

HEALTH, DISEASE, AND THE MEDICALIZATION OF LOW SEXUAL DESIRE: A VIGNETTE-BASED EXPERIMENTAL STUDY

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Debates about the genuine disease status of controversial diseases rely on intuitions about a range of factors. Adopting tools from experimental philosophy, this paper explores some of the factors that influence judgments about whether low sexual desire should be considered a disease and whether it should be medically treated. Drawing in part on some assumptions underpinning a divide in the literature between viewing low sexual desire as a genuine disease and seeing it as improperly medicalized, we investigate whether health and disease judgments are affected by factors such as an individual's gender, the cause of the low desire, whether the desire is high or low, and both personal and societal valuations of the condition. Our main findings indicate that (a) the cause of a condition influences whether it is judged a disorder, (b) how the individual values the condition influences whether the condition is seen as a proper target of medical intervention, and (c) perceived dysfunction influences judgments regarding health, disorder classification, medicalization, and medical intervention. Our findings help further illuminate the intricate interplay of factors that influence judgments about health and disease in controversial conditions.

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THE concepts of health and disease are central to medical research, health-care, and public health. Not only do these concepts inform our understanding of these disciplines but they plausibly have a key role in establishing the boundaries of *medicalization*, delineating which conditions legitimately fall within the purview of medicine. While the meaning of these concepts continues to be debated (see e.g., Kingma 2019; Murphy 2020; Reiss & Ankeny 2016), it is plausible that our understanding of these concepts carries significant implications for both medical research and practice.

These implications are clear when evaluating controversial conditions like “Female Sexual Interest/Arousal Disorder” (FSD). Whether FSD is correctly categorized as a disease carries significant implications, influencing not only how it is perceived and treated but also impacting broader discussions about the concepts of health and disease. The literature on FSD is divided between those that judge that low sexual desire is correctly categorized as a disease and properly falls under the medical realm (the “mainstream view”) and those that contest these claims (the “critical view”) (for a discussion, see Stegenga 2021). Both positions make crucial assumptions about a range of factors that they take to be determining whether FSD counts as a disease.

The aim of this paper is to subject some of these assumptions to empirical scrutiny. Our study diverges from traditional conceptual analysis in the philosophy of medicine and adopts some of the tools afforded by experimental philosophy of medicine (e.g., De Block & Hens 2021). Building on earlier work investigating people’s concepts of health and disease (e.g., Machery 2023; Varga, Latham, and Machery ms.), we explore the effect of several factors on people’s judgements regarding whether low sexual desire is a disease or a condition requiring medical intervention, also probing intuitions about the link between a condition being a disease and its being an apt target of medical intervention.

Using a standard vignette survey, the factors we investigated were the gender of the individual in the vignette (man or woman), cause of low sexual desire (biological or social), the direction of the desire (high vs. low), individual’s valuation of their own desire (positive vs. negative), and society’s valuation of their desire level (positive vs. negative). The resulting insights can inform whether people’s judgments align with the assumptions underlying the mainstream view or the critical view of FSD.

The paper is organized as follows. In §1, we provide a brief background to the debate about the medicalization of FSD and identify four specific issues that motivate our study. Then, in §2, we describe the experimental materials, methods, and hypotheses that guided our research based on these four issues. In §3 we offer a detailed presentation of the findings of the study. Finally, in §§4 and 5, we discuss the main findings, their limitations, and their implications for broader discussions in the philosophy of medicine, such as whether health is merely the absence of disease or rather the presence of some positive state or ability.

1. Background

FSD appears in the present edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; APA 2013). The core symptoms of FSD involve a decrease in interest in sex, including (i) sexual activity, (ii) sexual thoughts, (iii) sexual reception and initiation, (iv) sexual pleasure, (v) sexual cues, and (vi) genital sensation. The DSM stipulates that to be diagnosed with FSD, a female must have at least three of those core symptoms for at least six months and that those symptoms must cause her distress and not be explained by other medical conditions or other exogenous causes like relationship difficulties. The present version of FSD was developed from the earlier DSM-IV category ‘hypoactive sexual desire disorder’ (HSD), which was used for both males and females (APA 2000). In the DSM-5 the category was split into a male version (which retained the name from the fourth edition) and the female version. Despite the distinct categories, the two putative conditions have very similar diagnostic criteria, as they both involve low levels of sexual desire.

Earlier versions of the DSM had a category for so-called hypersexuality, which was historically referred to as “nymphomania” for women and “satyriasis” for men. The tenth edition of the *International Classification of Diseases* (ICD-10), used from approximately 1990 to 2018, included a category for “excessive sexual drive” which was defined as experiencing unusually frequent or intense sexual desires, yet this category was omitted from the latest eleventh edition. Thus, current diagnostic manuals have disease categories for conditions of low sexual desire but not high sexual desire.

