

# ***Environmental Prevention Strategies to Reduce College Student Drinking Problems***

**An Update**

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# Recommendations – Tier 2

- Increased enforcement of minimum drinking age laws
- Implementation, increased publicity, and enforcement of other laws to reduce alcohol-impaired driving
- Restrictions on alcohol retail outlet density
- Increased price and excise taxes on alcoholic beverages
- Responsible beverage service policies in social and commercial settings

# **Environmental Policies to Reduce College Drinking: An Update of Research Findings**

**Toomey, Lenk, & Wagenaar (2007)**  
*Journal of Studies on  
Alcohol and Drugs*

# Correlational Studies

- **Outlet density near campuses associated with alcohol consumption and problems**
  - Weitzman et al, 2003a; Williams, et.al, 2004; Wechsler et. al, 2002
- **Price, promotion, taxes related to consumption**
  - Weitzman, et al, 2003b; Williams, et.al., 2004; Kuo, et.al. 2003
- **Reduced access to alcohol**
  - Dry Campus tied to lower use (maybe not in high density environments) Wechsler, et. al, 2001a; Williams, et.al, 2004, 2005
  - Alcohol-Free Residences vs. Substance-Free Residences Williams, et.al., 2004; Wechsler, et.al, 2001a&b
  - Having more local and state alcohol policies is related to lower high-risk drinking (Nelson, et.al, 2005a)

# Opportunistic Studies

## ■ **Controlled Access**

- Keg ban increased consumption (Kilmer, et.al, 1999)
- Alcohol-free residences and Greek housing lowers prevalence, but not high-risk drinking (Odo, et.al, 1999)
- Stadium ban lowers problems (Borman & Stone, 2001)

## ■ **Social norms campaigns**

- Reduced consumption: Glider, et.al, 2001; Mattern and Neighbors, 2004; Smith et.al, 2006 but not always Clapp, et.al, 2003

## ■ **Multi-component Interventions**

- Homecoming Game (Johannessen, et.al, 2001)
- Massachusetts State campuses (Knight, et.al, 2003)
- Albany Campus-Community Intervention (Gebhardt, et.al, 2000)

# Rapid Response Initiative

## ■ Residence Hall Interventions

- University of Michigan Residential Learning Communities – McCabe/Lange >
- Fordham Resident Alcohol Prevention Program – Fisher/Saltz

