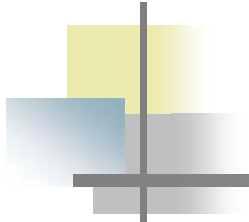


# Prevention of high risk alcohol consumption in university students: a systematic literature search including meta-analyses



---

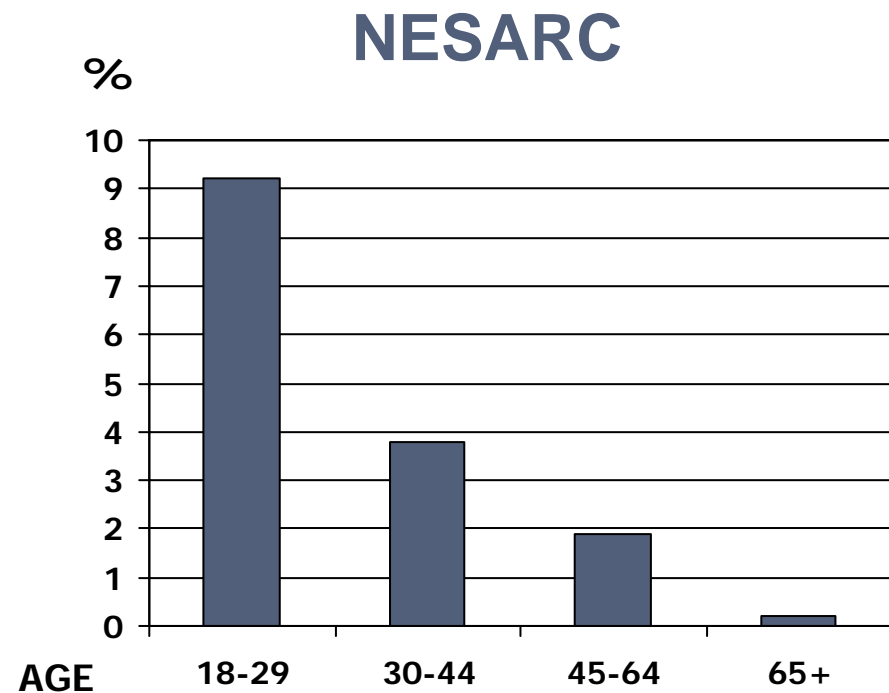
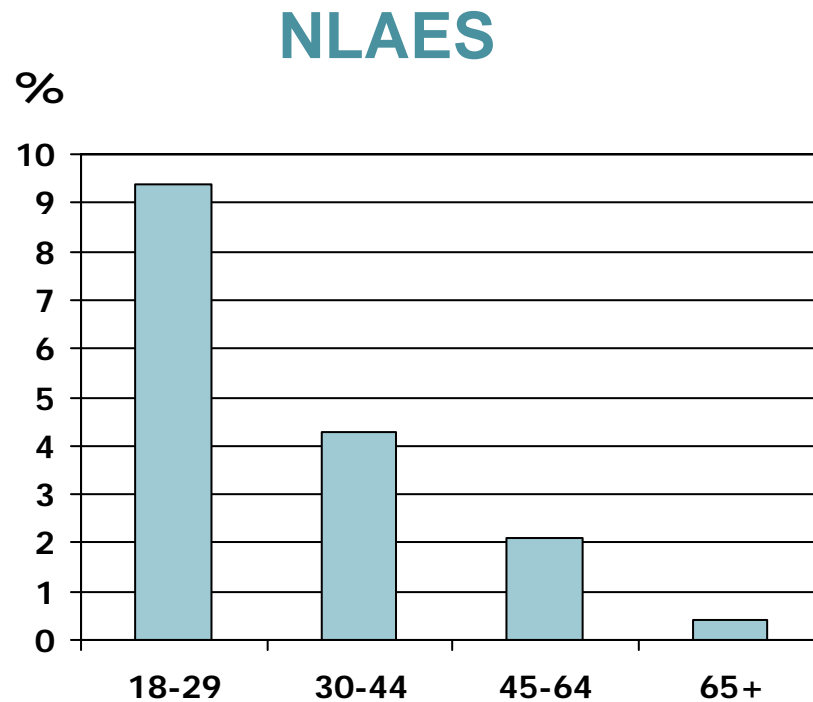
Mats Berglund

