these criteria allows one to categorize the patient's sexual preferences as normal or pathological, they seem insufficient for describing the complexity of individual sexual interest patterns in a comprehensive manner, useful for clinical purposes. These patterns, as well as the resulting problems, are multi-faceted. Some problems of patients can be clearly classified as disorder of sexual preference. However, there are also examples of sexual interests patterns which result in suffering or social adjustment problems and which do not fulfill the acknowledged criteria of disorder.

variants', 'sexual orientation', and 'sexual identity'. The discussion raises the issues of connotations attached to these terms with regard to the causes of specific arousal patterns (biological determinants or social learning) and subjective control over them (determinism or freedom of choice) [2, 12]. These questions, though important, will not be discussed here as they fall outside the main scope of this work. For the sake of clarity, the present analysis will consistently use the term sexual preferences as defined in the introduction.

² The term 'object' in this context pertains to persons or (in non-normative variants) items within the scope of sexual interest.

One of such examples is the pattern characterized by preference for conventional forms of sexual behaviors, while deviant behaviors are also arousing. Such situation is met in some sex offenders who, e.g., engage in contacts with children – sexually immature objects despite (next to?) a predominantly teleophilic arousal pattern [14]. Similar is the pattern of sexual arousing in patients who engage in sexual behaviors without the need for any additional requirements to be fulfilled (related to features of partner, situation or form of sexual behavior) [15, 16]. A sexual interest pattern which include stimuli activating conflict reactions, arousal and aversion, is another example of such problematic preference pattern. It can be met in some sexually traumatized patients who experience the associated stimuli as aversive as well as having the power to sexually excite them [17–21]. Finally, a problem for clinical diagnosis can be raised by patients' sexual preference which have typical and conventional content, but so precise and narrow that do not allow any (also adaptive) departure. Such a narrow preference impede adjustment to changing circumstances of sexual life in long-term relationships, when appearance or functioning of a partner change, e.g., with their age.

The goal of this article is to propose a model for expanding description of sexual preferences. It has been based on conclusions drawn in the literature, in partial analyses of the topic. The proposal is an attempt to arrange them into a coherent construct. The model has been prepared to enable the depiction of diversity of patients' sexual interests and various problems related to particular features of these patterns. The model allows to describe those problems which fulfill the criteria of disorders of sexual preference (paraphilic disorders) as well as more diagnostically vague ones, as those illustrated above.

Sexual preferences – conceptualization of the notion

Sexual preferences can be analyzed with regard to their two aspects: contentual and formal. The contentual aspect describes the properties of sexually arousing stimuli, i.e., what objects or what situations are sexually exciting for the patient. The formal aspect describes the degree of stimulus variety within the pattern (how many different stimuli are arousing), the pattern's changeability in time, the coherence between the components of sexual response to the stimuli (assessment of attractiveness as well as physiological and behavioral response), and the patient's insight into their own preferences.

Contentual aspect of sexual preferences

The contentual aspect of sexual preferences is constituted by the character of the stimuli that the person finds arousing (who or what is arousing and in which circumstances). In literature, this content is most often described categorially³. Notwith-

³ Catalogues of various sexual preferences and their proposed classifications can be found in the works of K. Imieliński [3, 4], Z. Lew-Starowicz [25–26], and others. Such a description is also offered by diagnostic classifications.

standing, there are indications that it is useful to describe preference content using the dimension of the strength of the stimulus's erotic influence – its sexual attractiveness [22]. Furthermore, considering that many people respond with sexual arousal to various stimuli, some more attractive than others, it is warranted to describe the hierarchy of stimulus attractiveness within the patient's interest pattern [1, 22–24].

