

Measurement Non-invariance with Respect to Race and Gender in DSM Criteria for Substance Abuse and Dependence

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A desirable feature of diagnostic criteria and quantitative assessments of liability to substance use and abuse is that they should measure equivalently in different groups. This property is known as measurement invariance. We use data from the National Survey on Drug Use in Households (N>50,000) to show that there is a lack of measurement invariance of the DSM criteria for marijuana and other substances with respect to race and gender. Those who identify as African American are more likely to report legal problems than others, and males are more likely than females to spend time getting marijuana and to continue use despite physical problems experienced. Findings for cocaine and opioid use show some similar patterns, but the lower base rates for these substances make the findings less statistically significant. Alternative approaches of calculating individuals' liabilities are proposed for both clinical and research purposes.