

THE COLORADO STATE UNIVERSITY CANNABIS RESEARCH GROUP: EARLY PROJECTS AND FUTURE DIRECTIONS

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TODAY

- ❑ CRG

- Research → Practice Activities
- Policy ← Research Activity

- ❑ Testing an adapted version of the Marijuana eCHECKUP TO GO program in the context of legalized adult use

COLORADO DEPARTMENT OF EDUCATION

Marijuana Use Prevention Resource Bank
The Jack Splitt Memorial Resource Bank

Programs from the Field

Interested in submitting a program for consideration?

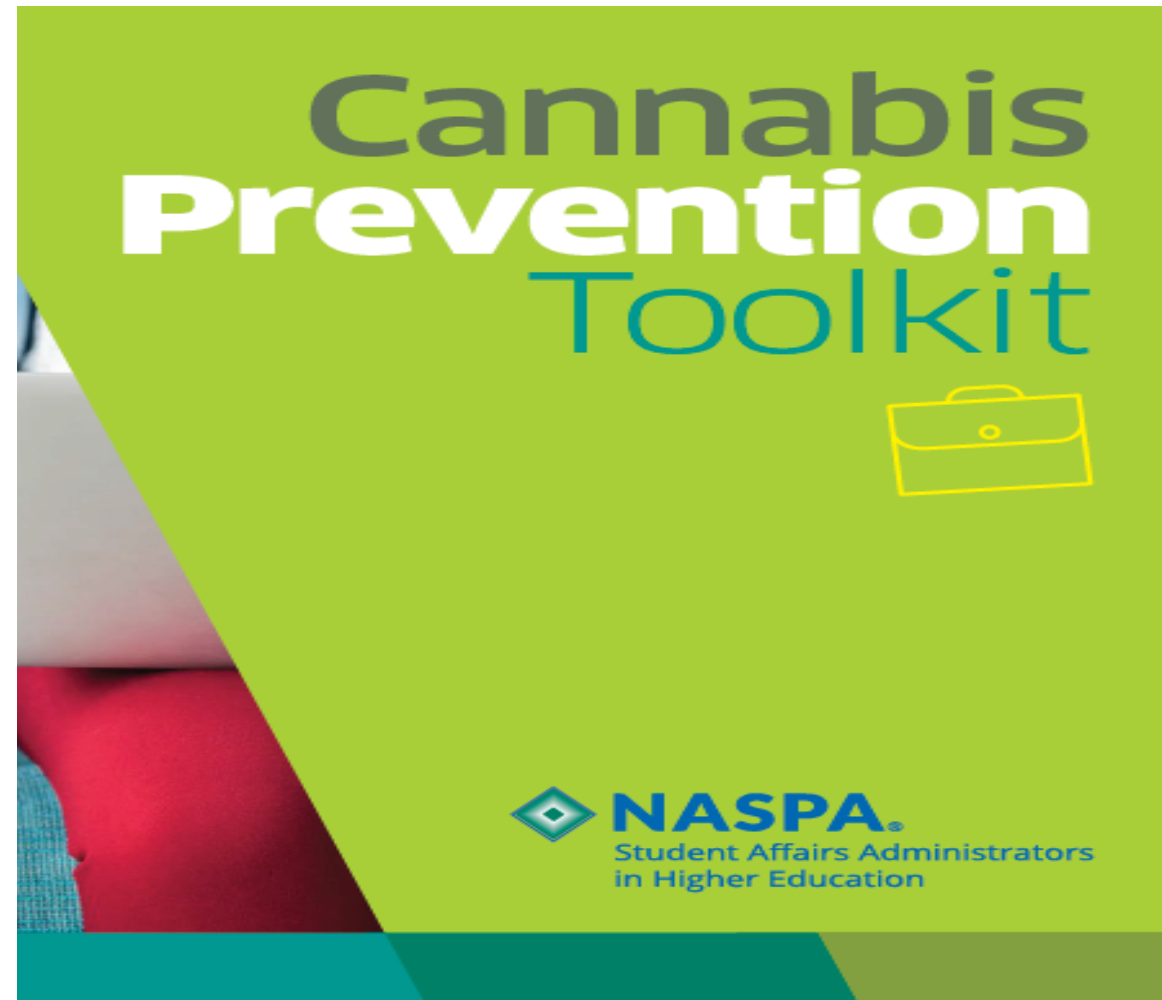
Program applications are currently being accepted for review by the Marijuana Use Prevention Resource Bank review committee. Programs will be accepted through May 1st, 2019, will be reviewed by a diverse team. If programs are accepted, they will be published quarterly along with other resource bank updates. The final group of Programs from the Field will be posted on July 1st, 2019. After this date, the funding for the Marijuana Education Materials Resource Bank will end, as will any other updates to the resource bank.