**Clinical Alcohol Research**

**Lund University, Malmö, Sweden**

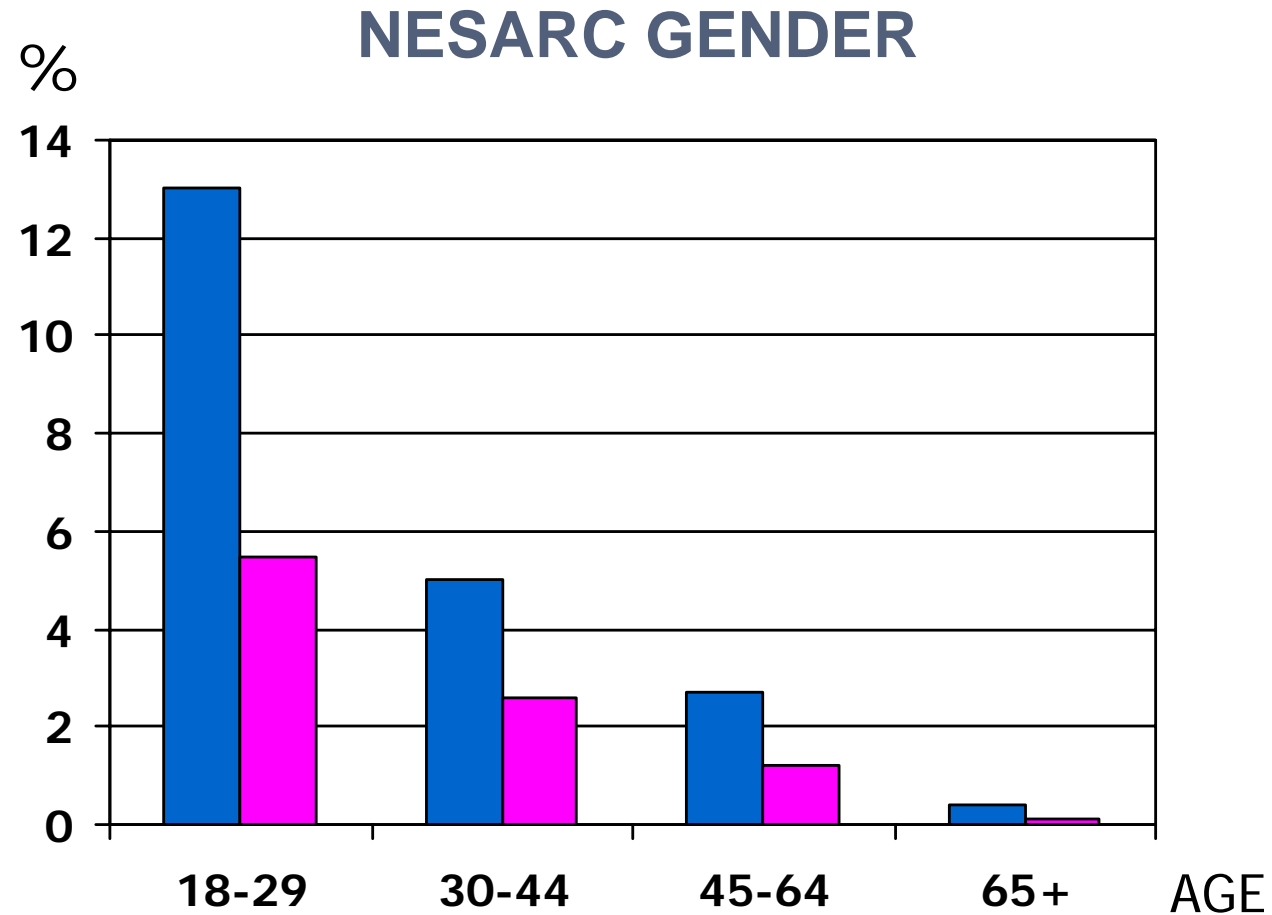
# 12-months prevalence in DSM-IV alcohol dependence: US

