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Intervening to change problematic alcohol use: Using online personalised feedback to encourage changes in behaviour

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Recipient of the SSA 2012 Fred Yates Prize

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Bringing the pieces together...

The context:

- Where?
- What?
- Who?

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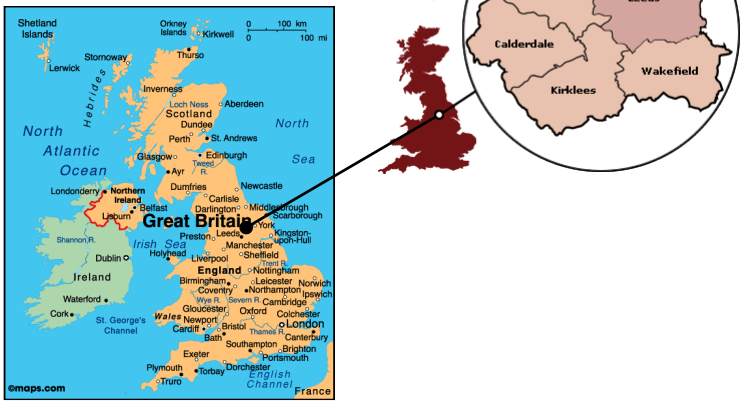
Where?

Where?



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Problematic alcohol consumption

Who?

NHS Leeds

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Intervening via the web:

- Personalised feedback
- Very brief
- Single session (but can revisit)
- Automated (no therapeutic input)
- Instant

Unitcheck: Complex intervention

Screening and brief intervention (instant personalised feedback) that included information informed by the social norms approach

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Who?