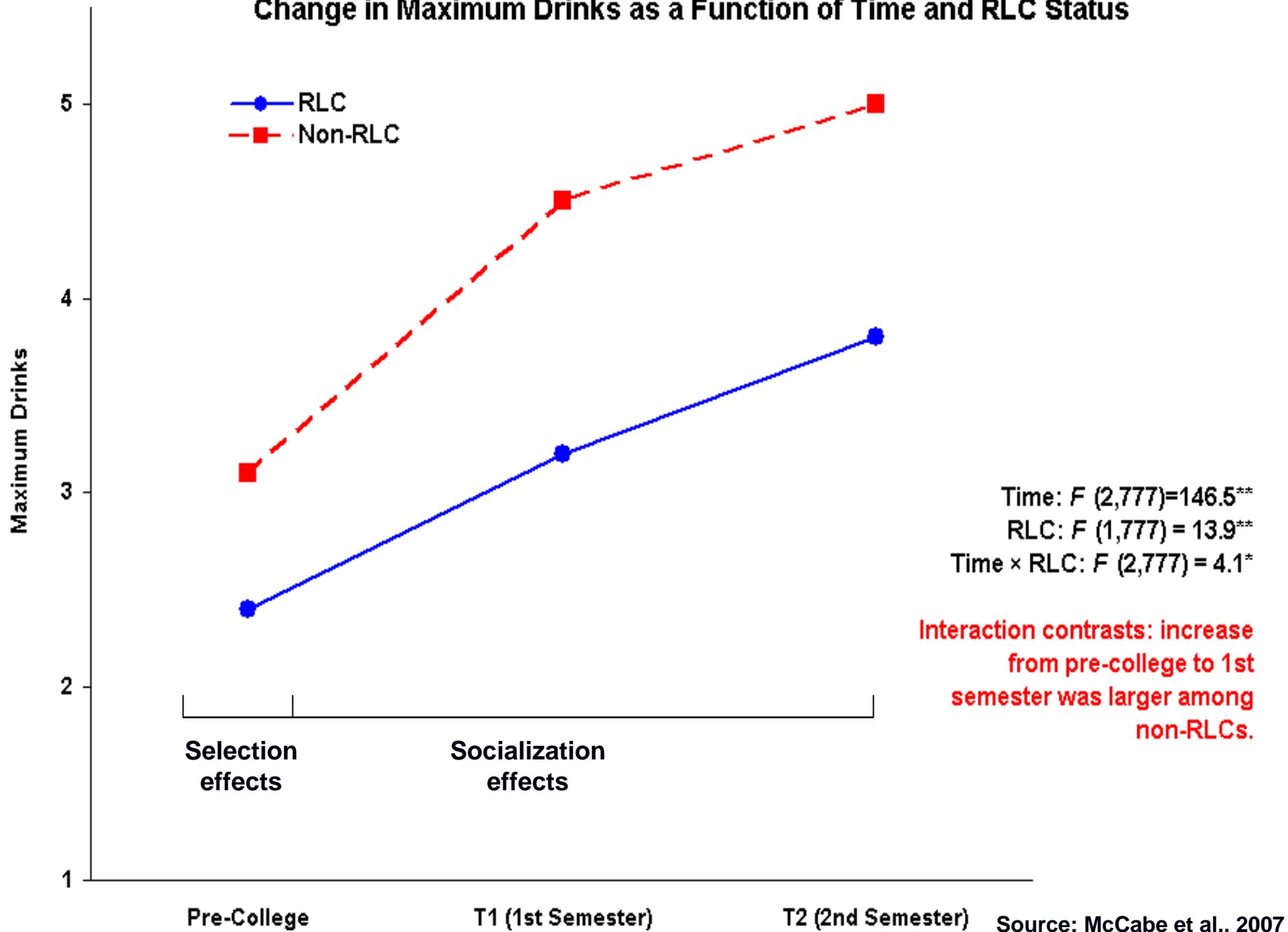
## ■ Social Norms Campaigns

- Ohio State University - Buettner/Rhodes
- Minnesota State University Mankato - Connolly/Lange

## ■ Campus-Community Interventions

- University of Rhode Island “Common Ground” – Cohen/Wood
- Western Washington University NEST Program - Welker/Saltz >