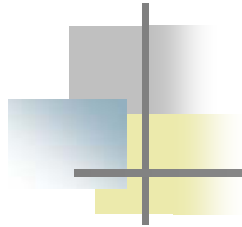
*Grant et al. 2004*



# 12-months prevalence in DSM-IV alcohol dependence: US

*Grant et al. 2004*





---

Alcohol use disorders  
(including alcohol dependence)

Developmental disorders  
towards adulthood  
*(Li, RSA 2004)*



# From high school to college

*Baer et al. 1995*

---

## High school risk sample (25%)

	High school	College
1-2 times/week or more	29%	63%
7-8 drinks/one occasion last month	42%	62%

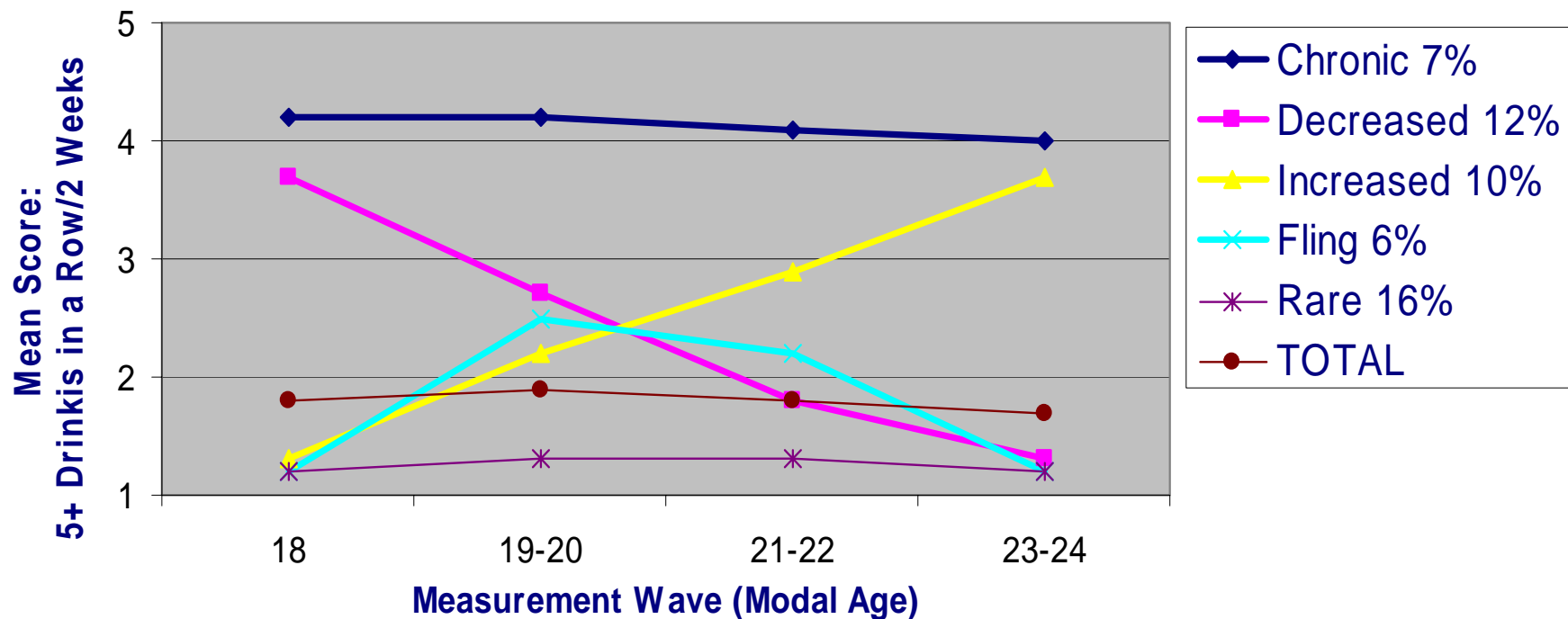
### Risk factors

- Male gender
- Greek houses
- History conduct problems

# Changes in drinking pattern 18-25 years

*(Schulenberg et al. 1996)*

## Binge drinking (men)





# Intervention models

---

- Alcohol Skills Training Program, ASTP  
(6 → 2 sessions)
- Expectancy Challenge, EC
- Personalized Drinking Feedback, PDF



