

Assessing Alcohol Use at Sporting Events: A Novel Approach for Allocating a Community-based Alcohol Intervention in Sweden

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Background

- **Heavy alcohol use and violent behaviors at sporting events: of increased concern in Sweden and abroad**
- **The relationship between alcohol use and violence: firmly established**
- **Community-based interventions provide a promising strategy to reduce heavy alcohol use and violence**

(Boles & Miotto, 2003; Holder; 2000; 2010; Hopkins & Treadwell, 2014;
National Council for Crime Prevention, 2008)

Background

- **Interventions developed by STAD: “Responsible Beverage Service” and “Clubs Against Drugs” associated with reductions in substance use, violence and cost-efficiency regarding violence (Cost-saving R = 1:39) in the community**
- **Will an intervention developed by STAD reduce heavy alcohol use at sporting events in Sweden?**
- **First task: To assess the alcohol use at football arenas in Sweden**

(Gripenberg-Abdon 2012; Månsdotter et al., 2007; Trolldal et al., 2013; Wallin, 2004)

Study objective

To assess alcohol use among game spectators at football arenas in Sweden

Method

- **A pre-/posttest study design with two sites: Intervention area (Stockholm) Control area (Gothenburg)**
- **Setting:**
 - **Swedish football games with teams in the Swedish premier league**
 - **Three football arenas: Two in the intervention area, one in the control area**

Method

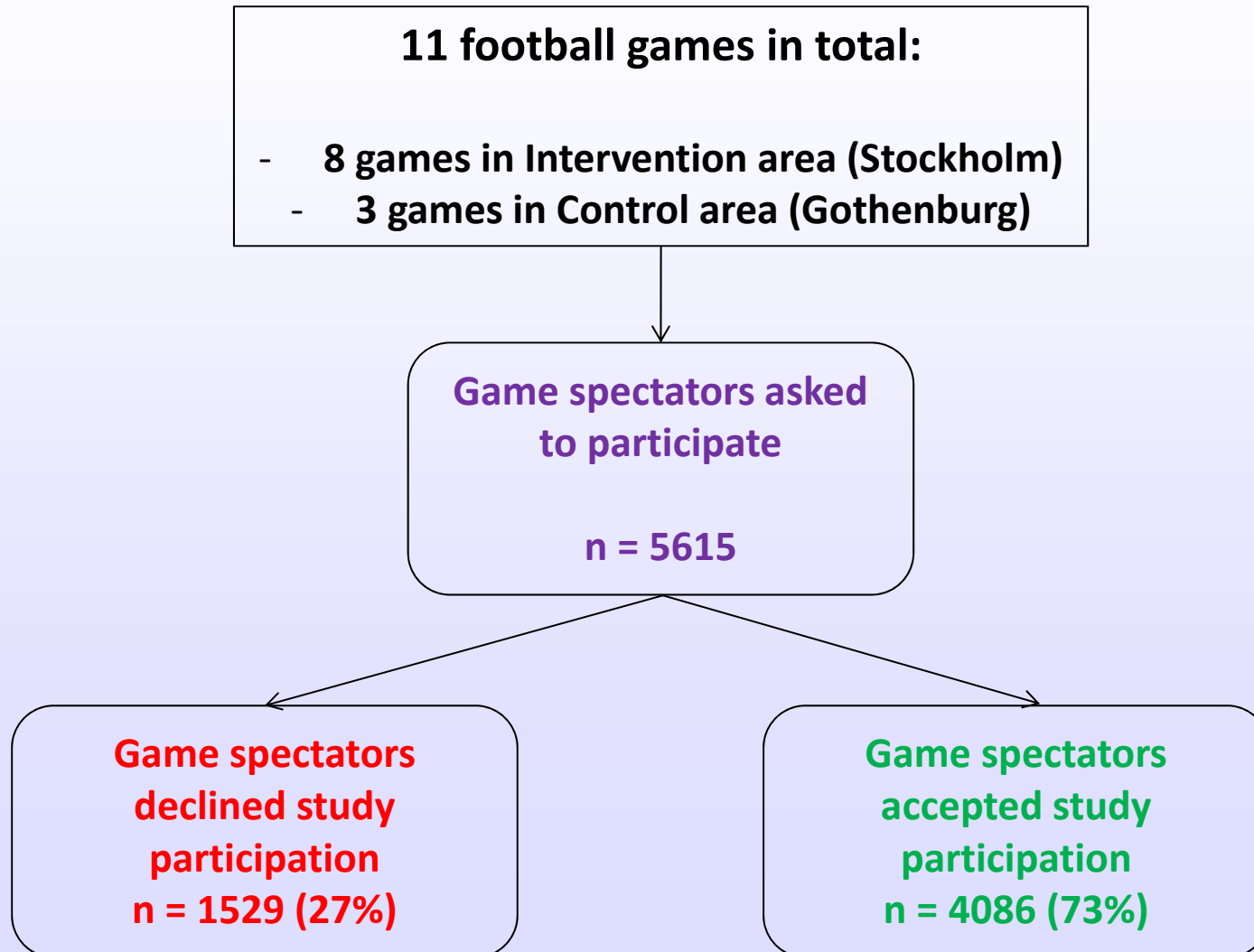
- **Data collection from April to October 2015**
- **18 data collectors divided into 6 teams + 1 project leader with overall responsibility**
- **Teams strategically placed at different sections of the arena:**
 - Home team section
 - Family section
 - Away team section
- **Data collected: 1) Prior to game, 2) During 1st half of the game and 3) During half-time break**

