

## **Social integration, genetics, and substance use disorders: How gender gets under the skin**

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### **ABSTRACT**

For decades, the distinction between sex and gender has served to delineate the domains of biology and social science, creating an intellectual space for the study of socially constructed difference and inequality. However, gender is increasingly being emphasized in biomedical research, and evidence that social and biological processes are intertwined in producing health and human behavior is rapidly accumulating. The present study utilizes innovative feminist approaches to sex, shifting the analytic lens to the ways in which gender moderates biological processes through a system of unequal social relations. Using data from the Collaborative Study on the Genetics of Alcoholism (COGA), the influence of gender, social integration, and genotype on three substance use disorders is examined. Three-way interaction models reveal gender specific moderation of genetic risk by social experiences. Namely, higher levels of social integration into families and communities are predictive of reduced risk of tobacco, alcohol, and drug dependence among men with the high-risk genotype. Conversely, there is no protective effect for women with the high-risk genotype, reflecting the disproportionate dualism (i.e. simultaneous costs and benefits) inherent in social integration for women. These findings contest the notion of genetic corporeality as a reflection of biological sex differences that exist apart from economic, political, and cultural systems of inequality.