# Personalized Drinking Feedback

## Women

### Party Alcohol Level

### AUDIT

High	...1.24.. ‰	...7.. points
75%	<b>X</b> ..... (1.12)	..... (8) <b>X</b>
50%	..... (0.73)	..... (5)
25%	..... (0.30)	..... (3)

Low



# Studies included in meta-analyses

---

- College students
- Randomized controlled trials
- Published in scientific journals
- Registered in **PubMed** (n = 15)



# Meta-analysis

---

- Comprehensive Meta-analysis Software Program (*Borenstein et al. 1998*)
- Standardized effect sizes (d)

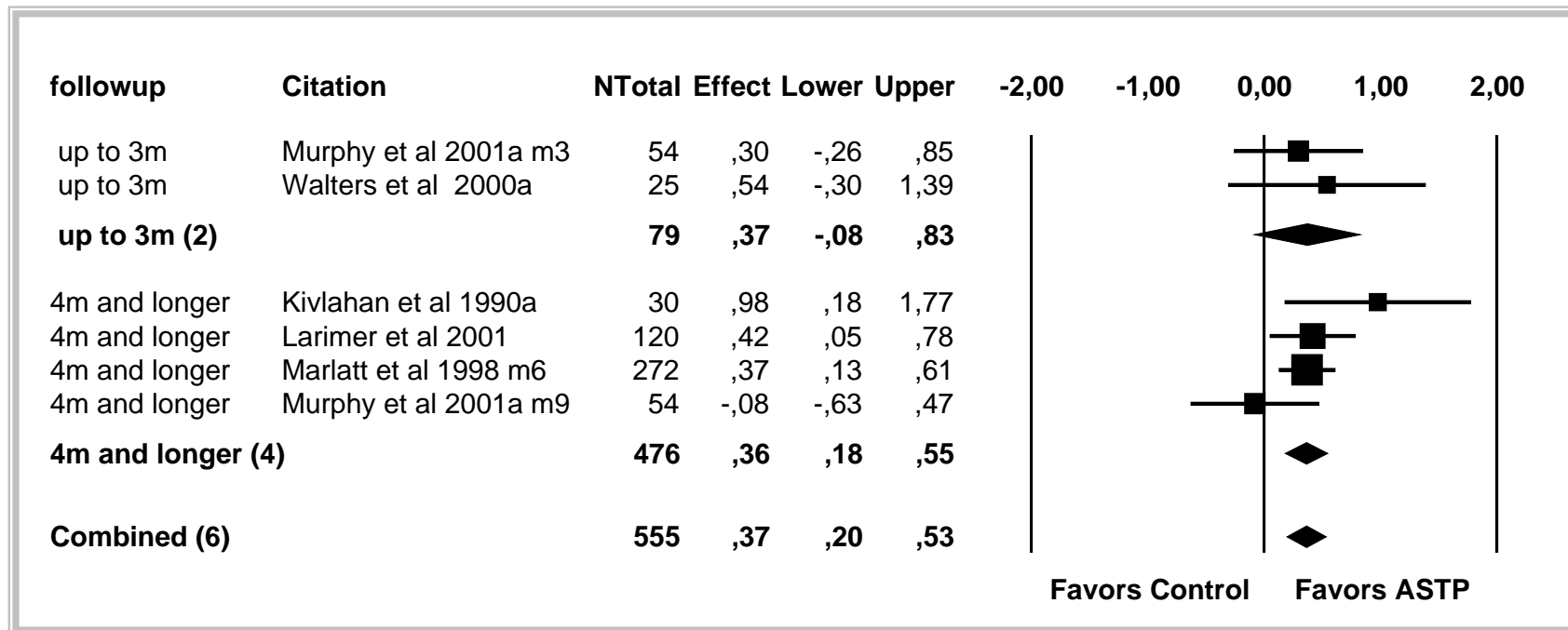
0.20 - 0.49	Small effect
0.50 - 0.79	Moderate effect
0.80 -	Strong effect

