Reflections on Asexuality and Penile Plesythmegraphy

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1. Introduction

One line of research that has been proposed regarding asexuals is vaginal and penile plesythmegraphy. A study of this sort including asexual women is already underway, and this article does not address that topic. Rather, I write specifically about research on biological males, and I argue that attempting this research at the present time is unlikely to be a fruitful line of research. Most of the arguments presented are applicable to biological males and have little bearing of the currently underway research on females.

2. Sampling problems

There are two basic problems with sampling that would be serious issues for penile plethysmographic (phallometric) research on asexuals. The first is rather basic and may be possible to overcome in the future: finding enough subjects for the study. These studies require that subjects be physically present to participate. Since one of the biggest challenges that asexuality faces as a movement is the fact that people do not even know it exists, this—among other reasons—has created problems for organizing real life asexual communities. Even in major cities, it is still often difficult to have enough active members for regular meet-ups. As visibility increases, this is likely to become less of a problem, but my expectation is that it will be several years—possibly a decade or two before the situation changes enough to enable researchers to find enough subjects, even if testing were done in multiple cities. Additionally, Bogaert (2004) found that more females than males are asexual, and this trend has also been observed in the asexual community.

The second problem may be insurmountable and is a problem with genital plethysmographic research in general: volunteering is non-random and involves a considerable amount of self-selection. The question is whether the self-selection biases the sample with respect to any variable under consideration in the experiment. One thing that has been noted in the asexual community is that there is considerable diversity with respect to sexually explicit materials. Some asexuals find them arousing and use them. Others have no interest (and some have tried and found them boring.) Also, some asexuals find erotic materials unpleasant to view. To what extent this does or does not mirror the general population (and in what proportions) is unclear. This problem would likely cause a good number of asexuals who would not be aroused by the sexually explicit materials to not volunteer, biasing the sample towards asexuals who like, or are at least more comfortable with, sexually explicit materials

3. Methodological Problems

Even if it were possible to eliminate the problems referred to above, there are serious methodological issues that, from what I have read of the penile literature on penile plesythmegraphy, have not been addressed adequately to date. Kuban et al. (1999) recommends removing from the data set the "low responders[1]" who do not measure an increase of at least 2.5mm increase in penile circumference (approximately 10% of full erection). In that study, 16 of 42 participants (approximately 38%) were removed from the data set for this reason. Following similar procedure, Chivers et al. (2004) removed from their sample all men who did not have at least a 2mm change, resulting in the removal 23 of 69 (33%) of the men. The justification for this move is that the equipment is not sensitive enough to reliably provide

[1] For the remainder of this article, I will use the term "non-responder" to include both low-responders and non-responders.

measurements in those cases. However, no theoretical explanation is given for why these people are low-responders or what implications this may have on the interpretation of the data. Because a large portion of subjects are simply removed from the data, the results of the studies cannot be extended to the non-responders with any scientific validity. Consequently, phallometry cannot be considered a reliable instrument for about a third of the males that volunteer for such experiments and likely a larger portion of the general population.

This problem becomes acute if attempting to study male asexuals with such a device. Suppose that some asexual male is not at all aroused by sexually explicit materials on account of his asexuality. If it is considered a perfectly normal practice to throw out non-responders, a non-response would not be interpreted as sign of asexuality. On the other hand, if some asexual male were to experience sexual arousal on account of sexually explicit materials, on the assumption that phallometry is capable of measuring sexual orientation—males are sexually oriented towards that which arouses them the most—I am afraid that this would somehow be used to delegitimate his asexuality. In fact, phallometry has been used to do precisely this by Rieger et al. (2005) in a study that attempted to "prove" that there is no such thing as genuine bisexuality among males. It is this catch-22 that worries me about similar methodology being used to study asexuality. It is conceivable that asexuals would be much less likely than the general population to be nonresponders. However, to detect this, either the effect would have to be incredibly robust or a rather large sample would be needed—much larger, in fact, that is likely to be possible in the near future.

