



SmartStart

Preloading & A Safe Night Out

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Acknowledgements

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Background

- Alcohol is one of the most widely used drugs in Australia (Doherty & Roche, 2003).
- Prior to entering licensed venues, youth are pre-loading, mixing energy drinks with alcohol, and using illicit drugs (e.g., DeJong, DeRicco, & Schneider, 2010; Hummer, Napper, Ehret, & LaBrie, 2013; LaBrie & Pedersen, 2008).
- Preloading may increase subsequent alcohol consumption & violence (Maclean & Callinan, 2013).
- Increased Police Resources needed?

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Background

- POINTED study – Systematic random sample of all people in entertainment district. X-sectional during the night. Asked regarding preloading but not focussed on preloaders (Miller, 2013).
 - 67% males & 62% females reported pre-loading (73% mixed Energy Drinks).
 - Median number of drinks: 6 and 4.
 - 47% at home & 36% at another's home.
 - Reasons: 67% = price, 13.9% = for fun, 8.5% = socialise.
 - 19% of alcohol pre-loaders (11% of non-preloaders) also consumed illicit drugs.
 - Preloaders higher median BAC when breathalysed during night (.068) compared to non-preloaders (.021).
- So what are they like when they come into the Entertainment Districts?

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Aims

Academic, Community & Operational Aims

- Gauge level of preloading as people enter entertainment district.
- Assess preloading behaviour – where, what, how much.
- Assess intoxication knowledge (guessed BAC in comparison to real BAC).
- Assess reasons for preloading.
- Estimate alcohol problems in sample.

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Aims

- Look at preloading with energy drinks.
- Other aims (with caution):
 - Assess preloading of drugs;
 - Assess body (particularly muscle) dysmorphia and any interactions with BAC (results for another day).

Solely Operational Aims

- Community engagement with police (particularly new constables).
- Police presence in form other than 'Command & Control'.

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Method

- Funding from National Drug Strategy Law Enforcement Funding Committee (NDSLEFC; \$39,800).
- Teams = 2-4 researchers & 2-3 Police (usual = 2 of each).
- Weekend – usually 9pm until 1am:
 - Thursdays: Usually outside City Metro, Victory Hotel, The Exchange.
 - Fridays: Usually outside Fortitude Valley Metro.
 - Saturdays: Usually outside Fortitude Valley Metro, Oh Hello!, The Family.
- Specials: Melbourne Cup (Doomben); Pre-Christmas (Mackay); Post-Christmas (Gold Coast – Surfer's and Broadbeach);
- Began: 21st August 2014; Completed 27th February 2015. The 'warm months'.

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Method

- Stopped by researchers or police and asked to take part in research.
- If already drinking in town gave BAC test and feedback (no questionnaire).
- Long Questionnaire (40 questions if 'yes' to all; about 3-5 minutes) – 2 versions (extra questions after 1 month of data collection).
- Short Questionnaire (3 questions: age, how many drinks, guess BAC).
- If 1 or 2 participants complete long questionnaire in group all others in group given short q're and BAC levels taken by 'roving researcher'.

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The Setting



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The Setting



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The Setting



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Participants

Region	Area	Long Q'res	Short Q'res	Total
Brisbane	Valley	2,166	586	2,752
	City			
Gold Coast	Surfer's	87	0	137
	Broadbeach	50	0	
North Qld	Mackay	60	91	151
Melb Cup	Doomben	0	161	161
Total		2,363	838	3,201

N=3,201 – uncleaned data.

Average Time = 2 ½ Minutes (Long Q're).

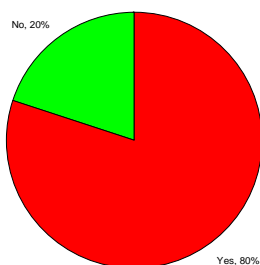
Gender: 52.67% men, 47.33% women (ratio 1.11; BoS 2014 Oz:15-24 years: 1.05).

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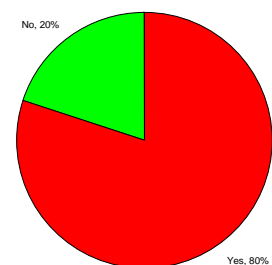
Participants / Results

How Many Said They Preloaded With Alcohol?

