

Changes in Behavior, Knowledge, Motivation, and Risk Perception Among Court-Mandated Participants in Prime For Life and Prime Solutions: A Pilot Study

Michele A. Crisafulli¹, Pamela A. Stafford², Blair Beadnell², and David B. Rosengren²

¹University of Maryland, Baltimore County; ²Prevention Research Institute, Lexington, KY

INTRODUCTION

Courts frequently require individuals with impaired driving offenses to receive substance abuse treatment. Evidence supports the use of motivational rather than confrontational interventions with this population.

PURPOSE

There were three aims:

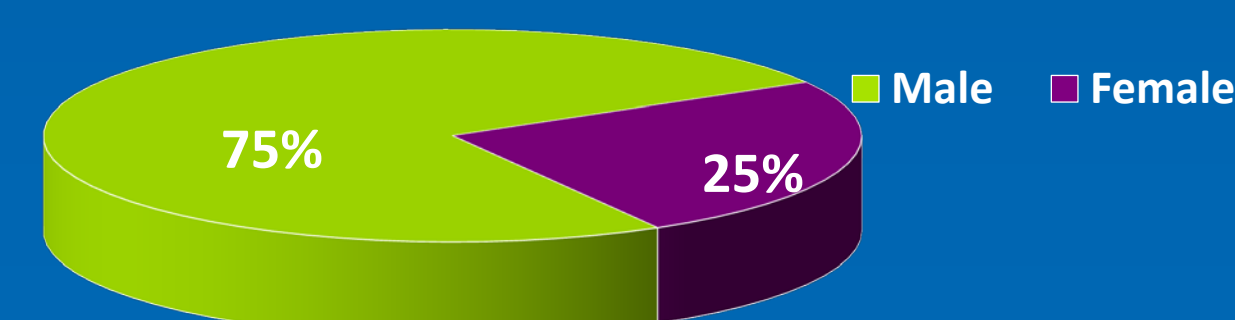
- Pilot test a motivationally-informed, community-delivered intervention approach
- Examine changes on cognitive and behavioral variables related to high-risk substance use
- When intervention effects appeared, determine when in the intervention sequence changes occur