## Change in Maximum Drinks as a Function of Time and RLC Status



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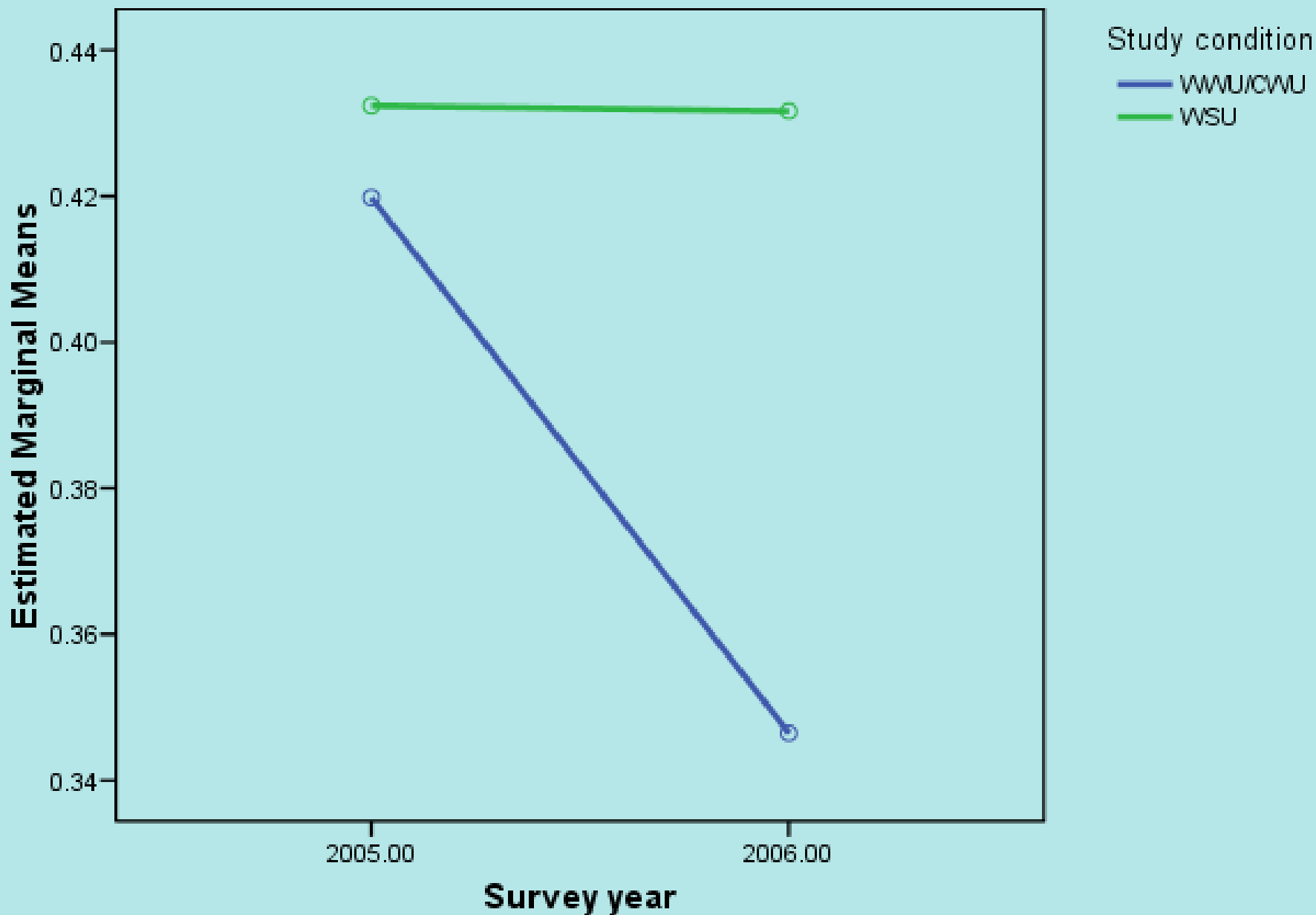
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# Estimated Marginal Means of Any binge drinking in the past 2 weeks



# Controlled Interventions

- **San Diego DUI Intervention**
  - Clapp, et.al., 2005
- **A Matter of Degree**
  - Weitzman, et.al., 2004
- **Social Norms Marketing**
  - DeJong, et.al., 2006 >
- **Safer California Universities**
  - Saltz, et.al., under review

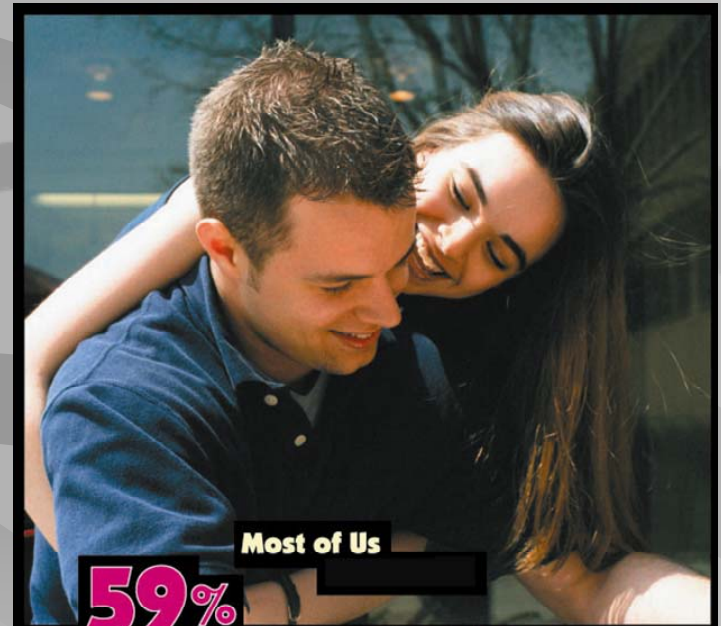
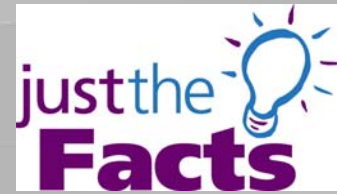
67% of STUDENTS



