

# Responses to PRIME For Life® Among Blacks<sup>1</sup>

Michele A. Crisafulli, MA, Pamela A. Stafford, MA, Blair Beadnell, PhD, & David B. Rosengren, PhD  
Prevention Research Institute, Inc., Lexington, KY

## Abstract

Previous evaluations of PRIME For Life® (PFL), an evidence-based indicated prevention program, have shown that program completion is associated with positive changes in beliefs and intentions, as well as lower recidivism rates. To test whether there are racial differences in response to PFL, we examined changes for Black participants and compared them to those for Whites. Data combined across program evaluations in five states (Iowa, Utah, Indiana, Georgia, and South Carolina) conducted in 2011 indicate that both Blacks and Whites perceived the program as helpful, and on many outcomes both groups experienced similar amounts of positive change. On fewer outcomes, racial differences occurred in either absolute scores or relative amounts of change, although there was no pattern suggesting greater program effectiveness for either group. Overall, PFL appears to be as effective in eliciting positive responses among Blacks as it is among Whites, though future studies replicating and extending these findings are necessary.

## Introduction

According to a report from the National Highway Traffic Safety Administration,<sup>1</sup> obtaining accurate data on racial differences in the prevalence of substance-impaired driving is complicated by a number of social

factors. As such, estimates tend to differ substantially depending on the type of data used (e.g., self-report versus archival data). Nonetheless, it is clear that no racial group is immune to impaired driving, and thus it

---

<sup>1</sup> On our questionnaires, participants could choose from a number of racial/ethnic categories including two relevant to this report: “African American, Black, or African” and “White, Caucasian, or European.” For simplicity, in this report we use the terms “Black” and “White.”

is important that interventions for those with substance-related offenses are sensitive to the particular needs of all racial groups.

PRIME For Life, a motivational intervention for people who need indicated prevention, helps participants assess their risks without engendering resistance. It supports participants' exploration of their current beliefs while providing information that may gently challenge those views. As part of this process, participants evaluate their need for change and determine their choices about reducing risk. Prior research suggests PFL is effective in changing attitudes, risk perceptions, and behavioral intentions; it is also related to lower recidivism.<sup>2-4</sup>

Evidence for the efficacy of motivational enhancement interventions in reducing substance abuse among Blacks is mixed, with some studies showing more promising results than others.<sup>5-9</sup> To our knowledge, however, no studies have examined the efficacy of motivational interventions among Black individuals convicted of alcohol- and drug-related offenses. The present study reports on the efficacy of PFL for Black participants as compared to their White counterparts.

## Methods

In order to examine whether Blacks benefit differently from the U.S. racial majority group in terms of responses to PFL, we compared intervention response for adults in five states (Iowa, Utah, Indiana, Georgia, and South Carolina) who completed PFL in 2011. Specifically, we examined a

subsample of Black ( $n = 330$ ) and White ( $n = 1,965$ ) participants who represented 13% and 76%, respectively, of the overall sample ( $N = 2,579$ ). The vast majority (99%) of participants in this subsample were mandated to attend PFL as a result of a drug- or alcohol-related infraction. Of these, 80% had been arrested for impaired driving, 8% for drug possession, 5% for underage drinking, 2% for underage drinking and driving, and 4% for other infractions.

There were more men (70%) than women (30%) in this subsample. Overall, participants were young, with 30% reporting their age as 18-24, 29% as 24-34, 18% as 35-44, 15% as 45-54, and 8% as 55 or older. In terms of education, 10% of the subsample had less than a high school education, 35% had completed high school or a GED, 35% had attended some college or technical school, 8% had an associate's degree, and 12% had a bachelor's or graduate degree.

