



SYMPOSIA PAPER

That Obscure Concept of Desire: The Ideological War over Scientific Models

Katarzyna Grunt-Mejer

SWPS University of Social Sciences and Humanities, Faculty of Psychology and Law, Poznań, Poland Email: kgrunt-mejer@swps.edu.pl

(Received 15 October 2021; revised 21 March 2022; accepted 25 April 2022; first published online 25 May 2022)

Abstract

This article analyzes the scientific debate surrounding the appropriateness of pharmacological interventions aimed at increasing female desire. It has three objectives: (1) to outline the nonepistemic values that underlie scientific concepts of desire; (2) to conduct an analysis of scientific misuses when justifying a drive-based model of desire and pharmacological intervention; and (3) to show how in this and similar cases of vague constructs we can demonstrate the role of nonepistemic values and assess their influence.

I. Introduction

In 2015, flibanserin (Addyi), a drug that is designed to decrease serotonergic transmission and increase dopaminergic and noradrenergic transmission, was registered in the United States as the first drug for premenopausal women complaining of low sexual desire accompanied by distress (so-called hypoactive sexual desire disorder, or HSDD). Four years later another drug, bremelanotide (Vyleesi), which is also intended to act on the central nervous system, was also registered in the United States. Several other drugs are lined up for the end of clinical trials and registration (Simon 2018). Because low desire in women is the most frequently reported sexual problem in clinics (Brotto et al. 2010), the market is tempted by the promise of billions of dollars in profits, similar to those once made by Viagra, if any of these aphrodisiacs become popular.

However, low desire is much more abstract and less understood than erectile dysfunction. Perhaps this is the reason for the main difference in effectiveness between Viagra and the two registered drugs for HSDD. In the case of the latter, there is a lack of (or in the best cases marginal) efficacy over placebo on all accepted clinical trial endpoints as well as frequent and serious adverse effects (Saadat et al. 2017; Spielmans 2021). Furthermore, the registration of these drugs has stirred up a major controversy that has divided sex researchers into two camps: pharmacoenthusiasts and pharmacoskeptics. The disagreement between these camps appears at first to be about the best operationalization of desire based on scientifically acquired data; however, as I shall point out in this article, this disagreement is primarily about

© The Author(s), 2022. Published by Cambridge University Press on behalf of the Philosophy of Science Association.

the values that would be realized or threatened by the availability of these desireenhancing drugs. These values lead researchers toward an ideologically motivated choice of the conceptualization and operationalization of desire, toward discrediting alternative concepts, and toward biased interpretations of research findings. First, I will indicate what kind of nonepistemic values are at stake in the two different scientific conceptions of desire. Second, I will analyze the scientific misuses that sometimes occur when justifying pharmacological intervention. Lastly, I will show how, in this and similar cases of vague constructs, we can demonstrate and assess the influence of nonepistemic values and reduce some of the aforementioned problems.

2. What are we fighting for when addressing reduced desire in women?

The beginning of the fierce exchange of arguments on the best approach to female desire dates back to the changes in the diagnosis of this disorder between DSM-IV-TR and DSM-5. In DSM-IV-TR, desire was understood as a biologically determined drive that manifests itself as spontaneous sexual need that does not require external stimulation, similarly to hunger and thirst. Low desire was also explicitly assumed to be the result of biological imbalances, thus validating drugs as the right solution to desire problems.

In DSM-5, female sexual arousal and interest disorders have been merged into one entity (FSIAD); also, the criteria concerning desire have been modified in accordance with newer concepts. One of them is the responsive desire model, according to which sexual activity in women in long-term relationships is often motivated by factors other than spontaneous desire (e.g., the wish for emotional closeness with a partner, sensual pleasure) (Basson 2000). Positive feelings during sex trigger the desire to continue sexual activity (in which case it is called "responsive desire"). In this and other influential conceptions, sexual inhibition is not necessarily seen as problematic, but it may be regarded as an adaptive response to unfavorable circumstances (Brotto et al. 2010). The responsive desire model has been shown to accurately describe the experience of many women. It was readily accepted as normative, primarily because it allowed many women to be depathologized (ibid.). Advocates of equating responsive desire with spontaneous desire have also emphasized the androcentric nature of the latter. The new broader norm of desire for women was thus based on the experience of women rather than a generalization to all people of the male way of experiencing desire.