Method

- Systematic sampling of game spectators
- Alcohol use measured using a breath analyzer for Blood Alcohol Concentration (BAC) – levels
- Data on gender, age and recent alcohol use collected through face-to-face interviews
- Statistics:
 - Means, SD, Frequencies, Ranges
 - Independent T-tests, Chi-square-tests



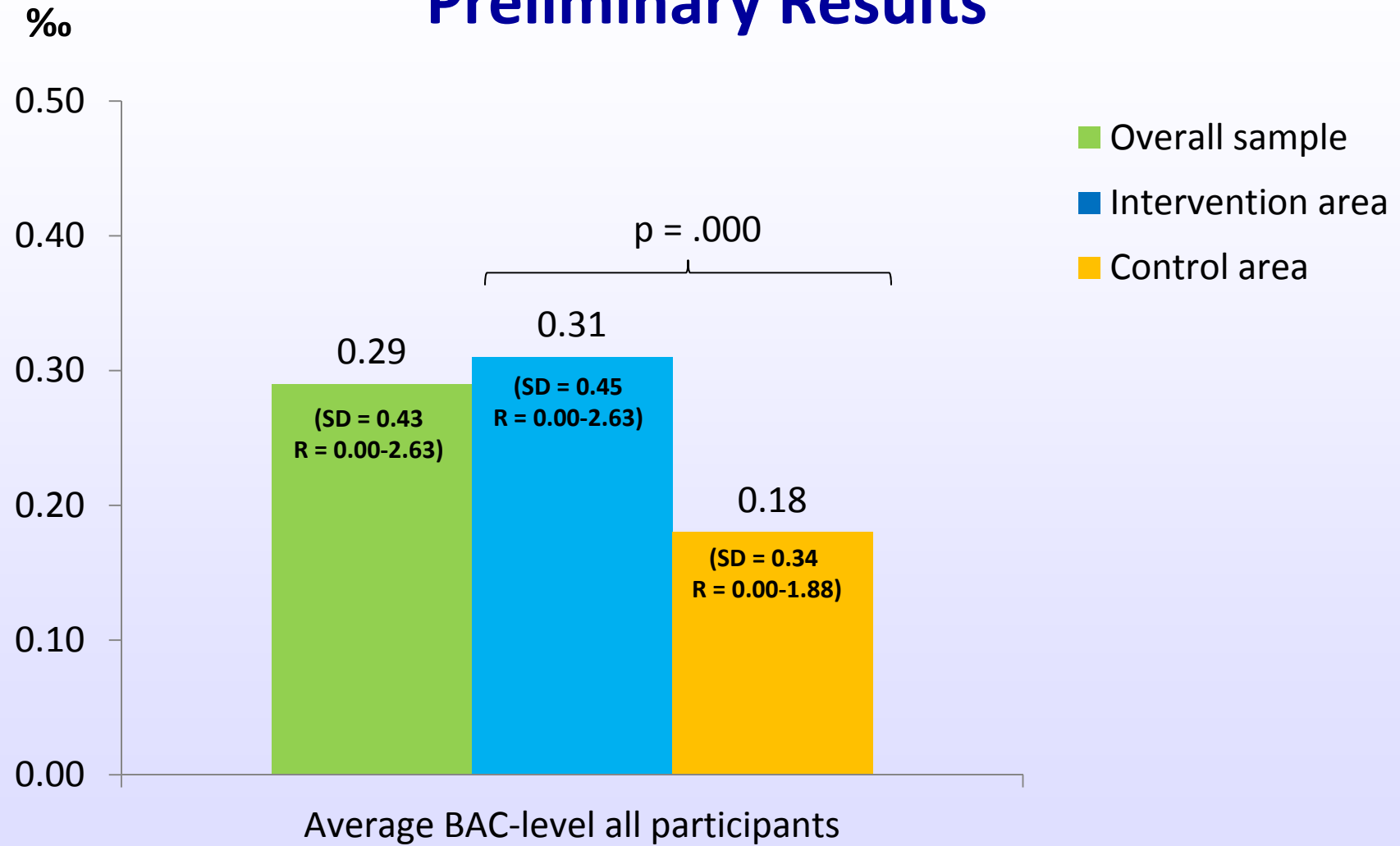
Preliminary Results



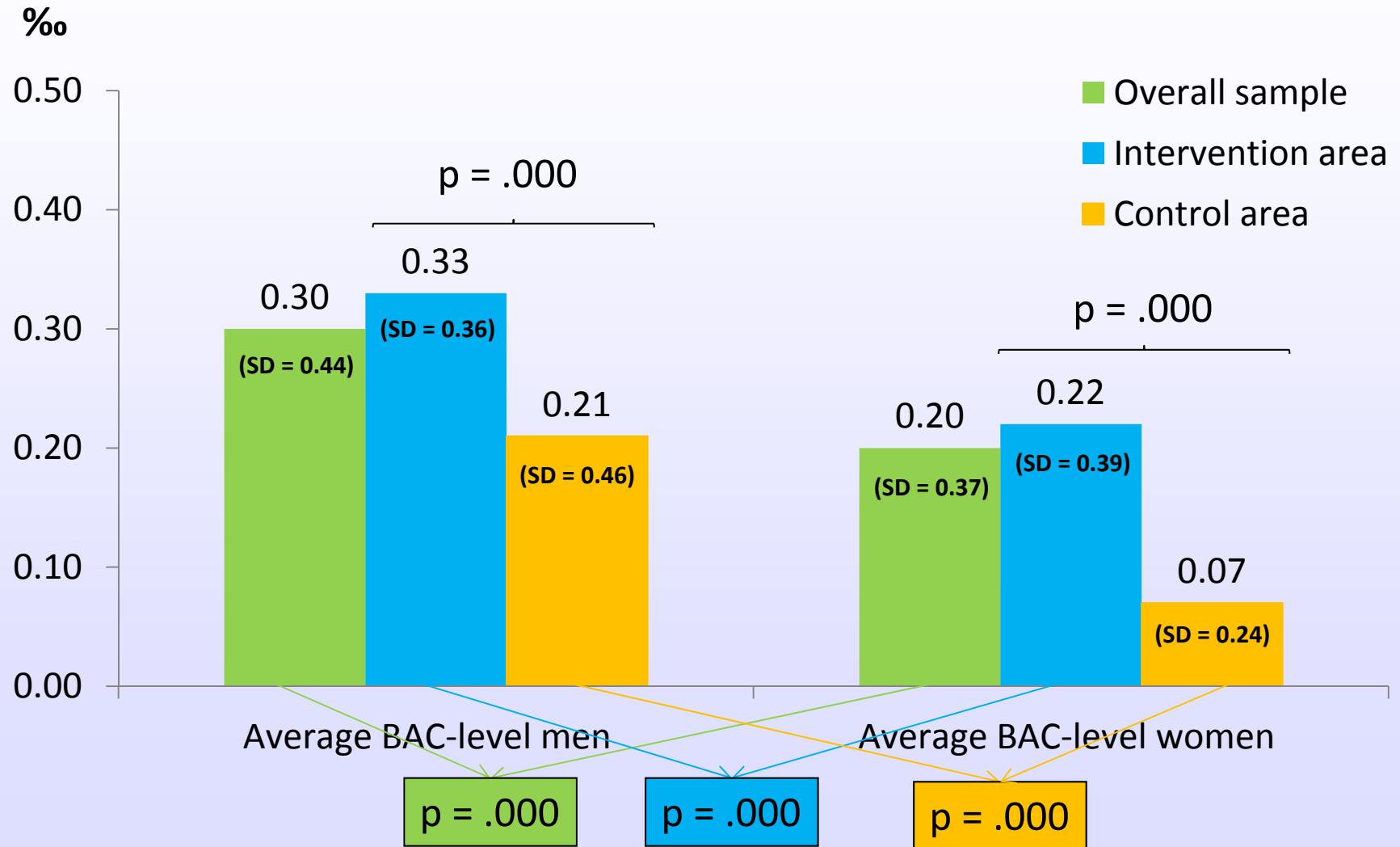
Preliminary Results

	Overall sample	Intervention area	Control area	p (Intervention/ Control)
No. of BAC-level samples	4086	3287	799	.000
No. of men	3380 (83%)	2727 (83%)	653 (82%)	n.s.
Mean age, all participants (yrs.)	37.80 (SD = 13.64, range = 15-94)	37.72 (SD = 13.81, range = 15-94)	38.11 (SD = 12.90, range = 16-87)	n.s.
No. of participants drinking alcohol prior to entering the arena (%)	1936 (47%)	1648 (50%)	288 (36%)	.000
No. of BAC-level samples > 0.00 ‰	1890 (46%)	1625 (49%)	265 (33%)	.000