NHS Leeds

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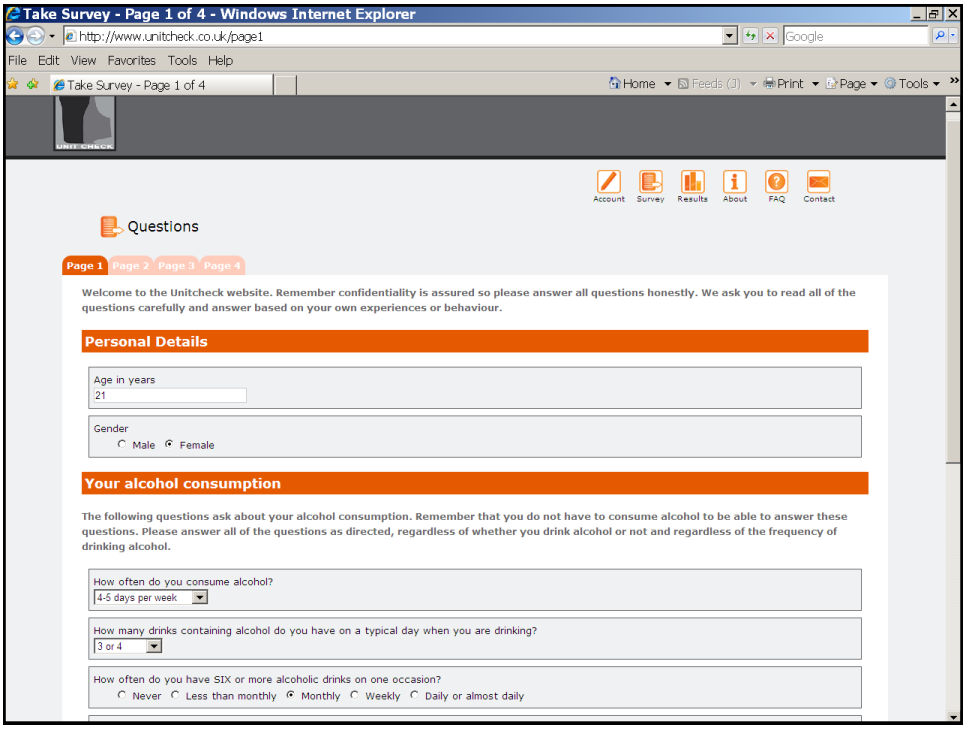
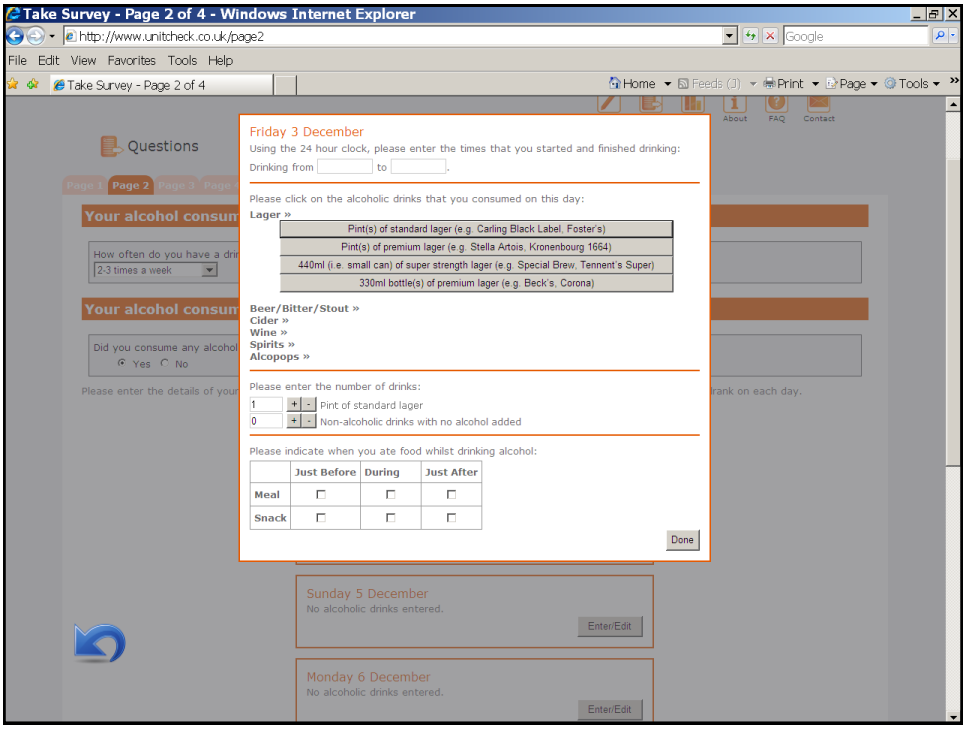
