Sex, Drugs, and Genes: Moral Attitudes Share a Genetic Basis

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Few hallmarks of the 1960s counterculture stand out like sex, drugs, and rock-n-roll—elements of a "lifestyle" that *Life* magazine once branded as "antithetical in almost every respect to that of conventional America." Over the decades, as rock music became more mainstream, public condemnation of casual sex and illicit drugs endured. Why was that? Part of the answer may reside in our genes.

New research published in the journal <u>Psychological Science</u> suggests that there is a common genetic basis underlying a person's disapproval of noncommittal sex and their condemnation of recreational drug use. This research helps psychologists better understand how heredity may relate to some of our deeply held moral values.

"People adopt behaviors and attitudes, including certain moral views, that are advantageous to their own interests," said Annika Karinen, a researcher at Vrije Universiteit Amsterdam in the Netherlands and the lead author on the paper. "People tend to associate recreational drug use with noncommitted sex. As such, people who are heavily oriented toward high commitment in sexual relationships morally condemn recreational drugs, as they benefit from environments in which high sexual commitment is the norm."

Past studies have shown that openness to engage in noncommittal sex is partially explained by genes; the rest is explained by the unique environment not shared by siblings. Karinen and her colleagues wanted to study if moral views concerning drug use, which surveys have shown closely correlate with openness to noncommittal sex, were influenced by the same genetic factors.

To tease out hereditary from environmental factors, the researchers surveyed 8,118 Finnish fraternal and identical twins to examine how open they were to recreational drug use and to sex outside of a committed relationship. Participants answered questions that gauged their moral views of situations in which people used recreational drugs, such as at a party or with friends. The participants were also asked questions that evaluated their openness to noncommitted sex.

The researchers then compared fraternal and identical twin pairs to assess the extent to which

condemnation of recreational drugs, openness to noncommittal sex, and the relationship between the two was explained by (a) genes, (b) the shared environment—such as growing up in the same household or community, or (c) unique experiences and environments not shared by the twins. The researchers found that moral views concerning both recreational drugs and openness to noncommitted sex are approximately 50% heritable, with the remaining 50% explained by the unique environment.

Furthermore, approximately 75% of the relationship between openness to noncommitted sex and moral views concerning recreational drugs was explained by genetic effects, and the remainder was explained by the unique environment. The researchers also found substantial overlap in the genetic effects underlying both factors—namely, that approximately 40% of the genes underlying openness to noncommitted sex also underlie moral views concerning recreational drugs.

"These findings suggest that the genetic effects that influence openness to noncommitted sex overlap with those that influence moral views concerning recreational drugs," said Karinen. "Important parts of hot-button culture-war issues flow from differences in lifestyle preferences between people, and those differences in lifestyle preferences appear to partly have a genetic basis."

Reference: Karinen, A., Wesselkijk, L., Jern, P., & Tybur, J. (2021). Sex, drugs, and genes: Illuminating the moral condemnation of recreational drugs. *Psychological Science*, *32*(10), 1582–1591. https://doi.org/10.1177/0956797621997350