

*12-Month SBIRT Outcomes in a Polish  
Emergency Department: Findings from  
a Randomized Controlled Clinical Trial*

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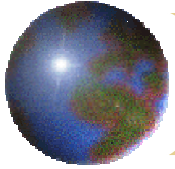
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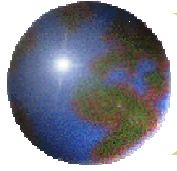
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Alcoholism (R21 AA-16081-01)**



## *Purpose of the Study*

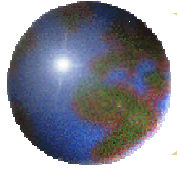
- To evaluate the effectiveness of brief motivational intervention (BI) in reducing alcohol consumption compared to controls at 12-month follow-up
- To evaluate assessment reactivity



## *Background*

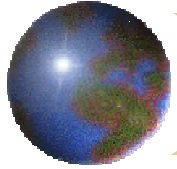
- An earlier study documented high rates of heavy drinking in the ER
  - 25% consumed more than 12 liters annually
  - 16% met diagnostic criteria for an alcohol use disorder

(Poland is a predominantly spirits drinking country characterized by infrequent but heavy drinking)
- Findings have been mixed regarding efficacy of BI in ED settings
- Assessment reactivity has been thought to account for improvements found in non-intervention control groups



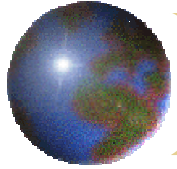
## *Background*

- ❖ 3-month follow-up found no differences in outcomes between the intervention and control groups



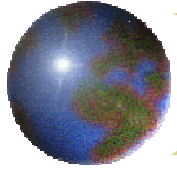
## *The Intervention and Training*

- Brief Negotiation Interviewing (BIN) (Bernstein's Project ASSERT) was used following the FRAMES model (Miller)
- The trainers trained Polish bilingual study collaborators on site in Poland
- Nurses from the ER setting were trained as interventionists
- College students were trained as study interviewers



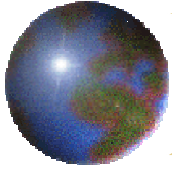
## *Eligibility Criteria/Screening Variables*

- ED patients 18 years and older
- Positive on RAPS4 (as indicator of alcohol dependence)  
or
- 11 or more drinks (6 or more females)/week last year  
or
- 4 or more drinks (3 or more females) on an occasion  
last 30 days
- Threshold lower than NIAAA guidelines – reflects Polish  
drinking pattern of infrequent but heavy drinking
- Not presently in treatment for problem drinking