HAVE 4 OR FEWER DRINKS WHEN THEY PARTY

For more information:  
Student Wellness Office 494-WELL

1 DRINK = 12 OZ. BEER = 4OZ. WINE = 1OZ. LIQUOR



Most of Us

59%

of students have

0 to 4 drinks when they party

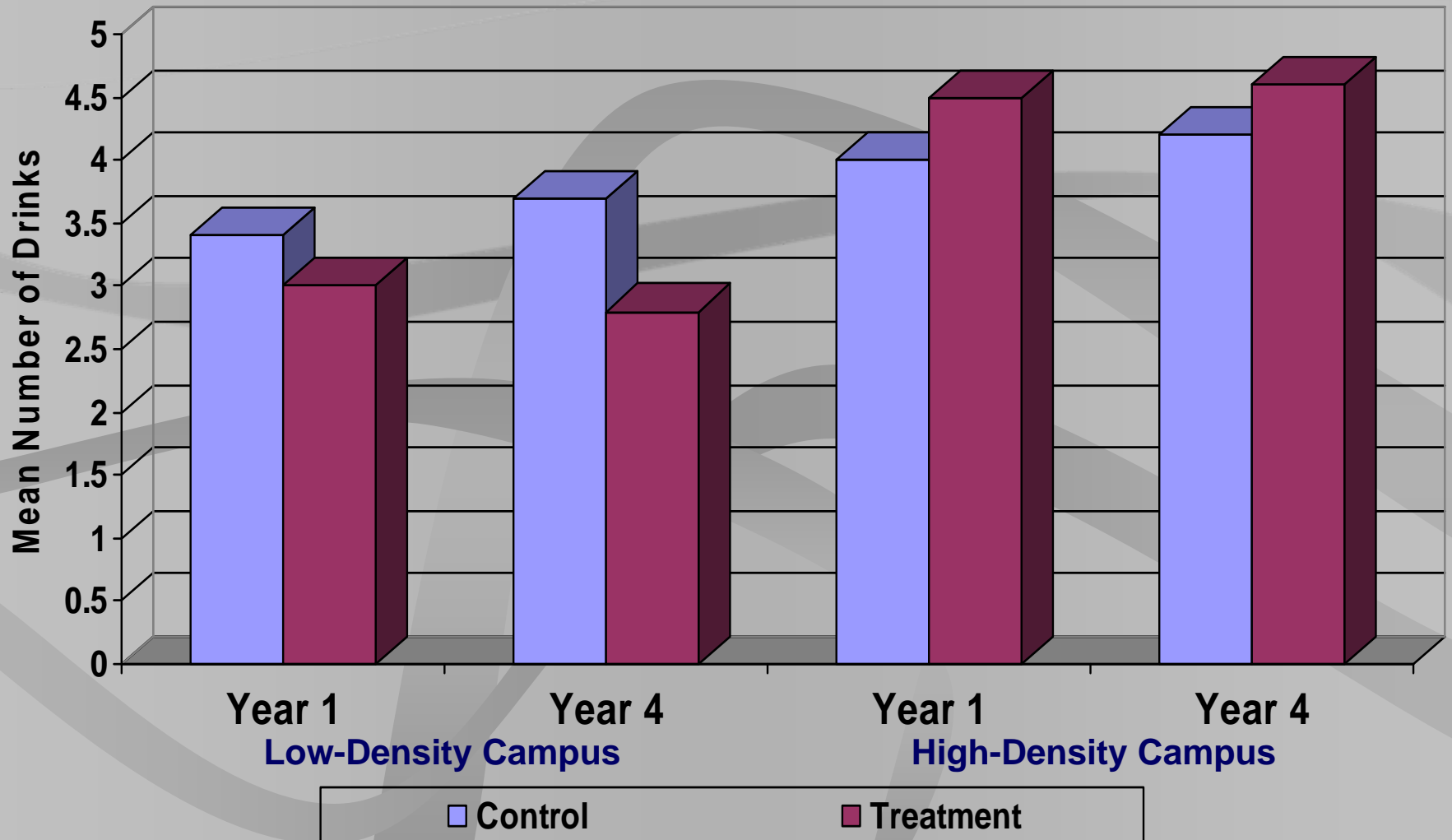


Sample Campaign Materials

Outcome Variable	Treatment Group		Control Group	
	2000 <i>n</i> =1,515 M (SD)	2003 <i>n</i> =1,536 M (SD)	2000 <i>n</i> =1,406 M (SD)	2003 <i>n</i> =1,365 M (SD)
Greatest number of drinks on one occasion in past two weeks	<b>3.57</b> (4.57)	<b>3.95</b> (4.86)	<b>3.44</b> (4.39)	<b>4.30</b> (5.17)
BAC for greatest number of drinks on one occasion in past two weeks	<b>.0830</b> (.0979)	<b>.0859</b> (.1023)	<b>.0804</b> (.0911)	<b>.0945</b> (.1072) ▲
Drinks when students party	<b>3.30</b> (3.34)	<b>3.57</b> (3.48)	<b>3.20</b> (3.26)	<b>3.85</b> (3.70)
