

Appendix
Sugar-Sweetened Beverage Health Warnings and Purchases: A Randomized Controlled Trial
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Appendix Exhibit 1. Questionnaire Items Assessing Secondary Psychosocial Outcomes

Construct (Source)	# of items	Items	Response scale	Reliability ^a
Behavioral intentions				
Intentions to limit consumption of beverages with added sugar (¹)	3	In the next week, I want to drink less than 1 beverage with added sugar.	1=Not at all 3=A little 5=Somewhat 7=Very much	0.91
		In the next week, I plan to drink less than 1 beverage with added sugar.	1=Not at all 3=A little 5=Somewhat 7=Very much	
		In the next week, I am likely to drink less than 1 beverage with added sugar.	1=Not at all likely 3=A little likely 5=Somewhat likely 7=Very likely	
Intentions to limit consumption of specific SSBs (¹)	5	In the next week, I am likely to drink less than 1 [beverage category] like these. ^b	1=Not at all likely 3=A little likely 5=Somewhat likely 7=Very likely	0.78
		...regular (non-diet) soda or soft drink...		
		...regular (non-diet) energy drink...		
		...regular (non-diet) sports drink or regular flavored water...		
		...fruit-flavored drink (not 100% juice)...		
...sweetened pre-packaged tea or coffee...				
Responses to trial labels				
Noticed trial label ^c (^{2,3})	1	Some of the beverages in the store may have had extra red stop sign [white rectangle] labels (stickers) added on top of the regular packaging, like in this picture. Did you see these labels?	0=No 1=Yes	NA
Attention to label ^d (⁴)	2	The labels grabbed my attention.	1=Strongly disagree 2=Disagree	0.83
		I read and looked closely at the labels.		

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			3=Neither agree nor disagree 4=Agree 5=Strongly agree	
Thinking about warning message/harms ^{d,e} (5,6)	2	How much did you think about the information that the labels convey?	1=Not at all 2=A little bit 3=Somewhat 4=Quite a bit 5=Very much	0.87
		How much did the labels make you think about the health problems caused by drinking beverages with added sugar?		
Negative emotions elicited by label ^{d,f} (7,8)	6	How much did the labels on the beverages make you feel...	1=Not at all 2=A little 3=Somewhat 4=Very 5=Extremely	0.90
		...anxious?		
		...scared?		
		...ashamed?		
		...guilty?		
		...disgusted? ...regretful?		
Social interactions about label (7,8)	1	How likely are you to talk about the labels with others in the next week?	1=Not at all likely 2=A little likely 3=Somewhat likely 4=Very likely 5=Extremely likely	NA
SSB perceptions and attitudes				
Perceived amount of added sugar in SSBs (2)	5	A normal can of soda is 12 ounces. How much <u>added sugar</u> do you think is in one 12-ounce serving of [beverage category] like these? ^b	1=None 2=A little 3=Some 4=A lot	0.57
		...regular (non-diet) sodas or soft drinks...		
		...regular (non-diet) energy drinks...		
		...regular (non-diet) sports drinks or regular flavored water...		
		...fruit-flavored drinks (not 100% juice)...		

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		...sweetened pre-packaged tea or coffee...			
Perceived healthfulness of SSB consumption (⁹)	5	For each beverage, say how healthy or unhealthy it is for you to drink that beverage every day. ^b	1= Unhealthy ... 7=Healthy	0.74	
		...regular (non-diet) sodas or soft drinks like these			
		...regular (non-diet) energy drinks like these			
		...regular (non-diet) sports drinks or regular flavored waters like these			
		...fruit-flavored drinks (not 100% juice) like these			
		...sweetened pre-packaged teas or coffees like these			
Positive SSB product attitudes (⁹)	10	Say how unappealing or appealing you think each beverage is. ^b	1=Unappealing ... 7=Appealing	0.79	
		...regular (non-diet) sodas or soft drinks like these			
		...regular (non-diet) energy drinks like these			
		...regular (non-diet) sports drinks or regular flavored waters like these			
		...fruit-flavored drinks (not 100% juice) like these			
		...sweetened pre-packaged teas or coffees like these			
	Say how uncool or cool you think each beverage is. ^b		...regular (non-diet) sodas or soft drinks like these		1=Uncool ... 7=Cool
			...regular (non-diet) energy drinks like these		
			...regular (non-diet) sports drinks or regular flavored waters like these		
			...fruit-flavored drinks (not 100% juice) like these		
			...sweetened pre-packaged teas or coffees like these		
			...sweetened pre-packaged teas or coffees like these		
Negative outcome expectations (²)	4	Drinking beverages with added sugar every day would increase my risk of...	1=Not at all ... 7=A lot	0.78	
		...weight gain			
		...diabetes			
		...tooth decay			
		...heart disease			