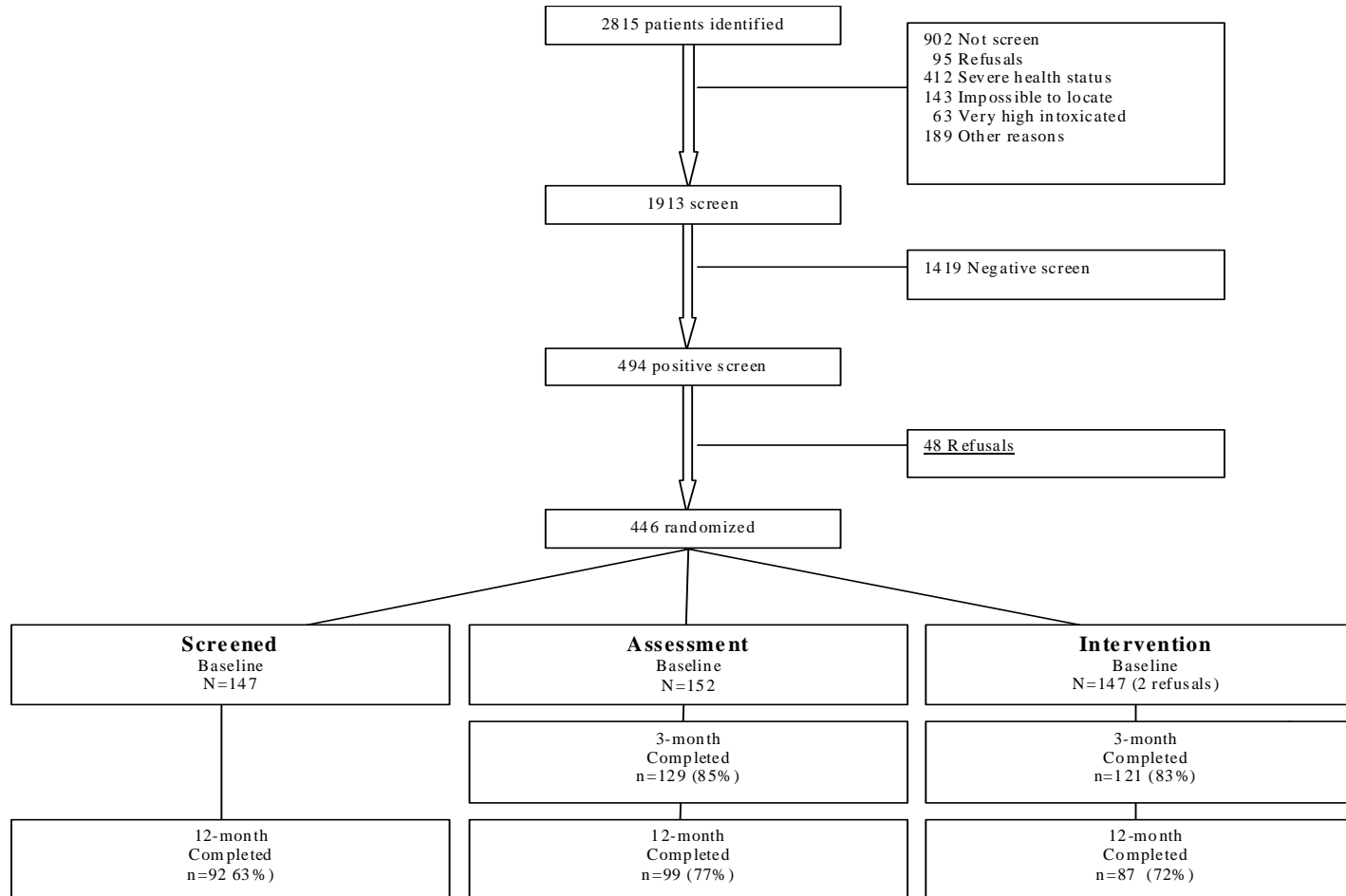


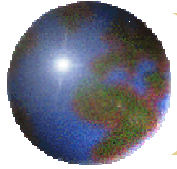
## *Study Design*

- ⊕ Data collected over a 23 week period (May to November 2007), 4:00 to midnight, 7 days a week
- ⊕ Of target population 65% were screened
- ⊕ 26% screened positive (n=494)
- ⊕ 446 patients recruited (10% refused)
- ⊕ Randomized into three groups (two-stage process)
  - Screened only – 147
  - Assessed – 152
  - Intervention – 147 (two refused at second stage of sampling – 145)



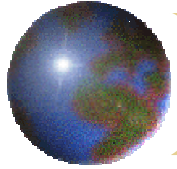
# Attrition Rates at 3 and 12 Months





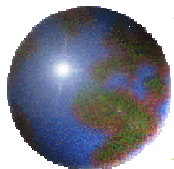
## *Follow-Up Variables*

- RAPS4
- 30-day Timeline Followback
- At-risk drinking (11/6 + drinks/week; 4/3 + drinks/drinking day)
- Alcohol treatment – last 3 months
- Short Inventory of Problems (SIPs + 6) – last 3 months
- Readiness and Stage of Change



## *Data Analysis*

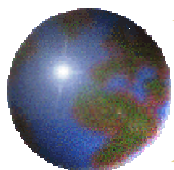
- ✦ Analysis was conducted on only those who completed both follow-up interviews
- ✦ Analysis was restricted to those who did not average more than 6 drinks per day at baseline
- ✦ Independent test of differences in proportion were conducted for dichotomous measures and independent ANOVA for continuous measures
- ✦ Multivariate group by time interactions were conducted, controlling for gender and age



## *Baseline Characteristics by Treatment Condition*

	Screened (n=147)	Assessment (n=152)	Intervention (n=147)
Injured (%)	n/a	77	64 ^
Male (%)	83	86	85
Age <30 (%)	35	44	46
1+ RAPS4 (last 3 mos) (%)	35	39	43
At-risk drinking (%)	83	90	88
Drinking pattern			
# drinking days per week	2.5	2.4	3 ^
# drinks per drinking day	5.5	5.6	7
# maximum drinks on an occasion last month	8.9	9.2	10.7
# Negative consequences (last 3 months)	n/a	1.8	2.7 ^
Alcohol Treatment last 12 mos (n)	(4)	(2)	(1)