Recently, Stegenga (2021) argued that there are two polarized views about the status of FSD: the “mainstream view” and the “critical view.” Both views have a range of adherents, including physicians, psychologists, pharmaceutical companies, patient advocacy groups, journalists, and academics. The mainstream view is that low sexual desire is correctly characterized as a disease and is an appropriate target of pharmaceutical treatment, exemplified by gynecologists, urologists, sex therapists, and FSD advocates (see, for example, Berman, Berman, & Goldstein 1999). What Stegenga called the ‘critical view’ opposes the mainstream view and denies both claims, exemplified by psychologist Leonore Tiefer (e.g., Tiefer 2001; see also Meixel, Yanchar & Fugh-Berman 2015). The stakes are high. For women, the most frequent reason to seek sex therapy is low sexual desire (Kleinplatz 2018). And, for pharmaceutical companies, the potential profits are enormous, as indicated by the profits to be had by selling interventions for erectile dysfunction. Given such interests, however, Bueter & Jukola (2020), and Holman & Geislar (2018), argue that the trials of pharmaceutical treatments for FSD and corresponding regulatory decisions were inappropriately influenced by the pharmaceutical industry.

For both the mainstream view and the critical view, attitudes regarding whether FSD is a disease are correlated with attitudes regarding whether FSD should be medically treated. Yet, in principle, attitudes regarding whether some condition is a disease and attitudes regarding whether that condition ought to be treated can diverge. A plausible case could be made, for example, that erectile dysfunction in elderly men is not a disease, yet there is no problem providing pharmaceuticals for the condition. Similarly, one might think that a simple headache is not a disease but that taking acetaminophine for it is fine. Conversely, one might plausibly hold that a fungal toenail infection is a disease yet maintain that pharmaceutical treatment would in most cases be inappropriate, since the condition is almost entirely cosmetic and pharmaceutical treatment for it has a range of harmful side effects.

While a detailed account of the literature is beyond the purposes of this paper, both the mainstream and critical view make several assumptions regarding FSD. The subsequent sections will explore four specific contentious issues that are relevant to whether FSD is correctly characterized as a disease and/or an apt target of medicine.

The first issue, the *etiology issue*, pertains to the causes of low sexual desire. Proponents of the mainstream view tend to hold that sexual desire is like a physical appetite, and that low sexual desire must have biological causes that can be intervened upon, much like type 1 diabetes is a result of low endogenous insulin production. What exactly the relevant biological causes are has not yet been discovered, but some claim that FSD is a result of insufficient hormones and others claim that it is a result of an imbalance in particular neurotransmitters (discussed in Stegenga 2021). Proponents of the critical view maintain that low sexual desire has social rather than biological causes, such as relationship difficulties or stress from work. What is more important for our purposes is that both sides seem to assume that the etiology of low sexual desire matters for whether it should count as a disorder or disease. The DSM-5 itself is committed to this premise, as it includes a so-called 'diagnostic exclusion criterion' for FSD based on abusive relationships: if a female who satisfies the diagnostic conditions for FSD is in an abusive relationship, then the DSM-5 advises physicians to not diagnose FSD and rather counsel for relationship interventions. In short, both sides in the debate about FSD hold that the etiology of the condition is important for determining whether the condition is a genuine medical disease.

The second issue, the *double standard issue*, revolves around assumptions about the influence of societal norms that have historically treated and still do treat men's and women's sexual desire differently. For instance, historically women with a high sexual drive have been stigmatized (e.g., 'nymphomaniacs'), while men with comparable desires have often been admired for their viril-

ity, and this double standard continues to impact both colloquial discussions and scientific investigations related to sexual desire (see, e.g., Endendijk et al. 2020, Dupré 2001). The sexual double standard could influence intuitions about whether FSD should count as genuine diseases and constitute a proper target of medical intervention.

The third issue, the *asymmetry issue*, has structural similarities to the double standard issue, and introduces a distinction between high and low libido as a factor that matters for whether atypical desire counts as a disease. Historically, there has been a lack of consensus on whether high and low sexual desire should be classified similarly, or if high sexual desire should be excluded as a medical condition. For instance, as mentioned above, the International Classification of Diseases (ICD-10), a diagnostic tool published by the World Health Organization (WHO) in 2007, includes a diagnosis labeled as “excessive sexual drive.” However, the revised ICD-11 published in 2019, brought about a substantial change. While “excessive sexual drive” was eliminated, the ICD-11 introduced a new classification named “Compulsive Sexual Behavior Disorder” placed within the grouping of impulse control disorders (Reed et al. 2019). This reclassification suggests a shift in understanding, transitioning from viewing these issues solely as sexual dysfunctions to emphasizing the role of impulse control. This transformation may mirror changing societal attitudes towards sexuality: low libido might be considered a disease, while high libido, unless accompanied by compulsive behaviors, could arguably be seen as normal.