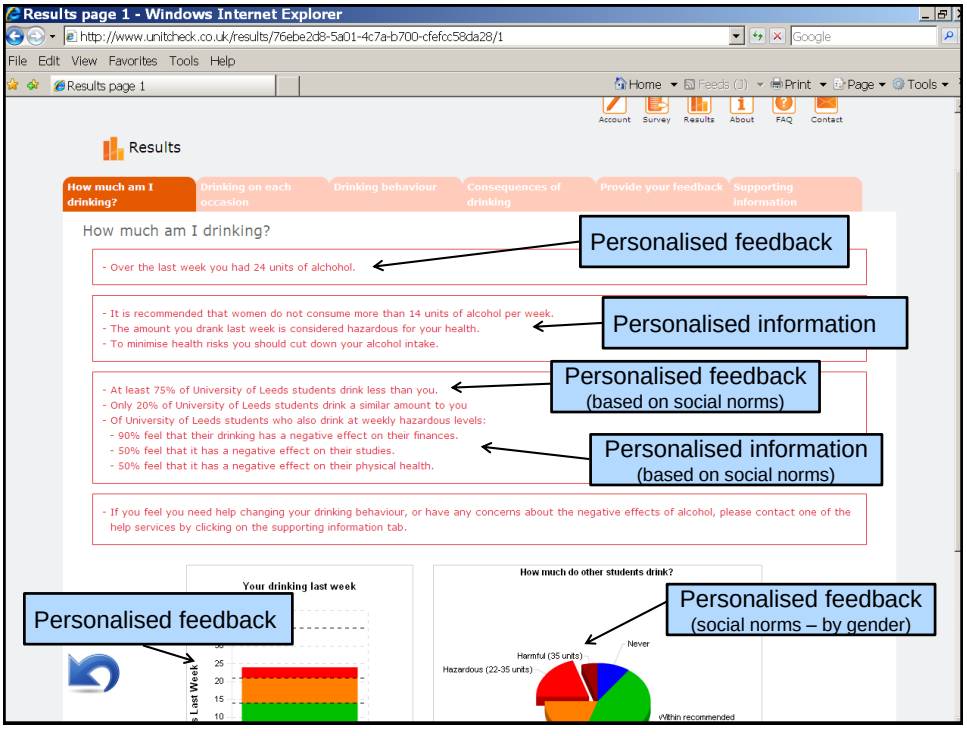
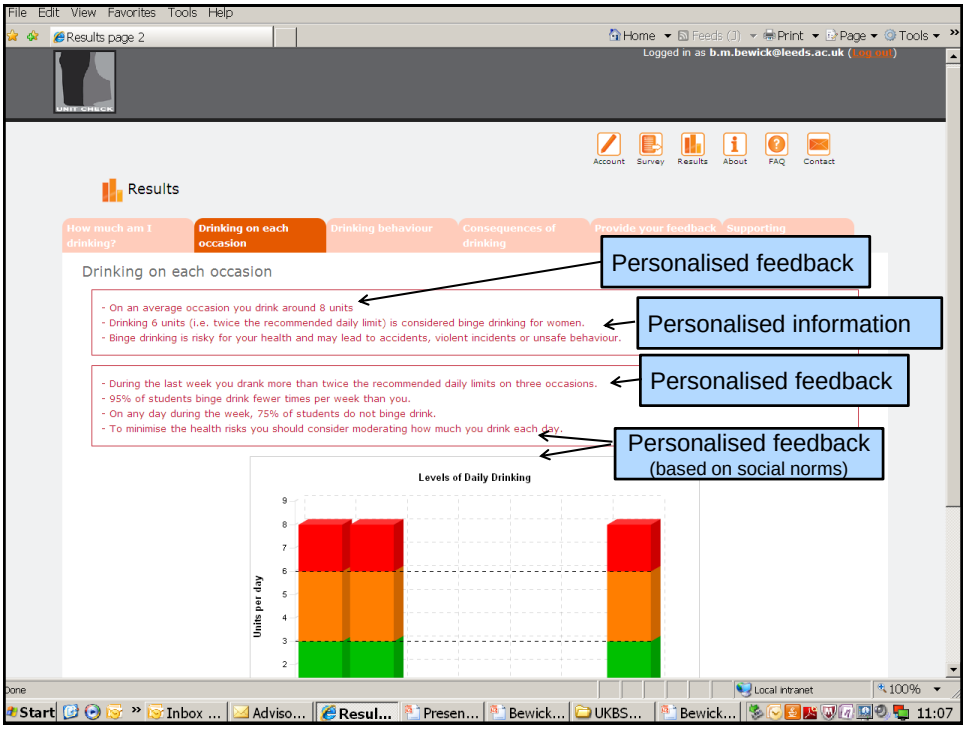
Personalised feedback