^ p<0.05, test of difference between screen, assessment and intervention groups

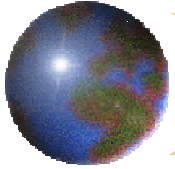


## Baseline and 12-month Characteristics

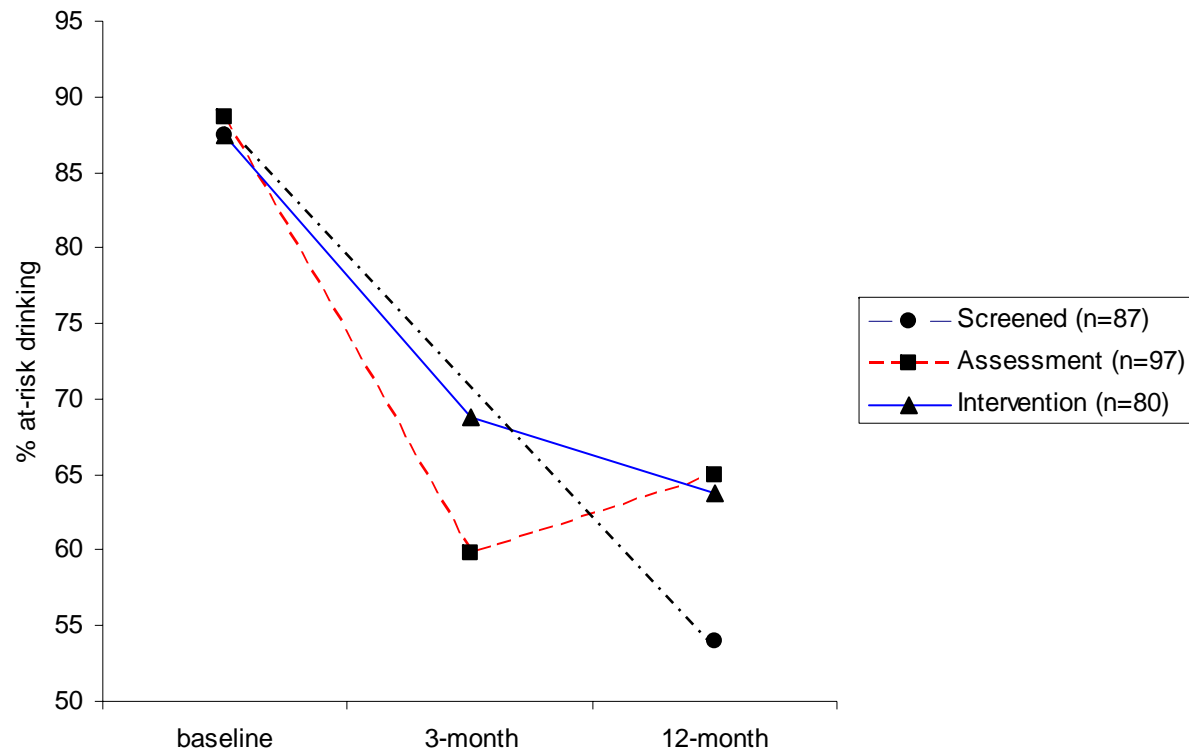
	Baseline			12-month follow-up		
	Screened (n=87)	Assessment (n=97)	Intervention (n=80)	Screened (n=87)	Assessment (n=97)	Intervention (n=80)
Injured (%)	n/a	71	64	--	--	--
Male (%)	83	86	85	--	--	--
Age <30 (%)	33	43	49	--	--	--
At-risk drinking (%)	87	89	88	54***	65***	64**
1+ RAPS4 (%) (last 3 mos)	25	35	45 <sup>a</sup>	22	24	24*
Drinking patterns						
# drinking days per week	2.3	2.3	2.5	2.0	2.1	1.8**
# drinks per drinking day	5.0	5.3	5.6	3.5**	4.2**	4.1**
# maximum drinks per occasion last month	6.7	7.8	9.3 <sup>^</sup>	6.1	7.7	7.4*
# Negative Consequences (last 3 mos)	n/a	1.5	2.0	0.4	0.8**	0.6***
Alcohol Treatment last 12 mos (n)	( 2 )	( 1 )	( 0 )	( 2 )	( 1 )	( 2 )