It is worthwhile to supplement the description of this hierarchy with a description of stimuli that are sexually aversive, repulsive⁴. The arguments for this solution come from two sources. The first is the analyses of more general models of human sexual response, in which the response is subject to the mechanisms of excitement and inhibition [27–29] or attractiveness and aversion [14, 30]. The second group of arguments comes from detailed studies on the sexual aversiveness of stimuli, e.g., sexual aversion to family members [31–34] or the aversiveness of stimuli associated with the experience of sexual trauma [17–21]. The results of these studies indicate that both sexual reluctance and attractiveness can be described in analogous terms: aversion can pertain to various properties of people, situations and sexual behavior (who or what causes sexual aversion and in which circumstances); the strength of aversive influence varies among stimuli, which allows for their hierarchization.

Empirical analyses of aversion and attraction evoked by sexual stimuli are usually conducted separately. When conducted jointly, they focus on one of these parameters, and aversiveness of a given stimulus is treated a priori as an indication of its lack of attractiveness [23, 35–36]. The proposed assumption, namely, that sexual attractiveness and aversiveness of stimuli are two dimensions that can be associated in a variety of ways, enables to go beyond simplified definitions of preference that points at only 'ideal' models of sexual partners or situations. It provides an opportunity to also describe the degree of any departures from this ideal model (to what extent the stimuli can depart from the preference while still being sufficient for sexual arousal) as well as situations in which sexual response is absent or inhibited (aversion dimension). This approach facilitates more comprehensive descriptions of patients' preferences which include stimuli experienced in conflict manner (the problem can be then described as an effect of overlap of arousing and aversive influence of a particular sexual stimuli) or preference of patients who are able to engage in sexual contacts in not-preferred circumstances (the problem results from lack of aversiveness of stimuli).

⁴ Sexual aversion is considered a sexual disorder, but in a different sense, i.e., as a problem of reluctance or anxiety with regard to engaging in sexual activity as such (cf. ICD-10, DSM 5). In this understanding, the main object of analysis is the individual's inability to engage in sexual relations according to their wishes due to this reluctance (sexual dysfunction). The character of sexual situations evoking aversive responses in the patient is secondary in this context.

Formal aspect of sexual preferences

Stimulus variety within the sexual interest pattern

Data from population [1, 13] and clinical [22, 37, 38] samples indicate that people react with sexual arousal to various types of stimuli. This justifies the inclusion of the extent of this internal diversity in descriptions of sexual interest patterns. Patient preferences can then be placed on a spectrum ranging from narrow range of sexual interests (exclusiveness of particular stimuli) to extensive diversity. Moreover, the extent to which the interests are specified can range from precise definitions of stimuli required for sexual arousal to undifferentiation (no preference for any stimuli, lack of erotic differentiation⁵). This degree of stimulus variety in the structure of sexual preferences is associated with the person's configuration of sexually attractive and aversive stimuli.

Arguments for considering this dimension of preference stem from studies on intergender differences with regard to sexual attractiveness patterns, which indicate that preferences concerning the gender and appearance of sexual partners are more strictly defined among men [2, 10, 41, 42]. However, the dimension, generally defined, allow to describe preferences of patients and their problems regardless of the content of preference. For example, the problem of exclusiveness of preference may apply to deviant sexual objects (as items) as well as to normative objects (features of appearance of sexual partners).

Changeability of sexual preferences

Changeability is a dimension that enables the description of the patient's sexual interests over time. Its inclusion is warranted by two types of issues observed in patients: the problem of excessive preference rigidity, which limits the ability to adapt to changing conditions of sexual realization in a stable relationship, and the problem of excessive habituation and need for novelty-seeking to achieve optimal arousal [2]. Analysis of individual preference changeability is further supported by the results of studies on so-called erotic plasticity [43–45]. Although currently these studies focus primarily on explaining intergender differences, it may be worthwhile to include this aspect in analyses of individual differences among patients as it can help explaining sexual difficulties in relationships, e.g., loss of interest in a partner whose functioning changes with age, and for estimating the possibility of changing the problematic arousal pattern during therapy.