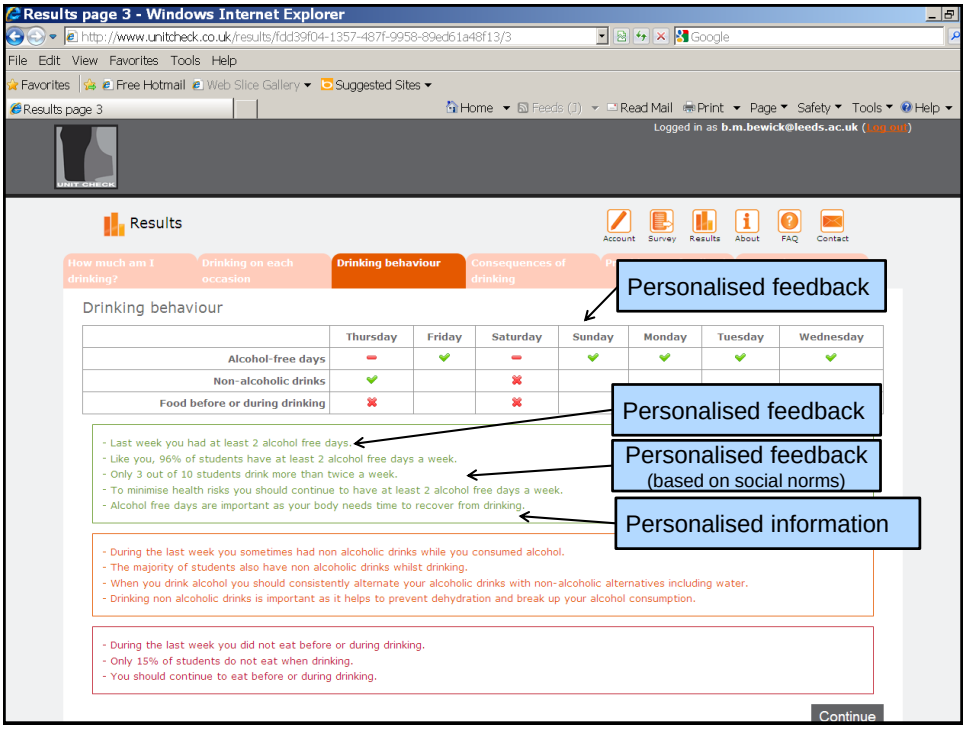
- Alcohol consumption
  - Units consumed per week (1 UK unit=10ml/8g)
  - Number of alcohol free days
  - Binge drinking behaviour
- Social norms
  - The percentage of students who drink less than them
  - Perceived negative effects of alcohol perceived by other students who consume a similar amount of alcohol.
- Information on support services