How to submit a promising program

If you would like to submit a promising program for review, would like to be notified when resource bank updates are made, or would like to provide feedback, please use the links below.:

- [Submit a program for review](#)
 - [View PDF preview](#)
 - [View DRAFT program submission rubric used by reviewers](#)
- [Subscribe for resource bank updates](#)
- [Apply to be a Marijuana Use Prevention Resource Bank, Programs from the Field Reviewer](#)

COLORADO CAMPUS ALCOHOL AND DRUG EDUCATORS (CADE), CDPHE, AND COLORADO STATE UNIVERSITY CANNABIS TOOLKIT



ANALYSIS OF DATA BEFORE AND AFTER IMPLEMENTATION OF RECREATIONAL MARIJUANA IN COLORADO

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A RANDOMIZED CONTROLLED PILOT STUDY OF THE MARIJUANA ECHECKUP TO GO PROTOCOL: PRELIMINARY FINDINGS

Riggs, N. R., Conner, B. T., *Parnes, J. E., Prince, M. A., Shillington, A., & George, M. W. (2018). Marijuana e-CHECKUP TO GO: Effects of a personalized normative feedback intervention for college student heavy marijuana use. *Drug and Alcohol Dependence*, 190, 13-19. DOI: 10.1016/j.drugalcdep.2018.05.020.



ADAPTATION OF THE MARIJUANA E-CHECKUP TO GO

- Project Funded by....



PREVENTION RESEARCH CENTER

Promoting Health & Well-being
Throughout the Lifespan



STUDY PURPOSES

- To adapt the Marijuana eCHECKUP TO GO, a Personalized Normative Feedback (PNF) approach to reducing heavy marijuana use among college students in a state with legalized adult use.
 - Include Injunctive Norms and Protective Behavioral Strategies
 - Edit language to be consistent with Colorado marijuana policy
- To test direct and biological sex moderated effects of the eCHECKUP TO GO on college student heavy marijuana use.
- To test indirect effects of heavy use through program targets/mediators (i.e., social norms and protective behavioral strategies) and time high in various social contexts.

PARTICIPANTS

- Eligibility determined through a screener
 - 18+ years of age
 - University student
 - Recreational marijuana user (i.e., non-medicinal)
 - Marijuana use of at least twice per week.
- **Baseline sample = 298**
 - 127 E-mails to on-campus and residence and fraternity/sorority life
 - 25 On-campus fliers
 - 130 Facebook advertisements
 - 15 Word-of-mouth

PROCEDURES AND DESIGN

- All participants were then e-mailed a survey link.
- Participants were randomly assigned to either the Marijuana eCHECKUP TO GO or wait-list control Healthy Stress Management (HSM) conditions.
- Feedback matched for time-- Approximately 15 minutes.
- Participants completed a posttest survey at 6 weeks.
- After that posttest all participants received the Marijuana eCHECKUP TO GO PNF.
- Participants completed a 12 week posttest.