The staunch opponents of the new diagnosis and criteria were primarily researchers and clinicians working with pharmaceutical companies involved in the production of drugs for low desire. As the new criteria take into account the normality of responsive desire, the pool of women suffering from FSIAD became significantly smaller than the population of women suffering from HSDD, thus the potential consumer base for the drug was reduced. The arguments put forward by opponents of this new diagnostic entity ranged from the formal to the strongly persuasive. The former have been discussed in the scientific literature (Balon and Clayton 2014), while arguments appealing to emotions and spiced with feminist rhetoric have been formulated by the same authors outside of the scientific discourse (e.g., Even the Score, 2014). For example, researcher and spokesperson for Addyi, Anita Clayton (2015), suggested on her blog that acceptance of the responsive model is acceptance of nonconsensual

sex and as such is incompatible with feminist values, as "what these people are REALLY saying is that a 'no' from a woman when it comes to sex might not really mean 'no' if her desire is going to kick in anyway." This example of an argument that only supports the normality of spontaneous desire was part of a wider campaign to convince the Food and Drug Administrations (FDA) that drugs designed to restore spontaneous desire were weapons in the fight for female autonomy, health, and sexual fulfilment (Chanska and Grunt-Mejer 2016; Segal 2018).

For some pharmacoskeptics, the first problem with this narrative is the nature of sexual fulfillment. During an FDA-ordered special panel on HSDD, women invited by the manufacturer of Addyi interpreted their own successful sex lives in terms of pleasing their male partners, who were said to enjoy sex more when a woman engages in it not out of a sense of obligation but out of her own desire. As Segal notes, "Addyi was almost helplessly understood by its own promoters to be, in the first instance, a(nother) drug for men—just one that they didn't have to take themselves" (Segal 2018, 7).

Feminist scholars also note that actual autonomy requires the freedom not only to have sex based on desire but also to say "no" (Fahs 2014). If we listen carefully to the voices of women with HSDD, we can see that this freedom is highly questionable (Wood et al. 2007; Traeen 2008; Frost and Donovan 2019). These women feared the consequences of not being sexually available to their partner (relationship breakdown, partner's infidelity, frustration and aggression) and felt guilt for not fulfilling what they perceived as a relational obligation. Two very different conceptions of autonomy thus emerge: pharmacoenthusiasts understand autonomy as the freedom of consumer choice to enable (if effective drugs exist) sex driven by bodily needs rather than a sense of obligation; pharmacoskeptics see autonomy as a broader contextual freedom in which there is no external or internalized pressure to increase female libido. In this context, pharmacological boosting of desire is seen as "a very progressive approach to a very old goal" (van Anders et al. 2021), thus illustrating a bridge between the new norms of sexual consent and the still-active obligation to serve male needs.

Pharmacoskeptics further note that women in stable heterosexual relationships received a diagnosis of HSDD disproportionately more often than single women or women in same-sex relationships. This may be explained by the androcentric norm, according to which spontaneous, high, and relatively constant-over-time desire is normal. At the same time, heterosexual relationships have a significant risk of a spontaneous desire discrepancy after a certain period because, on average, male desire decreases more slowly than female desire over the course of a relationship (Klusmann 2002). Instead of recognizing this discrepancy as normal, the androcentric perspective pathologizes a large proportion of women in heterosexual relationships and defines relational tension as a disorder of the individual. This happens regardless of the objective level of desire of the woman, which would not be a problem at all in the absence of a partner, or with another (less temperamental) partner, or in a sexually open relationship. A new framing, FSIAD, partly addresses these concerns by not only normalizing responsive desire but also noting that a desire discrepancy is not sufficient to diagnose a low-desire disorder in an individual.