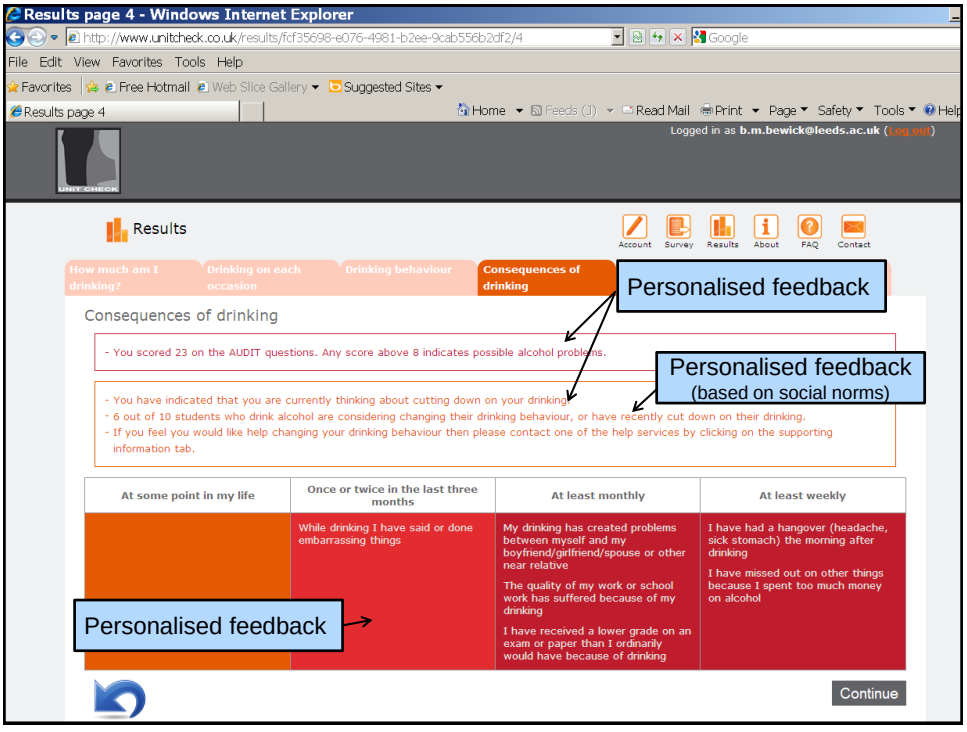


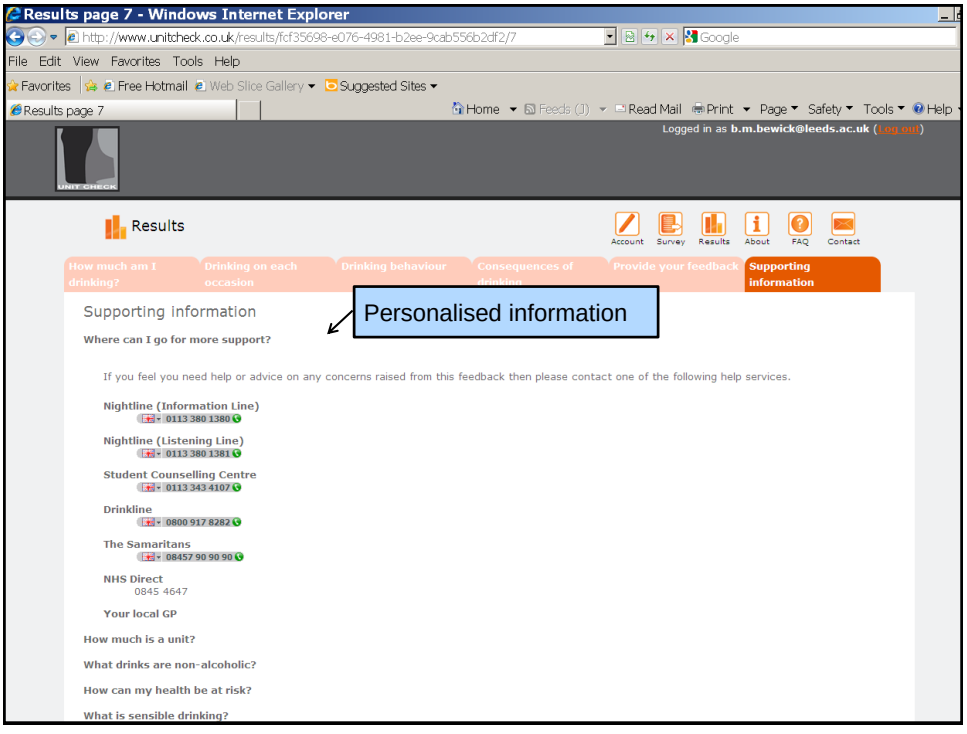

Take Survey - Page 2 of 4 - Windows Internet Explorer
http://www.unitcheck.co.uk/page2
Questions
Friday 3 December
Using the 24 hour clock, please enter the times that you started and finished drinking:
Drinking from to
Please click on the alcoholic drinks that you consumed on this day:
Lager »
Pint(s) of standard lager (e.g. Carling Black Label, Foster's)
Pint(s) of premium lager (e.g. Stella Artois, Kronenbourg 1664)
440ml (i.e. small can) of super strength lager (e.g. Special Brew, Tennent's Super)
330ml bottle(s) of premium lager (e.g. Beck's, Corona)
Beer/Bitter/Stout »
Cider »
Wine »
Spirits »
Alcopops »
Please enter the number of drinks:
Pint of standard lager
Non-alcoholic drinks with no alcohol added
Please indicate when you ate food whilst drinking alcohol:
Just Before
During
Just After
Meal
Snack
Done
Sunday 5 December
No alcoholic drinks entered.
Enter/Edit
Monday 6 December
No alcoholic drinks entered.
Enter/Edit


