Background

Sexuality is a complex phenomenon that has gained much interest over the years and has been extensively investigated. Though sexuality is often understood in terms of ‘heterosexuality’, ‘homosexuality’ and ‘bisexuality’, since the 1940s sexuality has been conceptualised as a continuous spectrum of sexuality, many individuals fall in between the two dichotomous poles.

Females have been noted to have a more ‘fluid’ sexuality than men (Diamond, 2008), in that they have the potential to be sexually responsive to both sexes, just not necessarily at the same time, akin to bisexuality (Kühle, 2013).

A range of measures have found evidence for the non-specificity of women’s sexual arousal, in that they have a heightened sexual response to both preferred and non-preferred stimuli (Chivers, 2010). These include self-report (Chivers et al., 2004), thermography (Huberman, 2014), vaginal photoplethysmography (VPP; Huberman, 2014), IAT (Snowden & Gray, 2013) and eye-tracking (Lyxzen et al., 2008).

However, using physiological methods, such as VPP, is most popular, whereas less research has been conducted utilising eye-tracking.

Aims

Thus, the present study aims to use eye-tracking in order to investigate whether women’s sexuality is non-category-specific, in that they will respond equally to both genders.

Method

Participants

- 37 participants (17 male, 20 female) aged between 18 and 25 (M = 20.71 years, SD = 1.31 years)
- Primarily University students, with normal, or corrected-to-normal, vision

Design

- 2 (participant gender – male, female) x 2 (picture eroticism – erotic, non-erotic) mixed design was employed
- Presentation of stimuli was quasi-randomised in a crossed design, and the order of the questionnaire presentation was counterbalanced

Materials & Apparatus

Questionnaire

- 87 included questions taken from the Kinsey Heterosexual-Homosexual Rating Scale (KS; The Kinsey Institute, 2013) and Kipp’s (2008) Sexual Attitudes and Feelings Scale (SAF)
- Implemented online using Qualtrics, and ran on a standard laptop.

Eye-Tracking Experiment

- Tobii T60XL eye-tracker and compatible software (Tobii Studio 3.2.3)
- 72 picture combinations for the ‘main phase’ and 5 combinations for the ‘practice’ phase, using images selected from the pilot study.
- Free stock photo websites, respectively.
- All pictures had a resolution of 600 x 700 pixels and were presented in full colour.

Procedure

1. Fully-informed consent was gained
2. Completion of the questionnaire either prior to, or after the eye-tracking experiment
3. Participants were given an instruction and sample images sheet, and if comfortable, a consent form.
4. Practice phase followed by the main experimental phase, where two pictures were presented alongside each other and they picked their preferred image with a button press.
5. Participants were fully debriefed.

Variables

- First Fixation Duration (FFD) – length of first fixation on an image in ms
- Total Fixation Duration (TFD) – total length of all fixations on an image in ms
- Total Time to First Fixation (TTFF) – time, in ms, from presentation of the image to first fixation on the image
- Image Selected (IS) – which image the participant selected as most appealing

Results

Of the 37 participants, 56.8% rated themselves as ‘exclusively heterosexual’, 37.8% rated themselves as ‘predominantly heterosexual’, and 6% rated themselves as ‘bisexual’ on the KS.

The above graph shows the differences in SAF scores for each of these sub-groups that have been defined by the KS. There were significant gender/sexuality differences only for ‘attraction to men’ (F (2, 31) = 7.181, p < .005). Both ‘sex drive’ and ‘attraction to women’ were non-significant, suggesting women responded similarly to men on the latter measure.

The results show that, though women score highest for their attraction to their preferred gender images, they have similar scores for both male and female images e.g. TTFF (see Figure 2), and SAF Scores for each Sexuality Sub-Group Defined by the KS

Discussion

Hypothesis One

Support?

- Support was found for this hypothesis – results for TTFF and FFD were non-significant for women, suggesting that they respond similarly to both male and female erotic stimuli.

Explanation?

- Women may be ‘checking out the competition’ – Joseph (1885) suggested that women attach significant importance to physical attractiveness of same-sex peers, and ‘compete’ amongst themselves due to threat to own image.
- Rupp & Wallen (2008) made that women’s visual attention appear less clear due to ‘checking out the competition’
- Women feel self-conscious about their physical attractiveness of same-sex peers, and ‘compete’ amongst themselves due to threat to own image.

Other Findings

Support?

- Though women reported on the questionnaire that they were, generally, more attracted to men, their objective data (in particular TTFF) showed that they had very similar interest in both male and female erotic stimuli.
- Rupp & Wallen (2008) proposed that women feel self-conscious about their response to explicit stimuli

Strengths & Limitations

- Used self-report and objective measures, both desirable for sexuality studies (Jones, 2013)
- Images were age-appropriate and up-to-date
- Utilised multiple measures of sexuality
- Images tested as a whole pictures so cannot establish specifically where participants were looking, making it difficult to make direct comparisons between other studies
- Stimuli were not fully-standardised with variation in flash speeds

Conclusions

Heterosexual women do appear to exhibit non-category-specific responding, however the reasons for this are unclear. It could be due to ‘checking out the competition’ or identifying with the stimulus. Further studies should aim to clarify this, perhaps by assessing why participants feel they focused their attention where they did.

Indicative Reading


Figure 1: A bar chart showing the SAF factors for each gender/sexuality sub-group as defined by the KS

Figure 2: Gender differences for TTFF

Figure 3: Gender differences for FFD

Figure 4: Gender differences for TFD

Figure 5: Gender differences for IS