Heteronormative gender inequities account for the second explanation of the frequency of female low desire in heterosexual relationships. These include cultural beliefs: the sexual role of a woman is to bring satisfaction to her male partner rather than to herself; the ideal form of sexual activity is penile-vaginal intercourse, that is, activity directed at male rather than female sexual pleasure; and a woman is an object of desire rather than a subject of desire (Richgels 1992). Other gendered problems also play a role: the stereotypical female role of caring for a partner, which has a detrimental effect on libido; bitterness and fatigue caused by lack of equitable participation in childcare, household, and relational labor; and a sense of sexual obligation exacerbated by lower economic power in a relationship (van Anders et al. 2021). In this light, accepting a drive-based model of desire and the possibility of its pharmacological enhancement would entail a smaller likelihood of these beliefs and inequalities being challenged.

3. Use and abuse of science in justifying pharmacological intervention

Anxieties about the consequences of adopting a particular conception of desire are reflected not only in different understandings of desire but also in hypotheses about the factors that influence its level. Pharmacoskeptics assume that psychological and biological factors are interdependent and their mutual influence is highly contextual (Brotto et al. 2010). Biological correlates are not the causes of lower desire but they are one of its various manifestations, or—as some research shows—they may even be an outcome of nonbiological phenomena (van Anders and Watson 2006). At the same time, pharmacoenthusiasts present psychological and biological factors as independent sets, each of which requires different treatment (Kingsberg 2014). Pharmacoenthusiasts currently present the biological cause of low desire according to the hypothetical mode of the action of both registered drugs as "an imbalance of neurotransmitter (chemical messengers) activity in the brain" (Vyleesi 2021). The cited evidence for a biological cause of HSDD is supposedly the action of the drugs and the differences in brain activity between "healthy" women and women with HSDD (Addyi 2021).

The argument based on the drugs' actions is flawed both pragmatically and logically. If a change in neurotransmitter levels causes higher desire, then inferring the cause of a disease from an observed response to treatment would be an example of an *ex juvantibus* fallacy. Just as a headache or rash are, respectively, not the result of aspirin deficiency or steroid imbalance, so a lack of desire would not necessarily be the result of too little dopamine or noradrenaline. Yet, the logical critique gives way here to a pragmatic one: The drugs work so poorly that it is difficult to see their effect as any confirmation of the assumed biological imbalance.

The argument from brain activity studies, as presented by the drug manufacturers, is also incorrect for several reasons. The Addyi website (2021) reports that the brains of "women with HSDD had little to no activation" when exposed to erotic materials. This and other representations of neuroimaging results that supposedly support a biological cause for HSDD are highly problematic, ranging from unauthorized claims about the dormancy/awakening of a particular brain region to health and disease rhetoric based on differences in images. Compared to the brains of women who researchers described as "normal," the brains of women with low desire were not dormant but showed increased activity in other areas when viewing erotica (Arnow et al. 2009; Bloemers et al. 2014; Woodard et al. 2013). Women with HSDD

showed greater activity in brain areas (e.g., medial frontal gyrus, right inferior frontal gyrus, and bilateral putamen) that are believed to be responsible for control of behavior in response to stimuli, and less activity in regions responsible for stimulus processing and relating sensory stimuli to memories (e.g., bilateral entorhinal, right thalamus, left parahippocampal gyrus). None of these studies examined how the brain reacts in women who have low desire but are not stressed by it (i.e., meeting only one of the two criteria necessary to diagnose HSDD). Therefore, we do not know whether to interpret these differences as an insight into the biological underpinning of low libido, or rather as a neural correlate of distress—in this case related to visual erotica, which can recall difficult memories of sexual trauma, a lack of personal sexual satisfaction, partner pressure, and so forth.

In the cited studies, it was assumed *a priori* that normal activity would be found in women with higher levels of desire, while abnormal activity would be present in women with low desire. Accordingly, the authors focused on explaining how "alterations in activation of limbic and cortical structures" in women with HSDD (Woodard et al. 2013, 1068) "may interfere with normal sexual response" (Arnow et al. 2009, 484). Needless to say, no objective measure indicated that the observed lower or higher brain activity in women with HSDD (compared to women without this diagnosis) was abnormal per se (e.g., disturbed due to an odd activation pattern).