Before phallometry is used to study asexuality, I think that two things need to be better understood. First, why is there such a high percent of people who are non-responders? If the people in the experiment were brought in on another day, would the same people be non-

responders? Is it because they are not aroused by the particular situations and/or people in the video? Simply put, a way of accounting for nonresponders would have to be established in order to allow for the possibility that asexual nonresponders and sexual nonresponders might in fact be different and might have little or no erectile response for different reasons (or different sexual nonresponders may be nonresponders for different reasons from other sexuals.)

Secondly, it would have to be more firmly established exactly what this methodology is measuring. It has a strong correlation with sexual orientation but cannot be considered to be a measure of sexual orientation for a few reasons. First, if it is a reliable measure of sexual orientation, then we must conclude that about a third of adult males that volunteer for the experiments (and probably a larger portion of the general population) are asexual. There seems to be a consensus that this figure is too high. A second line of argument comes from evidence comes from Chivers et al. (2004). Though they do not make this claim in their study, the implication can be derived from their data. They used only subjects that reported being either completely heterosexual or completely homosexual.[2] Subjects were hooked up to the equipment and watched male-male sexual videos and female-female sexual videos. The heterosexual male subjects, on average, were more aroused by the female-female videos, and the homosexual males were generally more aroused by the male-male videos. A sizable portion of males experienced some about of sexual arousal to both videos. This is significant because it means that these subjects experienced physiological arousal in response to videos with people that they did not find sexually attractive, meaning the physiological arousal in response to sexually explicit materials of one gender cannot be regarded as evidence that someone is sexually attracted to

[2] Data from post-op MTF transsexuals were also used. Those findings have been controversial, not least because two other labs have failed to replicate their results (Brotto 2006.) However, this part of the study is not relevant to the present discussion.

member of that gender. Because of this, they subtracted increase in penile circumference while watching videos of males from the increase in volume when watching of females. The difference between the gay males and the straight males was robust, but there was overlap. Consequently, the results are only true in the aggregate and are not generalizable to the individual. Moreover, the existence of overlap means that simply seeing how some individual responded cannot be used to completely accurately determine that individual's sexual orientation—even when excluding bisexual males.

Failure to recognize this was the fundamental mistake that was made in Rieger et al. (2005), the study that attempted to "prove" that this is no such thing as genuine male bisexuality. Their argument was that there was no "bisexual pattern," but that rather all self-identified bisexual individuals had either a "heterosexual response" or a "homosexual response." However, what this actually meant was that the "heterosexual response" was where response to men was less then response to women (with a few exceptions.) The "homosexual response" was where response to women was less than response to men (with a few exceptions.) Each of these was a considerable range—as such, there was no clear "bisexual response" because there were no clear heterosexual or homosexual responses. (In fact, there were two individuals that had equal response to both men and women. However, their self-reported sexual orientations were Kinsey 0 and Kinsey 6.) Heterosexual and homosexual responses were defined such that *a priori* there could not be a bisexual response. Given this methodological procedure, their claim is accepted *a priori*, and the actual data had no bearing on it, giving rise to the criticism of unfalsifiablity.

4. Conclusion

Because of these problems, I do not think that attempting to do phallometric research on asexuals would be a good idea. The methodology is not well enough developed, and the meaning of the results for much more studied populations is unclear. The motivation to do genital plethysmographic research—for both females and males—is simple enough. It is one of the few ways of studying sexual orientation that gives quantitative results that does not rely on self-report. However, from my understanding of the literature, there are some serious methodological issues that remain unaddressed. As long as these remain unanswered, there is serious danger of misinformation under the guise of science. On such a politically contentious area as sexuality, this is inherently dangerous.

If anyone still wants to use phallometry to study asexuality, I have two recommendations. First, do survey-based research to try to answer some of the questions raised in section 2: What variation is there is there among asexuals with respect to sexually explicit materials and how does this compare with variation among nonasexuals? (Conducting this without introducing major cofounding variables, however, may prove difficult.) Also, by describing the research to participants, find out who would or would not be willing to participate. How would the sample be skewed because of self-selection? (Internet recruiting of only asexuals is likely to be less problematic in this instance.) Secondly, more data is needed on the non-responders in phallometric research. Without a clear framework for understanding this question, I foresee research on asexuals to be fruitless.

Citations:

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