Finally, the fourth issue, the *harm issue*, pertains to the effects of low sexual desire on the individual. Part of the dispute between the mainstream view and the critical view hinges on the nature of the harm that females diagnosed with FSD experience because of the condition. The diagnostic criteria incorporate harm and distress from the condition, such that if an individual has low sexual desire without experiencing harm, then it generally would not be classified as a disorder. This aligns with two leading philosophical theories of disease, normativism and hybridism, on which harm or negative impact is a necessary feature for a condition to be deemed a disease (see, e.g., Cooper 2002; Horwitz & Wakefield 2007). Importantly, in the case of FSD, views vary regarding the sources of the harm. Defenders of the mainstream view highlight the harms caused by FSD that patients self-report, while critics respond by noting that the distress of FSD may be a result of not living up to social expectations or meeting a partner’s desires (Stegenga 2021). This question highlights one possible point of ambiguity in the literature about the viewpoint from which the attribution of harm should be assessed: whether it depends on the perspective of the individual with the condition in question, or prevailing societal standards and norms.

2. The Study: Aims and Methods

In the current paper we empirically examine how the above issues affect people's judgments regarding FSD's status as a disease and an apt target of medicine. Using empirical methods from experimental philosophy can plausibly contribute to deadlocked debates by supplementing traditional conceptual analyses (see e.g., De Block & Hens 2021; for a discussion, see Griffiths & Stotz 2008). As commonly used in experimental philosophy, we employ the contrastive vignette technique in our study. This method helps us assess whether individuals view low sexual desire as a disease, as a dysfunction, as a condition that warrants medical intervention, or as a condition that is compatible with health. As noted previously, beyond just seeking responses, we aimed to understand how the issues articulated above affect people's judgments about this controversial condition. If one thinks that definitions and conceptual analyses should aim for at least some continuity with lay judgments rather than being revisionist, such enhanced understanding could propel philosophical debates.¹

There are three further considerations to briefly mention at this point. First, it is a further question whether continuity with our ordinary judgments is desirable. If, for example, people exhibit the "double standard issue" with respect to gender, then we would have a good normative reason to seek to revise our ordinary understanding of FSD (and perhaps health and disease more generally). Continuity with common sense is a *defeasible* consideration.

Second, we do not think that people will have robust intuitions regarding the status of FSD. The case is contentious, in part, because ordinary intuitions regarding it are unclear. Whatever correct categorization is (qua the ordinary view), will depend on how people's judgments are impacted by the previously described issues. We seek to explore whether there is a continuity between our findings regarding the influence of these factors on participants' judgments and what the mainstream and critical views predict.

Third, many authors in the debates on FSD often implicitly or explicitly ground their arguments in what they assume are shared or common intuitions (see e.g., Stegenga 2021). By mapping out these lay perspectives, we are basically taking steps toward evaluating the empirical foundation of these claims. This means that our results can inform whether laypeople's judgments align with the assumptions underlying the mainstream view or the critical view of FSD.

We systematically compared the effect of five factors on people's judgments about this controversial condition. These factors are central to the four issues

1. For an in-depth discussion on matters related to continuity, though in the context of the sub-field of experimental philosophical bioethics (bioxphi), see Earp, Lewis, Dranseika, & Hannikainen (2021). The authors examine four strategies in bioxphi to make normative inferences based on premises that include empirical content.

described earlier. For this, the study utilizes a $2 \times 2 \times 2 \times 2 \times 2$ vignette-based experimental design, manipulating five factors: the gender of the individual in the vignette (man or woman), the source of low sexual desire (biological or social), the direction of the desire (high vs. low), individual's valuation of their own desire (positive vs. negative), and societal valuation of their desire level (positive vs. negative). As our study was designed to capture participants' intuitive judgments without steering them with a predefined notion, we refrained from providing specific definitions of health, disorder, or 'normal' sexual desire.

The *gender* of the individual (woman; man) pertains primarily to the double standard issue, and its manipulation allows us to investigate whether the responses of participants are influenced by the gender of the person experiencing unusually low or high sexual desire. Historically, society has viewed men's and women's sexual desire differently, and this manipulation will help us understand whether the double standard is relevant to judgements about this controversial condition. The *source of sexual desire condition* (biological; social) is directly related to the etiology issue. If participants view low or high sexual desire as more of a disease when its cause is biological, this will align with the mainstream view. If, however, they perceive it as a disease regardless of its biological or social origin, it may challenge some assumptions underpinning both the mainstream and critical views. The *intensity of the desire* (low; high) speaks to the asymmetry issue. It aims to determine if people see high and low sexual desire as equally problematic or deserving of medical intervention. If participants are more likely to view low sexual desire as a disease compared to high sexual desire, it would suggest an asymmetry in participants' attitudes toward disease attribution. The *individual valuation* (minds; does not mind) of the desire addresses the harm issue. If individuals who do not view their low sexual desire negatively are seen as having less of a disease than those who are distressed by it, it would suggest an agreement with the principle of harm being necessary for a condition to be classified as a disease. Finally, the *societal valuation* (minds; does not mind) of the desire also addresses the harm issue but from the perspective of societal norms and expectations. It seeks to understand if the societal judgment of the desirability of high or low sexual desire affects its classification as a disease and whether it should be medicalized.