The pathologizing of biological processes according to a preconceived social valuation of their behavioral manifestation and the drawing of causal instead of correlational conclusions on the basis of neuroimaging data do not happen only in relation to HSDD. Aldridge (2005) demonstrates a similar misuse of interpretation using fMRI images of the brains of gamblers (in whom a weak response to winning was portrayed as an anomaly that results from a poorly functioning reward system in the brain) and shows how a similar process would consistently look for properties that we do not socially recognize as unwanted:

the dangers of leaping to causal conclusions involving brain abnormalities can be seen by applying the same logic to the posterior hippocampus enlargement found in London cab drivers. Rather than concluding that the enlargement results from spatial demands, we might conclude that this "abnormality" creates an insatiable need for spatial stimulation, chaining its victims to potentially dangerous employment with limited executive prospects. (954)

Contrary to advocates of pharmacological solutions, neuroimaging studies are in no way evidence of a biological cause of low desire, much less a cause related to neurotransmitter imbalance. What we see during neuroimaging is only a neuronal correlate of processes whose "causes"—whether the direct stimuli that triggered these processes or motivations built on memory traces and associations with sexual activity—are not reducible to a given proportion of neurotransmitters. The differences in neural reflections of mental processes are obvious: The brain of a person who craves sex and has pleasant associations with it reacts differently to visual erotica than the brain of a person bored or annoyed by sex. However, this does not prove that the brain of any observed woman was malfunctioning and required pharmacological regulation (Grunt-Mejer 2022).

4. The obscure concept of desire and other vague, value-laden notions

While pharmacoenthusiasts embrace only the drive model of desire, pharmacoskeptical researchers propose a more complex definition of desire that includes, in addition to biologically underpinned sexual tension, the ability to interpret given stimuli as erotic (arousability) and the cognitive-emotional motivations of sexual activity, which may be influenced by numerous psychological factors, including relational ones (for a review of research, see Mark and Lasslo 2018). Several empirical studies (see Brotto et al. 2010) and the high effectiveness of two types of arousal-enhancing psychological therapies (mindfulness and cognitive therapy) in treating low desire (Brotto 2017) may provide some support for this wider conceptualization of desire.

In addition, experienced clinicians emphasize that the term "desire" can encompass a whole group of psychologically diverse phenomena, and the differences between them are important and noticeable to laypeople. Desire triggered by a specific partner is experienced differently from a general undirected need for physical gratification. Also, terms such as sexual appetite, motivation, need, wish, yearn, ache, interest, libido, passion, and lust describe different psychological phenomena, even if one could replace each of them with the word "desire" (Levine 2002). The ambiguity of the concept facilitates the deliberate categorical shifts used by pharmacoenthusiasts. Women with HSDD declare that they would like to desire their long-term partner again, thus protecting their relationships. The drug makers suggest that this will be the effect of their drugs (FDA 2014), but all they can offer is at best an increase in nonspecific physiological tension that is not always interpretable as erotic and is not necessarily directed toward the regular partner. As lessons from the (in)effectiveness of treatment show, ignoring these categorical shifts has important pragmatic consequences.

The realms of application and of scientific theory suffer from a careless approach to vague concepts. The discourse around pharmacological enhancement of desire is fraught with equivocations that hinder honest debate about the very essence of desire and the factors determining it. In this article, I described how the content of alternative conceptualizations of desire depend on the moral consequences of adopting a given concept. I have also indicated that the types of fallacies and deliberate misuses of science that are used to justify the superiority of one's conception may go unnoticed or unchallenged when moral values are invisibly woven into data-based argumentation. In the final section of the article, I outline areas of value impact analysis for other similarly obscure concepts.

The debate on the best conceptualization of a vague concept can take place in a clearer and more scientifically honest way if the following levels are described and assessed separately:

- 1. Precise content of a concept's definition and face validity;
- 2. Empirical evidence and potential biases in its interpretation, motivated by nonepistemic values; and
- 3. Consequences of accepting a concept as normative, with a clear statement of the values that underpin its acceptance or rejection.