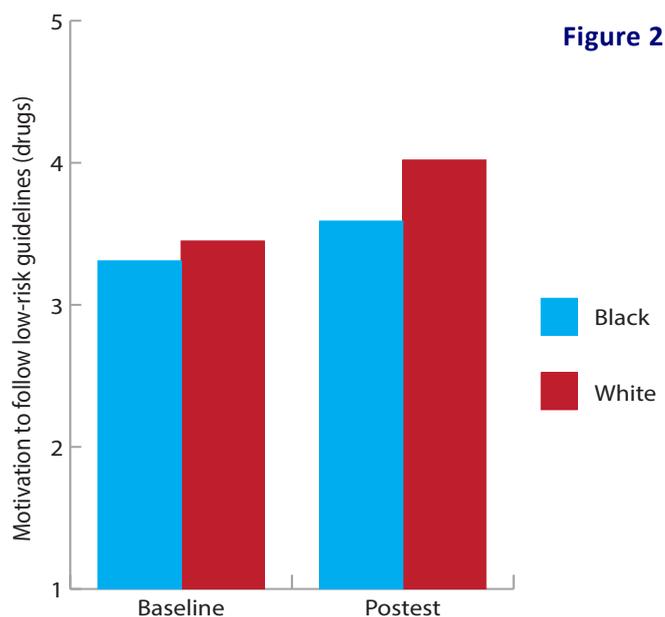
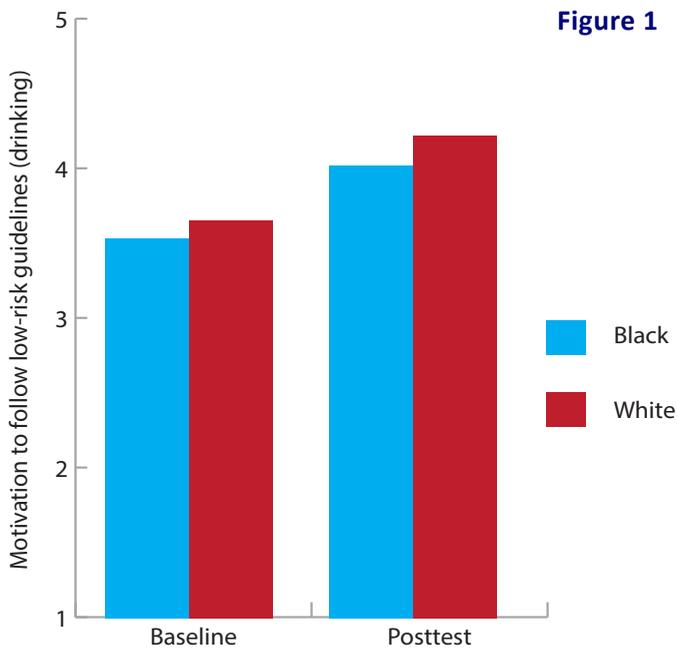
Both before and after participating in PFL, participants completed anonymous self-report questionnaires. Copies of the questionnaires and information regarding their psychometric properties are available upon request.

Statistical analyses consisted of Type III tests from Generalized Estimating Equations used to examine racial differences in participant outcomes. The key predictors were time (baseline to posttest), race, and the interaction of time and race. In all analyses, we controlled for the effects of gender, age and education level. Because we examined a relatively large number of outcomes, we used an adjusted alpha level of .005 as the criterion for statistical significance.