PARTICIPANT CHARACTERISTICS

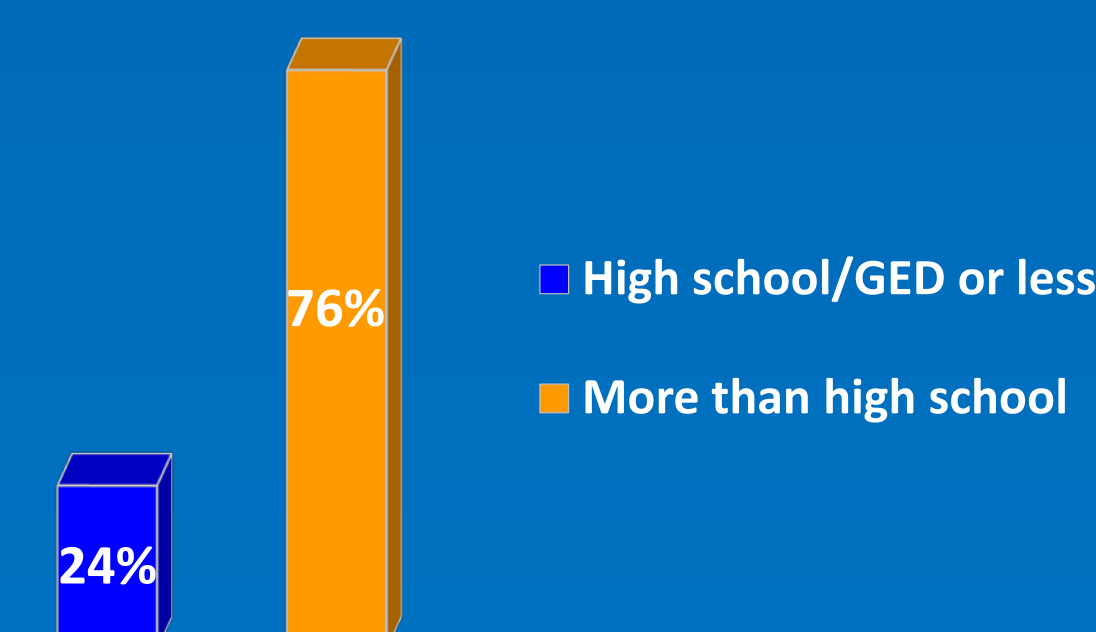
Age

Mean = 35.9 years ; SD = 12.7

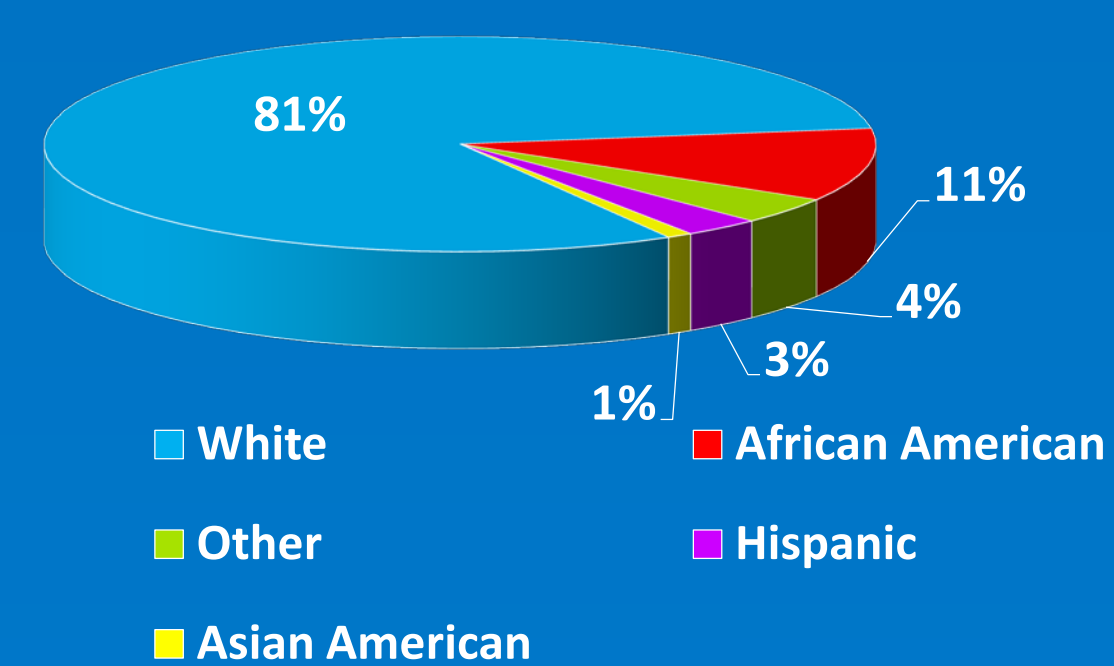
Gender



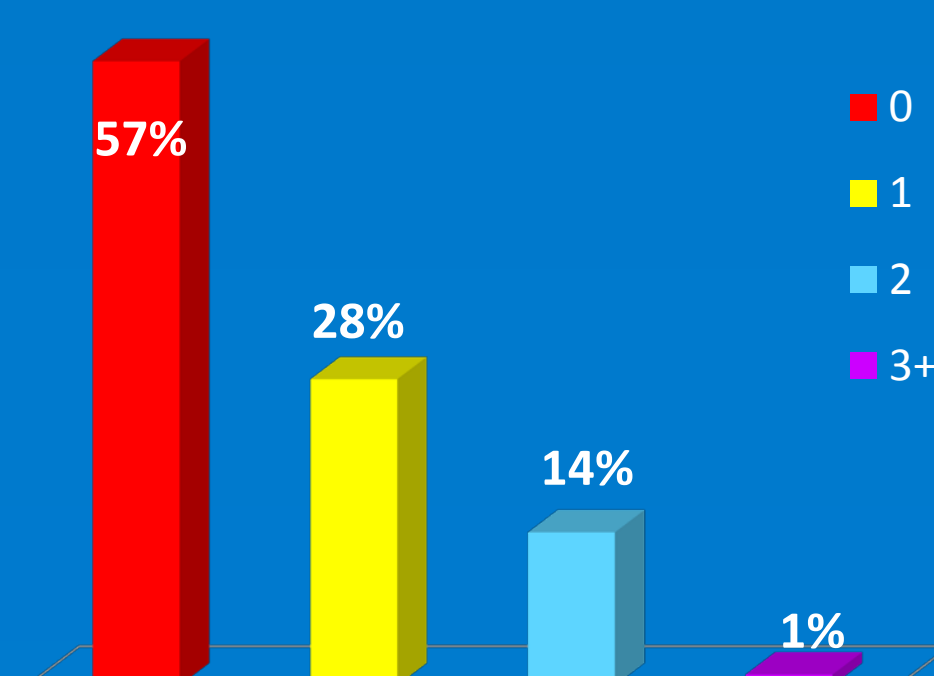
Education Level



Race/Ethnicity



Number of Prior Arrests



INTERVENTION APPROACH

The intervention combined elements of two programs developed by Prevention Research Institute (PRI):

- **Prime For Life® (PFL)**
 - ♦ Evidence-based indicated prevention program
 - ♦ Targets knowledge acquisition and motivation
- **Prime Solutions® (PS)**
 - ♦ Evidence-derived treatment program
 - ♦ Targets skills acquisition and motivation

Participants received:

- Three 3-hour sessions of PFL, delivered over consecutive days, to prepare for PS content
- Several 3-hour sessions of PS, delivered weekly. Number of required PS sessions varied: 90% completed 4 sessions, remainder either 7 or 10
- All sessions delivered in group format

PROCEDURE

Design

- Single-condition, longitudinal design
- Pencil and paper assessments completed at three timepoints: entry into treatment (baseline), after completing PFL (post-PFL), and after completing PS (post-PS)

Participants

- 72 individuals court-ordered to attend substance abuse treatment at a community-based facility in the southeastern US
- Recruited April 2012 to July 2013

Analysis

- Generalized Estimating Equations: first examined baseline to post-PS changes. Where statistically significant ($p \leq .05$), conducted follow-up tests to determine where change occurred (i.e., during PFL and/or PS)
- Examined clinical significance for changes that were statistically significant and/or had a Cohen's d effect size $\geq .35$

FINDINGS

Changes in Substance Use Behavior & Intentions

Statistical Significance

Relative to the 60 days prior, participants reported intentions to reduce future use, as well as lower actual use:

- usual number of drinks consumed per drinking day
- number of drinks consumed during peak drinking
- use of marijuana
- use of any drugs

Clinical Significance

Of those who usually consumed ≥ 4 drinks in the 60 days before the program, 57% adopted low-risk drinking behaviors (≤ 3 drinks) during the program.

- An additional 16% intended to do so following treatment completion.

Of those with peak drinking of ≥ 4 drinks in the 60 days before the program, 31% reduced their peak drinking to low-risk amounts (≤ 3 drinks) during the program.