Females = 926 / 1,157



Males = 963 / 1,206



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Participants / Results

If preloaded on anything ...

Males

- Number of drinks:
 - Mean = 6.34 (sd=4.39)
 - Median = 6
 - Mode = 5
- Where:
 - Most common = My House
 - 2nd = Friend's House
 - 3rd = Suburban Pub
 - 4th = Hotel / Motel / Hostel



Females

- Number of drinks:
 - Mean = 4.15 (sd=2.78)
 - Median = 4
 - Mode = 5
- Where:
 - Most common = My House
 - 2nd = Friend's House
 - 3rd = Hotel / Motel / Hostel
 - 4th = Suburban Pub

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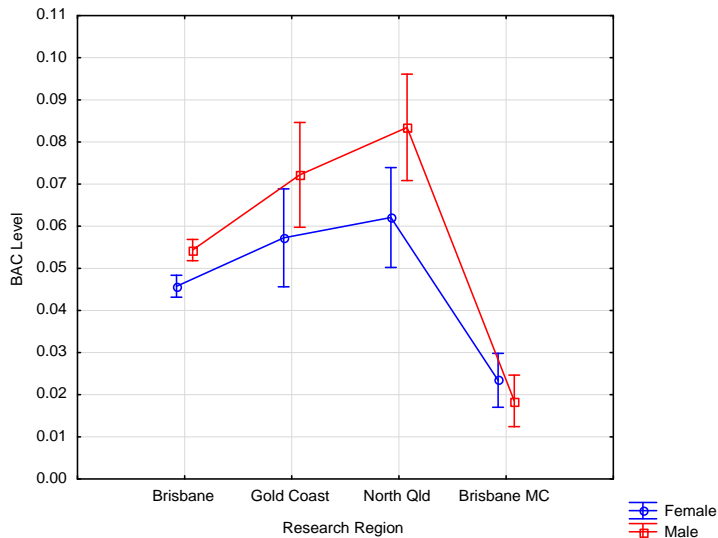
Participants / Results

Gender	N	Mean (sd)	Median	Mode	Min	Max
Age						
Males	1,682	23.58 (6.14)	22	19	16	61
Females	1,512	22.58 (6.33)	20	18	16	64
All	3,194	23.11 (6.25)	21	18	16	64
BAC						
Males	1,677	.055 (.05)	.047	0	0	0.258
Females	1,509	.046 (.047)	.033	0	0	0.246
All	3,186	.051 (.049)	.042	0	0	0.258
BAC if > 0						
Males	1,255	.073 (.045)	.067	.09	.008	.258
Females	1,022	.068 (.043)	.06	.033	.008	.246
All	2,277	.071 (.044)	.064	.033	.008	.258

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Results – BAC By Region

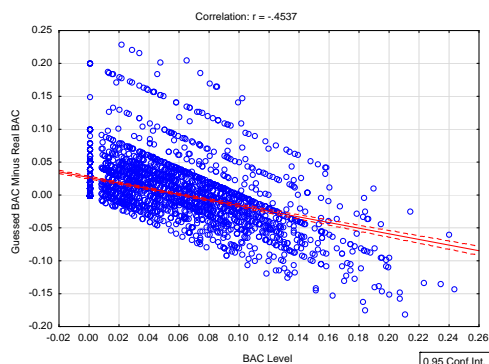


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Results – Guessed BAC vs Real BAC

- If guessed <.3 (≈19% no idea!) then:
 - Overall - mean difference between guessed and real (n=2,658) = .007 (.045)
 - Males - mean difference between guessed and real (n=1,424) = .006 (.044)
 - Females - mean difference between guessed and real (n=1,234) = .008 (.045)
 - Correlation – younger = more likely (just) to overestimate their BAC (variance explained = 0.55%!)
 - Correlation – more drunk = more underestimate their BAC (variance explained = 20.58%!)