## Results

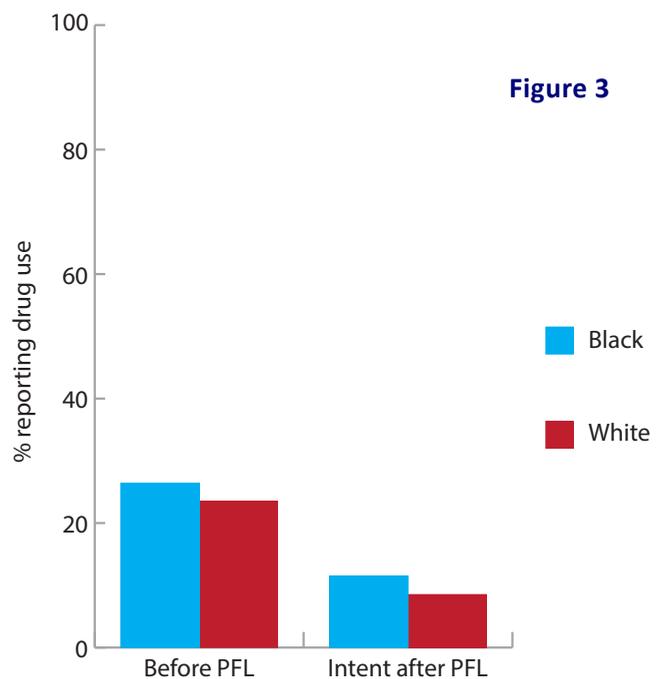
### Motivation

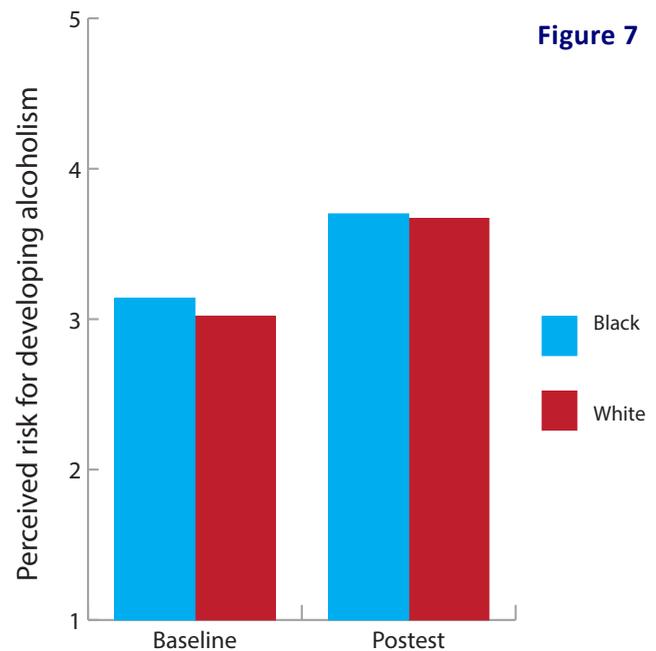
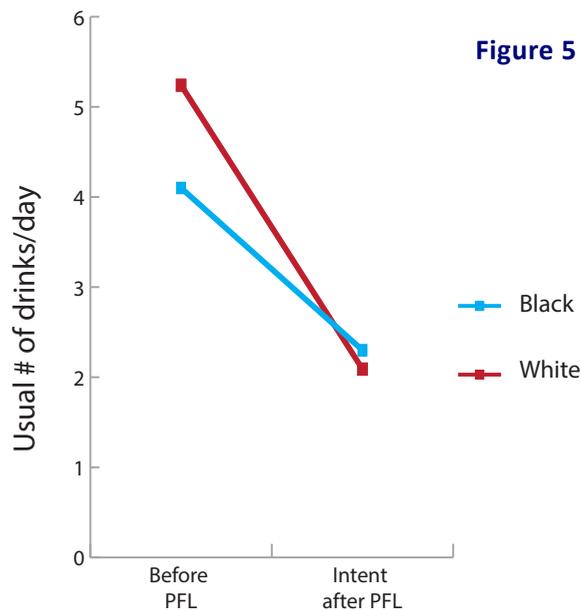
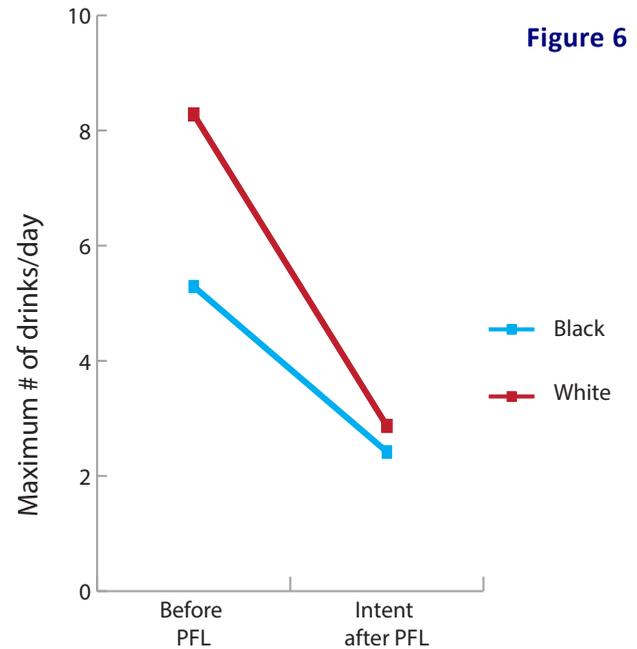
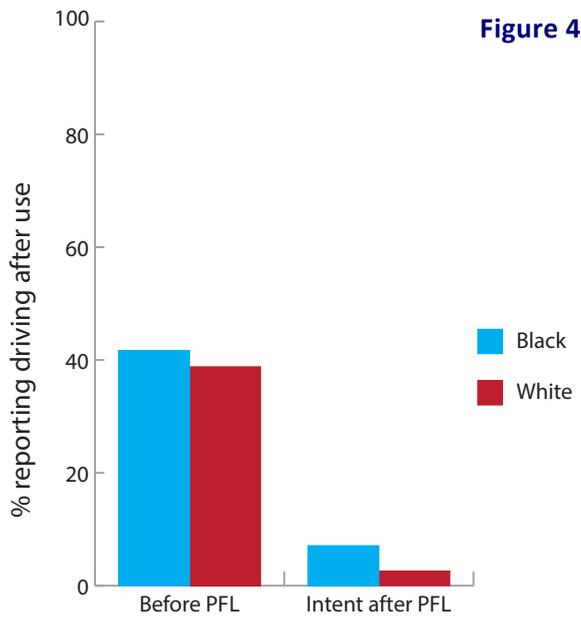
There were no significant differences between Black and White participants in motivation to follow low-risk guidelines for substance use (Figure 1 and Figure 2). Both groups experienced increases in motivation from baseline to posttest.