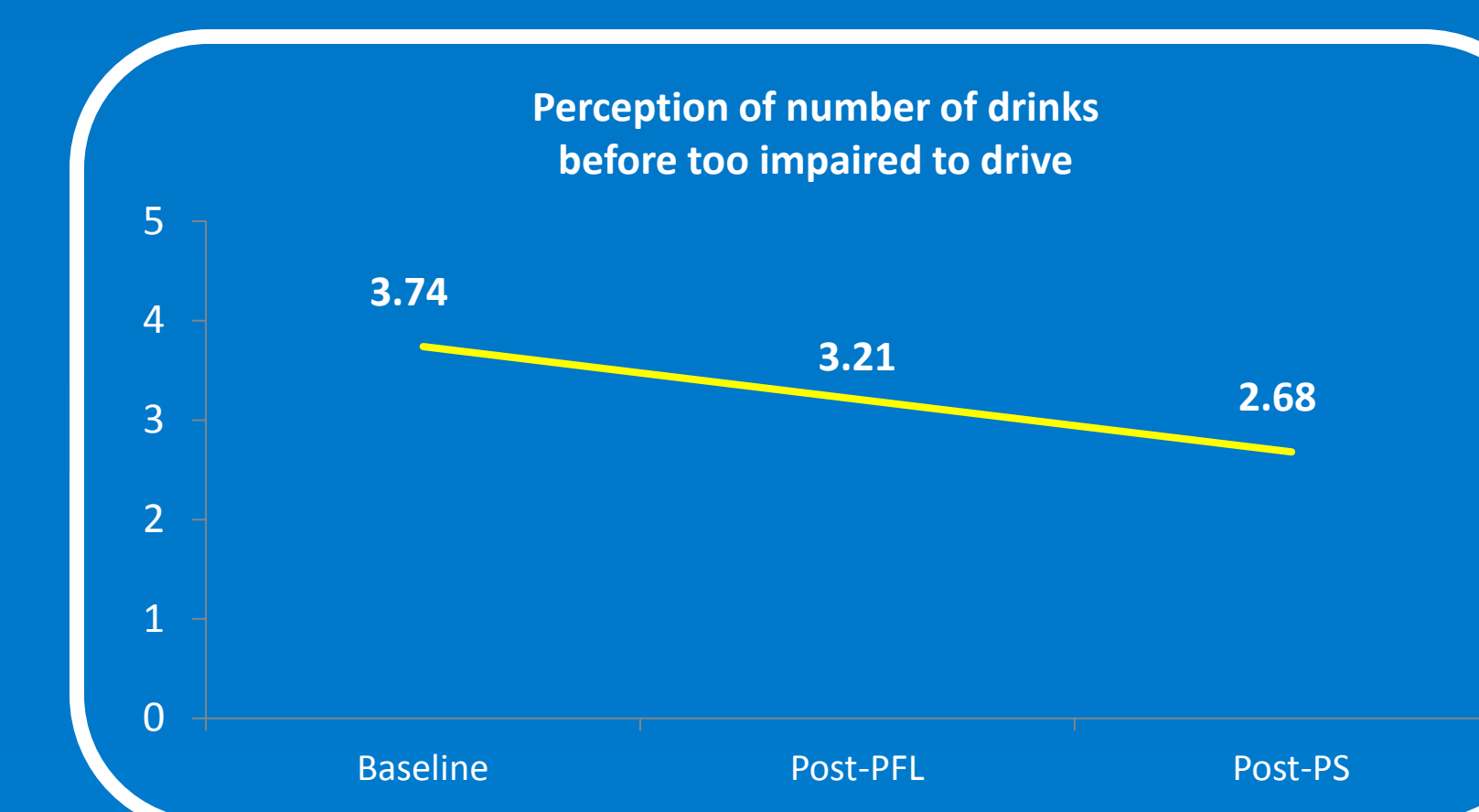
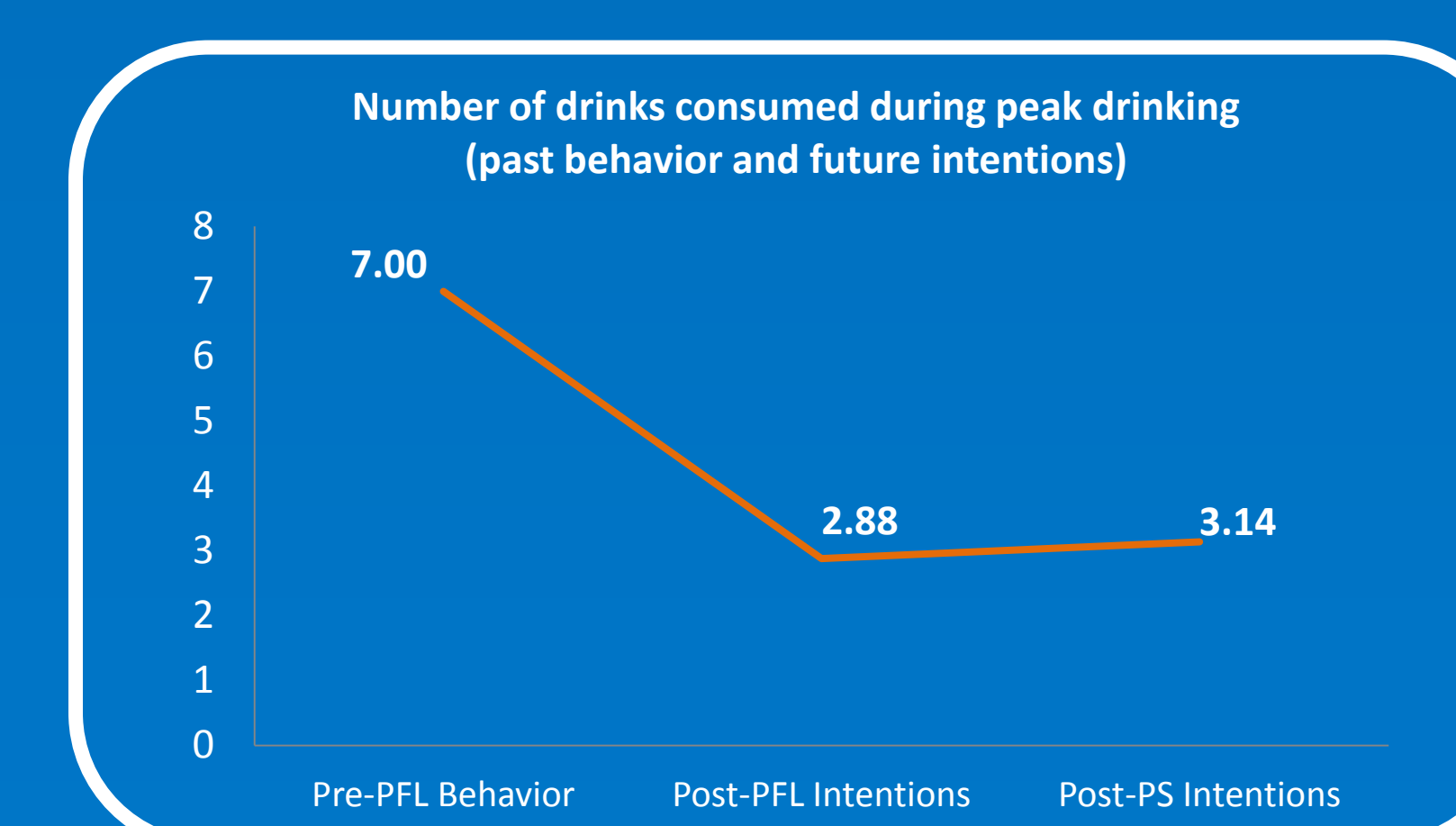