^aChronbach's α for measures with three or more items, Spearman's rho for two-item measures, and NA for single-item measures.

^bThese items included images of the products in this beverage category sold in the trial store. For example, items about "regular (non-diet) sodas or soft drinks" showed images of the 5 regular sodas sold in the trial store.

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^cThis item had two versions, one for the health warning arm and one for the control arm. Participants responded to their arm's version of the item. Items displayed a mocked up generic bottle of soda with a blank trial label (i.e., no text or image, but the appropriate color and shape) on the front-of-package.

^dItems were only asked of participants who indicated they had noticed the trial label.

^eListed as “cognitive elaboration” in the Clinical Trials Registry.

^fListed as “emotional reactions” in the Clinical Trials Registry.

SSB, sugar-sweetened beverage.

APPENDIX REFERENCES

1. Weiss BD, Mays MZ, Martz W, et al. Quick assessment of literacy in primary care: the newest vital sign. *Ann Fam Med*. 2005;3(6):514–522. <https://doi.org/10.1370/afm.405>.
2. Klein WMP, Zajac LE, Monin MM. Worry as a moderator of the association between risk perceptions and quitting intentions in young adult and adult smokers. *Ann Behav Med*. 2009;38(3):256–261. <https://doi.org/10.1007/s12160-009-9143-2>.
3. Roberto CA, Wong D, Musicus A, Hammond D. The influence of sugar-sweetened beverage health warning labels on parents' choices. *Pediatrics*. 2016;137(2):e20153185. <https://doi.org/10.1542/peds.2015-3185>.
4. VanEpps EM, Roberto CA. The influence of sugar-sweetened beverage warnings: a randomized trial of adolescents' choices and beliefs. *Am J Prev Med*. 2016;51(5):664–672. <https://doi.org/10.1016/j.amepre.2016.07.010>.
5. Nonnemaker J, Farrelly M, Kamyab K, Busey A, Mann N. Experimental study of graphic cigarette warning labels. Final Results Report. RTI Project. 2010;7.
6. Fathelrahman AI, Omar M, Awang R, Cummings KM, Borland R, Samin ASBM. Impact of the new Malaysian cigarette pack warnings on smokers' awareness of health risks and interest in quitting smoking. *Int J Environ Res Public Health*. 2010;7(11):4089–4099. <https://doi.org/10.3390/ijerph7114089>.
7. Moodie C, MacKintosh AM, Hammond D. Adolescents' response to text-only tobacco health warnings: results from the 2008 UK Youth Tobacco Policy Survey. *Eur J Public Health*. 2010;20(4):463–469. <https://doi.org/10.1093/eurpub/ckp199>.

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8. Brewer NT, Jeong M, Mendel JR, et al. Cigarette pack messages about toxic chemicals: a randomised clinical trial. *Tob Control*. 2018;28(1):74–80.
<https://doi.org/10.1136/tobaccocontrol-2017-054112>.
9. Brewer NT, Parada H Jr, Hall MG, Boynton, MH, Noar SM, Ribisl K M. Understanding why pictorial cigarette pack warnings increase quit attempts. *Ann Behav Med*. 2018;53(3):232–243. <https://doi.org/10.1093/abm/kay032>.
10. Bollard T, Maubach N, Walker N, Mhurchu CN. Effects of plain packaging, warning labels, and taxes on young people’s predicted sugar-sweetened beverage preferences: an experimental study. *Int J Behav Nutr Phys Act*. 2016;13:95.
<https://doi.org/10.1186/s12966-016-0421-7>.