### Intentions

We asked participants several questions regarding their behavior in the 90 days prior to PFL and how they intended to behave in the 90 days after PFL. For all outcomes measured, both Black and White participants intended to engage in lower-risk behaviors after PFL than they had before. However, patterns differed across the outcomes. For drug use, there were no differences between Blacks and Whites: both groups showed fewer people intending to use drugs in the future compared to their past use (Figure 3). For driving under the influence, both Blacks and Whites showed positive change, but at posttest slightly fewer Whites intended to drive under the influence than Blacks (3% vs. 7%, respectively; Figure 4). For usual and maximum number of drinks (Figures 5 and 6), Whites showed greater change, but because of higher levels at baseline did not differ from Blacks at posttest.

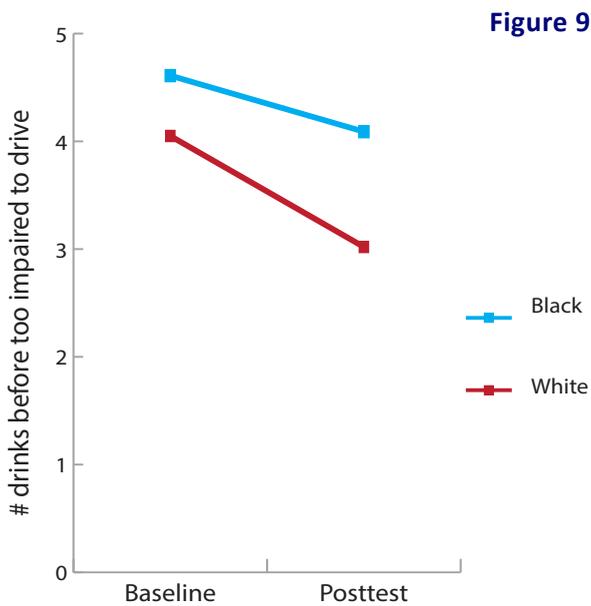
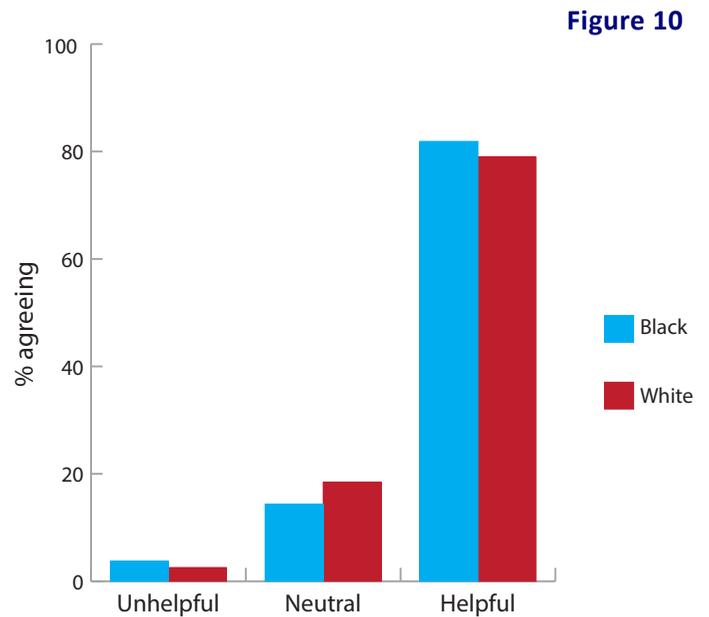
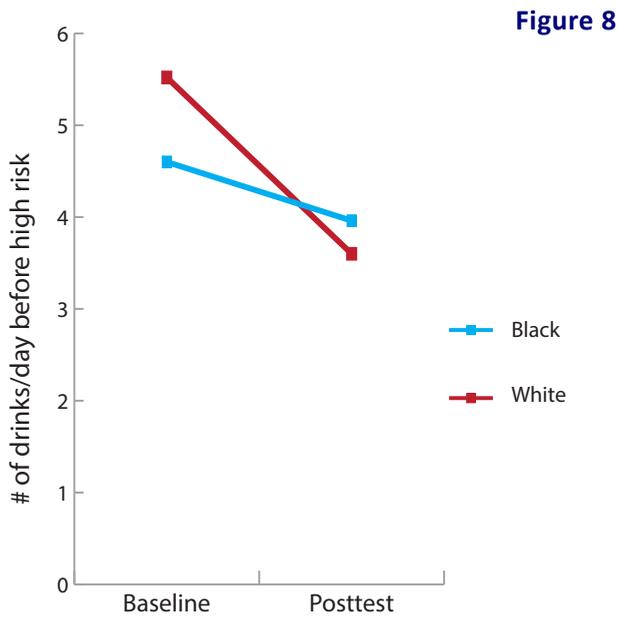




**Risk Perception**

Both Blacks and Whites showed improvements in three types of risk perception, although different patterns existed. With risk for developing alcoholism (Figure 7), the two groups held similar perceptions and showed similar improvements. With regard to how many drinks in a day are high risk (Figure 8), Blacks held less risky perceptions than

Whites at baseline. However, Whites experienced more change, thus eliminating the gap between the groups at posttest. Finally, Blacks on average believed they could have more drinks before they were too impaired to drive, although they showed similar rates of improvement to Whites (Figure 9).



