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The Futile Search for 'Physiological Evidence' of Male Bisexuality:

A Response to Jabbour et al. (2020)

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"Robust evidence for bisexual orientation among men" (Jabbour et al., 2020) collates data from eight studies measuring the genital responses of bisexual-identified cisgender men to erotic stimuli. The goal of the article is to provide "empirical verification [of male bisexuality through] physiological processes rather than self-report." (Jabbour et al., 2020, p. 1). Two questions emerge from this publication. First, is such research necessary? Second, can one physiologically 'prove' a sexuality's existence using the penile plethysmograph (phallometry)? This paper will first discuss some of the scientific inaccuracies and methodological flaws with Jabbour et al. (2020), followed by a critical reflection on the social import of these studies in relation to the medicalisation of sexuality.

The necessity of Jabbour and colleagues' (2020) research is questionable. The authors' justification relies upon several unreferenced or generalised assertions. For example, they state that "The question whether some men have a bisexual orientation has remained controversial among both scientists and laypersons" (Jabbour et al., 2020, p. 1). Yet, there is a large body of empirical research on understanding bisexual men that spans multiple decades (Anderson & McCormack, 2016; Firestein, 1996; Monro, 2015; Pallotta-Chiarolli, 2016; Wolff, 1979;). Similarly, the authors write that "skeptics believe that male sexual orientation can only be homosexual or heterosexual" (Jabbour et al., 2020, p. 1). Their references for this are two publications over a century old (Hirschfeld, 1914/2001, as cited in Jabbour et al., 2020; Krafft-Ebing, 1886). Despite representing the field of research on bisexual men as divided, almost all other articles they cite directly state that bisexual men exist. Together, this seems an overstatement of a scientific "controversy" regarding bisexual men. The article's only enduring justification is that there are 'laypersons' who deny male bisexuality's existence (this is a common feature in stigma towards and erasure of bisexual men in society), however, the methodology through which the article purports to prove its existence requires greater scrutiny.

The studies the article cites that are related to the data they use involve research on whether cisgender bisexual men react with genital arousal to different types of pornography. If these men experienced penile arousal watching both 'gay' and 'straight' pornography then, according to the authors, this provided physiological evidence that they really were bisexual, as they claimed they were. Yet, in most academic disciplines that study sexuality—and enshrined in discrimination law in countries including the UK and the US—sexuality is treated as an identity that does not necessitate any particular kind of physiological response. Further, while bisexual men do not all share the same physiological attributes, these studies only considered men with penises, a methodological limitation that fails to account for the transgender and intersex men of whom the group they are studying consists. The idea that one can find scientific validation of a sexuality by measuring physiological arousal is therefore inconsistent with the very concept it purports to measure.

Jabbour et al. (2020) also present an uncritical acceptance as to whether it is appropriate to use the penile plethysmograph, described as "a strain gauge around the penis," (p. 1) given its manifold logistical problems. The use of the penile plethysmograph is predicated upon the assumption that genital responses to different erotic stimuli hold the potential to evidence a sexuality's veracity, with little consideration of the problems with such a measurement as an index of arousal, how varied tastes in pornography, or lack thereof, can be, and how laboratory conditions might affect one's potential to respond to pornography physiologically. The authors themselves acknowledge this problem: "96 participants were excluded for exhibiting insufficient genital arousal," and they write: "In any given study of male sexual arousal, there is a proportion of low-responding participants who do not become substantially aroused to any of the stimuli (among the constituent studies, this proportion ranges between 4.95% and 26.73%)" (Jabbour et al., 2020, p. 7). It would be prudent, instead

of writing off such individuals as unusable data, to instead question whether such a setting, and such a tool, is an appropriate way to measure sexuality in the first place.

The penile plethysmograph also has a controversial practical history. In the decades following its development by sexologist Kurt Freund, it has been used to facilitate aversion therapies (Davison, 2020), identify the sexualities of soldiers (Janssen, 2007), test for paedophilic desires (Wilson, 2016), and ascertain the veracity of migrants' claims to seek asylum on the basis of their sexualities (ORAM, 2010). Concerns over phallometric testing and its connection with human rights abuses abound (UNHCR, 2011; Waidzunas & Epstein, 2015). What remains clear is its continued use as a technology to maintain social norms, often undergirding oppressions under the auspices of an unreflexive and self-affirming scientific discourse. The Jabbour et al., 2020 study legitimises the use of the penile plethysmograph for identifying bisexual men, and this is a recipe for abuse in the hands of those seeking to persecute men as much on the grounds of being queer as on the grounds of not being queer enough.

The potential for social harm these kinds of technologies carry speaks to a wellobserved tendency in critical theory, gender studies, and queer studies whereby scientific discourses and technologies have effected or concretised oppressive social structures. These robust critiques of sex, gender, and sexuality's medicalisation (Butler, 1990, 2004; Foucault, 1976; Preciado, 2002/2019; Rubin, 2015), which have enjoyed substantial interdisciplinary mobility, strongly rebut the claim that sexuality can be measured physiologically. Studies into male bisexuality that use the penile plethysmograph can thus be understood as part of an essentialising and medicalising scientific praxis, as argued by Eisner (2013). In this critical framework, these medical technologies can be said to *produce* the results they purport to observe. One of Jabbour et al.'s co-authors, Bailey, who conducted a study (Rieger et al.,

2005) that cast aspersions on male bisexuality's existence, can be seen, most directly, to parallel science with biphobic sentiment. In Bailey's earlier research (2003), he avers: "Freund...was never able to find a subset of men who appeared bisexual in the lab. Although their data are less scientific, gay men share Freund's skepticism. They have a saying: 'You're either gay, straight, or lying." (pp. 95-96). The use of scientific discourse here to reify biphobic prejudice is highly concerning. The ramifications of these past studies thus speak to the dangers Angelides (2001) highlights in using science to ascertain sexuality's origins: such enquiries exceed science's epistemic scope and risk perpetuating oppressive social norms.

Despite the fact that Jabbour et al.'s (2020) article purports to confirm male bisexuality's existence, the problems with its conceptual and methodological assumptions endure. It also serves as a warning regarding the use of hyperbolic language around 'conflict' within sexuality research when consensus on a topic is demonstrable. Finally, it is a reminder of the need for scientists researching sexuality to consult a wide range of up-to-date scholarship, within and outside of their field, and to listen to responses from the groups they study. The significant and serious problems outlined in this paper make it clear that sexuality cannot and should not be determined by physiological experiments and that research like this risks inflicting further harm onto already vulnerable groups.

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