For illustration, here is an example of a vignette that describes (i) a woman, (ii) with a genetic condition, (iii) that causes low sexual desire, (iv) and who does not mind the condition, (v) nor does her group mind the condition:

"Sarah is a woman in her early 30s who has a stable career and is in a long-term relationship with a partner that she loves and trusts. In all respects but one, Sarah is an ordinary woman: her low sexual desire. Sarah has a genetic mutation that influences the hormone levels linked to sexual desire. Sarah's doctor thinks that this otherwise benign genetic mutation

is the cause of her very low sexual desire, which is atypical compared to others her age and sex. Sarah does not mind the fact that she has very low sexual desire, and she does not perceive this as harmful or negative for her life. In fact, she values it, feels content with it and she cannot imagine herself desiring differently than the way that she does now. According to the prevailing social norms and values of the society in which Sarah lives, her low levels of sexual desire can be valuable and have a positive impact on achieving a good life, well-being, and long-term happiness.”

This vignette was systematically varied according to the condition that participants were assigned to. Participants who received a vignette describing a man read a vignette describing a man named Martin. Participants who received a vignette where the source of the condition was social read that the agent was raised in a community that condemned or encouraged sexual desire. Participants who received a vignette where the intensity of desire was high read that the level of sexual desire was atypically higher as opposed to lower than others. Participants who received a vignette where the individual minds the condition read a vignette where the agent perceived the condition as harmful and negative, and that they would change the condition if they could. Finally, participants who received a vignette where the group minds the condition read a vignette where the condition was disvalued and considered to have a negative impact on achieving a good life, well-being, and happiness.

By manipulating these factors, this study aims to untangle some of the intricacies involved in the judgments of low sexual desire as a disease. However, simultaneously, we anticipate that our findings might be generalized to say something about the features lay people find important when assessing whether a controversial condition ought to be categorized as a disease. As such, our findings could influence wider philosophical debates about health and disease.

3. Results

The study was pre-registered at <https://osf.io/p3wrk/>. 400 people were recruited online using Prolific. All participants were fluent English speakers from the USA. 8 were excluded from the analyses for failing to respond to all the questions or answer all the attention and comprehension checks correctly. The final sample consisted of 392 participants (191 female, 8 trans/non-binary; 284 White/European, 4 Native American/American Indian, 7 Multi Racial/Mixed Heritage, 24 Hispanic/Latino, 33 Black/African American, 39 Asian/Pacific Islander, 1 Not listed; aged 18–76; $M = 37.03$, $SD = 11.44$). Politically the sample skewed toward being more liberal than conservative. Ethics approval for the study was obtained

from the HPS Department Ethics Committee at Cambridge University. Participants' judgments were assessed using a Likert scale, which prompted them to indicate their level of agreement or disagreement with each statement.

We first examined participants' judgements across conditions using a MANOVA. Participant gender, age, ethnicity, political ideology, perceived dysfunction judgements, and perceived plausibility judgments were entered as covariates. These same covariates were entered into each of the analyses which follow, unless otherwise stated. The results of this analysis revealed a significant main effect of the *source of sexual desire condition*, $\Lambda = .80$, $F(4, 351) = 24.796$, $p < .001$, *individual valuation*, $\Lambda = .948$, $F(4, 351) = 4.853$, $p < .001$, and *perceived dysfunction*, $\Lambda = .644$, $F(4, 351) = 48.485$, $p < .001$. That is, across the questions we asked our participants, the source of the sexual desire condition, individual valuation, and perceived dysfunction significantly impacted their judgments. No other significant effects were observed. Next, we report results of separate ANOVAs that show the effects of these factors on participants' judgments.²

First, we examined participant's health judgments with an ANOVA. The results of this analysis only revealed a significant effect of *perceived dysfunction*, $F(1, 354) = 41.863$, $p < .001$. No other significant effects were observed. The effect of *perceived dysfunction* was that participant's health judgments were negatively associated with their dysfunction judgments. That is, higher perceived dysfunction judgments were associated with lower health judgments (see Figure 1).

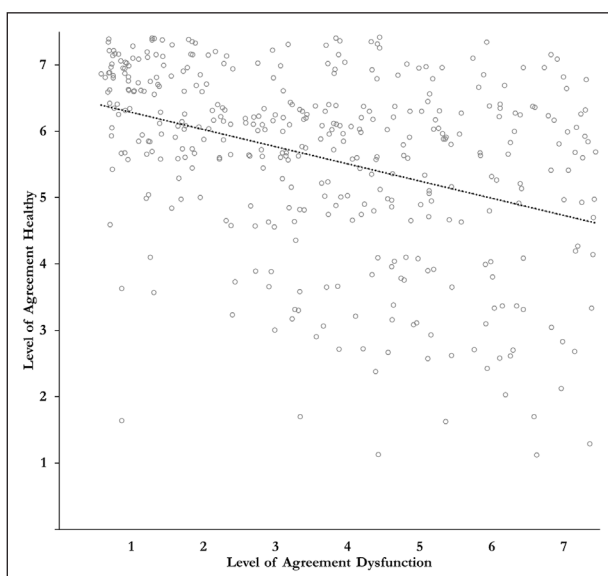


Figure 1: Jittered scatter-plot showing participant health judgments as a function of their dysfunction judgments.