⁵ The problem of the lack of differentiation between sexual situations may be concomitant with hypersexuality [37, 39]. In this context, separate diagnosis is required for the presented problems of differentiating objects and situations (which of them constitute sexual stimuli for the patient, what are their arousing or aversive values) and for problems of sex drive intensity. The latter group may also include problems patients have with differentiating their own internal states, e.g., sexual arousal and stress [40]. However, this group of difficulties does not pertain directly to sexual preference.

Coherence of sexual response components

Sexual arousal response to an attractive stimulus consists of: cognitive assessment of stimulus (acknowledging the stimulus as sexual and assessing its arousing value), autonomic response (specific – genital response and non-specific physiological arousal) and behavioral response (readiness to engage in sexual activity) [30]. These individual components interact with each other. The interactions enable sexual response harmonization, e.g., when a patient, feeling his/her genital response, considers it an effect of attraction to a person nearby. The components may also remain disparate, as attested by the results of many studies on differences between patient descriptions of their sexual arousal and the actual degree of their genital response [46]. Therefore, when describing a patient's sexual preference, it is worthwhile to consider the individual components of their response and the relations between them. This solution is more justified than making a priori assumptions concerning the primacy of a given component (e.g., considering genital response as an indication of the patient's 'real' preferences) or automatic coherence between the components. Describing this aspect of preference may be helpful in explaining the specifics of patient experience, e.g., lowered sexual satisfaction when the response to stimuli is incoherent, or the problems related to sexual self-identification when disharmony within the patient's sexual response results in confusion concerning their own desires and experiences (who or what is sexually exciting for me).

Awareness of sexual preferences

The final aspect of the proposed model is the patient's awareness regarding their own preferences. A significant portion of the process of sexual arousal occurs automatically; only the later stages are subject to insight and conscious control. Awareness of one's own sexual arousal emerges from several components of sexual response: self-observation of focusing one's attention on specific stimuli, the evaluation of their meanings (in sexual categories) and the identification of one's own physiological reactions. These pathways of preference realization are mediated by various cortical and subcortical structures of the brain [16, 30, 47, 48]. Therefore, it should be assumed that individuals can vary in degrees of insight into their own arousal pattern and the pathways through which this insight is obtained. This pertains to both situations of coherent sexual experience (harmonized among its components) and partial experiences expressed by only one response component, e.g., cognitive evaluation or bodily response [15, 30]. Recognizing own sexual preferences is an important element in the formation of the patient's sexual identity [2] as well as making decisions on sexual behaviors in particular forms.

Diversity of clinical problems associated with sexual preferences

The proposed model of detailed description of sexual preferences by using contentual and formal dimensions presented in this article may form a basis for classifying the varied clinical problems associated with features of sexual interest patterns presented by patients (Table 1). As it was mentioned, some of these problems are defined within the category of disorder of sexual preference (paraphilic disorder), the other, although do not fulfill criteria of this disorder, result in patients' problems which fall within the area of clinical practice. It is noteworthy that these problems may overlap with other types of sexual disorders: dysfunctions and sexual identity disorders. Such situations require to consider each time the significance of the particular aspects of the patient's disorder (the core, secondary or associated problems) and their role in the etiopathological mechanism of the disorder (how the various difficulties influence each other). Nevertheless, considering the particular features of patients' sexual preference can help to precise the essence of their problem, also when it is a complex one.