Results page 1 - Windows Internet Explorer
http://www.unitcheck.co.uk/results/76ebe2d8-5a01-4c7a-b700-cfefcc58da28/1
Results
How much am I drinking?
Drinking on each occasion
Drinking behaviour
Consequences of drinking
Provide your feedback
Supporting information
How much am I drinking?
- Over the last week you had 24 units of alchohol.
- It is recommended that women do not consume more than 14 units of alcohol per week.
- The amount you drank last week is considered hazardous for your health.
- To minimise health risks you should cut down your alcohol intake.
- At least 75% of University of Leeds students drink less than you.
- Only 20% of University of Leeds students drink a similar amount to you
- Of University of Leeds students who also drink at weekly hazardous levels:
- 90% feel that their drinking has a negative effect on their finances.
- 50% feel that it has a negative effect on their studies.
- 50% feel that it has a negative effect on their physical health.
- If you feel you need help changing your drinking behaviour, or have any concerns about the negative effects of alcohol, please contact one of the help services by clicking on the supporting information tab.
Your drinking last week
How much do other students drink?
Never
Harmful (35 units)
Hazardous (22-35 units)
Within recommended
Personalised feedback
Personalised information
Personalised feedback (based on social norms)
Personalised information (based on social norms)
Personalised feedback
Personalised feedback (social norms – by gender)


Results page 2
Logged in as b.m.bewick@leeds.ac.uk (Log out)
Account
Survey
Results
About
FAQ
Contact
Results
How much am I drinking?
Drinking on each occasion
Drinking behaviour
Consequences of drinking
Provide your feedback
Supporting
Drinking on each occasion
- On an average occasion you drink around 8 units
- Drinking 6 units (i.e. twice the recommended daily limit) is considered binge drinking for women.
- Binge drinking is risky for your health and may lead to accidents, violent incidents or unsafe behaviour.
- During the last week you drank more than twice the recommended daily limits on three occasions.
- 95% of students binge drink fewer times per week than you.
- On any day during the week, 75% of students do not binge drink.
- To minimise the health risks you should consider moderating how much you drink each day.
Levels of Daily Drinking
Units per day
Personalised feedback
Personalised information
Personalised feedback
Personalised feedback
(based on social norms)


Results page 3 - Windows Internet Explorer
http://www.unitcheck.co.uk/results/fdd39f04-1357-487f-9958-89ed61a48f13/3
Logged in as b.m.bewick@leeds.ac.uk (Log out)
Account
Survey
Results
About
FAQ
Contact
Results
How much am I drinking?
Drinking on each occasion
Drinking behaviour
Consequences of drinking
Drinking behaviour
Thursday
Friday
Saturday
Sunday
Monday
Tuesday
Wednesday
Alcohol-free days
Non-alcoholic drinks
Food before or during drinking
- Last week you had at least 2 alcohol free days.
- Like you, 96% of students have at least 2 alcohol free days a week.
- Only 3 out of 10 students drink more than twice a week.
- To minimise health risks you should continue to have at least 2 alcohol free days a week.
- Alcohol free days are important as your body needs time to recover from drinking.
- During the last week you sometimes had non alcoholic drinks while you consumed alcohol.
- The majority of students also have non alcoholic drinks whilst drinking.
- When you drink alcohol you should consistently alternate your alcoholic drinks with non-alcoholic alternatives including water.
- Drinking non alcoholic drinks is important as it helps to prevent dehydration and break up your alcohol consumption.
- During the last week you did not eat before or during drinking.
- Only 15% of students do not eat when drinking.
- You should continue to eat before or during drinking.
Continue
Personalised feedback
Personalised feedback
Personalised feedback
(based on social norms)
Personalised information


Results page 4 - Windows Internet Explorer
Results
Personalised feedback
Personalised feedback
(based on social norms)
Consequences of drinking
- You scored 23 on the AUDIT questions. Any score above 8 indicates possible alcohol problems.
- You have indicated that you are currently thinking about cutting down on your drinking.
- 6 out of 10 students who drink alcohol are considering changing their drinking behaviour, or have recently cut down on their drinking.
- If you feel you would like help changing your drinking behaviour then please contact one of the help services by clicking on the supporting information tab.
At some point in my life
Once or twice in the last three months
At least monthly
At least weekly
While drinking I have said or done embarrassing things
My drinking has created problems between myself and my boyfriend/girlfriend/spouse or other near relative
The quality of my work or school work has suffered because of my drinking
I have received a lower grade on an exam or paper than I ordinarily would have because of drinking
I have had a hangover (headache, sick stomach) the morning after drinking
I have missed out on other things because I spent too much money on alcohol
Personalised feedback
Continue


Results page 7 - Windows Internet Explorer
Results
Personalised information
Supporting information
Where can I go for more support?
If you feel you need help or advice on any concerns raised from this feedback then please contact one of the following help services.
Nightline (Information Line)
0113 380 1380
Nightline (Listening Line)
0113 380 1381
Student Counselling Centre
0113 343 4107
Drinkline
0800 917 8282
The Samaritans
08457 90 90 90
NHS Direct
0845 4647
Your local GP
How much is a unit?
What drinks are non-alcoholic?
How can my health be at risk?
What is sensible drinking?