2. We used a Bonferroni adjustment for multiple comparisons.

Next, we examined participant's disorder judgments with an ANOVA. The results of this analysis revealed a significant effect of the *source of the sexual desire condition*, $F(1, 354) = 32.555$, $p < .001$, and *perceived dysfunction*, $F(1, 354) = 100.121$, $p < .001$. No other significant effects were observed. The effect of the *source* was that participant's disorder judgments were significantly higher in biological cases ($M = 4.21$, $SD = 1.50$) than in social cases ($M = 3.34$, $SD = 1.51$). The effect of *perceived dysfunction* was that participant's disorder judgments were positively associated with their dysfunction judgments. That is, higher dysfunction judgments were associated with higher disorder judgments (see Figure 2).

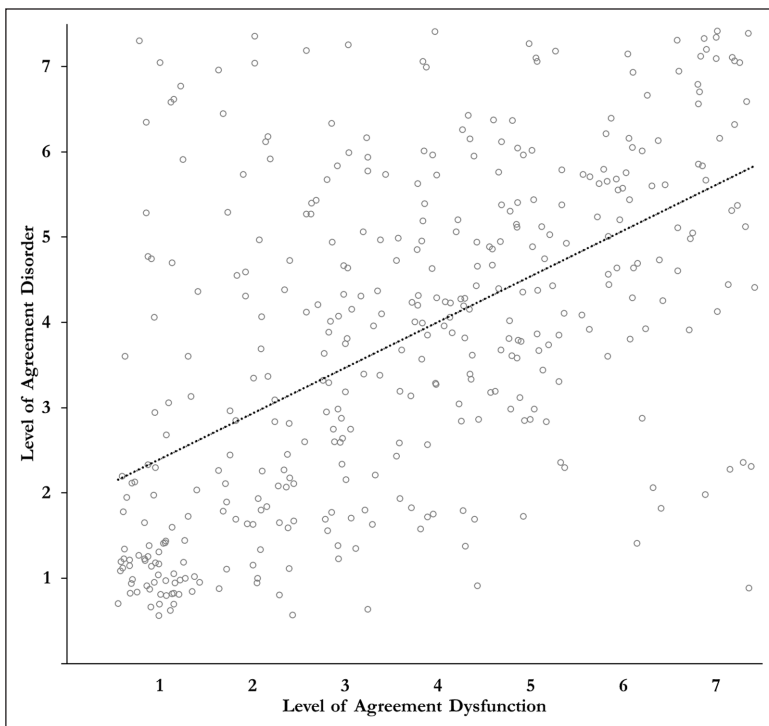


Figure 2: Jittered scatter-plot showing participant disorder judgments as a function of their dysfunction judgments.

Next, we examined participant's medicalization judgments with an ANOVA. The results of the analysis revealed a significant effect of the *source of the sexual desire condition*, $F(1, 354) = 79.564$, $p < .001$, and *perceived dysfunction*, $F(1, 354) = 86.642$, $p < .001$. No other significant effects were observed. The effect of the *source* was that participant's medicalization judgments were significantly higher in biological cases ($M = 4.20$, $SD = 1.36$) than in social cases ($M = 2.96$, $SD = 1.37$). The effect of *perceived dysfunction* was that participant's medicalization judgments were positively associated with their dysfunction judgments.

ments were positively associated with their dysfunction judgments. That is, higher dysfunction judgments were associated with higher medicalization judgments (see Figure 3).

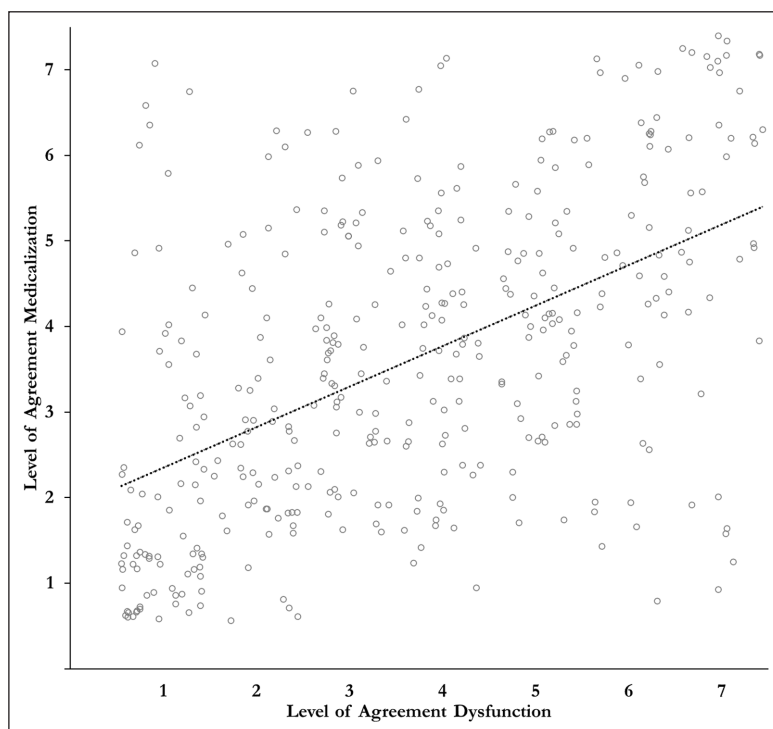


Figure 3: Jittered scatter-plot showing participant medicalization judgments as a function of their dysfunction judgments.