Table 1. Classification of problems associated with sexual preferences

Aspect of sexual preferences	Problems associated with sexual preferences	Associations with other types of sexual disorders
Content of sexual preferences	<ul style="list-style-type: none"> • atypical pattern of arousing and aversive stimuli • overlap of arousing and aversive values of sexual stimuli 	<ul style="list-style-type: none"> • disorders of sexual preferences, paraphilias • sexual desire, arousal, and orgasmic dysfunctions (associated with stimulus aversiveness)
Degree of stimulus variety within the preference pattern	<ul style="list-style-type: none"> • narrowness of the arousing stimulus pattern (exclusiveness) • sexual undifferentiation (no pattern of preferences or aversions) 	<ul style="list-style-type: none"> • sexual desire, arousal, and orgasmic dysfunctions (in situations in which the preferred erotic situations cannot be realized) <ul style="list-style-type: none"> • hypersexuality
Changeability of the preference pattern	<ul style="list-style-type: none"> • rigidity of the sexual preference pattern impeding adaptation to changes in intimate relationships • excessive changeability of preference impeding the formation of a stable relationship 	<ul style="list-style-type: none"> • sexual desire, arousal, and orgasmic dysfunctions (experienced primarily in the context of a partner relationship)
Coherence of sexual response components	<ul style="list-style-type: none"> • no correspondence between the components of sexual response to sexual stimuli (e.g., a pattern of autonomic arousal in response to stimuli considered non-sexual or sexually aversive) 	<ul style="list-style-type: none"> • sexual arousal dysfunctions (lack of some sexual response components or inhibition activated by one of the response components) • psychosexual development disorders (associated with sexual identity) – confusion about one's own sexual experiences

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Awareness of sexual preferences	<ul style="list-style-type: none"> • no awareness of one's sexual preferences • partial awareness of sexual preferences (regarding selected arousing/aversive stimuli or selected components of sexual response) • suffering and lack of self-acceptance associated with the identified sexual preference 	<ul style="list-style-type: none"> • sexual desire and arousal disorders (no consciously expected sexual response to situations considered preferable by the patient) • impulsive, egodystonic sexual behaviors in situations of reduced control (no awareness of their attractiveness) <ul style="list-style-type: none"> • psychosexual development disorders (related to sexual identity) <ul style="list-style-type: none"> – experiencing preferences as egodystonic
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Conclusions

Human sexual preferences and the associated problems appear are the subject of interest for a wide range of scientific analyzes. So far, the analyzes have primarily concerned diversity of preferred sexual stimuli and situations (normative and deviant ones), the frequency of occurrence of specific preferences in general and clinical populations, and the methods for their identification. The rich empirical data gathered so far allow to compare various groups and to describe sexual stimuli central for particular preferences.

However, beside the above-mentioned issues, the significance of individual, unique features of patterns in which patients get sexually aroused is also a basic area of analysis in clinical practice. The construct of sexual preference, if it is to be useful for clinical practice, has to enable to classify dominant urges of the person and to compare his/her to reference group, as well as to describe his/her idiosyncrasy.

It seems that the previous analyses of sexual preferences have insufficiently explored such aspects as, e.g., diversity within patients' patterns of sexual interests. The following issues also need more attention: relations between the attractiveness and aversiveness of sexual stimuli, the stability and changeability of arousing patterns, the scope of incoherence between components of sexual response to stimuli, and, finally – the awareness and ability to control one's own interest pattern. I hope, that the proposed model of expanding the description of sexual preferences will become a useful tool for diagnostic practice in favor of patients who report diverse problems determined by the characteristics of their sexual preference. Perhaps, the presented model will also inspire new, creative research questions on this complex topic.

References

1. Skowroński D. *Preferencje seksualne Polaków*. Poznan: P.W. "Interfound"; 2003.
2. Bancroft J. *Seksualność człowieka*. Wrocław: Elsevier; 2011.

