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TITLE: The impact of receiving genotypic information for psychiatric conditions: A literature review

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ABSTRACT: Genome-wide association studies are rapidly advancing our understanding of the genetic architecture of complex disorders, including many psychiatric conditions such as major depression, schizophrenia, and substance use disorders. One common goal of genome-wide association studies is to use findings for enhanced clinical prediction in

the future, which can aid in identifying at-risk individuals to enable more effective prevention screening and treatment strategies. In order to achieve this goal, we first need to gain a better understanding of the issues surrounding the return of complex genetic feedback for psychiatric conditions. Here, we review and summarize the current literature on the impact of receiving genotypic information for psychiatric conditions on affect, thoughts, and behavior. Reviewed literature shows that genotypic information indicating increased risk for a psychiatric condition lowers an individual's confidence to control behavior, reduces self-agency, and negatively impacts affect and retrospective recall of mood. Individuals may believe that a change in behavior is important; however, the current literature does not provide evidence that genotypic information indicating increased risk for a psychiatric condition is strongly associated with behavior change. Some evidence suggests that education about non-deterministic nature of genetic influences can mitigate negative effects on self-agency. Due to limitations of these studies, future research will need to investigate the impact of receiving true complex genotypic information for psychiatric conditions on a person's behavior and psychological state over an extended period of time and identify effective educational materials that will mitigate potential negative outcomes.

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