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## **Initial Results from a New Personalized Feedback Program for Addiction Risk Integrating Genomic, Behavioral, and Environmental Risk**

### **Background**

We have made tremendous advances in understanding the etiology of substance use disorders (SUDs). Despite these advances, screening for SUDs has remained largely unchanged. We have built a program that integrates advances across genomics, developmental psychology, and epidemiology to provide individuals with personalized information about their addiction risk profile.

### **Methods**

We conducted a randomized clinical trial (RCT) in which participants (aged 18-25) complete an online survey assessing behavioral/environmental risk factors and provide DNA samples. Genetic and behavioral/environmental risk scores are integrated to provide personalized risk estimates. Participants are randomly assigned to one of three active conditions receiving personalized risk estimates followed by 1) psychoeducation, 2) online Cognitive Behavioral Therapy-based modules, or 3) a virtual genetic counseling appointment, or a waitlist control condition where they receive psychoeducation about substance use without personalized feedback.

### **Results**

This RCT concluded in March 2026 (Mean age = 21.87, 76% female, 61% cisgender woman, 72% White, and 86% non-Hispanic). At baseline, 68% of participants endorsed alcohol use in the past 30 days and 40% of participants endorsed past 30-day other drug use. Initial results indicate high satisfaction with the program. Among individuals who received their personalized risk estimates, 92% reported enjoying receiving their personalized risk profile, 76% would recommend the program to a friend, and 87% learned new information. Lastly, participants report proficient understanding and low distress upon receiving genetic information. Analyses examining changes in substance use at the 30-day and 3-month follow-ups are underway.

### **Conclusions**

Provision of personalized feedback about addiction risk factors, including genetic information along with behavioral and environmental feedback, may be a viable way to promote earlier screening and intervention with the goal of preventing substance use problems before they start.

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