Drinks per week	<b>4.67</b> (7.92)	<b>4.62</b> (8.00)	<b>4.61</b> (7.93)	<b>5.24</b> (8.43)

<b>Outcome Variable</b>	<b>Treatment Group</b>		<b>Control Group</b>	
	<b>2001</b> <i>n=1,117</i> M (SD)	<b>2004</b> <i>n=979</i> M (SD)	<b>2001</b> <i>n=1,199</i> M (SD)	<b>2004</b> <i>n=1,063</i> M (SD)
<b>Greatest number of drinks on one occasion in past two weeks</b>	<b>4.87</b> (5.00)	<b>5.12</b> (5.84)	<b>4.70</b> (4.91)	<b>4.78</b> (5.23)
<b>BAC for greatest number of drinks on one occasion in past two weeks</b>	<b>.1364</b> (.1003)	<b>.1420</b> (.1107)	<b>.1337</b> (.0970)	<b>.1296</b> (.0990)
<b>Drinks when students party</b>	<b>4.33</b> (3.63)	<b>4.35</b> (4.00)	<b>4.16</b> (3.55)	<b>4.37</b> (3.85)
<b>Drinks per week</b>	<b>6.07</b> (8.50)	<b>6.59</b> (10.37)	<b>6.24</b> (8.85)	<b>6.20</b> (9.16)