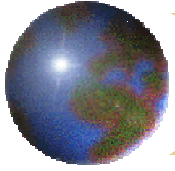
<sup>^</sup> p<0.05 between group comparisons for screen, assessment and intervention conditions at baseline and 12-month follow-up

p<.05; \*\* p<.01; \*\*\*p<.001 within group comparisons at baseline and 12-months

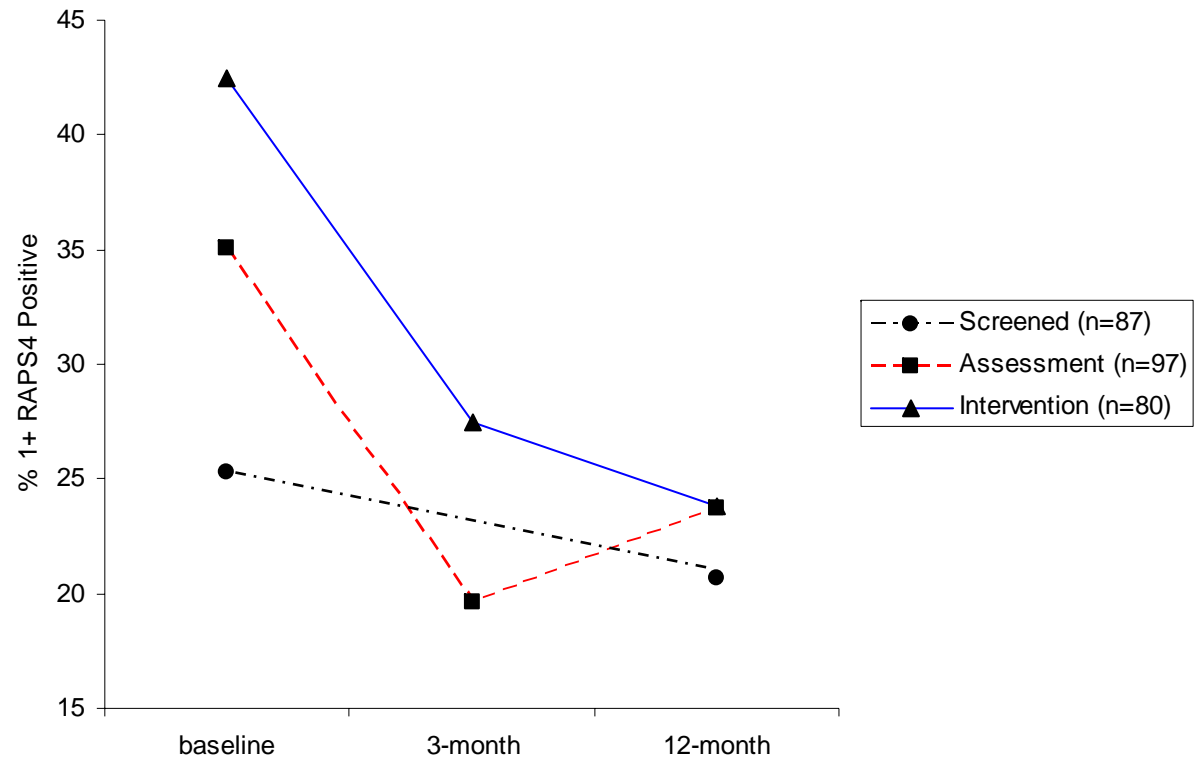


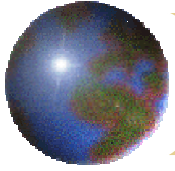
## *Percent positive for at-risk drinking by intervention condition*



