

How accurate is client self-report about baseline substance use?

The timing of questions and intervention conditions appear to matter

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INTRODUCTION

Self-reports of information about substance use continues to be extensively used in the alcohol and drug addiction field. While alternative means of assessing substance use and associated problems exist, many clinical, program evaluation, and research settings may not be able to use these. Such techniques, such as the collection of significant others' reports or testing biological samples (e.g., urine testing and hair analysis), require additional costs, expertise, participant cooperation, and procedures that often are not feasible.

Intervention methods have been developed that are likely to increase subject willingness to discuss problematic behavior. Treatment approaches such as motivational interviewing (MI), acceptance and commitment therapy (ACT) and community reinforcement approach and family therapy (CRAFT) share some common factors, including avoidance of highly confrontational approaches that engage client resistance. Motivational interviewing in particular has pressed the addictions field to observe that an apparent cardinal feature of addiction (i.e., denial about the impact of substance use on the individual's life) may be a function of practitioner behavior. Researchers have shown that higher levels of resistance predict worse outcomes and that practitioner behavior influences level of resistance. Some indicated prevention programs, such as PRIME For Life (PFL), have also capitalized on these findings.

STUDY GOALS

What has not been evident in the literature to date is whether exposure to an intervention condition with these factors may improve the accuracy of reporting about baseline use. Towards that end, this paper attempts to answer two questions about a non-confrontational, indicated prevention program:

- does it lead to greater reporting of substance use at baseline; and
- if so, does the nature of the program matters?

DESIGN

We conducted two studies to answer these questions. Both had pretest and post-intervention assessments. Participation in assessments was voluntary. Participants were convicted of impaired driving or other alcohol- or drug-related offenses

Study One Design

- Within-group design, all participants receiving PFL
- n = 8512 participants from seven states (2006 to 2008)

Study Two Design

- Nonrandomized matched comparison group design,
- N = 339 participants; n = 269 receiving PFL and n = 70 receiving Intervention as Usual in North Carolina (2007 to 2009)

PROCEDURES

Participants completed assessment prior to the intervention program and at the end of the intervention program. Post-test questions again queried the participant about alcohol and other drug use in the 30 days prior to attending the program.

MEASURES

The pencil and paper pre- and post-intervention measures addressed broad program evaluation questions (e.g., participant beliefs, behavioral intentions, perceived risks associated with engaging in certain high-risk behaviors). Analyses here used questions about drinking during the 30 days prior to the intervention programs and perception of problems associated with this use. Participants indicated the typical number and most drinks they had consumed in a day during the 30 days prior to their participation in PFL. The pre-intervention item asked, "In the past 30 days, the *most* drinks I had in a day was...", while the post-intervention item prompt was, "In the 30 days *before this program*, the *most* drinks I had in a day was..." The post-intervention assessment repeated these queries to examine whether experiencing the intervention affected the answers. The post-intervention assessment also asked about the presence of indicators of potential alcohol dependence within the last year.

SAMPLE DESCRIPTIONS

Study 1:

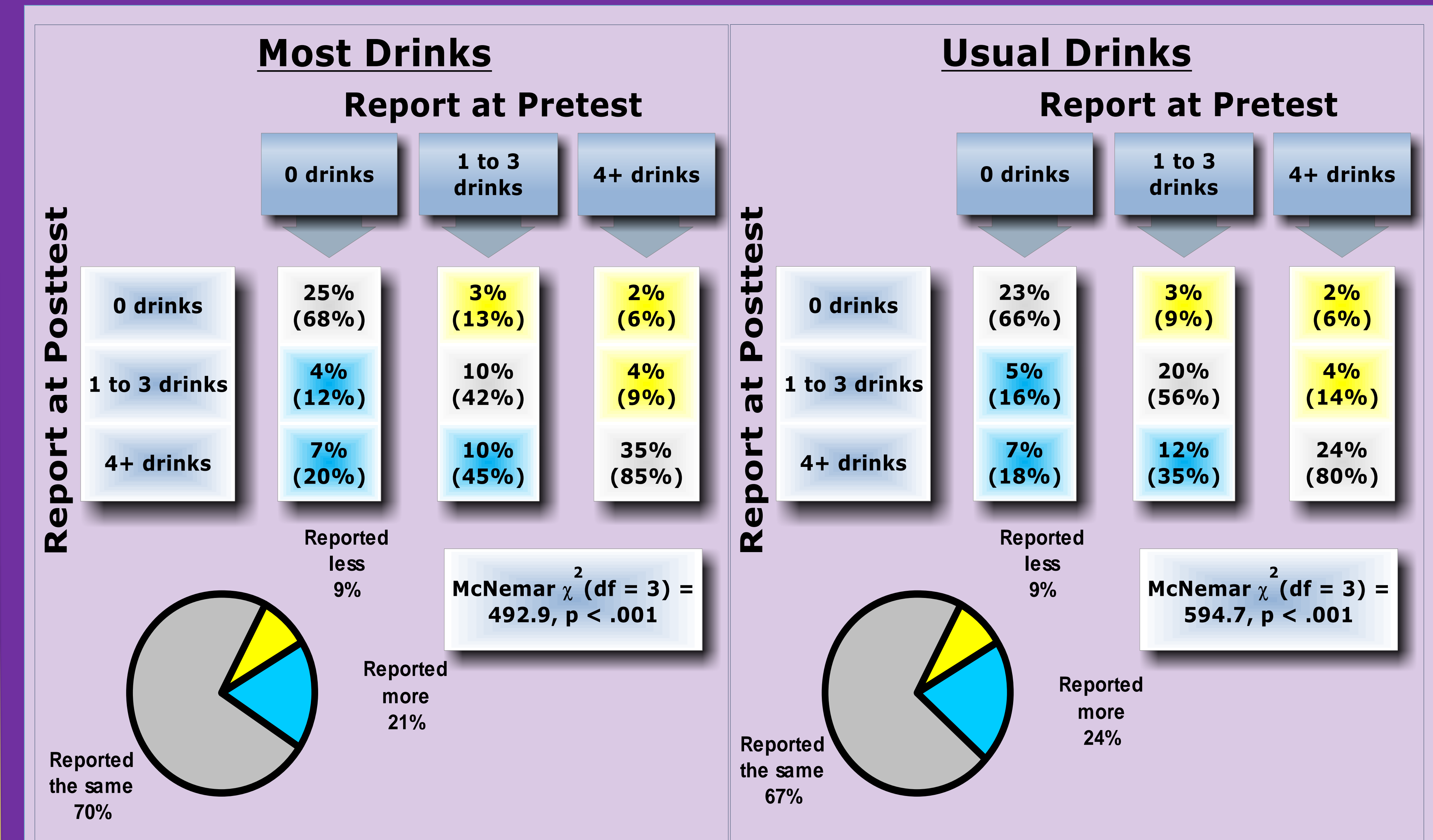
- Mean age =32.5, 75% male
- 86% White, 5% African American, 3% Latino/a, 1% Native American
- 2% < high school, 21% high school, 76% > high school

Study 2:

- Mean age =32.1, 61% male
- 85% White, 6% African American, 2% Asian American 2% Latino/a
- 11% < high school, 35% high school, 54% > high school

RESULTS: STUDY 1:

SAMPLE (AND COLUMN) PERCENTS: CHANGES IN REPORTS OF DRINKING FOR THE 30 DAYS BEFORE BASELINE



RESULTS: STUDY 2

PFL participants showed similar and statistically significant patterns as above for both *most* and *usual* number of drinks. They also reported more substance use symptoms: $M = 2.1 (SD=1.8)$ vs. $1.5 (SD=1.4)$; $t (df=316) = 2.63, p < .01$.

In contrast, pre- to posttest change for IAU participants was non-significant for *most* drinks. However, a statistical trend ($p = .08$) was observed for *usual* number of drinks, with a similar but less pronounced pattern as for the PFL participants.

SUMMARY

Study 1: While many PFL participants did not change their drinking reports, some acknowledged more at the posttest, including approximately 1/3 or more of those who had reported 0 or 1-3 drinks. A greater percentage reported more drinking than reported less than they had at pretest.

Study 2: PFL participants showed greater willingness to report substance use related problems at posttest. The same drinking reporting patterns as in Study 1 occurred for PFL. In terms of statistical significance, this was not true for IAU participants. However, there are indications that this pattern may occur, for them but less strongly, for *usual* number of drinks.

IMPLICATIONS

A motivation-based intervention can lead to increased, and probably more accurate, self-reports of drinking behaviors for a smaller but present group of individuals who otherwise under-report. This does not seem to occur for interventions less specifically focused on reducing resistance when reporting on the *maximum* number of drinks in a day. Future research is needed to clarify whether motivational interventions have added value in terms of reports of *usual* number of drinks.

WHAT ELSE?