# *Mean Number of Drinks When Partying by Experimental Group & Alcohol Outlet Density*



# **Safer California Universities Project Goal**

**To evaluate the efficacy of a  
“Risk Management” approach to  
alcohol problem prevention**

**NIAAA grant #R01 AA12516  
with support from CSAP/SAMHSA.**

# Random Assignment

## Intervention Sites

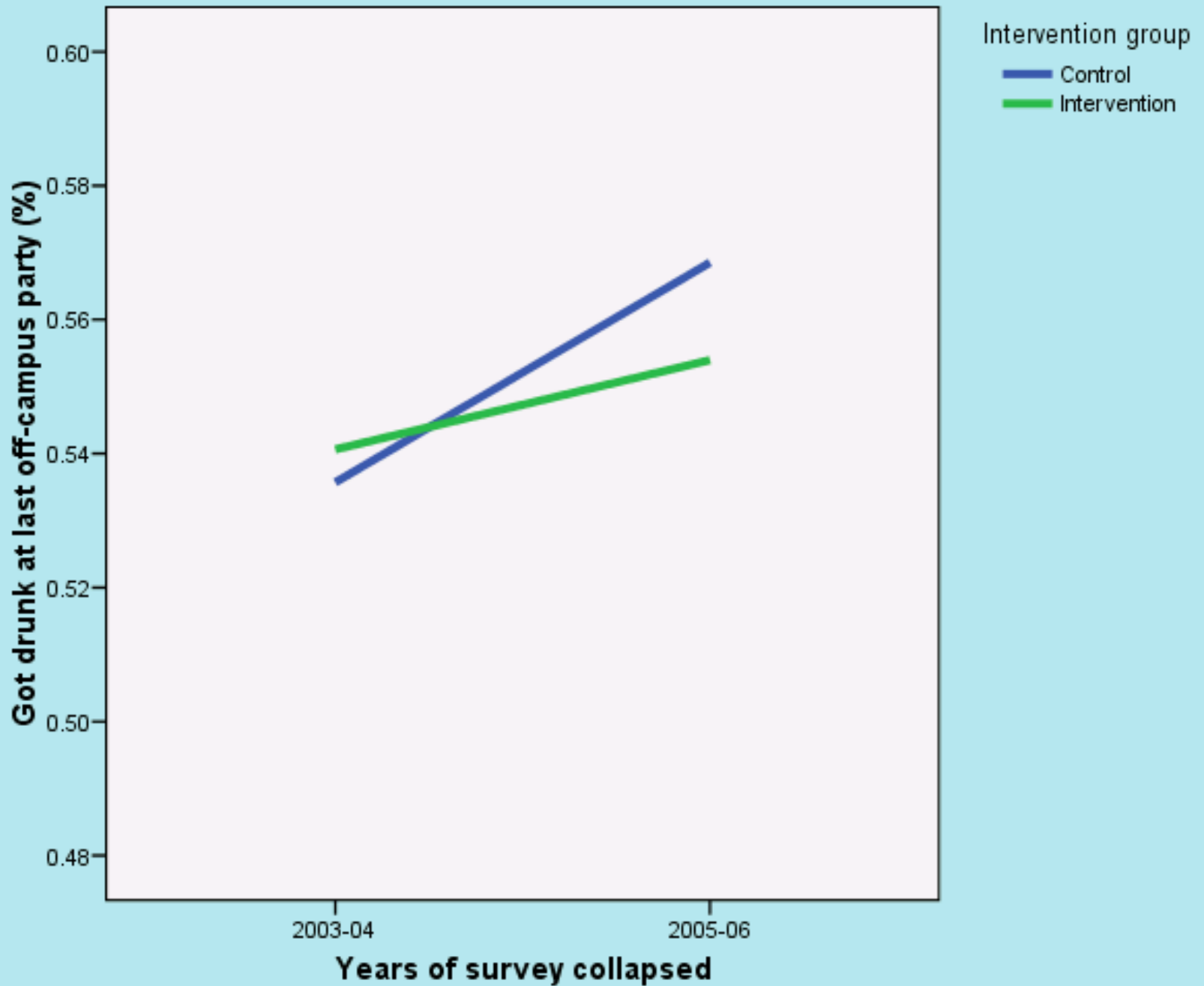
- CSU Chico
- Sacramento State
- CSU Long Beach
- UC Berkeley
- UC Davis
- UC Riverside
- UC Santa Cruz