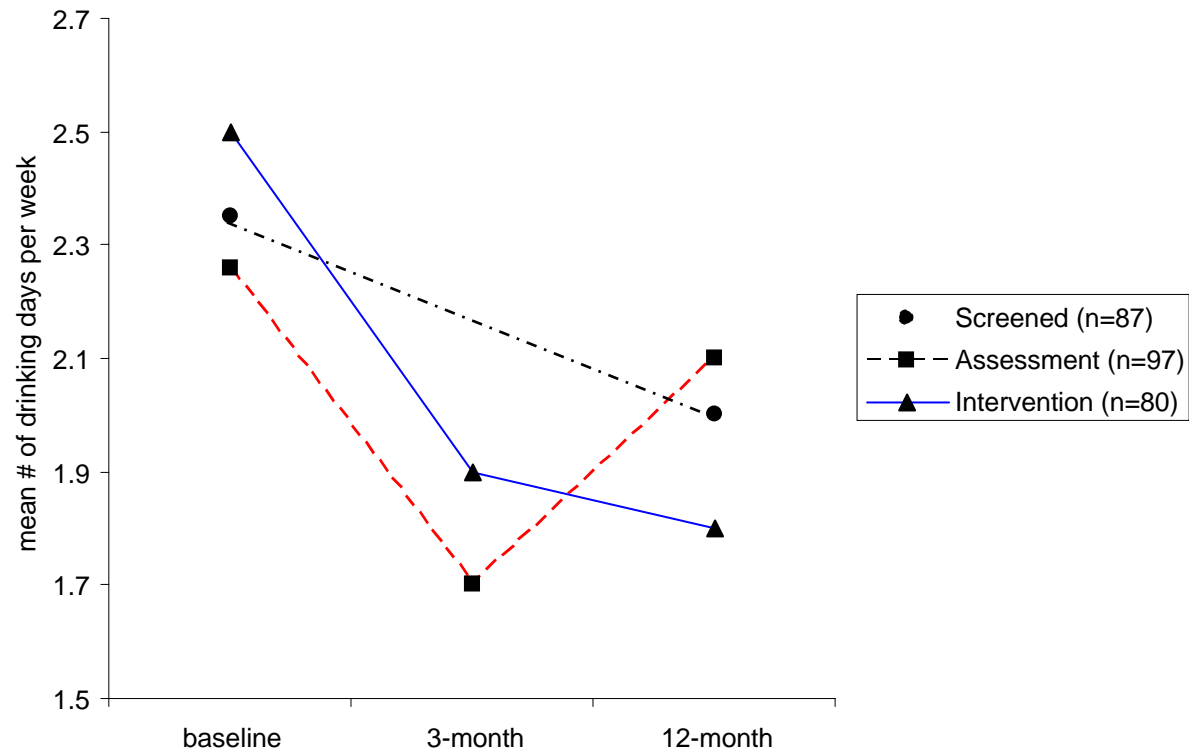


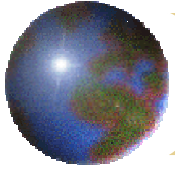
## *Percent positive for one or more RAPS4 items by intervention condition*