The first two areas are rather straightforward and require agreement on which specific conceptualization and operationalization of a concept is being discussed. This is followed by an unbiased analysis of empirically based justifications for the concept along with alternative interpretations of the "supporting" findings. The third field is the most demanding and requires analysis of the relationship between nonepistemic values and the conceptualization of the vague concept. As Kincaid, Dupré, and Wylie emphasize, there is an essential difference "between values being involved by implication or in the use of science as opposed to by presupposition or in the construction of science" (2007, 11). In the first case, we assume a fact may have moral implications but we can state it independently of these implications. In the second case, nonepistemic values constitute the "fact," and the extent to which we find this "fact" acceptable depends on these values. In the science of desire, we have seen the entanglement of values in the production of science. We also may assume that this entanglement is an inevitable part of the humanities and social sciences, where researchers more often create and define a research space by conceptualizing and operationalizing abstract concepts rather than describe and theorize about found phenomena.

The impact of these values need not always be judged negatively. Some nonepistemic values are an inherent part of scientific endeavor and may be scrutinized in fruitful ways, thus leading to new perspectives and theories (Douglas 2015). In the science of desire, critical analysis of invisible androcentric assumptions has contributed to the formulation of a broader conception of desire that better reflects women's experience and thus to better content validity of the concept of desire. However, for pharmacoskeptics, the reductionist vision of desire seems inappropriate not only because of its low content validity but mostly because they see potential harm in adopting a drive-based model as normative. It is precisely the harmful consequences that seem to be the main drivers of change in the contemporary debate about the best operationalization of desire and the question of what level of desire can be considered alarmingly low.

Similarly, the influence of nonscientific values is seen in the discrediting of alternative concepts not on the basis of their weaker empirical grounding but through their negative moral evaluation. In the case of responsive desire, we saw the use of an argument from specifically interpreted feminist values. The discrediting of alternative models or conceptions based on fear of the social consequences of adopting a given perspective can be observed in the case of other socially significant phenomena, including hypotheses about the contribution of environmental factors to the formation of gender identity or the biological determinants of sexual aggression (Dreger 2015). While one can empathize with activism-rooted dislike of these hypotheses in part by understanding their impact on social politics, the search for truth suffers.

We encounter similar challenges when trying to define other vague concepts such as satisfaction, love, intelligence, and so forth. Social scientists point out that the dominant operationalizations of vague terms such as "prejudice" led to conservatives being systematically judged as significantly more prejudiced than liberals (Grunt-Mejer 2017). For a few decades, indicators of prejudice have included dislike of feminists or sexual minorities but not, for example, businessmen or religious people. When new indicators were added, it turned out that people from the political poles were equally prejudiced but against different groups. Another example of value-laden conceptualization and operationalization is the inclusion of the intensity of sexual jealousy in the concept of romantic love. What for a person who prefers a monogamous relationship is an indicator of love, for a person who prefers consensual nonmonogamy is an expression of disrespect for the partner's freedom and failure to work through their own

psychological limitations. In typical monogamy-centered love intensity tests, nonmonogamous people perform worse. These examples of bias due to value-laden assumptions may have negative pragmatic consequences, ranging from less knowledge about a given phenomenon, through reduced chances of mutual understanding between people with different views and opinions, to stigmatization of certain groups. At the levels of concept formation, of analysis of empirical data to legitimize it, and of assessing the consequences of accepting/rejecting a concept, a discussion that makes clear the value involved could help reduce the risk of these problems.

References

Addyi. 2021. "HSDD Information." Accessed October 25, 2021. https://addyi.com/hsdd/

