Reviewer's report

Title: Exploring Racial/Ethnic Differences in Substance Use: A Theory-Based Investigation with a Sample of Juvenile Justice-Involved Youth

Version: 1 Date: 28 February 2011

Reviewer: Matthew Howard

Reviewer's report:

Minor and Discretionary Revisions

This is a very well written and carefully conducted report of substance use and racial/ethnicity-related factors in a relatively large and ethnically diverse sample of juvenile probationers. The authors were interested in determining whether racial/ethnicity minority youth are overrepresented in the juvenile probationer population, substance use rates differ across adolescent groups differing in race/ethnicity, and whether individual risk factors were better predictors of substance use for Caucasian youth than for youth of other races/ethnicities.

In addition to the large, diverse, and important sample studied, the investigators also administered a set of high quality risk factor and substance use measures and plan to conduct longitudinal analyses of this data set with latent growth curve methods. Thus, there should be much of worth coming from this project in the future.

The chief limitation of this report is that much of the findings are of the "old news" variety. A number of reports have established that ethnicity minorities are overrepresented in most juvenile offender populations and I believe there are solid national data in this area as well. Further, many studies of racial and ethnicity differences in the epidemiology of adolescent substance use have been conducted with general population and juvenile justice samples. The former would include the Monitoring the Future study. The latter would include several papers I have published describing ethnicity differences in substance abuse among state populations of juvenile offenders (Howard & Jenson, 1999; Howard, Balster, Cottler, Wu, & Vaughn, 2008). I find the effort to determine whether or not a set of individual risk factors predicts substance use equally well across samples of adolescents of different races/ethnicities to be a meritorious idea; that said, the number and diversity of risk factors examined in this study was modest and I expect that such analyses have been undertaken by other groups previously.

With respect to specific comments:

1. Include the standard deviation for age along with the mean in the abstract.

2. Check the accuracy of the statement that the "level of substance use is not clear across racial/ethnic minorities..." that appears on page 5 of the introduction.
3. "got drink" should be "got drunk" on the fourth line up from the bottom of page 10; also, on the third line up from the bottom of page 10, the word "the" should be inserted before the word "average."

4. I disagree with the characterization of the reported findings as "novel" on the 6th line of page 13.

5. I found Table 1 hard to read. All reported means should be identified as such and should appear along with their respective standard deviations. For example, with regard to the age at first use of tobacco variable, no standard deviations were reported for the first three means but a standard deviation is reported for the 4th listed mean.

In sum, this is a very well written and professionally prepared report of a large and diverse cross-sectional sample of juvenile probationers. Several of the findings are of the "old news" variety, but other reported findings (the last study aim specifically) are more interesting. I recommend publication of the paper with relatively minor revisions.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.