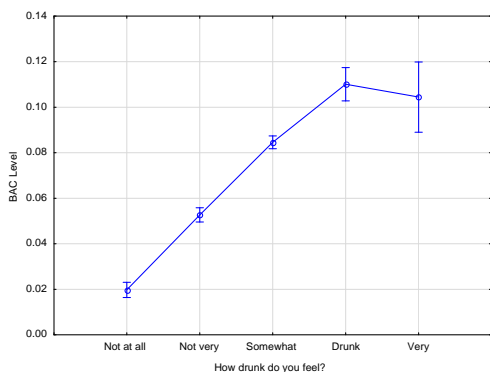


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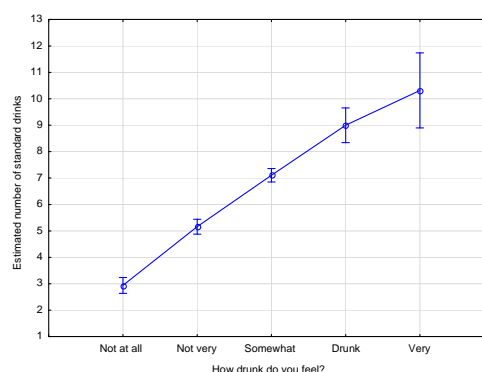


Results – How Drunk They Felt?

In relation to how drunk they were...



In relation to how many drinks they had...



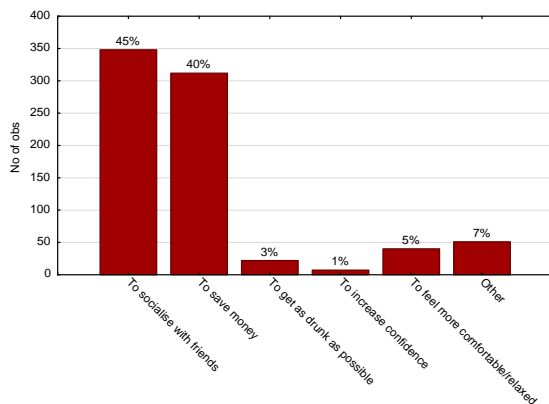
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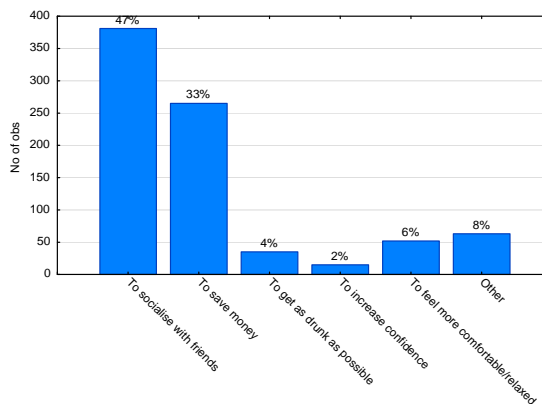
Results - Reasons For Preloading

- Reasons for preloading if only gave one answer:

Females



Males

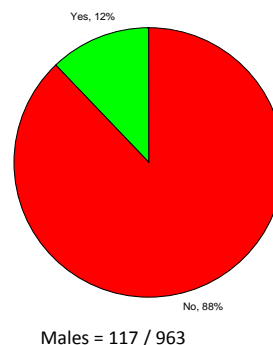


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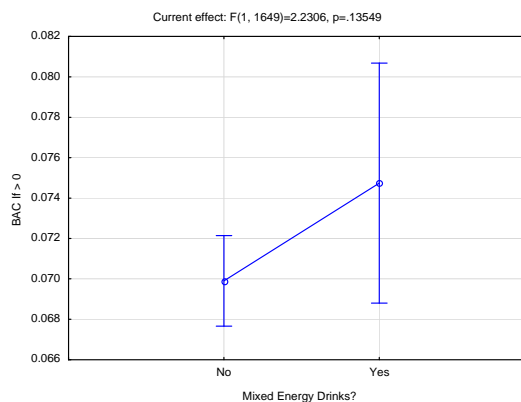
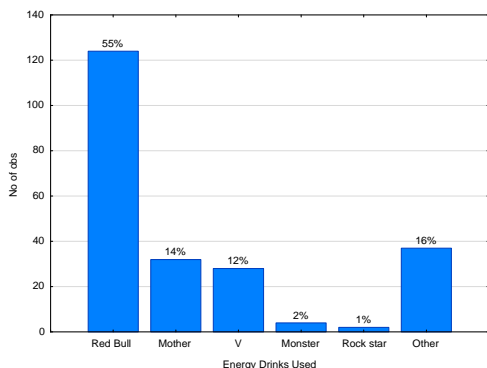
Results – Use Of Energy Drinks

- If preloading, mixed energy drinks?