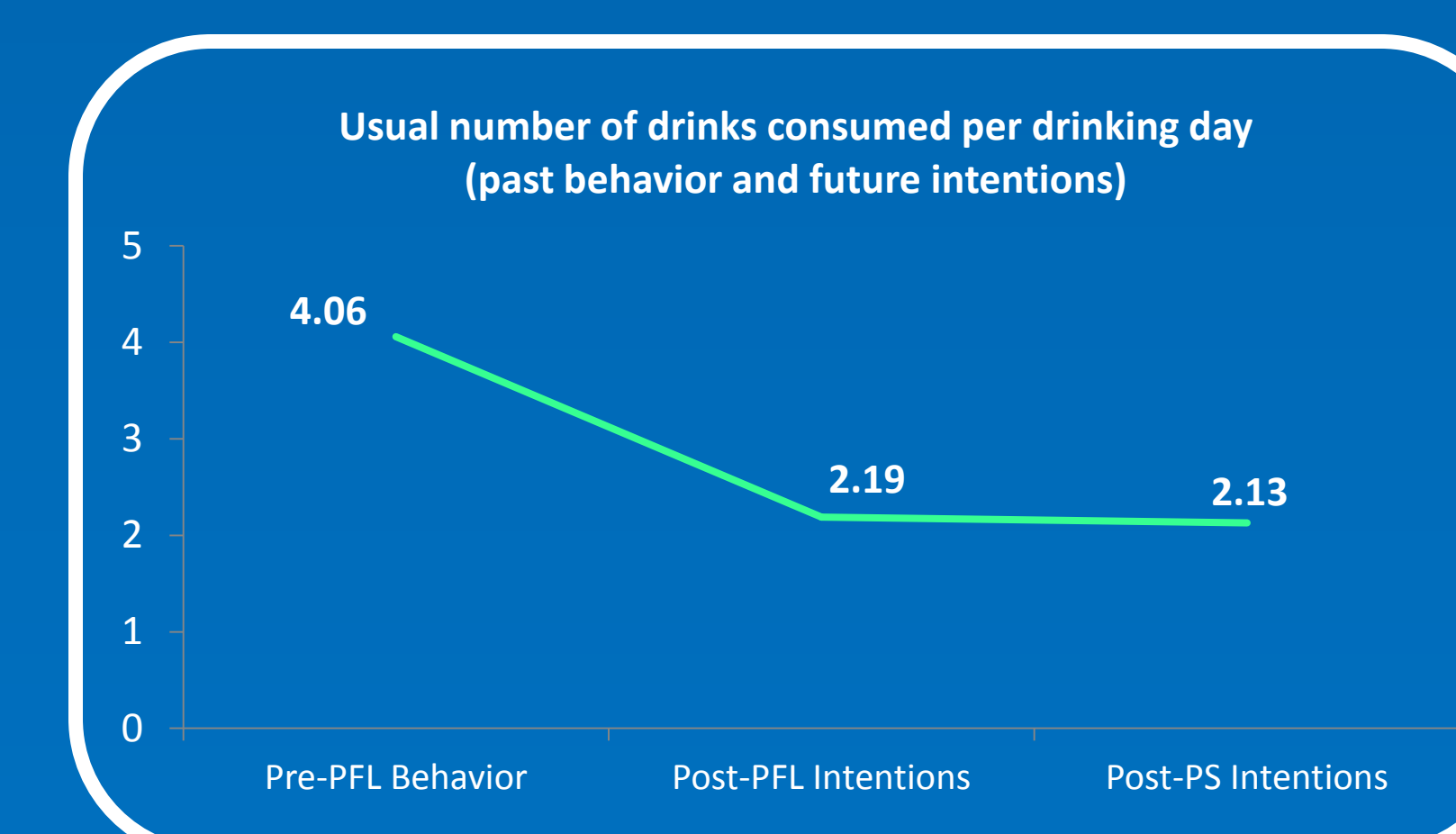
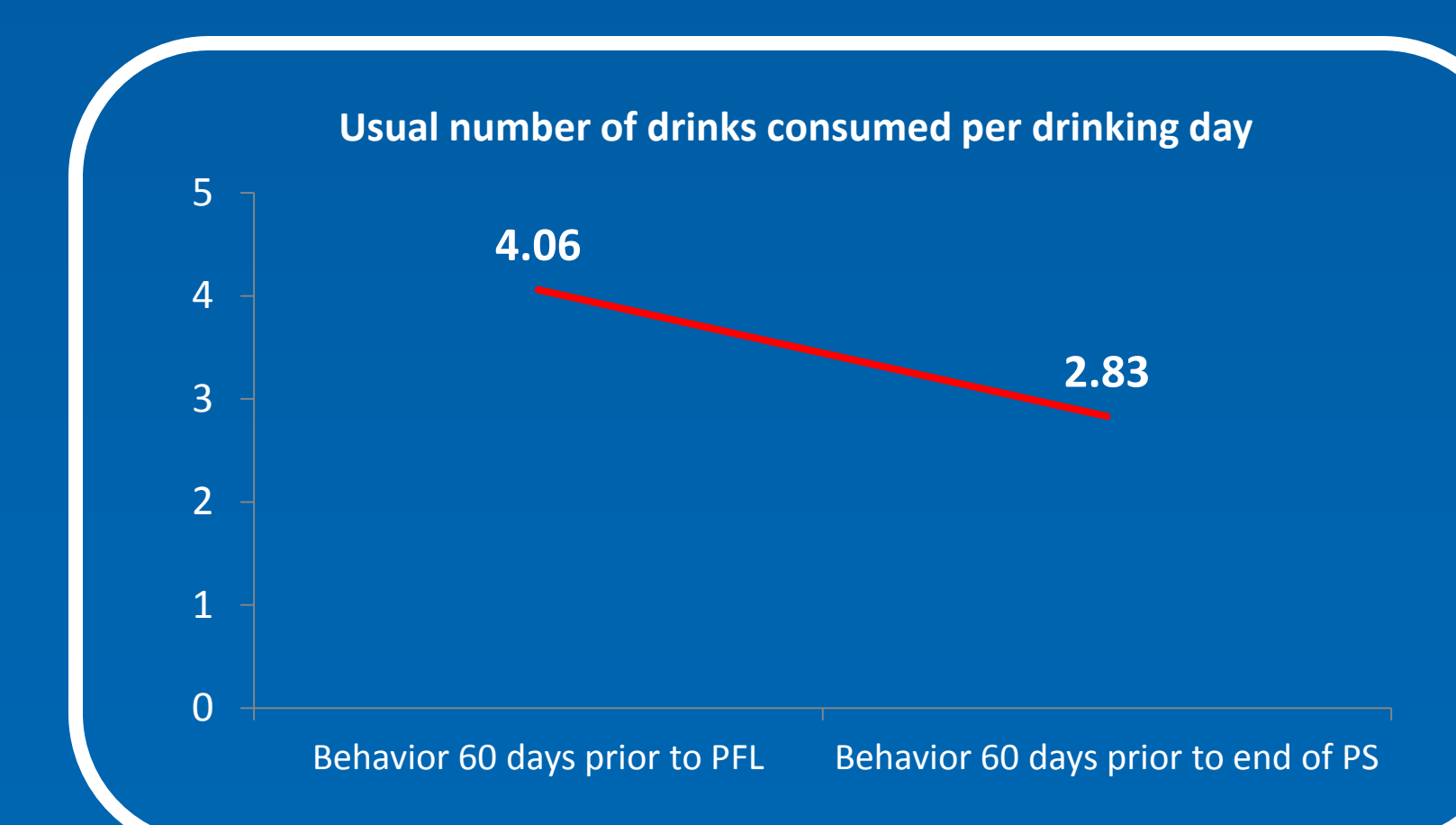
- An additional 26% intended to do so following treatment completion.

