

## ARE FEMALE JAPANESE MACAQUES THAT ENGAGE IN HOMOSEXUAL BEHAVIOR MASCULINIZED? BEHAVIORAL AND NEUROANATOMICAL EVIDENCE

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Female Japanese macaques in the Arashiyama population routinely demonstrate male-typical sexual behavior (i.e., mounting) and sexual partner preference (i.e., facultative preference for female sexual partners). If additional aspects of their behavior and neuroanatomy were shown to be male-typical, this would lend support to the conclusion that females, in certain populations of this species, have been masculinized during their development. Focal animal data were collected on the Arashiyama population. Female Japanese macaques do not employ male-typical strategies, such as consort intrusions and sexual coercion, to acquire female sexual partners. Similarly, they do not exhibit male-typical patterns of courtship behavior. Although female Japanese macaques routinely mount same-sex partners, the postures and pelvic movements they employ during such interactions are not male-typical. Likewise, inter-mount social behavior during female homosexual consortships is overwhelmingly female-typical in expression. Japanese macaque hypothalamic tissue was serial sectioned at 70 $\mu$ m, stained with thionin and examined at a final magnification of 300X. A subdivision of the hypothalamus thought to regulate sexual behavior, the dorsocentral portion of the anterior hypothalamic nucleus, was not male-typical in its organization. Female Japanese macaques that engage in same-sex mounting and exhibit facultative same-sex sexual partner preference do not appear to be masculinized in terms of their brains or other aspects of their behavior.

Keywords: sexual behavior, homosexual behavior, brain, Japanese macaque