Results – Use Of Energy Drinks

- If preloading:

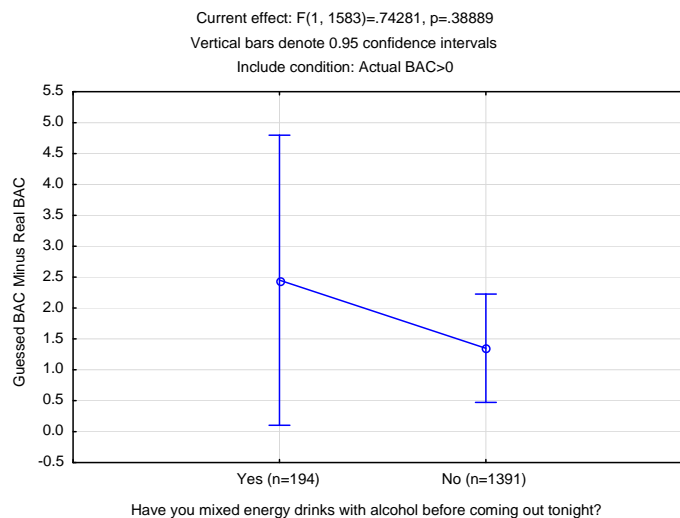




Results – Use Of Energy Drinks

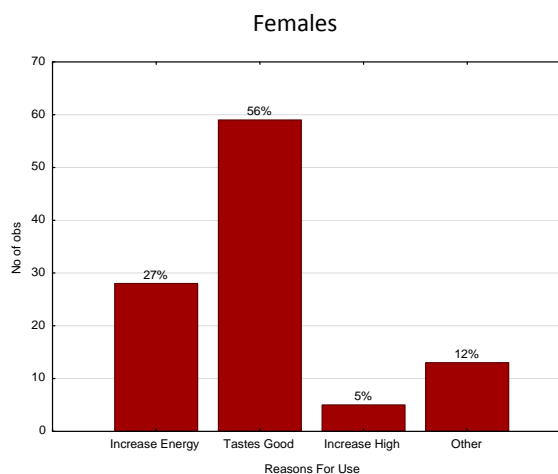
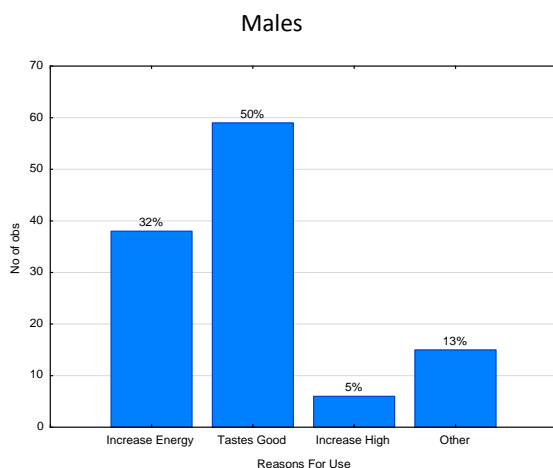
- If preloading:

No masking effect:



Results – Why Energy Drinks?

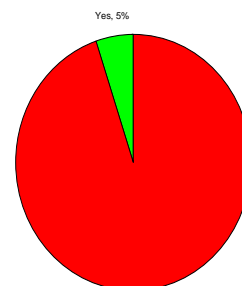
- If preloading:



Results – Use Of Drug Preloading



Females = 23 / 1157

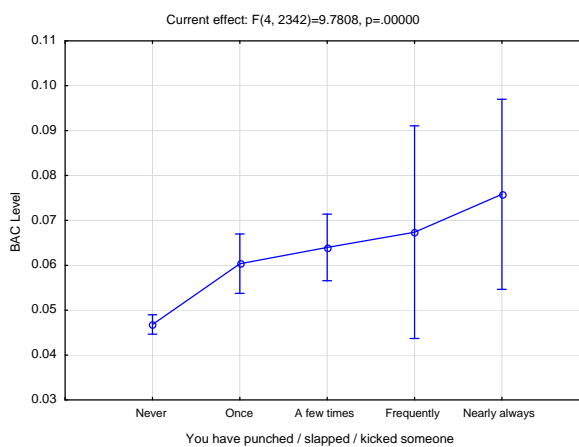
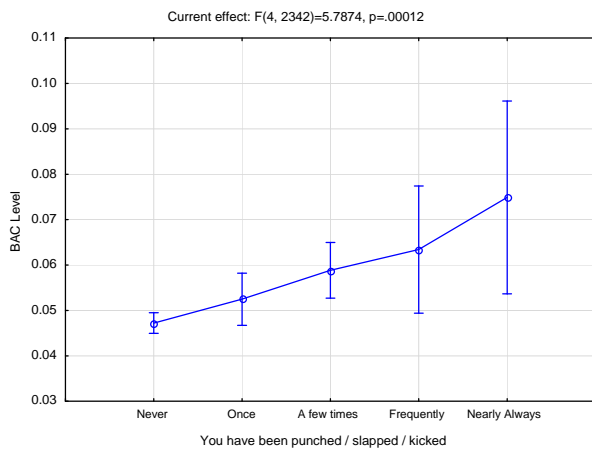


Males = 62 / 1206



Results – Injury

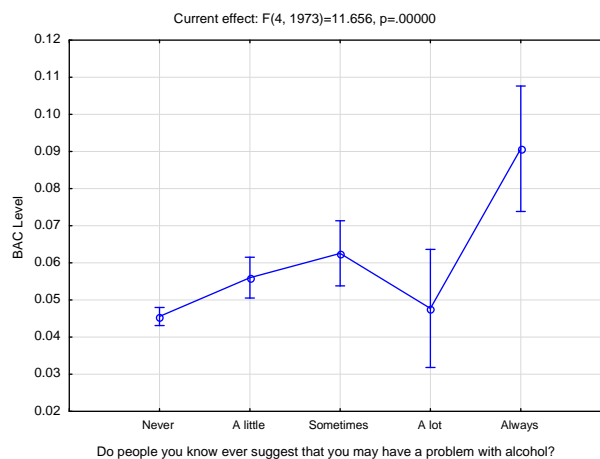
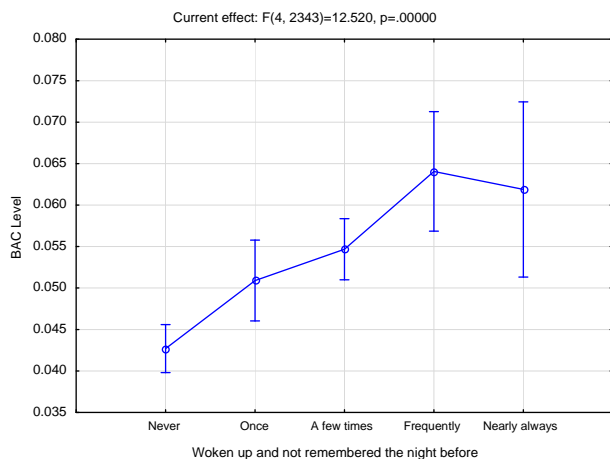
- Irrespective of whether preloaded:





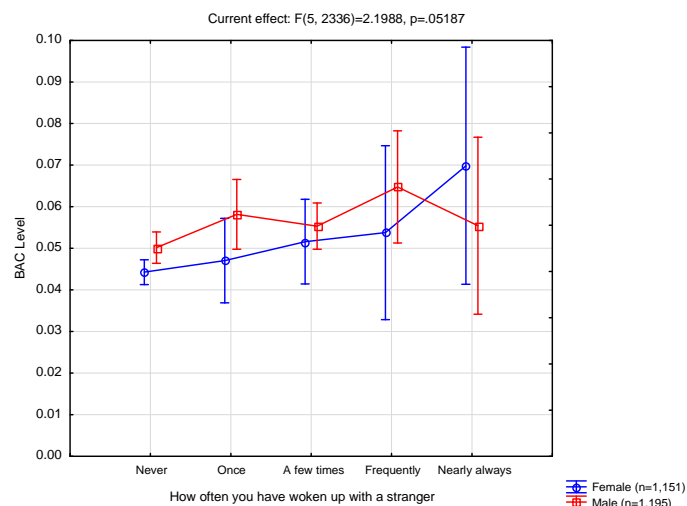
Results – Impairment / Dependence?