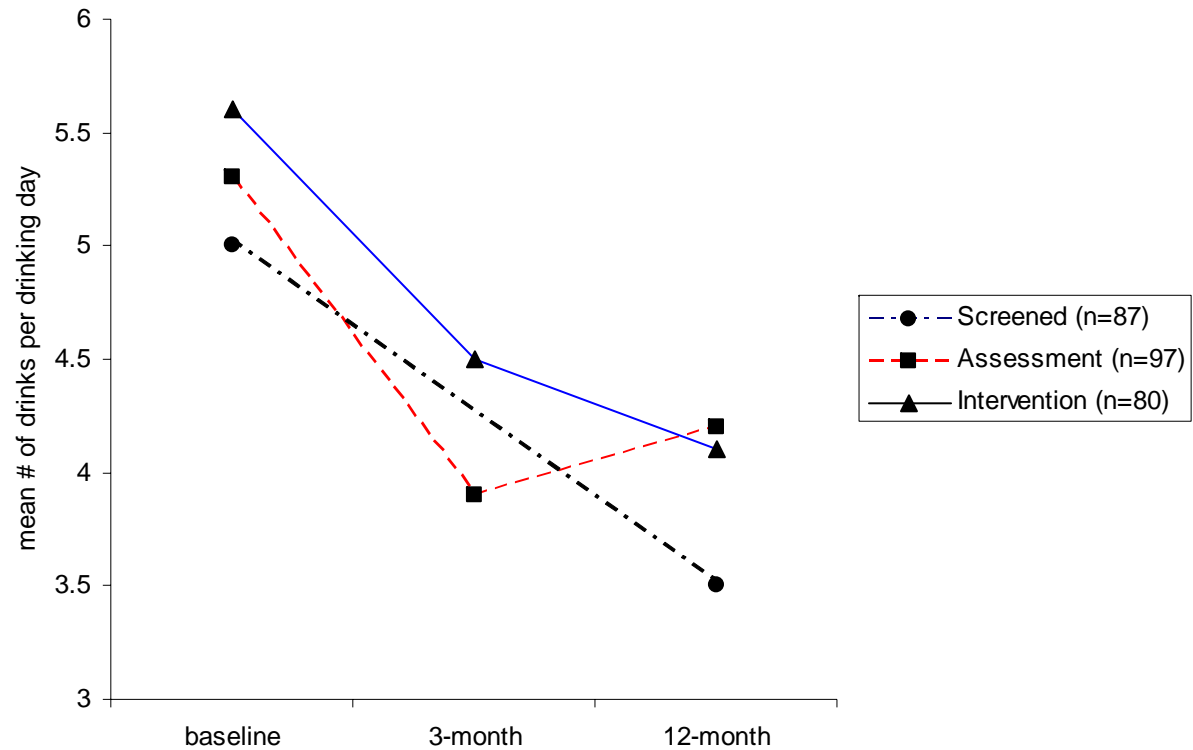


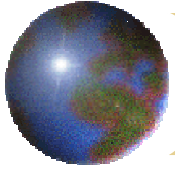
## *Mean number of drinking days per week by intervention condition*



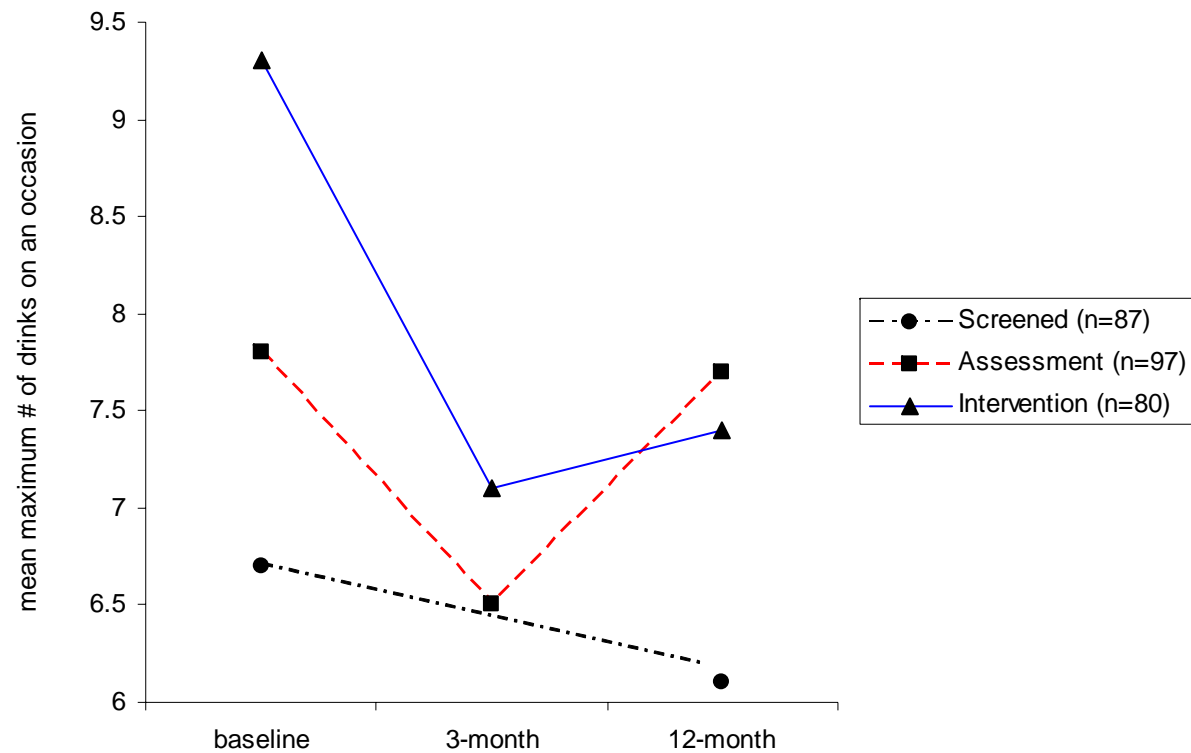


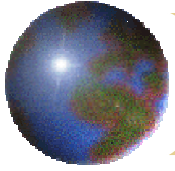
## *Mean number of drinks per drinking day by intervention condition*