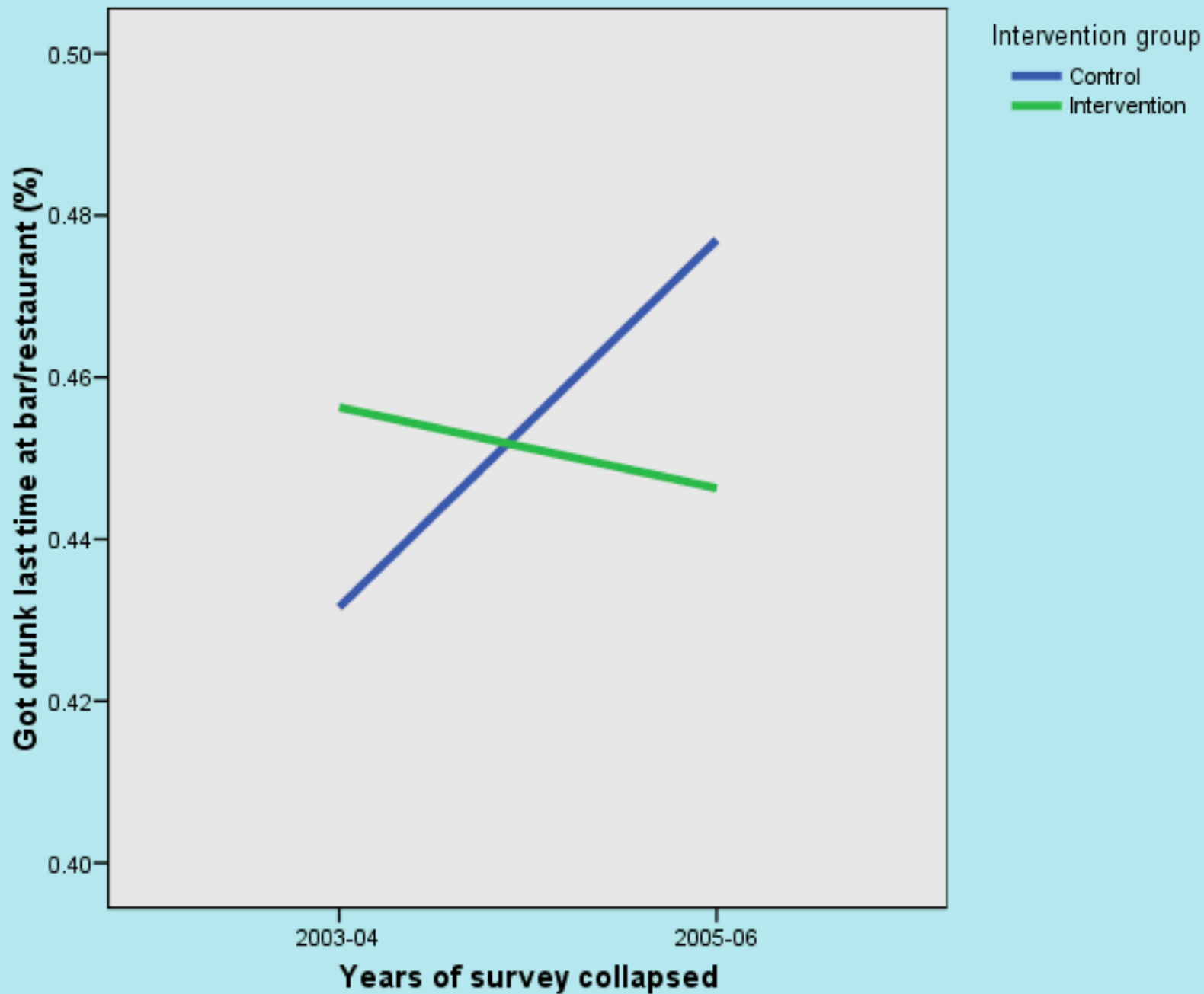
## Comparison Sites

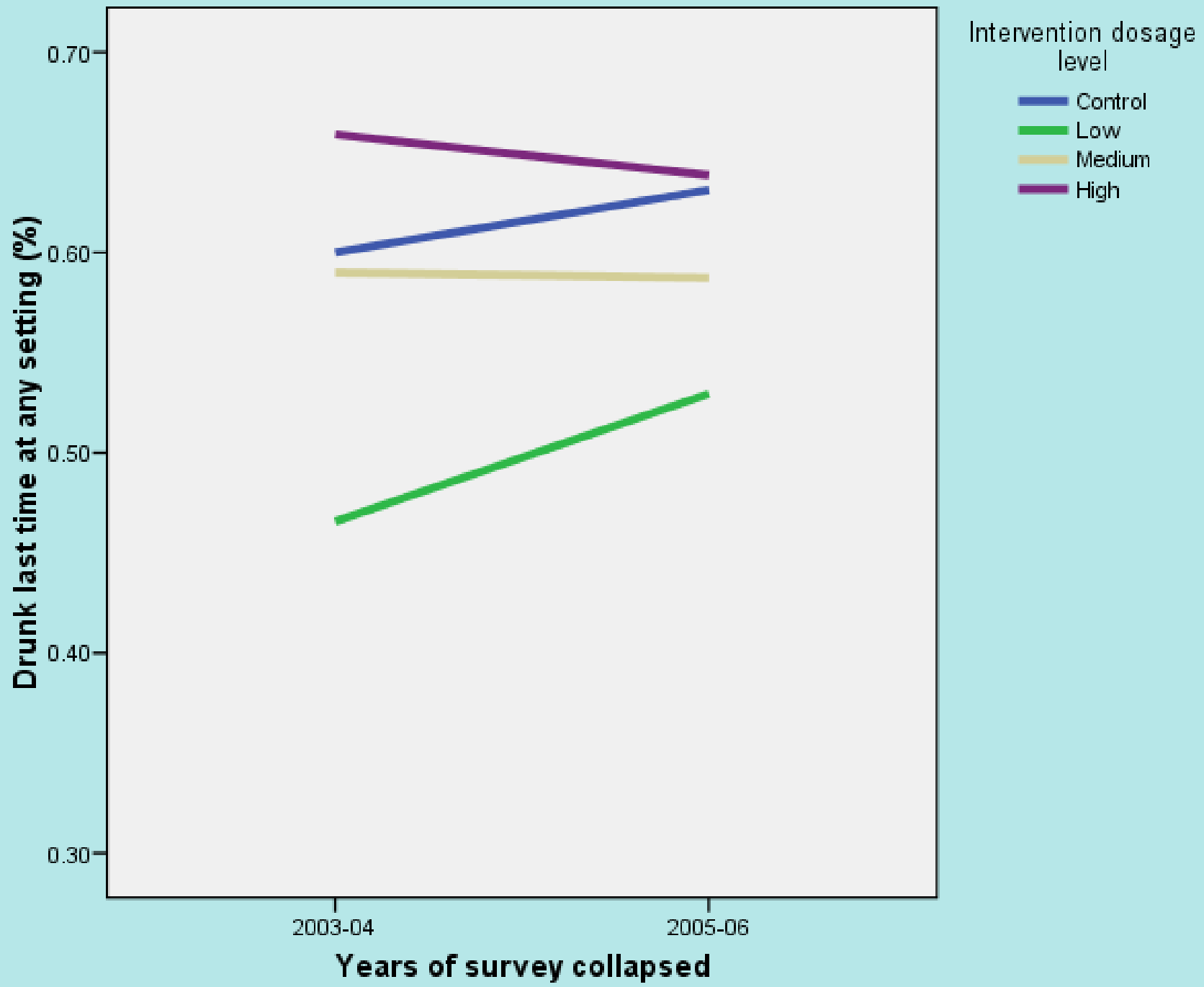
- Cal Poly SLO
- San Jose State
- CSU Fullerton
- UC Irvine
- UC Los Angeles
- UC San Diego
- UC Santa Barbara

# **Integrated Intervention Strategies for Off-Campus Drinking**

- **Compliance Checks**
- **DUI Check Points**
- **Party Patrols**
- **Social Host “Response Cost” Ordinance**
- **Social Host Safe Party Campaign**







# In Sum

- **We are building more evidence in support of Tier 2 interventions for college populations**
- **We are building better capability for achieving population-level change**
- **We are building capability for use of Group-Randomized Controlled Trials for evaluating environmental interventions**

# Future Research

- **Evaluating Full-Spectrum Comprehensive Interventions**
- **Replications**
- **Effectiveness Studies**  
(with emphasis on mediators and moderators)
- **Diffusion Research**
- **Basic Research on Organizational and Community Change**

**Thank You!**