# Intervention studies for risk alcohol consumption in college students

	Year	n	Comparision				
			ASTP-Ctr	EC-Ctr	PDF-Ctr	ASTP-PDF	Bri-Ctr
Kivlahan et al.	1990	30	X				
Bear et al.	1992	102	X				
Marlatt et al.	1998	272	X				
Borsari and Carey	2000	59	X				
Larimer et al.	2000	120	X				
Walters	2000	24	X		X	X	
Walters et al.	2000	25	X		X	X	
Murphy et al.	2001	54	X				
Darkes and Goldman	1993	50		X			
Darkes and Goldman	1998	51		X			
Agostinelli et al.	1995	23			X		
Collins et al.	2002	100			X		
Neighbors et al.	2004	252			X		
Johnsson and Berglund	2004	177				X	
Murphy et al.	2004	51				X	
Grossberg	2004	226					X
<b>Total</b>		<b>1616</b>					

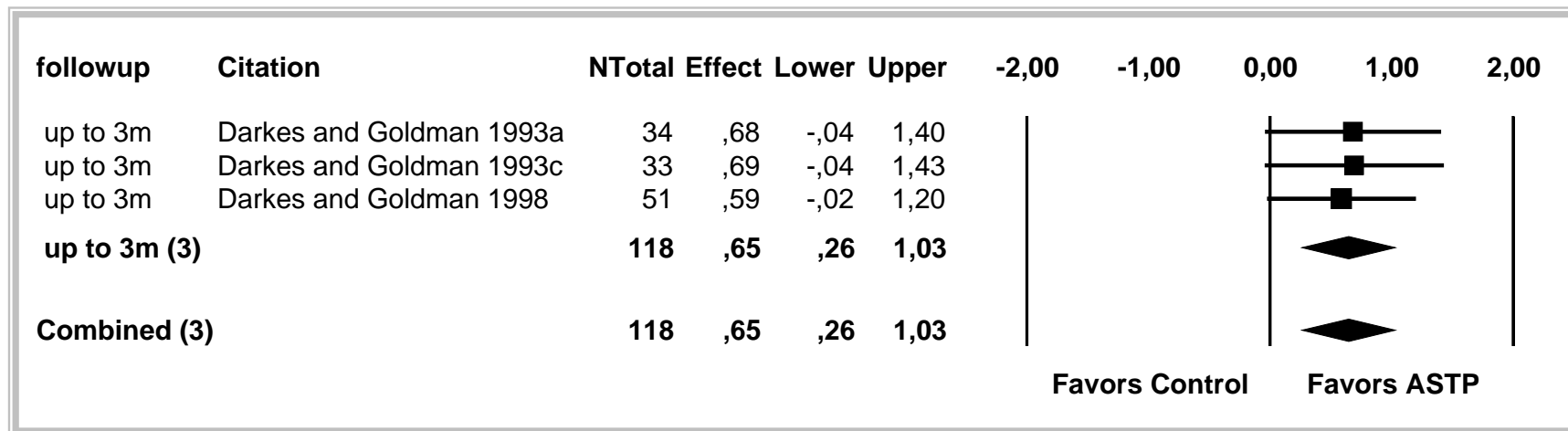
# Alcohol consumption

## ASTP vs control



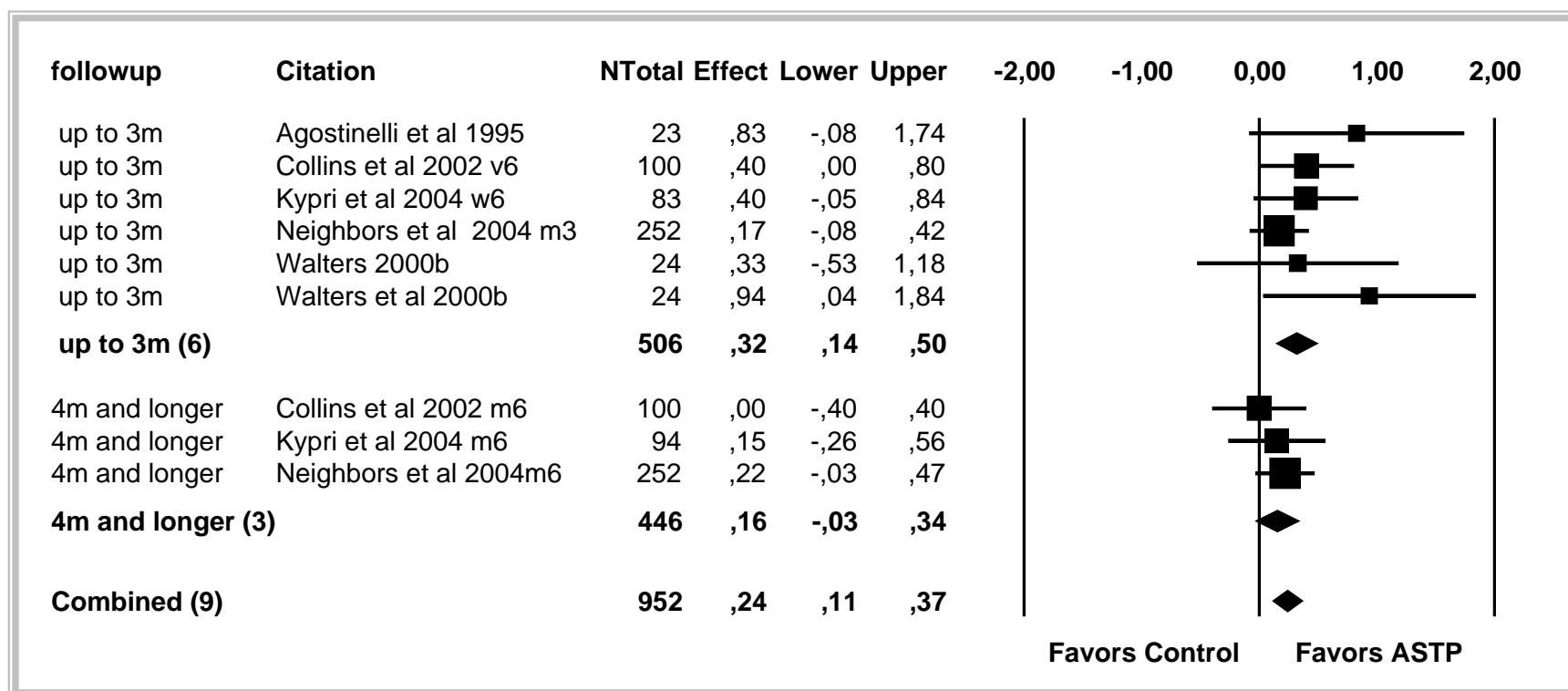
# Alcohol consumption

## Expectancy Challenge vs control



# Alcohol consumption

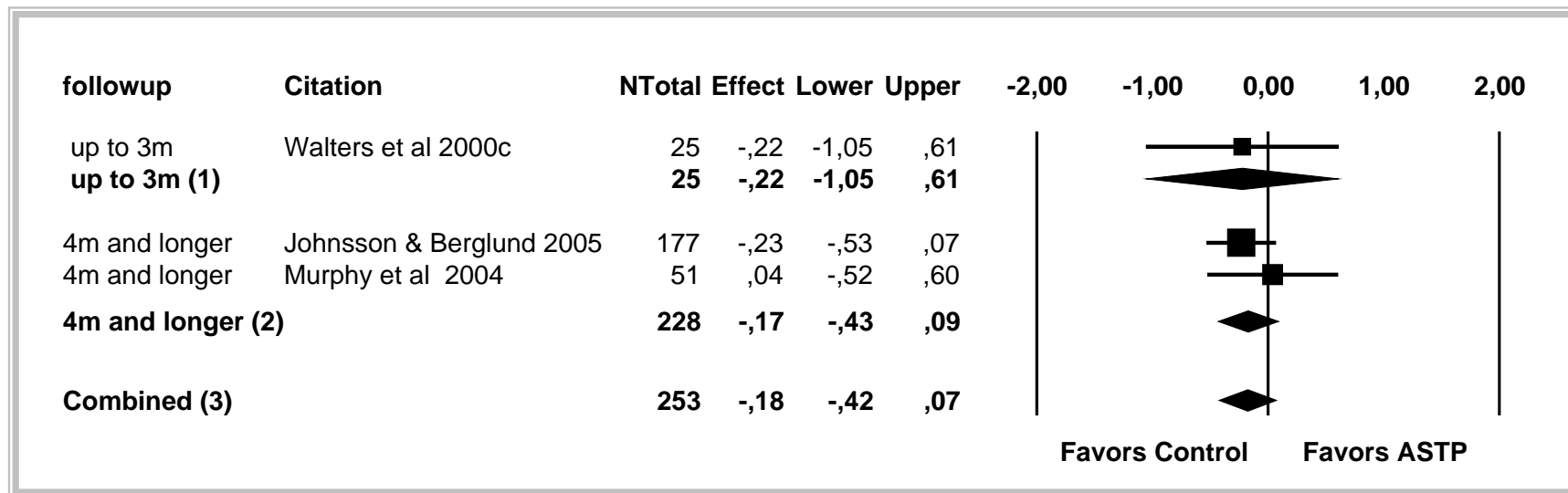
## Personalized Drinking Feedback vs control