- Aldridge, J. W. 2005. "Interpreting Correlation as Causation?" Science 308 (5724):954–54. https://doi.org/ 10.1126/science.308.5724.954
- Arnow, Bruce Arnow, Leah S. Millheiser, Amy S. Garrett, M. Lake Polan, G. H. Glover, K. R. Hill, A. Lightbody, et al. 2009. "Women with Hypoactive Sexual Desire Disorder Compared to Normal Females: A Functional Magnetic Resonance Imaging Study." *Neuroscience* 158 (2):484–502. https://doi.org/10.1016/j.neuroscience.2008.09.044
- Balon, Richard, and Anita H. Clayton. 2014. "Female Sexual Interest/Arousal Disorder: A Diagnosis Out of Thin Air." Archives of Sexual Behavior 43 (7):1227–29. https://doi.org/10.1007/s10508-013-0247-1
- Basson, Rosemary. 2000. "The Female Sexual Response: A Different Model." *Journal of Sex & Marital Therapy* 26 (1):51–65. https://doi.org/10.1080/009262300278641
- Bloemers, Jos, H. Steven Scholte, Kim van Rooij, Irwin Goldstein, Jeroen Gerritsen, Berend Olivier, and Adriaan Tuiten. 2014. "Reduced Gray Matter Volume and Increased White Matter Fractional Anisotropy in Women with Hypoactive Sexual Desire Disorder." *The Journal of Sexual Medicine* 11 (3):53–67. https://doi.org/10.1111/jsm.12410
- Brotto, Lori A. 2017. "Evidence-Based Treatments for Low Sexual Desire in Women." Frontiers in Neuroendocrinology 45 (April):11–17. https://doi.org/10.1016/j.yfrne.2017.02.001
- Brotto, Lori A., Johannes Bitzer, Ellen Laan, Sandra Leiblum, and Mijal Luria. 2010. "Women's Sexual Desire and Arousal Disorders." *The Journal of Sexual Medicine* 7 (1):586–614. https://doi.org/10.1111/j.1743-6109.2009.01630.x
- Chańska, Weronika, and Katarzyna Grunt-Mejer. 2016. "The Unethical Use of Ethical Rhetoric: The Case of Flibanserin and Pharmacologisation of Female Sexual Desire." *Journal of Medical Ethics* 42 (11):701–4. https://doi.org/10.1136/medethics-2016-103473
- Clayton, Anita. 2015. "According to Science, Your Sex Drive Is Real." Accessed October 25, 2021. https://www.huffpost.com/entry/according-to-science-your_b_7279140
- Douglas, Heather. 2015. Values in Science. Vol. 1. Edited by Paul Humphreys. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199368815.013.28
- Dreger, Alice. 2015. *Galileo's Middle Finger: Heretics, Activists, and the Search for Justice in Science.* New York: Penguin Press.
- Even the Score. 2014. "Even the Score." Accessed October 25, 2021. Playlist available at https://www. youtube.com/channel/UCuA05Q18ixNS4rsBL19Ah1w/featured
- Fahs, Breanne. 2014. "'Freedom to' and 'Freedom from': A New Vision for Sex-Positive Politics." *Sexualities* 17 (3):267–90. https://doi.org/10.1177/1363460713516334
- FDA. 2014. "The Voice of the Patient." Accessed October 25, 2021. https://www.fda.gov/files/drugs/ published/The-Voice-of-the-Patient-Female-Sexual-Dysfunction.pdf
- Frost, Rebecca, and Caroline Donovan. 2019. "A Qualitative Exploration of the Distress Experienced by Long-Term Heterosexual Couples When Women Have Low Sexual Desire." *Sexual and Relationship Therapy*, January:1–24. https://doi.org/10.1080/14681994.2018.1549360
- Grunt-Mejer, Katarzyna. 2017. "Światopogląd a błąd konfirmacji—problem nauk społecznych." *Filozofia Nauki* 2 (98):103–19.
- Grunt-Mejer, Katarzyna. 2022. "Disordering' Sex through Medicine." In *The Routledge Handbook of the Philosophy of Sex and Sexuality*, edited by B. D. Earp, C. Chambers, and L. Watson, 375–92. Abingdon and New York: Routledge.