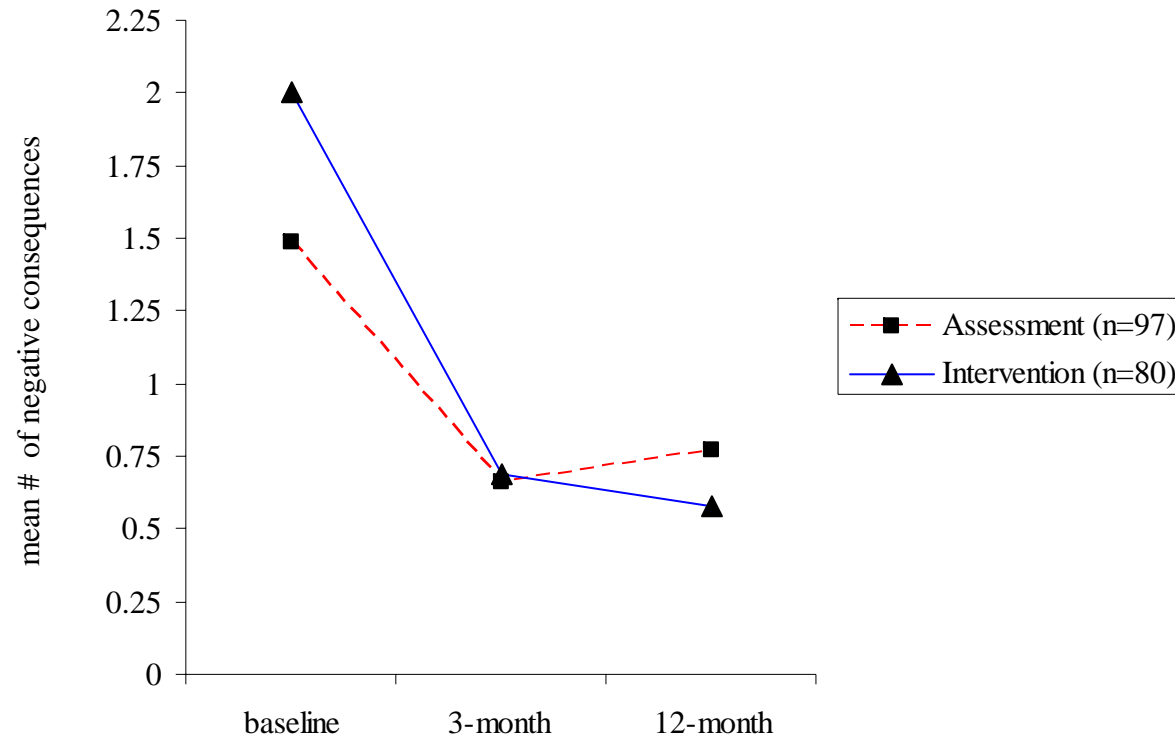


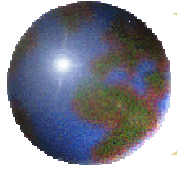
## *Maximum number of drinks per occasion by intervention condition*





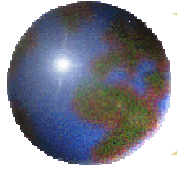
## *Mean number of negative consequences by intervention condition*





## *Summary*

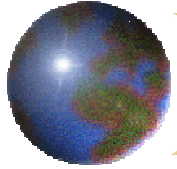
- ✚ The sample exhibited infrequent but heavy episodic drinking
- ✚ At baseline 87% met criteria for at-risk drinking and 40% screened positive for alcohol dependence
- ✚ Only a small proportion received any alcohol treatment



## *Summary, continued*

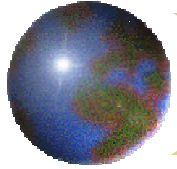
At 12-Month Follow-up (compared to baseline)

- ✦ Intervention condition showed significant decline in all outcome variables
- ✦ Assessment condition showed significant decline in at-risk drinking, number of drinks/drinking day, and negative consequences
- ✦ Screened condition showed significant decline in at-risk drinking, and number of drinks/drinking day



## *Summary, continued*

- ✦ Only those in the intervention condition reported significant improvement in all outcome variables from baseline to 12-month follow-up
- ✦ Intervention condition appeared to continue to improve in drinking outcomes between 3 months and 12 months
- ✦ Improvements in assessment condition at 3 months deteriorated by 12 month follow-up, approaching baseline values for drinking days/week and maximum drinks/occasion
- ✦ Improvements in drinking outcomes in assessment condition not due to assessment reactivity



## *Conclusion*

- ✚ A brief motivational interview applied in the ED is associated with improved drinking outcomes one year later
- ✚ Those in the intervention condition may undergo more sustainable long-term benefits compared to those in either the screened or assessment conditions