3. Imieliński K. *Zarys seksuologii i seksiatrii*. Warsaw: PZWL; 1982.
4. Imieliński K. *Seksiatria*. Warsaw: Polish Scientific Publishers; 1991.
5. Quinsey VL, Rice M, Harris GT, Reid KS. *The phylogenetic and ontogenetic development of sexual age preferences in males: Conceptual and measurement issues*. In: Barbaree EH, Marshall LW, Hudson MS. ed. *The juvenile sex offenders*. New York: Guilford Press; 1993. P. 143–163.
6. Gagnon JH, Simon W. *Sexual deviance in contemporary America*. *Annals of the American Academy of Political and Social Science* 1968; 376(1): 106–122.
7. Gagnon JH, Simon W, Carns DE. *Sexual deviance*. New York: Harper & Row; 1967.
8. Moser C. *Paraphilia: A critique of a confused concept*. In: Kleinplatz JP ed. *New directions in sex therapy: Innovations and alternatives*. Philadelphia: Brunner-Routledge; 2002. P. 91–108.
9. De Block A, Adriaens PR. *Pathologizing sexual deviance: A history*. *J. Sex. Res.* 2013; 50(3–4): 276–298.
10. Money J. *Paraphilias: Phenomenology and classification*. *Am. J. Psychother.* 1984; 38(2): 164–179.
11. Wincze JP. *Ocena i leczenie nietypowych zachowań seksualnych*. In: Leiblum SR, Rosen RC ed. *Terapia zaburzeń seksualnych*. Gdańsk: Gdansk Psychological Publishing House; 2005. P. 517–541.
12. Savin-Wiliams RC. *Homoseksualność w rodzinie. Ujawnianie tajemnicy*. Gdansk: Gdansk Psychological Publishing House; 2011.
13. Ahlers CJ, Schaefer GA, Mundt IA, Roll S, Englert H et al. *How unusual are the contents of paraphilias? Paraphilia-associated sexual arousal patterns in a community-based sample of men*. *J. Sex. Med.* 2011; 8(5): 1362–1370.
14. Kolářský A, Brichcín S. *Priorities in male erotic activation and paraphilias*. *Psychiatrie* 1999; 3(1): 3–8.
15. Marshall WL, Barbaree HE, Christophe DD. *Sexual offenders against female children: Sexual preferences for age of victims and type of behavior*. *Can. J. Behav. Sci.* 1986; 18(4): 424–439.
16. Roszyk A. *Neuropsychologiczne uwarunkowania przestępstw seksualnych*, doctoral thesis. Poznan: Institute of Psychology, Adam Mickiewicz University in Poznan; 2016.
17. Briere J, Smiljanich K, Henschel D. *Sexual fantasies, gender, and molestation history*. *Child Abuse. Negl.* 1994; 18(2): 131–137.
18. Hall K. *Childhood sexual abuse and adult sexual problems: A new view of assessment and treatment*. *Feminism & Psychology* 2008; 18(4): 546–556.
19. Heiman JR, Verhulst J, Heard-Davison AR. *Childhood sexuality and adult sexual relationship. How they are connected by data and by theory?* In: Bancroft J ed. *Sexual development in childhood*. Bloomington: Indiana University Press; 2003. P. 404–420.
20. Maltz W. *Sex Therapy with survivors of sexual abuse*. In: Kleinplatz PJ ed. *New directions in sex therapy: Innovations and alternatives*. Philadelphia: Brunner-Routledge; 2001. P. 258–278.
21. Noll JG, Trickett PK, Putnam FWA. *Prospective investigation of the impact of childhood sexual abuse on the development of sexuality*. *J. Consult. Clin. Psychol.* 2003; 71(3): 575–586.
22. Schmidt AF, Mokros A, Banse R. *Is pedophilic sexual preference continuous? A taxometric analysis based on direct and indirect measures*. *Psychol. Assess.* 2013; 25(4): 1146–1153.
23. Camperio CA, Battaglia U. *Implicit measurement of sexual preference in self-declared heterosexual men: A pilot study on the rate of androphilia in Italy*. *J. Sex. Med.* 2014; 11(9): 2207–2217.