Addictive Behaviors 33 (2008) 1192–1198

Contents lists available at ScienceDirect

Addictive Behaviors

The feasibility and effectiveness of a web-based personalised feedback and social norms alcohol intervention in UK university students: A randomised control trial

Bridgette M. Bewick [a,*], Karen Trusler [b], Brendan Mulhern [a], Michael Barkham [c], Andrew J. Hill [a]

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ARTICLE INFO

Keywords:
Alcohol
e-health
Intervention
Student
Social norms

ABSTRACT

Objective: Alcohol misuse amongst University students is a serious concern, and research has started to investigate the feasibility of using e-health interventions. This study aimed to establish the effectiveness of an electronic web-based personalised feedback intervention through the use of a randomised control trial (RCT).

Methods: 506 participants were stratified by gender, age group, year of study, self-reported weekly consumption of alcohol and randomly assigned to either a control or intervention

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The effectiveness of a web-based personalized feedback and social norms alcohol intervention in UK university students: A randomized controlled trial.

Bewick, B.M., West, R.M., Barkham, M., Mulhern, B., Marlow, R., Traviss, G., and Hill, A.J.

.... Findings: The regression model predicted a monitoring effect, with participants who completed assessments reducing alcohol consumption over the last week. Further reductions were predicted for those allocated to receive the intervention, and additional reductions were predicted as the number of visits to the intervention website increased.

Conclusions: Unitcheck can reduce the amount of alcohol consumed and the reduction can be sustained in the medium-term (i.e. 19 weeks after intervention was withdrawn). The findings suggest self-monitoring is an active ingredient to web-based personalized feedback.

(Bewick et al., Submitted)

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JOURNAL OF MEDICAL INTERNET RESEARCH Bewick et al

Original Paper

Providing Web-Based Feedback and Social Norms Information to Reduce Student Alcohol Intake: A Multisite Investigation

Bridgette M Bewick[1]; Robert West[2]; Jan Gill[3]; Fiona O'May[3]; Brendan Mulhern[1]; Michael Barkham[4]; Andrew J Hill[1]

(Bewick et al., 2010)

aerc
the alcohol education and research council

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How do students process the information?

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Understanding the role of social norms in a web-based personalised feedback intervention for student alcohol use

Sarah Marley
Doctoral Student (Dclin)

Bridgette Bewick and Hilary Bekker
Supervisory team

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Recruitment: First year students from the University of Leeds drinking over recommended weekly limits

Participants: 21 students
Female: n=14; Male n= 7
Mean age 19 years (range 18-21)

Year of study at interview: First year n=10; Second year n= 11

Reported units consumed in previous week (at interview)**:**
Group A: Median 36.5 units
Group B: Median 28 units

Active thinking

Participants engaged with the data and related it to their own experience. This often resulted in an evaluation of their own drinking behaviour.

(Marley, 2012)

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*...that's your life that's like life recommendations to you and it's saying that I'm it's putting it that I weekly, yeh have arguments with my girlfriend, I break the law, but you know that's and they are because of drinking yeh, arguments with the Mrs are definitely because of drinking she said on our one year anniversary she said that I had a drinking problem, I was like well and I think that's literally that's just hit me now.. which is s***, yeh, its literally just hit me. (P7, MA)*

(Marley, 2012)

This evaluative process started early on in the Unitcheck programme.

17 out of 21 participants negatively evaluated some aspect of their drinking behaviour before receiving any feedback.