Finally, we examined participant's medical intervention judgments with an ANOVA. The results revealed a significant effect of the *source of the sexual desire condition*, $F(1, 354) = 27.208$, $p < .001$, *individual valuation*, $F(1, 354) = 17.764$, $p < .001$, and *perceived dysfunction*, $F(1, 354) = 116.205$, $p < .001$. No other significant effects were observed. The effect of the *source* was that participant's medical intervention judgments were significantly higher in biological cases ($M = 3.95$, $SD = 1.38$) than in social cases ($M = 3.22$, $SD = 1.38$). The effect of *individual valuation* was that participant's medical intervention judgments were significantly lower in cases where the person does not mind the condition ($M = 3.24$, $SD = 1.48$) than in cases where the person minds the condition ($M = 3.92$, $SD = 1.47$). The effect of *perceived dysfunction* was that participant's medical intervention judgments were positively associated with dysfunction judgments. That is, higher dysfunction judgments were associated with higher intervention judgments (see Figure 4).

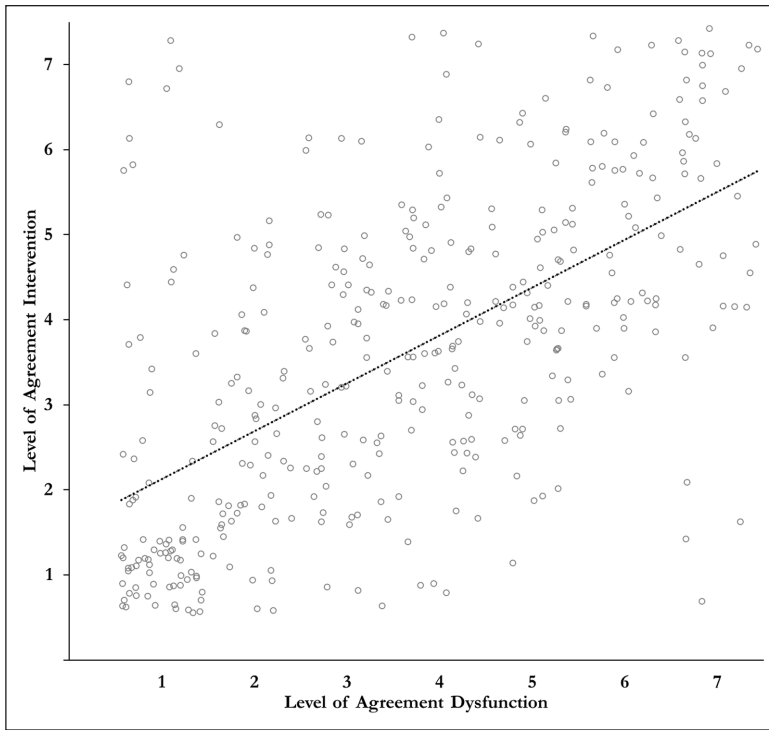


Figure 4: Jittered scatter-plot showing participant intervention judgments as a function of their dysfunction judgments.

Given the apparent ubiquitous effect of *perceived dysfunction* on participant's health, disorder, medicalization, and medical intervention judgments, we were interested in exploratorily examining the effect of *gender*, *source of the sexual desire condition*, *intensity of desire*, *individual valuation*, and *group valuation*, on participant's *perceived dysfunction* judgments. To do this we ran a further ANOVA. The results of this analysis revealed a significant effect of *intensity of desire*, $F(1, 355) = 20.568$, $p < .001$, and *individual valuation*, $F(1, 355) = 119.929$, $p < .001$. Shockingly, however, it also revealed a significant four-way interaction between *intensity of desire*, the *source*, *individual valuation*, and *group valuation*, $F(1, 355) = 10.315$, $p = .001$. No other significant effects were observed. Because we cannot decompose the four-way interaction we decided to rerun our analyses without adding *perceived dysfunction* as covariate. Differences in reported results should give us a rough idea what participant's *perceived dysfunction* judgments might be responsive to in each case.³

Re-examining participant's health judgments revealed a new significant effect of *individual valuation*, $F(1, 355) = 24.563$, $p < .001$. The significant effect of

3. The reported analyses regarding *perceived dysfunction* were not pre-registered and are entirely exploratory.

individual valuation was that participant's health judgments were significantly higher in cases where the person does not mind the condition ($M = 5.94$, $SD = 1.30$) than in cases where the person minds the condition ($M = 5.29$, $SD = 1.31$). Similarly, re-examining participant's disorder judgments revealed a significant effect of *individual valuation*, $F(1, 355) = 50.194$, $p < .001$. Participant's disorder judgments were significantly lower in does-not-mind cases ($M = 3.16$, $SD = 1.70$) than in minds cases ($M = 4.38$, $SD = 1.70$). There was no change in the effect of the *source of the sexual desire condition* on participant's disorder judgments.