- Kincaid, Harold, John Dupré, and Alison Wylie. 2007. Value-Free Science? Ideals and Illusions. New York: Oxford University Press.
- Kingsberg, Sharon. 2014. "Dr. Sheryl Kingsberg: Explaining Hypoactive Sexual Desire Disorder." Accessed October 25, 2021. https://www.youtube.com/watch?v=vzCGTftfigI
- Klusmann, Dietrich. 2002. "Sexual Motivation and the Duration of Partnership." Archives of Sexual Behavior 31 (3):275–87. https://doi.org/10.1023/A:1015205020769
- Levine, Stephen B. 2002. "Reexploring the Concept of Sexual Desire." Journal of Sex & Marital Therapy 28 (1):39–51. https://doi.org/10.1080/009262302317251007
- Mark, Kristen P., and Julie A. Lasslo. 2018. "Maintaining Sexual Desire in Long-Term Relationships: A Systematic Review and Conceptual Model." *The Journal of Sex Research* 55 (4–5):563–81. https:// doi.org/10.1080/00224499.2018.1437592
- Richgels, Patricia B. 1992. "Hypoactive Sexual Desire in Heterosexual Women: A Feminist Analysis." Women & Therapy 12 (1-2):123-35. https://doi.org/10.1300/J015V12N01_10
- Saadat, Seyed, Yunes Panahi, Milad Hosseinialhashemi, Ali Kabir, Khaled Rahmani, and Amirhossein Sahebkar. 2017. "Systematic Review and Meta-Analysis of Flibanserin's Effects and Adverse Events in Women with Hypoactive Sexual Desire Disorder." *Current Drug Metabolism* 18 (1):78–85. https:// doi.org/10.2174/1389200217666161026090333
- Segal, Judy Z. 2018. "Sex, Drugs, and Rhetoric: The Case of Flibanserin for 'Female Sexual Dysfunction." Social Studies of Science 48 (4):459–82. https://doi.org/10.1177/0306312718778802
- Simon, James A. 2018. "Future Developments and Research." In Textbook of Female Sexual Function and Dysfunction, edited by Irwin Goldstein, Anita H. Clayton, Andrew T. Goldstein, Noel N. Kim, and Sheryl A. Kingsberg, 337–48. Chichester, UK: John Wiley & Sons, Ltd. https://doi.org/10.1002/ 9781119266136.ch23
- Spielmans, Glen I. 2021. "Re-Analyzing Phase III Bremelanotide Trials for 'Hypoactive Sexual Desire Disorder' in Women." The Journal of Sex Research March:1–21. https://doi.org/10.1080/00224499. 2021.1885601
- Traeen, Bente. 2008. "When Sex Becomes a Duty." Sexual and Relationship Therapy 23 (1):61–84. https://doi.org/10.1080/14681990701724758
- Van Anders, Sari M., Debby Herbenick, Lori A. Brotto, Emily A. Harris, and Sara B. Chadwick. 2021. "The Heteronormativity Theory of Low Sexual Desire in Women Partnered with Men." *Archives of Sexual Behavior* 51 (1):391–415. https://doi.org/10.1007/s10508-021-02100-x
- Van Anders, Sari M., and Neil V. Watson. 2006. "Social Neuroendocrinology: Effects of Social Contexts and Behaviors on Sex Steroids in Humans." *Human Nature* 17 (2):212–37. https://doi.org/10.1007/s12110-006-1018-7
- Vyleesi. 2021. "Symptoms, Information & Treatment." Accessed October 25, 2021. https://www.vyleesi. com/know-hsdd/
- Wood, Jill M., Phyllis Kernoff Mansfield, and Patricia Barthalow Koch. 2007. "Negotiating Sexual Agency: Postmenopausal Women's Meaning and Experience of Sexual Desire." *Qualitative Health Research* 17 (2):189–200. https://doi.org/10.1177/1049732306297415
- Woodard, Terri L., Nicole T. Nowak, Richard Balon, Manuel Tancer, and Michael P. Diamond. 2013. "Brain Activation Patterns in Women with Acquired Hypoactive Sexual Desire Disorder and Women with Normal Sexual Function: A Cross-Sectional Pilot Study." *Fertility and Sterility* 100 (4):1068–76.e5. https://doi.org/10.1016/j.fertnstert.2013.05.041

Cite this article: Grunt-Mejer, Katarzyna. 2022. "That Obscure Concept of Desire: The Ideological War over Scientific Models." *Philosophy of Science* 89 (5):1085–1093. https://doi.org/10.1017/psa.2022.51