Um, so that would be 100ml um, 200ml er, lets call it . . . 15 – actually and then I had a couple of shots when I got to the club as well. God <pauses> that's really bad! (P16, MB)

(Marley, 2012)

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Comparison with others

Encapsulates the cognitive and emotional reaction of participants when comparing their own drinking behaviour with that of a specific reference group.

The process of comparison:

- begins with participant estimates of where their drinking rates in comparison to other student groups;
- continues with their initial cognitive and emotional appraisal of the normative feedback they receive;
- and concludes with their evaluation of the feedback and the specific normative reference group used.

(Marley, 2012)

19 of the 21 participants estimated that they were average in terms of student drinking

13 of the 21 participants described being shocked or surprised by the actual normative feedback

"Yeh, I just think like ...I am just shocked...I guess I thought I drank pretty much the same as the majority of people and according to the results they've got on there I don't at all, I drink more than the majority." (P5,FA)

(Marley, 2012)

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8 participants specifically commented on the use of normative comparative data as interesting and worthy of further consideration

"um, I guess it's more useful to be told in comparison to other students because I know what I'm drinking (aware of what I'm drinking) and I already know what I do when I get drunk like so it's just knowing what other people do. 'Cause I guess this is an assumption that everyone else just does the same things" (P10,FB)

(Marley, 2012)

Could e-interventions encourage early help-seeking?

ChangeDrinking.com

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Who?

NHS Leeds

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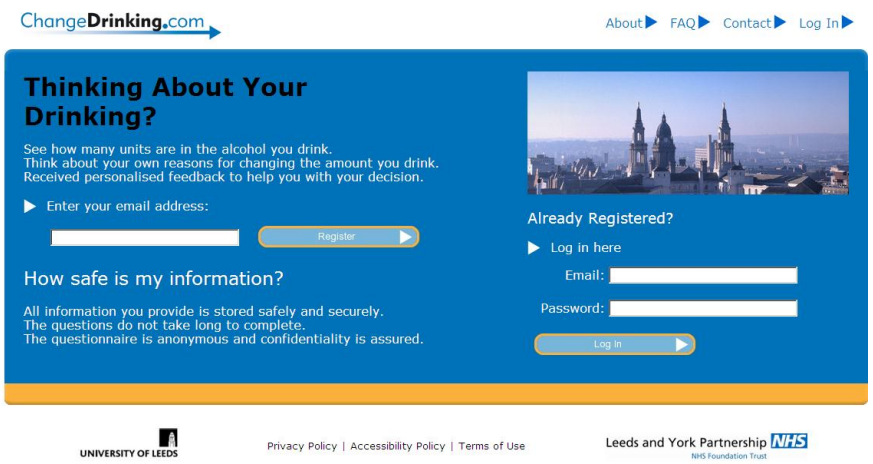

Bewick et al (submitted)

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Recruitment: Current service users at Leeds Addiction Unit

Participants: 10 service users
Female: n=4; Male n= 6
Age range 31-58 years

- Working status ranged with unemployed, not working, part-time, retired
- Range of drinking from consistently for last 30 years to abstinent (2 day-5 months)
- 1:1 vs Group LAU sessions; some long-term clients (e.g. 4 years)
- Disclosure of complex presentation (e.g. Cancer, heroin addiction)
- Range of IT literacy and cognitive abilities

How would participants:

- Engage with think aloud
- Engage with online resource
- Navigate and respond to content and feedback

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Feasibility:

- Participants with lower levels of IT literacy and some cognitive difficulties can engage in ‘think aloud’.
- Think aloud provided insight
- Engage with online resource
- Navigate and respond to content and feedback

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Conclusions

- Unitcheck, a web-based intervention providing personalised feedback, reduces alcohol consumption of non help-seeking university students.
- Monitoring effects combined with social norms comparisons appear to be important active ingredients of Unitcheck.
- Underpinnings from motivational Interviewing can be used to inform translation of face-to-face 'brief conversation' to web-based 'conversation' using predetermined dialogue.
- Think aloud methodology provided insight into the process of engaging with web-based resources (including with those less confident with IT and with cognitive difficulties)
- Think aloud methodology was usefully applied to two interventions; one established the other in development.

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Thanks for listening

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What the flock

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