

# Study reveals potential evolutionary role for same-sex attraction

4 February 2010

Male homosexuality doesn't make complete sense from an evolutionary point of view. It appears that the trait is heritable, but because homosexual men are much less likely to produce offspring than heterosexual men, shouldn't the genes for this trait have been extinguished long ago? What value could this sexual orientation have, that it has persisted for eons even without any discernible reproductive advantage?

One possible explanation is what evolutionary psychologists call the "kin selection hypothesis." What that means is that [homosexuality](#) may convey an indirect benefit by enhancing the survival prospects of close relatives. Specifically, the theory holds that homosexual men might enhance their own genetic prospects by being "helpers in the nest." By acting altruistically toward nieces and nephews, [homosexual men](#) would perpetuate the family genes, including some of their own.

Two evolutionary psychologists, Paul Vasey and Doug VanderLaan of the University of Lethbridge, Canada tested this idea for the past several years on the Pacific island of Samoa. They chose Samoa because males who prefer men as sexual partners are widely recognized and accepted there as a distinct gender category—called fa'afafine—neither man nor woman. The fa'afafine tend to be effeminate, and exclusively attracted to adult men as sexual partners. This clear demarcation makes it easier to identify a sample for study.

Past research has shown that the fa'afafine are much more altruistically inclined toward their nieces and nephews than either Samoan women or heterosexual men. They are willing to babysit a lot, tutor their nieces and nephews in art and music, and help out financially—paying for medical care and education and so forth. In a new study, the scientists set out to unravel the psychology of the fa'afafine, to see if their [altruism](#) is targeted specifically at kin rather than kids in general.

They recruited a large sample of fa'afafine, and comparable samples of women and heterosexual men. They gave them all a series of questionnaires, measuring their willingness to help their nieces and nephews in various ways—caretaking, gifts, teaching—and also their willingness to do these things for other, unrelated kids. The findings, reported on-line this week in the journal *Psychological Science*, lend strong support to the kin selection idea. Compared to Samoan women and [heterosexual men](#), the fa'afafine showed a much weaker link between their avuncular - or uncle like - behavior and their altruism toward kids generally. This cognitive dissociation, the scientists argue, allows the fa'afafine to allocate their resources more efficiently and precisely to their kin—and thus enhance their own evolutionary prospects.

To compensate for being childless, each fa'afafine would have to somehow support the survival of two additional nieces or nephews who would otherwise not have existed. "If kin selection is the sole mechanism by which genes for male same-sex sexual attraction are maintained over time," the fa'afafine must be "super uncles" to earn their evolutionary keep, explains Vasey. Consequently, Vasey suggests "that the fa'afafine's avuncularity probably contributes to the evolutionary survival of genes for male same-sex sexual attraction, but is unlikely to entirely offset the costs of not reproducing."

Do these findings have any meaning outside of Samoa? Yes and no. Samoan culture is very different from most Western cultures. Samoan culture is very localized, and centered on tight-knit extended families, whereas Western societies tend to be highly individualistic and homophobic. Families are also much more geographically dispersed in Western cultures, diminishing the role that bachelor uncles can play in the extended family, even if they choose to. But in this sense, the researchers say, Samoa's communitarian culture

may be more—not less—representative of the environment in which male same-sex sexuality evolved eons ago. In that sense, it's not the bachelor uncle who is poorly adapted to the world, but rather the modern Western world that has evolved into an unwelcoming place.

Provided by Association for Psychological Science

APA citation: Study reveals potential evolutionary role for same-sex attraction (2010, February 4) retrieved 10 April 2021 from

<https://medicalxpress.com/news/2010-02-reveals-potential-evolutionary-role-same-sex.html>

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*