STUDY 1: DIRECT AND BIOLOGICAL SEX MODERATED EFFECTS:

- Covariates:
 - Dependent Variable at T1
- Independent Variable:
 - Intervention Condition
(eCHECKUP TO GO = 1; HSM = 0)
- Moderator
 - Sex (Female = 1; Male = 0)
- Dependent Variables
 - Hours High Per Week (Range 0 – 168)
 - Hours High Per Using Day (Range 0 - 24)
 - Days High Per Week (Range 0 - 7)
 - Periods High Per Week (0 - 28)
 - Weeks High Per Month (Range 0 - 4)

PROCEDURES AND PARTICIPANTS

- Two hundred and twenty-seven (76%) participants completed survey at posttest.
- Retained participants at posttest reported significantly fewer:
 - Hours High/Week ($t = -3.71, p < .001$).
 - Hours High/Using Day ($t = -3.60, p < .001$).
 - Days High/Week ($t = -2.46, p < .05$).
 - Time Periods High/Week ($t = -4.25, p < .001$).
 - Males ($OR\ 0.52, 95\%\ CI\ 0.30-.89, p < .05$).
- ***Missingness did not differ by intervention condition ($OR\ 1.05, 95\%\ CI\ 0.62-1.79, p > .05$).***

RESULTS: DIRECT EFFECTS MODELS

Table 4. Direct eCHECKUP TO GO Intervention Effects

	Hours High/Week			Hours High/Using Day			Days High/Week		
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>B</i>	<i>SE</i>	<i>t</i>
T1 Dependent Variable	0.99	0.05	20.20***	1.10	0.09	11.98***	0.83	0.04	20.28***
Sex	-4.01	1.34	-3.00**	-0.81	0.32	-2.51*	-0.21	0.19	-1.11
eCHECKUP TO GO	-2.68	1.33	-2.02*	0.10	0.32	0.31	-0.74	0.19	3.97***
	Weeks/Month			Periods High/Week					
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>B</i>	<i>SE</i>	<i>t</i>			
T1 Dependent Variable	0.71	0.05	13.80***	0.81	0.04	18.44***			
Sex	-0.21	0.11	-1.86	-0.66	0.54	-1.23			
eCHECKUP TO GO	-0.35	0.11	-3.04**	-1.18	0.54	-2.20*			

* $p < .05$, ** $p < .01$, *** $p < .001$.

RESULTS: INTERACTION MODELS

Sex did not significantly moderate PNF intervention effects

Table 5. PNF by sex interaction estimates

	PNF by Sex		
	<i>B</i>	<i>SE</i>	<i>t</i>
Hours High/Week	-2.34	2.69	-0.87
Hours High/Use Day	-0.80	0.64	-1.25
Days High/Week	-0.32	0.37	-0.85
Weeks High/Month	-0.06	0.23	-0.25
Periods High/Week	-0.42	1.08	-0.39
Hours High Studying etc.	-1.69	1.59	-1.06

DISCUSSION

- eCHECKUP TO GO participants were high approximately _____ less than HSM participants:
 - 2.5 hours per week
 - ½ week per month

SUBSEQUENT ANALYSES

- 12-week follow up showed no significant decrease in program effect for original intervention group and a replication of program effects in wait-list comparison group.
- Intervention effects differed by context of use.
 - Decreases in amount of time high while studying
 - Decreases not significant when using while social, active, or in class
- Intervention effects mediated through:
 - Descriptive norms for males
 - Injunctive norms for females

FUTURE DIRECTIONS

- Adapt for:
 - Targeted messages for males and females
 - Greater efficacy at reducing use while socializing, being active, and in class.

FUTURE DIRECTIONS

- Identify how to retain heavier users and males.
- Test for differential program effects across states with varying marijuana use policies.
- Combine with other evidence-based marijuana use programs for a more comprehensive approach to prevention.

THANKS TO CRG MEMBERS!

❑ CSU Faculty Members

- Brad Conner (Psychology)
- Melissa George (HDFS)
- Mark Prince (Psychology)
- Nathaniel Riggs (HDFS)
- Audrey Shillington (Social Work)

❑ UNC Faculty Members

- Kristina Phillips (Psychology)
- Michael Phillips (Psychology)
- Laura Stewart (Sport & Exercise Science)

❑ CSU Student Members

- Olivia Bolt (Psychology)
- Ted Fetterling (Psychology)
- Jamie Parnes (Psychology)
- Gemma Wallace (Psychology)
- Ashley Wheeler (HDFS)