Re-examining medicalization judgments also revealed a new significant effect of *individual valuation*, $F(1, 355) = 47.824$, $p < .001$. The significant effect of *individual valuation* was that participant's medicalization judgments were significantly lower in cases where the person does not mind the condition ($M = 3.04$, $SD = 1.52$) than in cases where the person minds the condition ($M = 4.11$, $SD = 1.52$). There was no change in the effect of the *source of the sexual desire condition* on participant's medicalization judgments. Finally, re-examining medical intervention judgments revealed a new significant effect of the *intensity of desire*, $F(1, 355) = 12.631$, $p < .001$. The significant effect of the *intensity of desire* was that participant's medical intervention judgments were significantly higher in low desire cases ($M = 3.87$, $SD = 1.60$) than in high desire cases ($M = 3.29$, $SD = 1.60$). There was no change in the effect of the *source of the sexual desire condition* and *individual valuation* on participant's medical intervention judgments.

4. Discussion

Our results indicate that perceived dysfunction is the biggest predictor of whether someone with this controversial condition is judged to be healthy, have a disorder, or fall under the scope of appropriate medical intervention. The impact indicated that as participants' dysfunction assessments increased, their health evaluations decreased. Essentially, participants who assigned greater levels of dysfunction typically offered more negative health judgments. Correspondingly, there was a positive correlation between dysfunction assessments and participants' disorder evaluations. Participants who perceived higher levels of dysfunction consistently provided more pronounced disorder judgments. Given such a clear influence of perceived dysfunction on health and disease judgments, one might anticipate that a similar pattern would hold for judgments about medicalization and medical intervention. In line with this expectation, our results show that those with higher dysfunction assessments were more likely to provide elevated medicalization and medical intervention evaluations. This indicates a strong positive association between dysfunction perceptions and both medicalization and intervention judgments.

This result is consistent with previous work in philosophy of medicine which sometimes shows that it is *only* dysfunction which determines people's health and disease judgments (e.g., Machery 2023). While naturalists and hybridists contend that dysfunction is—at the very least—a necessary element, our findings do not necessarily indicate that participants considered dysfunction in purely naturalistic terms, devoid of value judgments. One might think that this result aligns with a naturalist position, which suggests that rather than valuation, it is the descriptive characteristics of a condition (i.e., dysfunction) that determine its status as a disorder. However, it appears that people's perception of dysfunction is informed by a complex interaction of several factors that we are unable to tease apart here. Nevertheless, we can see that factors relevant to people's dysfunction judgments are both descriptive (e.g., condition source and desire intensity) and normative (e.g., individual and group valuation). While the constraints of our study prevent us from elaborating further on this subject, future research should investigate the connection between perceived impairments and valuations, probing the possibility of some hybridist intuition underlying judgements of dysfunction.

Setting aside the matter of dysfunction for the moment, how about each of the issues that we sought to investigate in this study? Providing further impulses for the *etiology issue*, we found that the source of the condition had an impact on participants' disorder judgments. When the condition was portrayed as stemming from genetic factors, participants' disorder judgments were elevated compared to instances where the condition's cause was attributed to upbringing. Similarly, participants' medicalization judgements and medical intervention judgments were higher in genetic source cases than in upbringing source cases. What might explain this? One suggestion would be that different sources also suggest different methods of intervention. If someone has a condition with a genetic source, then the relevant intervention could be pharmaceutical, whereas if someone has a condition with a social source, then the relevant intervention could be at the social level. Of course, the strength of the effect of condition source was not very strong. One reason for this is that the connection between source and intervention is not clear cut. Many conditions might have a social cause but be relevantly intervened on at the biological level. Similarly, many conditions might have biological causes but be relevantly intervened on by adopting certain behavioral practices.

As to the *double standard issue*, our data did not provide evidence pointing to the presence of a double standard, where men's and women's low or high sexual desires are judged differently based on societal norms. One reason for this might be the 'sanitized' nature of our vignettes. If the individuals and groups in our vignettes possessed the relevant gendered attitudes, then it is possible that gender might have come out as significant. Alternatively, it is quite possible that

'gender' itself has no effect over and above the valuations of the individual and the group being described. The historic stigmatization of women with a high sexual drive, in contrast to the admiration of men's virility, has influenced discourse about sexual desire and it likely still continues to have an effect.

Speaking to the *asymmetry issue*, the intensity of the desire, whether it was high or low, did not affect whether the condition was considered healthy, a disorder, and it also did not affect participants' opinions on medicalization and medical intervention. However, people's perceptions of dysfunction were informed by whether the case being examined was one that involved low or high sexual desire in the context of medical intervention. Specifically, there was a greater inclination to judge that medical intervention was appropriate in cases of low sexual desire compared to those with high sexual desire. At the same time, participants were no more likely to view low sexual desire as a disease compared to high sexual desire. So, if there is an asymmetry, it is a narrow one resulting only in differences in terms of whether medical intervention is seen as appropriate. This difference between the asymmetry of attitudes towards treatment and the symmetry of attitudes towards disease attribution could perhaps be due to an underlying hunch that treatment for high sexual desire could be more invasive and perhaps harmful than for low sexual desire.