24. Blanchard R, Lykins AD, Wherrett D, Kuban ME, Cantor JM et al. *Pedophilia, Hebephilia, and the DSM-V*. Arch. Sex. Behav. 2009; 38(3): 335–350.
25. Lew-Starowicz Z. *Seksuologia sądowa*. Warsaw: PZWL; 2000.
26. Lew-Starowicz Z. *Seks nietypowy*. Lodz: “Cztery Strony Świata” Publishing House 2003.
27. Bancroft J, Janssen E. *The Dual-Control Model: The role of sexual inhibition & excitation in sexual arousal and behavior*. In: Janssen E ed. *The psychophysiology of sex*. Bloomington, In: Indiana University Press; 2007. P. 197–222.
28. Bancroft J, Graham CA, Janssen E, Sanders SA. *The Dual Control Model: Current status and future directions*. J. Sex. Res. 2009; 46(2–3): 121–142.
29. Toates F. *An integrative theoretical framework for understanding sexual motivation, arousal, and behavior*. J. Sex. Res. 2009; 46(2–3): 168–193.
30. Everaerd W, Both S, Laan E. *The experience of sexual emotions*. Annu. Rev. Sex. Res. 2006; 17(1): 183–199
31. Westermarck E. *Three essays on sex and marriage*. London: Macmillan; 1934.
32. Westermarck E. *The history of human marriage*. London: Macmillan; 1891.
33. Shor E, Simchai D. *Incest avoidance, the incest tabll, and social cohesion: Revisiting Westermarck and the Case of the Israeli Kibbitzim*. Am. J. Soc. 2009; 114(6): 1803–1842.
34. Antfolk J, Lieberman D, Santtila P. *Fitness costs predict inbreeding aversion irrespective of self-involvement: Support for hypothesis derived from evolutionary theory*. PloS ONE 2012; 7(11): e50613.
35. Chivers MD, Riegel G, Latty E, Bailey JM. *A sex difference in the specificity of sexual arousal*. Psychol. Sci. 2004; 15(11): 736–744.
36. Renaud P, Rouleau JL, Granger L, Barsetti I, Bouchard S. *Measuring sexual preferences in virtual reality: A pilot study*. Cyberpsychol. Behav. 2004; 5(1): 1–9.
37. Kafka M. *Zaburzenia o charakterze parafilijnym. Nieparafilijna nadaktywność seksualna oraz seksualna kompulsja (nalog)*. In: Leiblum RS, Rosen CR ed. *Terapia zaburzeń seksualnych*. Gdansk: Gdansk Psychological Publishing House; 2005. P. 542–577.
38. Seto MC, Lalumiere ML, Kuban M. *The sexual preferences of incest offenders*. J. Abnorm. Psychol. 1999; 108(2): 267–272.
39. Carnes P. *Od nalogu do miłości*. Poznan: Media Rodzina; 2001.
40. Cortoni F, Marshall WL. *Sex as a coping strategy and its relationship to juvenile sexual history and intimacy in sexual offenders*. Sex. Abuse. 2001; 13(1): 27–43.
41. Symons D. *The evolution of human sexuality*. New York: Oxford University Press; 1979
42. Kinnish KK, Strassberg DS, Turner CW. *Sex differences in the flexibility of sexual orientation: A multidimensional retrospective assessment*. Arch. Sex. Behav. 2005; 34(2): 173–183.
43. Baumeister RF. *Gender differences in erotic plasticity: The female sex drive as socially flexible and responsive*. Psychol. Bull. 2000; 126(3): 347–374.
44. Baumaister RF. *Gender and erotic plasticity: Sociocultural influences on the sex driver*. Sex. Rel. Therapy 2000; 19(2): 133–139.
45. Baumeister RF, Stillman TF. *Nature, culture, and sex: Gender and erotic plasticity*. In: McAnulty RD, Burnette MM ed. *Sex and sexuality*, Vol. 3. Westport, CT: Praeger Press; 2006.
46. Chivers ML, Seto MC, Lalumière ML, Laan E, Grimbos T. *Agreement of self-reported and genital measures od sexual arousal in men and women: A meta-analysis*. Arch. Sex. Behav. 2010; 39(1): 5–56.

47. Janssen E, Everaerd W, Spiering M, Janssen J. *Automatic processes and the appraisal of sexual stimuli: Toward an information processing model of sexual arousal*. J. Sex. Res. 2000; 37(1): 8–23.
48. Spiering M, Everaerd W. *The sexual unconscious*. In: Janssen E ed. *The psychophysiology of sex*. Bloomington: Indiana University Press; 2007. P. 166–184.

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