INTRODUCTION

Birthday-focused brief alcohol interventions (BBAIs) delivered electronically or via mail are one option for curbing hazardous alcohol use among college students celebrating their 21st birthdays. BBAIs often provide information about consequences of excessive drinking, harm reduction strategies, and/or personalized normative feedback. These interventions are often attractive to university administrators because they offer a potentially cost- and time-effective way of addressing a serious public health issue.

OBJECTIVE

To synthesize evidence on the effectiveness of BBAIs in reducing 21st birthday celebratory alcohol use among college students.

ELIGIBILITY CRITERIA

- Randomized controlled trial or quasi-experimental research design comparing BBAI with no treatment or treatment as usual
- College student participants who receive BBAI immediately prior to their 21st birthday
- At least one post-intervention alcohol outcome
- All publication types, all languages

LITERATURE SEARCH

Literature coverage 1/1/1980 – 12/31/2012

- 12 electronic bibliographic databases (e.g., DAI, IBSS, PsycINFO, PubMed)
- 19 grey literature sources/databases (e.g., Index to Theses, Clinical Trials Registry, conference proceedings)
- Reference harvesting, forward citation searching

Total Identified Reports: 7,593 Duplicate Reports: 2,467 Deemed Ineligible at Abstract Level: 2,641 Deemed Ineligible at Full Text Level: 2,474 Eligible and Analyzed: 11 Reports

SYNTHESIS METHODS

- Standardized mean difference effect size (Hedges' g) indexing post-BBAI alcohol use during 21st birthday celebration
 - Quantity of alcohol consumed
 - Blood alcohol concentration (BAC)
- Inverse-variance weighted random-effects meta-analyses

9 Studies

A Meta-Analysis of 21st Birthday Brief Alcohol Interventions for College Students

RESUL

Study

ALCOHOL QL

Smith et al. (2006) BRAD, Social Norms & Info (1) -Glassman et al. (2010a) Risk Reduction & Social Norms Smith et al. (2006) BRAD, Social Norms & Info (2) Hembroff et al. (2007) BRAD Glassman (2010b) Social Norms & Risk Reduction Lewis et al. (2008) Personalized Normative Feedback Neighbors et al. (2009) Web-based Personalized Feedback Neighbors et al. (2012) 21 WEB BASICS LaBrie et al. (2009) Birthday Card $\tau^2 = .001; Q = 8.62; I^2 = 7.2\%$

Favors Control

Study

BAC

Neighbors et al. (2005) Birthday Card Lewis et al. (2008) Personalized Normative Feedback Neighbors et al. (2009) Web-based Personalized Feedback Neighbors et al. (2012) 21 WEB BASICS LaBrie et al. (2009) Birthday Card $\tau^2 = 0; Q = 3.69; I^2 = 0\%$

Favors Control

Katarzyna T. Steinka-Fry & Emily E. Tanner-Smith Vanderbilt University

Sean P. Grant **RAND** Corporation

'S			
ΙΛΚΙΤΙΤΛ			Study, Des Interventio
	Hedges' g (95% CI)		Randomize
			Conducted
	-0.21 (-0.52, 0.09)		Male
	0.00 (-0.27, 0.28)		White
•	0.06 (-0.10, 0.22)		Interventio
•	0.08 (-0.09, 0.25)		
•	0.09 (-0.20, 0.38)		reedba
•	0.10 (-0.13, 0.34)		Norm re
•	0.17 (-0.11, 0.45)		Educati
•	0.48 (-0.01, 0.98)		Campus
	0.05 (-0.03, 0.13)		Info. ab
			BAC inf
05 Favors Intervention	1		Delivery vi
		<i>r</i> =	= bivariate correlation
	Hedges' g (95% CI)		
	0.03 (-0.28, 0.34)	T	here was no
	0.10 (-0.18, 0.39)	C	consumed du
•	0.25 (0.01, 0.48)	Т	he interventi
•	0.25 (-0.04, 0.53)	r E	eductions in bsolute term
•	— 0.54 (0.04, 1.03)		
	0.20 (0.07, 0.33)		
2	1.05	T	his work was
.∠ Favors Intervention	CU.1	A	Abuse and Ale

RESULTS	

Sample, and	%	r
ontrolled trial	100	
United States	100	
	41	0.03
	75	-0.07
omponents		
	20	0.34
encing	80	-0.06
nformation	50	-0.04
oximal feedback	40	0.04
negative consequences	40	-0.05
ation/feedback	10	0.17
ail (vs. computerized)	80	-0.34

elation between study characteristic and alcohol quantity effect size.

CONCLUSIONS

no evidence that brief birthday-focused erventions reduced quantities of alcohol during birthday celebrations.

entions were associated with significant in BAC levels, but this effect was small in

ACKNOWLEDGEMENTS

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