Of those who used marijuana in the 60 days before the program, 40% became abstainers during the program.

- An additional 30% intended to abstain following treatment completion.

Of those who used any drugs in the 60 days before the program, 44% became abstainers during the program.

Representative Graphs



Changes in Cognitive Outcomes

Statistical Significance

Improvements during PFL that were maintained during PS:

- Understanding tolerance
- Knowledge of what constitutes a standard drink
- Perception of quantity of alcohol that creates risk

Motivation to drink in a low-risk manner was unchanged during PFL, then improved during PS.

Perception of amount of alcohol that places one at risk for impaired driving improved during PFL, with additional improvement occurring during PS.

Improvement during PS (may or may not have also improved during PFL – outcomes not measured at baseline):

- Recognition of alcohol or drug problem
- Perceived social support for reducing substance use

Clinical Significance

73% of those who started the program with low motivation to drink in a low-risk manner increased their motivation to do so.

63% of those who misperceived the risks of high tolerance at baseline improved their understanding during participation.

SUMMARY AND IMPLICATIONS

- An intervention package combining Prime For Life and Prime Solutions showed promise, with a clinically meaningful proportion of participants making positive changes.
- Prime For Life led to positive changes in expected areas – knowledge, attitudes, and motivation.
- Prime Solutions sustained those changes and led to additional improvements in motivation, risk perception, perceived social support, and problem recognition.
- Participants reduced drinking and drug use during these programs and intended to continue reducing their substance use.
- Future evaluations should examine Prime Solutions effects with all types of drug users and as a stand-alone intervention.