With respect to the *harm issue*, pertaining to the effects of low sexual desire, we found that neither individual valuation nor group valuation had a marked effect on its classification as a disorder. The only effect was that individual valuation mattered for participants' medical intervention judgments, which were lower in does-not-mind cases than in minds cases. However, individual valuation was found to influence people's dysfunction judgments. We see evidence of this when dysfunction is absent from the analyses and so individual valuation appears to impact people's health and disorder judgments. When subjects were portrayed as not devaluing their condition, participants perceived them as healthier. Conversely, when subjects viewed their condition negatively, participants tended to evaluate them as less healthy. But when subjects were depicted as not devaluing their condition, participants were less inclined to see it as a disorder, whereas devaluation by subjects led participants to label the condition more readily as such. This suggests that the valuation of a condition by the affected individual influences both health and disorder judgments with respect to that condition.

Similarly, participants' medicalization judgments were significantly lower in does-not-mind cases than in minds cases and participants' medical intervention judgments were significantly lower in does not mind cases than in minds cases. Moreover, when individuals were depicted as not minding their condition, participants were less likely to see the condition as suitable for medicalization or as a legitimate target of medical intervention. In contrast, when indi-

viduals expressed disvaluation in the vignettes, participants showed a greater inclination for both medicalization and intervention. As such, it is possible that a condition being thought harmful might be part of what it is for a condition to be thought of as a dysfunction.

The role of valuation we find has some implications for the mainstream view, which holds that this condition is correctly characterized as a disease and constitutes an apt target for medical intervention. Participants tend to affirm the latter claim, thus judging that in cases where the individual disvalues the condition, the condition can be the proper target of medical intervention. Note two interesting details. First, individual valuation does not matter for whether a condition is seen as properly placed in the domain of medicine, but it does modulate judgments about whether the condition is a proper target of medical intervention. Second, participants' inclination to judge that medical intervention is appropriate depends on the individual's valuation of their condition, but not in relation to societal valuation of the condition.

Impacting other broader discussions in the philosophy of medicine, we observe divergences in certain judgment patterns that have interesting implications that extend beyond the specific issue at hand.

First, we observe a discrepancy between people's judgements of when medical intervention is deemed appropriate for a given condition, and their judgements of whether that same condition constitutes a disorder. This divergence suggests that in the public's view, medicine is not limited to addressing conditions defined as diseases or disorders, but can legitimately extend to other conditions, provided they are disvalued by the individual. This observation has implications for ongoing debates in the philosophy of medicine concerning the primary objectives of medical practice. Specifically, it challenges a narrow, "pathocentric" conception of the legitimate aim of medicine and aligns instead with a more permissive view that sees medicine's role as not only to treat diseases but also to promote abilities linked to positive health and well-being (e.g., Boorse 2016; Broadbent 2019; Stegenga 2018; Varga 2023).

Second, while both perceived dysfunction and the source of the condition had an impact on participants' judgments of whether the condition is a disorder, these had no effect on health judgments. This means that people's health and disorder judgments come apart, suggesting that they do not view health as merely the absence of disease (as previous studies have shown). This replicates patterns found in the existing literature (Varga and Latham, 2024), and has implications for the debate between *negativism*, i.e., the view that health is merely the absence of disease (e.g., Boorse 1977; Wakefield 2014) and *positivism*, i.e., the view that health is the presence of some positive state or ability (e.g., Nordenfelt 2017; Venkatapuram 2013; Wren-Lewis & Alexandrova 2021).

Finally, it is essential to acknowledge some of the limitations of the approach we employed. This offers some additional context for our conclusions but also charts a course for future investigations to provide a more nuanced understanding of the topic. First, our study investigated the judgments of English-speaking Americans, which raises valid concerns about the extent to which our findings generalize to other societies and cultural settings. Especially when it comes to ideas about health, disorder, and sexual desire, norms and intuitions probably vary across societies. To improve generalizability, future studies should include more diverse samples and examine possible cross-cultural variation with respect to judgments. Second, while using a single vignette about a single person helps to suitably isolate the factors we wanted to study, we cannot exclude that some particularity in the vignette explains the response patterns we find. Subsequent studies ought to examine if the judgment patterns we identified apply consistently across different situations.

5. Conclusion

The way individuals perceive, classify, and issue judgments on controversial conditions has important implications for judgments about how these conditions are treated, underscoring the importance of comprehending the factors that influence such judgments. By integrating the empirical tools of experimental philosophy with traditional philosophical inquiry, our study offers a fresh contribution to the disagreement surrounding FSD's classification but also broader discussions about our conceptions of health and disease. Our findings thus not only inform our understanding of FSD but also help further illuminate the intricate interplay of factors that influence our judgments about health and disease.

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