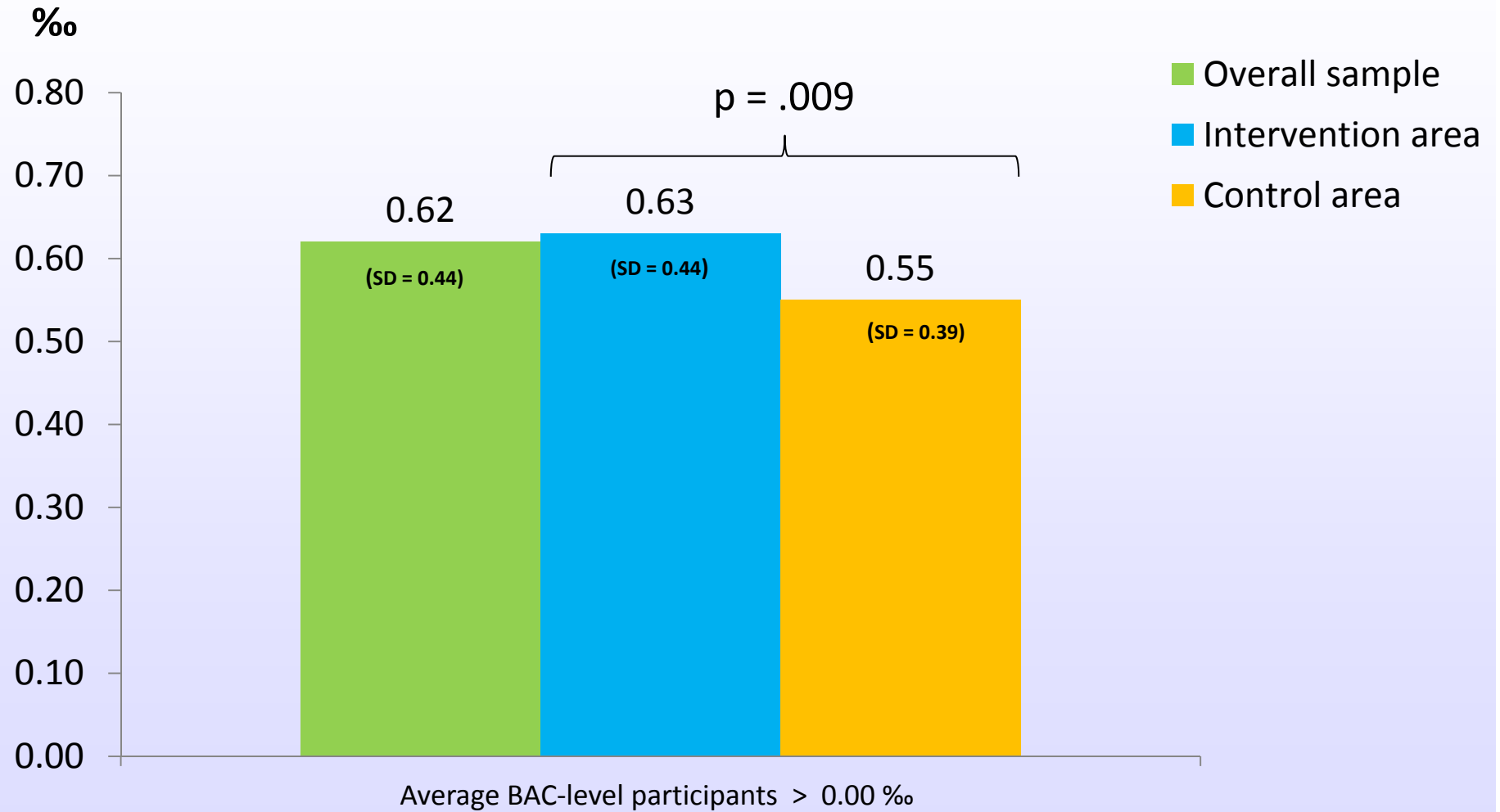
Preliminary Results



Preliminary Results



Preliminary Results



Preliminary Results

	Overall sample Participants > 0.00 ‰	Intervention area Participants > 0.00 ‰	Control area Participants > 0.00 ‰	p (Intervention/ Control)
Average BAC-level at high-risk games, n = 3	0.65 (SD = 0.45) n = 765	0.65 (SD = 0.45) n = 765	n.a.	
Average BAC-level at low-risk games, n = 8	0.59 (SD = 0.43) n = 1125	0.61 (SD = 0.45) n = 860	0.55 (SD = 0.39) n = 265	0.068
p (high risk games/low risk games)	.000	.054		

Summary of Preliminary Results

- **Most participants: men in their mid-thirties**
- **Nearly half of participants had been drinking alcohol**
- **Average BAC-levels all participants: 0.18-0.31‰**
- **Average BAC-levels drinking participants: 0.55-0.63 ‰**
- **Higher average BAC-levels:**
 - **In the Intervention area compared to Control area**
 - **Among men compared to women**
 - **At high risk-games compared to low-risk games (in overall sample)**

Conclusions

- **Alcohol use: common among spectators at football arenas in Sweden**
- **Relatively high average BAC-levels among drinking participants at football arenas in Sweden (0.55-0.63 ‰)**
- **Similar average BAC-levels reported in previous research on game spectators drinking alcohol (e.g. 0.57 ‰)***
- **Heavy alcohol use at football arenas could be targeted through community interventions in order to reduce such use**

*(Erickson et al., 2011)

Future Work

- A community-based intervention (e.g. training, policy work, increased enforcement and media advocacy) developed by STAD allocated to the intervention area
- Follow-up assessments of BAC-levels in the intervention- and control areas
- Survey to explore attitudes toward alcohol use at football arenas
- Observational studies to explore overserving at football arenas
- Assessment of drug use in the intervention- and control areas
- Similar research at other sporting events

Thank you!

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