

Science Beyond Consensus: Defending Open Inquiry in Sensitive Scientific Debates

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To the Editor,

We write in response to the letter critiquing our editorial, "Homosexuality: A Mental Problem That Shouldn't Be Called Sexual Deviance (1)." While we welcome academic discourse, the rebuttal mischaracterizes our position, misinterprets the cited literature, and dismisses valid biological, psychological and philosophical perspectives that are essential for a complete scientific understanding of human sexuality.

First, the accusation that we "misrepresent" the work of Quintana and Pfaus (2) is unfounded. Our editorial's core argument aligns with their key biological conclusion: "sex in humans is a biological reality that is largely binary and based on genes, chromosomes, anatomy, and physiology." This foundational point is crucial. From this biological vantage point, which we as researchers have the right to emphasize, sexual orientation is intrinsically linked to reproductive function. The primary evolutionary imperative for any species, including humans, is survival and reproduction. From this perspective, any sexual behavior that does not lead to procreation presents a profound evolutionary paradox. The rebuttal's appeal to same-sex behavior in 261 animal species is a classic example of the naturalistic fallacy—confusing what is observed in nature with what ought to be considered normative or optimal for human societal and biological flourishing. The mere existence of a behavior in the animal kingdom does not negate its potential classification as a maladaptive trait or deviation from the primary reproductive function within a specific species' framework.

Second, the critique of our neuroscientific references is selective. The study by Votinov *et al.* (3) indeed identifies "brain structure changes associated with sexual orientation." The rebuttal dismisses these findings as merely "subtle neuroanatomical differences," but this does not invalidate their existence or potential significance. The consistent finding of structural and functional neurological correlates, including in regions like the thalamus and putamen that are involved in reward and sensory processing, supports the view that homosexuality has a biological substrate. However, the presence of a biological correlate does not automatically confer a status of "health" or "normality"; biological anomalies underlying various psychological conditions are well-documented (4, 5). Our argument is that these differences can be studied as deviations from a heteronormative biological standard established for reproduction without this being a value judgment on the individual.

Third, the rebuttal attempts to entirely divorce gender from biology, championing it as a purely sociocultural construct. Yet, it simultaneously dismisses religion, which is arguably one of the most powerful and enduring sociocultural forces in human history, shaping laws, ethics, and norms for millennia. To discuss sociocultural constructs while ignoring the profound influence of religious frameworks—which across Abrahamic faiths uniformly recognize the biological binary and procreative purpose of sex—is an incomplete and biased analysis. A truly holistic sociocultural examination must engage with, not dismiss, these dominant worldview systems that provide meaning and structure for billions.



While scientific neutrality, in principle, entails the willingness to examine and engage with opposing viewpoints, multiple well-documented cases reveal that, in this area of research, such openness is frequently absent. The rebuttal itself exemplifies a broader and concerning asymmetry in modern scientific discourse: as noted, “all major health organizations have long rejected” the view of homosexuality as a disorder. We do not dispute this political and social consensus. However, this consensus has fostered a powerful publication bias, making it nearly impossible to find contemporary literature that critically examines homosexuality from a biological or evolutionary standpoint without being framed through a lens of acceptance. Studies that might explore potential associated challenges or etiologies are often suppressed or dismissed as “pseudo-scientific” not solely on methodological grounds, but on ideological ones. Well-known examples include the removal under pressure of Lisa Littman’s study on “rapid-onset gender dysphoria” from her university’s website (6); the dismissal of Kenneth Zucker for advocating a cautious approach to pediatric gender transition (7); the campaign against J. Michael Bailey following the publication of *The Man Who Would Be Queen* (8); the inability of Mark Regnerus to replicate a highly cited mortality study on sexual minorities (9); and the political attacks on Hilary Cass’s independent NHS review of pediatric gender services in the UK (10). These cases collectively illustrate a pattern in which not only unconventional conclusions, but even the act of raising certain scientific questions, is subject to suppression or delegitimization. True scientific inquiry requires the freedom to ask difficult questions from multiple perspectives, including biological, psychological and philosophical, without fear of being labeled “homophobic.” The rush to pathologize the inquiry itself, rather than substantively engaging with its substance, threatens academic freedom and robust debate.

Conclusion

In conclusion, our editorial sought to contribute a perspective that is increasingly marginalized, yet remains scientifically valid: that human biology is organized around a reproductive binary, and deviations from this, while deserving of compassion and understanding, warrant critical scientific examination

rather than unquestioning normalization. We defend our right to express this biological opinion and urge the journal to uphold intellectual diversity by allowing this essential debate to continue.

Conflict of Interest

None.

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