**Perceived Helpfulness**

Most Blacks and Whites rated PFL as helpful, and the groups did not differ from each other (Figure 10).

**Conclusions**

The relative effectiveness of PFL for Blacks and Whites was somewhat variable depending on the outcome considered. Both Blacks and Whites tended to perceive PFL as helpful, and on many outcomes, both groups experienced similar amounts of positive change regarding:

- motivation to follow low-risk guidelines for substance use
- perceived risk of developing alcoholism
- intent to smoke marijuana or take other drugs in the next 90 days

On several outcomes, Blacks reported higher-risk attitudes than Whites at both baseline and posttest but experienced positive changes of similar or greater magnitude than Whites for:

- perception of how many drinks one can have before being too impaired to drive
- intent to drive under the influence

- perceived risk to things they value if using substances once a week or continuing prior drinking choices

On relatively few outcomes, Whites showed greater positive change than Blacks, but because they started out with riskier perceptions and behaviors, they did not differ from Blacks after PFL in:

- intent regarding usual and maximum daily number of drinks
- perceptions of what constitutes high-risk drinking

Several studies have demonstrated that PFL effectively produces short-term change in primarily White populations. The present study demonstrates that it appears to produce similarly positive change in Black individuals. However, further research to replicate and/or clarify patterns of results for particular outcomes will be important, as will research looking at longer-term outcomes.

## References

<sup>1</sup> Romano, E., Voas, R., & Lacey, J. (2010). *Alcohol and highway safety: Special report on race/ethnicity and impaired driving* (Rep. No. DOT HS 811 336). Washington, DC: National Highway Traffic Safety Administration.

<sup>2</sup> Beadnell, B., Nason, M., Stafford, P. A., Rosengren, D. B., & Daugherty, R. (2012). Short-term outcomes of a motivation-enhancing approach to DUI intervention. *Accident Analysis and Prevention, 45*, 792-801.

<sup>3</sup> Beadnell, B., Stafford, P. A., Nason, M., & Rosengren, D. B. (2010). *Decreased recidivism rates following PRIME For Life attendance* (Technical Report 3.1). Lexington, KY: Prevention Research Institute.

<sup>4</sup> Rosengren, D. B., Crisafulli, M. A., Nason, M., & Beadnell, B. (2013). *A review of the empirical support for PRIME For Life* (Technical Report 4.1). Lexington, KY: Prevention Research Institute.

<sup>5</sup> Dennis, M., Scott, C. K., & Funk, R. (2003). An experimental evaluation of recovery management checkups (RMC) for people with chronic substance use disorders. *Evaluation and Program Planning, 26*, 339-352.

<sup>6</sup> Longshore, D., Grills, C., & Annon, K. (1999). Effects of a culturally congruent intervention on cognitive factors related to drug use recovery. *Substance Use and Misuse, 34*, 1223-1241.

<sup>7</sup> Longshore, D., & Grills, C. (2000). Motivating illegal drug use recovery: Evidence for a culturally congruent intervention. *Journal of Black Psychology, 26*, 288-301.

<sup>8</sup> Montgomery, L., Burlew, A. K., Kosinski, A. S., & Forcehimes, A. A. (2011). Motivational enhancement therapy for African American substance users: A randomized clinical trial. *Cultural Diversity and Ethnic Minority Psychology, 17*, 357-365.

<sup>9</sup> Murphy, J. G., Dennhardt, A. A., Skidmore, J. R., Martens, M. P., & McDevitt-Murphy, M. E. (2010). Computerized versus motivational interviewing alcohol interventions: Impact on discrepancy, motivation, and drinking. *Psychology of Addictive Behaviors, 24*, 628-639.

To cite this paper:

Crisafulli, M. A., Stafford, P. A., Beadnell, B., & Rosengren, D. B. (2013). *Responses to PRIME For Life Among Blacks* (Technical Report 6.1). Lexington, KY: Prevention Research Institute.