- Irrespective of whether preloaded:



Results – Sexual Practices

- Irrespective of whether preloaded:

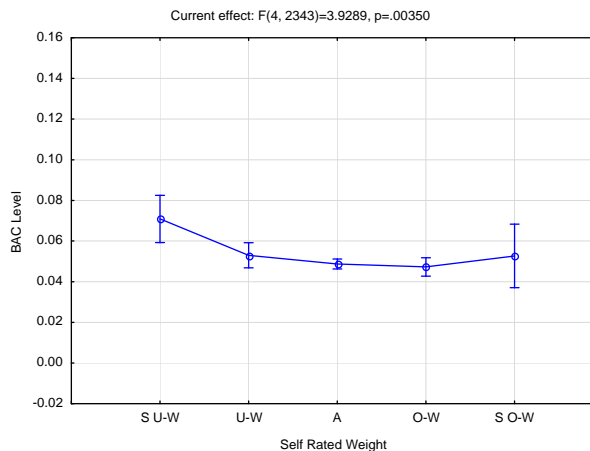
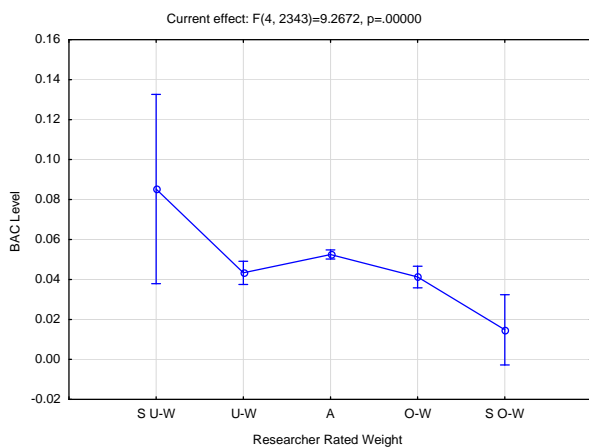


Woken-up with a stranger?	Gender	BAC Mean	BAC Std Err	N	%
Never	Female	.044	0.002	930	80.8%
Never	Male	.05	0.002	669	56%
Once	Female	.047	0.005	88	7.7%
Once	Male	.058	0.004	129	10.8%
Few Times	Female	.052	0.005	84	7.3%
Few Times	Male	.055	0.003	299	25%
Frequently	Female	.054	0.010	28	2.4%
Frequently	Male	.065	0.007	73	6.1%
Nearly Always	Female	.07	0.014	21	1.8%
Nearly Always	Male	.055	0.010	25	2.1%



Results – Body Weight?

- Irrespective of whether preloaded:



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Possible Research Effects

1. As of December 2014, change in personal crime where the research happens in relation to police utilisation generally

	2013/14	2014/15	Totals
Personal Crime	21	7	28
Calls for assistance	419	488	907
Totals	440	495	935

$\chi^2(df=1, N=935) = 9.05, p=.001, \Phi = 0.098$; Yates' Correction = 7.26, $p=0.002$; Fisher's Exact Test = .002

2. As of December 2014, change in public order crime where the research happens in relation to police utilisation generally

	2013/14	2014/15	Totals
Public Order	43	32	75
Calls for assistance	419	488	907
Totals	462	520	982

$\chi^2(df=1, N=982) = 3.45, p=.03, \Phi = 0.06$; Yates' Correction = 3.02, $p=0.04$; Fisher's Exact Test = .004

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Conclusions

- Analysis still continuing...
- Higher rate of preloading than expected (80% vs 65% from previous research)
- BAC of people entering entertainment district even higher than previously estimated (more in line with x-section of people already out)
- No difference between males & females
- The more they drink, the more they underestimate their BAC
- 20% had NO idea how the BAC system worked
- Main reason = 'socialise' followed by 'save money'

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Conclusions

- Rate of violence related to preloading BAC
 - 10.37% been hit a few times or more
 - 6.34% have hit others (4% lost in self-image or same people hitting?)
- Increased BAC on entry to entertainment district related to impairment & dependence
- Research may have performed community service
- Giving BAC feedback may have performed a diversionary service
- Increased engagement between police and revellers

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Future

- Assess people at end of night
 - End loading?
 - Money spent over the night?
- Provision of breathalysers in entertainment districts
- Role of body image needs further research
- More targeted research on drug preloading
- Need to look the issue of 'happy hour' again?

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Thank you!

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