# Drinking scores

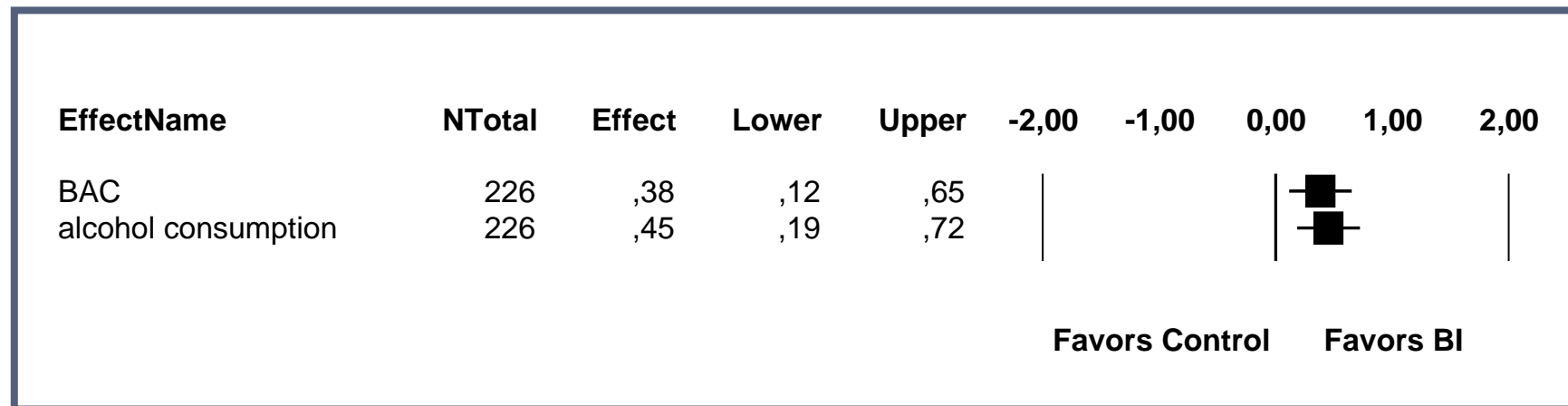
## ASTP vs

## Personalized Drinking Feedback



# Brief Intervention versus controls in young adults

*Grossberg et al., 2004*



# Interventions in college drinking

## Meta-analyses, summary scores

	<b>Alcohol consumption</b>	<b>BAC</b>	<b>Alcohol problem</b>	<b>Average score</b>
<b>ASTP vs control</b>	<b>0.37</b>	<b>0.31</b>	<b>0.18</b>	<b>-</b>
<b>Expectancy Challenge vs control</b>	<b>0.65</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Personalized Drinking Feedback vs control</b>	<b>0.24</b>	<b>0.26</b>	<b>0.16</b>	<b>-</b>
<b>ASTP vs Personalized Drinking Feedback</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-.18</b>
<b>Brief Interventions vs controls (GP-settings)</b>	<b>0.45</b>	<b>0.38</b>	<b>-</b>	<b>-</b>



# Conclusions

---

- Prevalence of alcohol dependence most frequent in the age group 18-25
- Large changes of drinking pattern during the age period 18-25



# Conclusions

---

## Meta-analyses

- ASTP > Control
- Expectancy Challenge > Control
- Personalized Drinking Feedback > Control
- ASTP = Personalized Drinking Feedback
- College Intervention = Brief Intervention in GP setting